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Dr. Harry W. Bruce, Washington, D. C., President of the Southern Branch, who will preside over the outstanding program planned for the 32nd annual meeting of public health workers from sixteen southern states in Tampa, Fla., April 22-24. (See page two and following.)
Public Health workers from sixteen southern states will be gathering in Tampa, Florida April 22-24 for the 32nd annual meeting of the Southern Branch, American Public Health Association. The meeting, which offers a stimulating program and plenty of entertainment, convenes at the Floridan Motor Hotel located in downtown Tampa.

"Professional Growth through Education" is the theme of this year’s Convention. Certainly one of the program’s many highlights is the three symposia, which will be held simultaneously. Professional growth through graduate study, continuing education, and inservice education are the subjects for opinionative discussion in the symposia. Of particular interest to us North Carolinians is the presence of Dean W. F. Mayes and Dr. Robert Coker, School of Public Health, UNC, on the program. They will both speak in Symposium I – "Professional Growth Through Graduate Study."

Dr. Harry W. Bruce, President of Southern Branch, has given all assurances that the program will be one of excellence from which valuable insights can be derived.

Certainly no convention can be complete without a fair share of entertainment. Well, those who plan to attend can rest assured that the Southern Branch convention is complete. Beginning with an Early Bird Party on April 21 and continuing through the convention, a variety of entertaining events have been arranged, both in the convention headquarters and in beautiful and scenic Tampa. At the sumptuous banquet, a Spanish band will cha-cha-dineu right through their meals and a singer and guitarist will serenade during a brief intermission between the banquet and dance. Dancing music will be provided American style, and, for any old timers, "early American" style.

See you in Tampa!!
Advance Program

Southern Branch, A.P.H.A. Annual Meeting
Floridan Hotel — Tampa, Florida
April 22, 23, 24, 1964

Theme: PROFESSIONAL GROWTH THROUGH EDUCATION

Tuesday, April 21

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<th>Time</th>
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<td>10:00 a.m.</td>
<td>Executive Committee Meeting</td>
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<tr>
<td>2:00 p.m.</td>
<td>Governing Council Meeting</td>
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<tr>
<td>7:30 p.m.</td>
<td>Early Bird Party</td>
<td>Main Ballroom</td>
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Wednesday, April 22

First General Session

Time: 9:30 a.m. - noon
Room: B, C, D, — Convention Hall
Presiding __________ Dr. Harry W. Bruce, Jr., President, S.B., A.P.H.A.
Invocation ___________ Dr. John B. Dickson, First Presbyterian Church
Welcoming Address _________________ Dr. Wilson Sowder
Introduction _________________ Dr. Russell Teague
President’s Address _______________ Dr. Harry W. Bruce, Jr.
Introduction _________________ Mr. H. P. Hopkins
Keynote Address _________________ Dr. John Porterfield
(Film on U.S.S. Hope, 1-2 p.m., immediately following General Session)

Governing Council Luncheon

Time: 12:00 - 2:00 p.m.
Room: Salon A — Sheraton Motor Inn

First Sectional Session

Time: 2:00 - 4:00, 4:30 or 5:00 p.m.
Room: (Include Business Meetings so that resolutions may be considered by the Governing Council at its next meeting.)

President’s Reception

Time: 7:30 p.m.
Room: Main Ballroom
Thursday, April 23
Second General Session

Time: 9:30 - 10:45 a.m. – Simultaneous Symposia
Room: Convention Hall
Symposium I – Professional Growth Through Graduate Study
Room: Section B, C, – South Ballroom, Sheraton Motor Inn

Presiding _____________________________ Dr. Robert Lewis
Speakers _______________________________ Dr. W. F. Mayes
_______________________________________ Dr. Joe Volker
_______________________________________ Dr. John C. S. Patterson
Summarizer _____________________________ Dr. Robert Coker

Symposium II – Professional Growth Through Continuing Education
Room: Teak Room, North & South

Presiding _______________________________ Dr. Howard Bost
Speakers _______________________________ Dr. W. L. Bowden (tentative)
_______________________________________ Mr. Brad Bridges
_______________________________________ Dr. Thomas B. Merson
Summarizer _____________________________ Mrs. Mildred H. Fredrickson

The Health Bulletin
First Published—April 1886
The official publication of the North Carolina State Board of Health, 608 Cooper Memorial Health Building, 225 North McDowell Street, Raleigh, N. C. Published monthly. Second Class Postage paid at Raleigh, N. C. Sent free upon request.

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Editor—Edwin S. Preston, M.A., LL.D.
Vol. 79 January, 1964 No. 1
THE HEALTH BULLETIN January, 1964
Symposium III — Professional Growth Through Inservice Education
Room: B, C, D, — Convention Hall
Presiding ___________________________ Dr. Edward M. Campbell
Speakers ___________________________ Dr. Robert Schultz
_____________________________ Dr. Harry P. Kramer
____________________________ Mrs. Elizabeth R. Bailey
Summarizer __________________________ Mr. George Gehres

Summarizing Session
Time: 11:00 a.m. - noon
Room: Convention Hall
Presiding ___________________________ Mr. H. B. Hopkins
(15 to 20 minute summaries from the three symposia)

Gulf Coast Health Conference Luncheon
Time: 12:00 noon
Room: Sheraton Motor Inn

Second Sectional Session
Time: 2:00 - 4:00, 4:30 or 5:00 p.m.
Room:

Governing Council
Time: 5:00 - 6:00 p.m.
Room: 415

Banquet and Dance
Time: 8:00 p.m.
Room: Main Ballroom

Friday, April 24
Third General Session
Time: 9:00 a.m., Brunch meeting
Room: B, C, D, — Convention Hall
Presiding ___________________________ Dr. Harry W. Bruce, Jr.
Introduction __________________________ Mr. H. P. Hopkins
General Program Summarizer __________ Mr. Robert Johnson

Business Session
Executive Committee Meeting
Time: 10:00 a.m.
Room: 210 — Sheraton Motor Inn

C. Scott Venable, Raleigh, was named the new President of the N.C. Health Council succeeding Mrs. Marie Noell, Raleigh, who completed a two-year term.

January, 1964
Smoking and Health

The Surgeon General’s Advisory Committee on Smoking and Health composed of ten outstanding scientists, eight of them medical doctors, has released its 400 page report on “Smoking and Health.” The release of the findings arrived at by this Committee has intensified the activity in this area on many fronts. From time to time the activities pro and con in this area will be mentioned briefly in The Health Bulletin. Some recent activities are given below.

The Agriculture Committee of the House of Representatives, under the chairmanship of North Carolina’s Harold D. Cooley, has asked for funds to make a comprehensive study to free cigarette smoking from any vulnerability to the charge that it causes certain diseases, including lung cancer.

The American Medical Association has been proffered the sum of some ten million dollars by the combined cigarette manufacturing companies to conduct specific research in this area. Spokesmen for the American Medical Association have indicated that this money would only be accepted if there were no limitations placed upon its use and the Association thus permitted to use its best judgment in making the investigations.

Plant geneticists at North Carolina State of the University of North Carolina at Raleigh and in other institutions stand ready to produce a species of tobacco without elements harmful to health whenever research can identify the specific elements which should be eliminated from the new breed of tobacco they would produce.

Michigan has adopted strong measures (quoted elsewhere in this issue) to deter the cigarette smoking habit. Any spread of such measures could materially affect the tobacco industry and North Carolina’s economic interests.

Herewith are quoted the principal findings on the effects of smoking as arrived at by the Surgeon General’s Advisory Committee on Smoking and Health. This comprehensive report may be secured as Public Health Service Publication No. 1103 at $1.25 per copy from the Superintendent of Documents, United States Government Printing Office, Washington, D. C.
Cigarette smoking is associated with a 70 percent increase in the age-specific death rates of males. The total number of excess deaths causally related to cigarette smoking in the U.S. population cannot be accurately estimated. In view of the continuing and mounting evidence from many sources, it is the judgment of the Committee that cigarette smoking contributes substantially to mortality from certain specific diseases and to the overall death rate.

**Lung Cancer**

Cigarette smoking is causally related to lung cancer in men; the magnitude of the effect of cigarette smoking far outweighs all other factors. The data for women, though less extensive, point in the same direction. The risk of developing lung cancer increases with duration of smoking and the number of cigarettes smoked per day, and is diminished by discontinuing smoking. In comparison with non-smokers, average male smokers of cigarettes have approximately a 9- to 10-fold risk of developing lung cancer and heavy smokers at least a 20-fold risk. The risk of developing cancer of the lung for the combined group of pipe smokers, cigar smokers, and pipe and cigar smokers is greater than for non-smokers, but much less than for cigarette smokers.

Cigarette smoking is much more important than occupational exposures in the causation of lung cancer in the general population.

**Chronic Bronchitis and Emphysema**

Cigarette smoking is the most important of the causes of chronic bronchitis in the United States, and increases the risk of dying from chronic bronchitis and emphysema. A relationship exists between cigarette smoking and emphysema but it has not been established that the relationship is causal. Studies demonstrate that fatalities from this disease are infrequent among non-smokers. For the bulk of the population of the United States, the relative importance of cigarette smoking as a cause of chronic broncho-pulmonary disease is much greater than atmospheric pollution or occupational exposures.

**Cardiovascular Diseases**

It is established that male cigarette smokers have a higher death rate from coronary artery disease than non-smoking males. Although the causative role of cigarette smoking in deaths from coronary disease is not proven, the Committee considers it more prudent from the public health viewpoint to assume that the established association has causative meaning than to suspend judgment until no uncertainty remains.

Although a causal relationship has not been established, higher mortality of cigarette smokers is associated with many other cardio-
vascular diseases, including miscellaneous circulatory diseases, other heart diseases, hypertensive heart disease, and general arteriosclerosis.

Other Cancer Sites

Pipe smoking appears to be causally related to lip cancer. Cigarette smoking is a significant factor in the causation of cancer of the larynx. The evidence supports the belief that an association exists between smoking and cancer of the esophagus, and between cigarette smoking and cancer of the urinary bladder in men, but the evidence whether these relationships are causal. Data on an association between smoking and cancer of the stomach are contradictory and incomplete.

On the "Smoking and Health" Front

Recommendations to the State Health Commissioner
Adopted by the Michigan Governor's Conference on the Cigarette Hazard

1. It is recommended that legislation be introduced to provide that all locations where cigarettes are sold at retail (including places where each cigarette vending machine is located) be licensed by the State Department of Revenue and that the income therefrom be provided to the Michigan Department of Health to enable it to explore, promote, and develop programs for the reduction and the ultimate elimination of cigarette smoking.

2. It is recommended that the State Health Commissioner convene a small group of involved agencies to study the provisions of the present laws regarding cigarettes, tobacco, and minors, to propose legislation which would make the existing laws both conform to reality and be enforceable, and to develop a proposed licensing provision as called for in recommendation number one.

3. It is recommended that the State Health Commissioner recommend to the Superintendent of Public Instruction that each school district in the state be requested to review and strengthen its policies and programs regarding the health of the school age child in the light of the report on cigarette smoking by the Surgeon General of the Public Health Service.

4. It is recommended that the State Health Commissioner get together representatives of those voluntary health agencies involved with the cigarette hazard and, together with the Superintendent of Public Instruction, develop and further coordinate those educational efforts and programs in this area which can be best carried out within the school system.

5. It is recommended that the State Health Commissioner recommend to the healing professions of the state that they take action to discourage cigarette smoking both by precept and example.

6. It is recommended that the State Health Commissioner take appropriate steps to promote the development of a meaningful national program of labeling cigarette packages as "Dangerous to Health."

7. It is recommended that the State Health Commissioner conduct an educational program on the hazard of cigarette smoking in all offices and institutions under his control, and that to ensure compliance with the existing laws...
concerning the sale of cigarettes to those under 21, cigarette vending machines continue to be banned from the State Health Department properties.

It is further recommended that the State Health Commissioner recommend that the administrator of each patient care institution in the state remove all cigarette vending machines from his institution and, in addition, take such other appropriate measures as are necessary to eliminate the sale of cigarettes to minors which is in violation of state law.

It is further recommended that the State Health Commissioner recommend that the administrator of each patient care institution in the state remove all cigarette vending machines from his institution and, in addition, take such other appropriate measures as are necessary to eliminate the sale of cigarettes to minors which is in violation of state law.

The problems of air pollution, pesticides, radiological hazards and water pollution will be discussed by leading scientists at the first American Medical Association Congress on Environmental Health Problems May 1-2 in Chicago.

The theme for the meeting, sponsored by the AMA Committee on Environmental Health, will be "Can Some Diseases Be Engineered Out of the Environment."

The first week of 1964 deserves special recognition. It was the first week on record without a reported case of poliomyelitis.

Ten years ago poliomyelitis probably was the most feared disease in America. According to the Communicable Disease Center at Atlanta, Ga., the attack rate during the peak year of 1952 was 37.2 per 100,000 population. The preliminary total for 1963 shows an attack rate of 0.2 per 100,000. Credit for this success belongs to every person who took advantage of the new vaccines.

Just five years ago the annual number of poliomyelitis cases was 5,995. Last year the annual total was 431 cases. During the first week of 1964 there was none. It is a week to remember.

The average American family now is made up of 3.7 persons, the Population Reference Bureau, Inc., reported. The figure represents an increase over the 1950 average of 3.5 persons per family.

The number of taxpayers who included medical and dental expenses among itemized deductions showed a 12.6% increase and the total of such deductions increased 15.5% between 1960 and 1962, the U. S. Internal Revenue Service said.

Rules and Regulations Governing the Sanitation of Private Hospitals, Sanatoriums, Sanitariums and Educational Institutions have been published by the Sanitary Engineering Division of the North Carolina State Board of Health as a supplement to The Health Bulletin. Interested persons may secure copies by writing to the Sanitary Engineering Division of the State Board of Health.

Rules and Regulations for the Licensing of Nursing Homes has been published as a supplement to The Health Bulletin and copies may be secured by writing to the Nursing Home Section of the State Board of Health.

The 1964 Easter Seal Campaign will be conducted this year from March 1 - March 29, Easter Sunday.

"The first step for an organization to take in good public relations is to live up to the image it hopes the public will have of it."

Results of a five year research study to determine the rehabilitation progress of 616 hospitalized stroke patients revealed that the greater the disability on admission, the higher was the mortality rate and the slower was improvement while in the hospital.
New Yorker Wins NCOA’s First Ollie A. Randall Award

Mrs. Louis Tishman of New York City received the first Ollie A. Randall Award from The National Council on the Aging during an Award dinner at its 13th annual meeting at the Edgewater Beach Hotel in Chicago.

The Award was created this year by The Council “to give recognition to individuals who have made singular contributions to the well-being of older people . . . and interpreting The Council’s philosophy of enabling the older person to live a dignified, healthier, happier and more productive life.”

Mrs. Tishman won the Award for her work with day center programs, notably with the William Hodson Community Center in the Bronx, New York, and as a pioneer in making vacation services available for older people. She advanced and encouraged professional training in work with the aging, aided volunteers’ co-operation with government agencies in the New York area and was instrumental in developing an educational program that brought better understanding of the capacities and potentials of older people.

A special surprise presentation was made to Ollie A. Randall, which included several volumes of letters from Miss Randall’s colleagues. Among these: New York Governor Nelson A. Rockefeller recognized the Award as “a fitting acknowledgment of your (Miss Randall’s) tireless and selfless service in the . . . cause of aging.”

Walter Reuther, president of the United Automobile Workers of America, wrote: “. . . we have come to regard (Miss Randall) as a member of the family of the UAW retired workers program to whom we turn frequently for counsel . . . .”

A replica of the Steuben glass Award trophy given to Mrs. Tishman was also presented to Miss Randall. Miss Randall is a vice-president of The National Council on the Aging and consultant to the Ford Foundation’s Program in Aging. She is also special consultant on nursing homes to the New York State Joint Hospital Review and Planning Commission as well as a member of the New York State Council on Recreation for the Elderly.

Miss Randall is past president of the Gerontological Society and of the New York State Conference on Social Welfare. She was a member of the former Commission on Chronic Illness and for many years was associated with the Community Service Society of New York and its services for the aged.

Mr. Albert J. Abrams, secretary of the Senate of the State of New York, noted in a personal interview that “Ollie Randall was working with aging problems long before any one else became interested and was the only resource one could turn to in the formative years of these important programs we see materializing today.”

Charles E. Odell, director of the Older and Retired Workers Department, United Automobile Workers of America, AFL-CIO, and vice-president of The National Council on the Aging, presided over the Award ceremonies.

The National Council on the Aging is a national, volunteer membership organization through which all groups and individuals interested in aging can work together in clarifying needs, setting standards and finding practical solutions to problems. These groups and individuals, representing business, labor, social welfare, education, government, health and religion, comprise the membership of The Council and, along with foundations, finance its activities.
The HEALTH CAREERS EXCHANGE has reported from time to time the formation of new state health career committees. These have ranged from a small group of interested professionals and others who have organized without benefit of paid staff to produce and distribute a state directory of health careers, to broadly representative state-wide committees with paid staff, budgets up to $75,000 a year, and comprehensive programs that include a variety of recruitment projects in addition to the usual information services.

At present we know of 25 such committees operating at the state level, or currently forming. There may be more. If so, we'd like to hear about them.

Our records indicate that state-level health career committees are operating in the following states:

- Colorado
- Connecticut
- Idaho
- Illinois
- Indiana
- Iowa
- Kentucky
- Maine
- Maryland
- Michigan
- Minnesota
- Missouri
- Montana
- New Hampshire
- New Jersey
- North Carolina
- North Dakota
- Oklahoma
- Pennsylvania
- Rhode Island
- **Tennessee
- Utah
- Virginia
- Washington
- **Wisconsin

"People and Profits" Theme for Eighth Conference Set for March 12

Charlotte’s Sheraton-Barringer has been chosen as the site for the day-long conclave which has been held each year since 1957. Co-sponsor with HEART SERVICES is the Charlotte Chamber of Commerce, long a supporter of the occupational health movement through its important health committee.

The program, developed by Chairman James A. Nelson; George W. Dowdy; John T. Fielder; Charles R. McAdams, Jr., M.D.; Mrs. Dorothy Fitzjohn; and William C. Matthews, M.D., is designed to deal with fundamentals of employee health conservation as well as reveal new developments in the field. Three speakers and thirteen panelists will get under way at eleven o'clock on the 12th and continue through an evening banquet session.

The beginning of a five-year study to determine what happens to pesticides after completing their tasks of killing insects was announced recently by the U. S. Public Health Service. Among the questions the scientists will attempt to determine is whether a pesticide, such as DDT, is decomposed in the soil, whether it leaches out of the soil into streams or whether it is taken up by weeds and food plants.

The promotion of Dr. Robert H. Felix, Assistant Surgeon General and Director of the National Institute of Mental Health, to the two star rank which is comparable to that of Major General in the Army, has been announced by Surgeon General Luther L. Terry of the Public Health Service. He formerly held the one star rank, equivalent Army rank to Brigadier General.
Sterilization clinics in India, legalized abortion in Japan and birth control pills in the United States are some of the events growing out of the explosive growth of the world’s population and its inherent problems.

Asia, with half the world’s population, is the greatest problem because of insufficient food and inadequate clothing, housing and health care.

Emphasis on population control has brought a team of seven public health experts from India to the United States for two months. The group began its cross-country visit with a week at the University of North Carolina School of Public Health in Chapel Hill. During this week, the group spent some time in Raleigh at the State Board of Health. At this time, they had opportunity to meet many of the staff personnel and see how North Carolina has organized its public health program.

Dr. J. W. R. Norton, North Carolina’s State Health Director and immediate past president of the American Public Health Association, was requested by the Ford Foundation to accompany the Indian officials on a portion of their tour of selected public health centers throughout the United States. The group is traveling under the auspices of the Ford Foundation and the Indian Government.

Miss Anne Lamb retired recently as a Public Health Nursing Consultant in the Division of Local Health after 38 years of continuous service. Dr. J. W. R. Norton, State Health Director, is shown presenting her with one of the gifts from appreciative staff members.
The establishment of a Mental Retardation Branch within the Service as a means for improving and extending the availability of health services to the mentally retarded has been announced by Surgeon General Luther L. Terry of the Public Health Service.

The International Planned Parenthood Federation has entrusted the Excerpta Medica Foundation with the publication of the full proceedings of the following recent Conferences: Third Conference of the Region for Europe, Near East and Africa of the International Planned Parenthood Federation, Warsaw, June 5-8, 1962; and The Seventh Conference of the International Planned Parenthood Federation, Singapore, February 10-16, 1963.

Informal talks on the multiple opportunities qualified youth may expect from a health career have been presented at more than 100 high schools in the state. Over 20,000 students have listened to brief explanations of medically oriented careers through the work of North Carolina Health Careers, Inc.

A Nurses Cancer Conference will be held on Friday, April 24, at the Cabarrus Memorial Hospital in Concord. This informative program is sponsored by the Cabarrus County Unit of the N. C. Division of the American Cancer Society.

Nationally distinguished speakers will appear on the five-day program of the 1964 Carolina Symposium at Chapel Hill, April 5-9. This Symposium will explore the nature of the Cold War demands and will seek to assess the effects of the requirements of collective security on individual freedom and democratic values.

January, 1964

Health Tidbits

District IV of Health Careers for North Carolina held its annual Congress for high school students on Saturday, January 18 at North Carolina State in Raleigh. Although the date conflicted with a state guidance meeting, many counselors were seen during the afternoon session. The attendance of over 400 from this area indicated the students' eagerness to know more about opportunities that are available in the field of health.

Scholarships to finance specialized training for professional workers who help crippled children and handicapped adults are available from the National Society for Crippled Children and Adults.

Dr. Mason F. Lord, of Baltimore, Maryland, was the dynamic speaker at one of the Student-Faculty Seminars at the School of Public Health of the University of North Carolina. He is shown with Dr. William Fred Mayes (right) in the spacious and well stocked library at the School of Public Health.
FLUORIDATION ELSEWHERE
and in North Carolina

At least 48 communities in Oklahoma have fluoride in their water naturally. That is, they have at least seven tenths of one part fluoride per million gallons of water.

Morrison, Oklahoma has six parts per million gallons and Indiahoma, Oklahoma has 6.5 parts per million gallons. Maud, Oklahoma has 5.5. Actually, this is too much fluoride. It causes a mottling or discoloration of the teeth.

There are 20 communities in Oklahoma which are artificially fluoridating their water supplies. They include Oklahoma City and Tulsa. The first city in Oklahoma to provide artificial fluoridation was Nowata. Nowata started in August of 1951.

North Carolina has 17 communities with naturally fluoridated water supplies. Public water supplies in 40 additional communities in North Carolina have been artificially fluoridated since 1949 when Charlotte began its fluoridation program.

It must present a difficult dilemma for opponents of artificial fluoridation to explain their opposition even to themselves in view of the many places in the nation where Nature has gone ahead with fluoridation without consulting these professional opponents nor calling for a referendum.

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Fourteenth Short Course in Public Health Records

FOURTEENTH PUBLIC HEALTH RECORDS SHORT COURSE—More than two score public health workers from over the State gathered in Raleigh recently for the Fourteenth Public Health Records Short Course. The four-day course was presented by the Local Health Division of the State Board in cooperation with the School of Public Health of the University of North Carolina. Appearing in the picture from left are the following: Brenda Overcash, Marion; Joyce Faulkner, Henderson; Agnes Olmstead, Lumberton; Patricia Walters, Siler City; Kathleen Braxton, Chapel Hill; Polly Leigh, Concord; Joyce Dobson, Statesville; Mabel Boggs, Hillsboro; Nettie Cartwright, Elizabeth City; Louise Barber, Hertford; Nora McDougald, Elizabeth City; Janet Sawyer, Currituck; Nancy Overcash, Hickory; Rose Gregory, Durham; Sarah Goggans, Records and Procedures Analyst, Raleigh; Athelene Johnson, Raleigh; Diane McKinney, Marion; Mae Gurley, Goldsboro; Mabel Gilbert, Wilmington; Dulah Hammond, Whiteville; Eunice Pierce, Greenville; Hilda Sanders, Elizabethtown; Doris Tillery, Records and Procedures Analyst, Raleigh.
DATES AND EVENTS
March 9-11—N. C. Association of Nursing Homes, Annual Convention, Charlotte.
March 12—N. C. World Affairs Conference, 10:00 a.m., Carroll Hall, UNC, Chapel Hill.
April 1-4—Health Fair, Duke University, Durham.
April 1-3—Three Days of Cardiology at Duke University Medical Center, Durham.
April 5-9—1964 Carolina Symposium, Chapel Hill.
April 6-10—American College of Physicians, Annual Meeting, Atlantic City, N. J.
April 8-10—National Council on Alcoholism, New York, N. Y.
April 9-11—AMA Conference on Mental Retardation, Aurora-Hilton Inn, N. Aurora, Ill.
April 14-16—American Industrial Health Conference, Pittsburgh, Pa.
April 15-18—American Society for Public Administration, New York, N. Y.
April 22-24—Southern Branch, APHA, Tampa, Fla.
April 24—Nurses Cancer Conference, Cabarrus Memorial Hospital, Concord.
April 26-May 2—Mental Health Week.
April 30-May 1—President’s Committee on Employment of the Handicapped, Washington, D. C.

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New X-Ray Trailer Launched

X-Ray personnel stand in front of the new Mobile X-Ray Unit Trailer of the State Board of Health. From the left, those shown are A. G. Chiswell, Mobile X-Ray Supervisor; Miss Margaret Lyons and O. B. (Tony) Hinnant, the Mobile X-Ray technicians. (See story on page 2.)
New X-Ray Unit Moves Into Action

A new beautifully appointed Mobile Tuberculosis Chest X-Ray Trailer has been secured by the Tuberculosis Control Section of the State Board of Health.

This white trailer made by Magnolia and pulled by a light Dodge truck, will take the place of one of the oldest trailers operated by the Section. This old trailer has been in operation some eighteen years and has traveled over 100,000 miles. It is estimated that each of the eight trailers which have been operated by the Section has taken chest x-ray pictures of approximately 500,000 people.

This new trailer is the second and the most carefully planned and conveniently arranged trailer in a series of four which eventually will become the backbone of the Mobile X-Ray Unit.

The new Chest X-Ray Trailer is ready to move to the next location.
The Mobile X-Ray work is supervised by A. G. Chiswell. Dr. William A. Smith is Chief of the Tuberculosis Control Section.

Planning for the trailer has been such that its arrangement reduces radiation for a person to be x-rayed to a very low margin. There is no exposure to radiation until the x-ray picture is actually taken.

The traffic flow of people to be x-rayed is worked out so as to expedite the record-keeping and picture taking.

The new trailer had Williamston as its first location according to the advance plans.

When such a Mobile Unit is parked at a good central location either in a city, near an industrial plant or at some college situation in the State, the pictures are made and processed by the State Board of Health. A report is made by mail to each person x-rayed and when there is suspicion of active tuberculosis, the letter advises the person to be examined by his personal physician for further judgment and possible treatment.

O. B. (Tony) Hinnant is the Mobile X-Ray technician in charge of the X-Ray Trailer. He drives from location to location and handles the chore of making the x-ray pictures. Clerks to keep the necessary records are employed locally.
A new publication "Man, Medicine, and Work" has just been released by the Division of Occupational Health of the U.S. Public Health Service.

"Man, Medicine, and Work," which traces the growth and development of occupational medicine, was developed from an exhibit by Dr. Jean S. Felton, of the University of California, and was published on the occasion of the Division's 50th year of service in furthering the health of workers.

Beginning with prehistoric man, "Man, Medicine, and Work," portrays man's efforts to control his environment and his battles against the sometimes mysterious, and always present, danger of occupational illness. Not until Bernardino Ramazzini, the father of occupational medicine, made his classic studies in the 17th century on the diseases of workers were any efforts made to protect people who worked. Ramazzini's advice went unheeded while the world underwent the economic and social upheaval of the industrial revolution. The wholesale poisonings, crippling and maiming of workers, inherent in the industrial environment of the time, however, created a social awareness of the problem, and the modern concept of occupational medicine was born. Today, workers can face their jobs with far greater assurance of health and well-being than ever before thought possible.

"Man, Medicine, and Work" may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at 40¢ a copy. Single copies are available from the Public Inquiries Branch, Office of Information and Publications or from the Division of Occupational Health U.S. Public Health Service, Washington, D.C. 20201.
Reduction Seen in Surgical Hazards

Notable progress continues to be made in reducing the hazards of surgery in the United States.

A report on major operations performed on more than 9,000 patients in a large southern hospital indicates a steady decrease in surgical mortality over a period of three decades.

Marked reductions in surgical mortality have also been recorded for a number of specific operative procedures. In one study, surgical mortality for gastric ulcer decreased more than four fifths between 1936-45 and 1946-57.

Mortality for duodenal ulcer surgery in the same institution was reduced by more than half, to about 1 percent, in approximately the same time. In a large southwestern medical center, mortality for cases of peptic ulcer in which acute perforation occurred was reduced to less than 1.0 percent in 1955-61, from 4.3 percent in the preceding five years.

Surgery for disorders of the intestine in children has become much safer.

Not only has cardiovascular surgery been utilized recently in many cases which would have been considered inoperable in earlier years, but the risk for patients undergoing such surgery has also been decreasing.

A considerable number of amputations of the lower extremities are still performed annually because of gangrene resulting from arteriosclerotic disease, particularly in diabetic patients. The hazards incidental to such operations have diminished appreciably.

Operations involving the respiratory system have been undertaken with increased frequency in the past two decades. This trend adds to the significance of reported reductions in operative mortality in such cases.

The outlook has also improved measurably for patients undergoing surgery for malignancies of the digestive system.

Marked progress, particularly in the past decade, has been made in the field of neurosurgery. This is indicated by a study of operative mortality in the treatment of brain tumors.* In 100 consecutive cases treated surgically in recent years there were only three operative deaths.

The excellent results obtained in current practice are attributable to a variety of factors. Among them are better training of surgeons, earlier and more precise diagnosis, improved surgical techniques and better surgical instruments, advances in anesthesiology, better understanding of the physiologic changes associated with disease conditions both before and after surgery, the use of chemotherapeutic and antibiotic agents, and closer observation of patients in the immediate postoperative period.

Operative mortality has been reduced despite the greatly broadened scope of surgery, the increased complexity of some of the newer operative procedures, and the more frequent use of surgery in infants and the aged. The significance for life conservation resulting from safer surgery can be gauged from a recent estimate that about 2½ million people a year in the United States undergo major surgery.


February, 1964
Water Pollution Causing Fish Kills

The U. S. Public Health Service and the State of Louisiana have announced that water pollution involving toxic synthetic organic materials appears to be the cause of massive and continuing fish kills in the lower Mississippi drainage basin and its estuarine waters in the Gulf of Mexico.

Several chemical compounds have been found in significant quantities in dead and dying fish and in the water environment, including at least two substances so far unidentified and two pesticides, endrin and dieldrin.

The announcement follows three months of investigations carried on by a team of engineers and scientists from the Public Health Service's Division of Water Supply and Pollution Control. The studies were made at the request of the State of Louisiana because of a series of fish deaths involving millions of fish which have taken place in the River and the Gulf each fall and winter since 1960.

Both the Public Health Service and the Food and Drug Administration within the Department of Health, Education, and Welfare are intensifying their food and water protection surveillance activities in the Mississippi River basin.

Some trace quantities of organic chemicals are normally present in drinking water supplies; levels found in the lower Mississippi Basin do not present any immediate health problems.

Aquatic life is particularly sensitive to pollution from certain synthetic organic wastes; the presence, in water, of some of these substances in proportions less than one part per billion is lethal to some fish varieties. The intensive studies under way will identify any potential hazards to health from the consumption of fish in which toxic substances may be concentrated.

Examination of dead and dying fish, of mud, and of the river water has shown the presence of a number of synthetic organic materials. Recently developed measuring techniques enabled Public Health Service scientists to detect and measure these substances in quantities as small as parts per trillion. The analyses were made independently by five teams of investigators, four within the Public Health Service and one private research team.

Biologists of the Fish and Wildlife Service of the U. S. Department of the Interior have ruled out parasitic or bacterial disease as the cause of the fish kills. Metals and environmental conditions such as low dissolved oxygen and drastic temperature changes have also been ruled out as causes of these deaths.

In cooperation with several States in the lower Mississippi basin, the Division of Water Supply and Pollution Control of the Public Health Service is establishing a continuing study to determine the water pollution control measures necessary to protect these waters for all legitimate uses. Scientists and engineers are being assigned to the area and will be supported by several laboratories of the Public Health Service. Other Federal, State, and local agencies are expected to participate in this effort.

The Public Health Service's studies are now being reviewed by other Federal agencies including the Department of Agriculture, and the Department of Interior's Bureau of Sport Fisheries and Wildlife and Bureau of Commercial Fisheries of the Fish & Wildlife Service.
Insecticides are Poisonous for Humans TOO!

The summer-time bugs that chew up your woolens, play havoc with your flower beds and make patio life a misery can also be responsible—indirectly—for human death.

This warning comes from Dr. Jay M. Arena, director of Duke Hospital's Poison Control Center, one of the seven Poison Control Centers in North Carolina.

The insect pests themselves are usually little more than annoying, but many of the bug bombs, sprays and powders used to control them may be dangerous if improperly used.

"During the summer, the Duke Hospital Poison Control Center receives four or five calls a week from people who are worried about possible danger from pesticides they've been using," Dr. Arena says. "Occasionally they hear from someone who's in real trouble."

During a recent 12-month period, 65 out of a total of 364 accidental poisonings handled by the Duke Poison Control Center were caused by insecticides and other pesticides. Thanks to proper treatment, however, only one of these poisonings resulted in death.

The statistics on accidental poisoning in the United States are pretty grim. Probably close to a quarter of a million children under the age of 5 years ingest toxic or potentially toxic substances each year. Of these, about 300 to 400 will die. Two factors can reduce both of these figures—prevention and
prompt, effective treatment. In recognition of this, the physicians of many communities have established poison control centers. It is probable that most communities will, in the near future, want to organize such a center to deal with their problems of accidental poisoning.

In North Carolina, the seven Poison Control Centers are in the following places: Mercy Hospital in Charlotte; Duke University Hospital in Durham; Onslow Memorial Hospital in Jacksonville; Northern Hospital of Surry County in Mount Airy; James Walker Memorial Hospital in Wilmington; Margaret R. Pardee Hospital in Hendersonville; and Memorial Mission Hospital in Asheville.

In the past five years physicians, and pediatricians in particular, have become acutely aware that accidental poisoning is an important, frequent, and serious problem. A major facet of this problem has been the fact that a great many household products sold to the American public do not give information on their ingredients, toxicity, or effective antidotes. This information is essential to the physician who has to treat cases of accidental poisoning involving these products. With more than a quarter of a million household items being sold and the number rapidly increasing each year, it is clear that the American youngster has potential exposure to substances that may lead to poisoning accidents.

As a general rule-of-thumb for handling pesticides, Director Arena, of Duke Hospital’s Poison Control Center offers this: If it’s bad for bugs, it’s probably bad for people too.

A few of the chemicals used in pesticides are so deadly that the finest pinch would kill a human being.

Pesticides should be handled with the same respect you’d accord a power mower or a king cobra.

More specifically, Dr. Arena offers these pointers on how to get rid of bugs and weeds without endangering yourself or your family in the process:
—Pay attention to warning labels. They were put there for your protection—not decoration.
—Read the label every time you use a pesticide. Your memory may not be infallible.
—Keep pesticides out of reach of children.
—Store sprays and dusts in the original labeled containers.
—Don’t leave empty pesticide containers lying around. They may not be quite empty.
—Don’t smoke while spraying or dusting. This may be inviting an explosion.
—Keep your sleeves rolled down and your collar buttoned when wielding a spray gun. Don’t inhale sprays or dusts.
—Wash immediately with soap and water if you spill pesticide materials on your skin.
—Don’t use bug bombs or sprays in a closed room. Some of the most deadly chemicals are odorless.
—If you suddenly feel sick while using a pesticide or shortly afterwards, don’t chalk it up to the summer heat. Call your family doctor immediately, and keep the container handy so you can tell him the kind of pesticide you were using.

Pesticides aren’t the only family poisoners. The list includes aspirin and many other medications; household products such as polishes, detergents, and bleaches; and various cosmetics.

Common sense precautions—especially where children are concerned—can avert needless tragedies.

Has your household been poison-proofed?
Bowman Gray Development Evaluation Clinic
Serves Unique Purpose

Below are some members of the staff of the Clinic in Winston-Salem which is operated by the Department of Pediatrics of Bowman Gray Medical School for the diagnosis of children suspected of being mentally retarded. The Clinic also provides consultation to the parents. The State Board of Health has made a grant available for operating funds. This teaching Clinic is two and one-half years old and has a forty bed residential unit associated with it — Amos Cottage — also used for teaching purposes.

From the left, those shown are: Mrs. Bernice Everhart, Medical Social Worker; Miss Edith Vail, Physical Therapist; Dr. James Chappell, Pediatrician — acting director, Developmental Evaluation Clinic, Department of Pediatrics, Bowman Gray School of Medicine; Miss Dorothy L. Redfern, Public Health Nurse Consultant; Mrs. Nancy Drum, Growth and Development Specialist; R. S. Evans, Speech Pathologist.
A public health professor proposed in Atlanta recently that the health profession and the safety engineering profession end their courtship, get married and give birth immediately to a vigorous safety movement in the U.S.

"Medicine and health workers have enjoyed an extremely engaging courtship with those in safety engineering," observed Dr. Charles M. Cameron Jr., professor of public health administration at the University of North Carolina School of Public Health.

"I hold even greater enthusiasm for the hope that this relationship can be consummated completely within the next decade.

"Until accidents are more effectively controlled, positive health will not be realized by most American families."

Dr. Cameron addressed the Southern Regional Federal Safety Conference, placing stress on some suggestions for reducing the accidental injury toll by a closer association of the health sciences and safety engineering.

Only in recent years, he said, have public health and medical personnel started "to look beyond the microbe and recognize the tremendous expenditures of human life, health and efficiency claimed by accidents each year."

He paused at this point to remind his audience that accidents rank third as the leading cause of death in the general population. And, he added, accidents rank almost equal in importance to the common cold as a cause of illness, absenteeism and reduced efficiency.

Dr. Cameron indicated that health and medical people now recognize that some techniques useful in solving disease problems might be adapted to accident control programs. He had direct reference to a new emphasis on prevention of accidents rather than on the treatment of accident victims.

"One can say that no major disease has ever been significantly controlled by diagnosis and treatment," he said. "In public health and medical sciences, the safety engineer has an ally in the cause of prevention."

Dr. Cameron envisioned round-the-clock safety protection for American workers through a concentrated, cooperative effort of the public health safety specialist and the occupational safety engineer.

"Public health safety programs are likely to focus on home, farm, recreational and public place accidents to the exclusion of any major responsibility for occupational deaths and injuries," he said.

"Their areas of concern frequently start where the occupational safety specialists may leave off."

Dr. Cameron has responsibility at the UNC School of Public Health for the Accident Control Graduate Program.
To emphasize the crucial need for communities to develop or improve plans for providing continuing nursing service between hospitals and patients' homes, the National League for Nursing has issued a new booklet, "Nursing Service Without Walls."

In the foreword, Marion B. Folsom, former U. S. Secretary of Health, Education, and Welfare, states: "Nursing is one of the essential services in any community health care plan or program. The citizens in any community have a direct responsibility, therefore, to make sure that needed continuing nursing care is provided for men, women, and children as they move from home to hospital, or from hospital to home or to any other place where care may be given. Generally, nursing care in the home can be provided by a voluntary or governmental public health nursing service."

According to the booklet, if a community does not already have a hospital-public health nursing service referral plan, a committee can be organized to spark interest, provide leadership, develop and sponsor an over-all program.

Specific suggestions are outlined for committees, including ways by which present referral plans can be analyzed. The booklet also underscores what needs to be taken into consideration when a new community plan for continuing nursing service between hospital and home is developed or one already in existence is updated.

Examples show the steps three different types of communities have taken to provide this more complete nursing care. Included is a description of how representative committees in some of those communities reviewed what happened to post-hospital patients when current referral programs were inadequate or non-existent, and how those communities sponsored referral plans or programs based on conditions in their own localities.

Twelve basic principles considered to be "of the utmost essentiality" are explained in some detail, with suggestions for applying them in hospitals, visiting nurse associations, health departments, and school health services. The right administrative setting, workable and well-understood referral procedures, better physician-nurse collaboration, criteria for effective selection of patients for post-hospital follow-up nursing care, and instructions geared to each patient's own home setting are among the highlighted essentials.

Also included is a sample interagency referral form.

The 64-page booklet was prepared cooperatively by the Department of Public Health Nursing and the Department of Hospital Nursing, National League for Nursing. Copies are available at $2.00 for single copies from the League's national headquarters, 10 Columbus Circle, New York 19, N. Y. There is a special reduction for quantity orders.
Glue-sniffing, increasingly popular among adolescents who want to get "high," is potentially harmful.

The inhalation of plastic cements and airplane glue produces effects ranging from mild intoxication to disorientation and coma if exposure is prolonged, Drs. Helen H. Glaser and Oliver N. Massengale of the adolescent clinic, University of Colorado Medical Center, said in the Journal of the American Medical Association.

"Glue-sniffing may be considered by some merely as an adolescent craze, soon to be replaced by some other passing fad, and hence of little significance," they said.

"But unlike other relatively harmless activities, such as telephone booth-stuffing, glue inhalation appears to carry with it a potential for significant detriment to the child's physical and emotional health.

"Certainly the practice is symptomatic of social illness in the individual habitue and appears to be closely associated with other forms of juvenile asocial behavior. That it can lead the young person to more serious and lasting forms of misbehavior such as alcoholism, drug addiction, and criminal activity is implicit in the nature of the practice.

"Although it is doubtful that true addiction to glue occurs, it is clear that children do acquire psychological dependency on the sensations induced and physiological tolerance to the vapors."

Although there is no documented evidence of serious physical harm resulting from glue-sniffing, the two physicians said, the solvents contained in glues can be harmful to organ systems such as the liver, kidneys, brain and bone marrow.
A study of children who make a habit of glue-sniffing has been started by the authors to determine the possible organic effects. Glue-sniffing, almost unheard of two years ago, has become "a serious threat in some communities," they said. In the Denver area, it is now considered to be the most serious problem among youngsters involved in law violations, they said. In the city of Denver, the number of arrests for glue-sniffing increased from 30 in 1960 to 134 in 1961, they said. The 130 youngsters involved in these arrests ranged in age from 7 through 17 and all but 6 were boys, they said. Eighty percent were of Spanish-American origin and lived in low income neighborhoods, they said. Additional offenses for which some glue-sniffers were charged included primarily burglary and larceny but also drunkenness, drinking, car-prowling, running away, and curfew violation, they said. "Many of these children were undoubtedly emotionally disturbed," they added. The young glue-sniffer usually experiences the effects of cement vapors by accident, or out of curiosity or daring, the authors said. Plastic cement and airplane glues are common components of hobby kits used extensively by children in making model planes, they said. The most common method of inhaling the fumes is to squeeze out a tube of cement into a handkerchief which is held near the nose, they explained. At first, they said, "a few whiffs" will produce a "jag," but habitual users may have to inhale as many as five tubes to produce the desired results. The immediate effect is one of mild intoxication, exhilaration and a sense of well-being, they said. Then the child begins to act "drunk" exhibiting a loss of muscular coordination and slurring his speech, they said. At the same time double vision and a buzzing in the ears are likely to occur during this phase lasting 30 to 45 minutes, they said. Drowsiness, stupor and unconsciousness may follow with the child remaining unresponsive for as long as an hour or more, they said. Subsequently, the child cannot remember his actions during this final phase, they said. As one boy described it: "I felt very light, like floating in the breeze. I saw two of everything, and everything far away looked real near. I had ringing in my ears like a firecracker going off near you, then I blacked out."
The habitual glue-user suffers from unpleasant breath and excessive salivation resulting from irritation to the membranes of the nose and mouth, the physicians said. They also experience nausea, loss of appetite and loss of weight, they said. School authorities have noted irritability and inattentiveness on the part of student glue-sniffers, who may fall asleep in the classroom or even lose consciousness, they said. Plastic cement and model airplane glue contain different combinations of solvents which evaporate easily, including chloroform and alcohol, the authors said. These solvents are used so widely in lacquers, paint thinners and enamels, they are not considered poisonous in general use, they said. Legislation to prevent the sale of potentially poisonous cements has been suggested, they pointed out, and certain manufacturers have been experimenting with the idea of giving the cement an unpleasant odor. The two physicians said they hoped public awareness of the seriousness of glue-sniffing would lead to its ultimate control.
Physicians Show Concern about Smoking and Health

More than 60,000 physicians have made it clear in a nationwide survey that U.S. medical opinion is nearly unanimous on one subject: cigarette smoking is dangerous.

Many physicians report they have changed their own smoking habits by stopping, cutting down, or switching away from cigarettes.

The survey was conducted by the medical journal Modern Medicine. A questionnaire was sent to the 192,000 physicians in active practice, and was returned by 60,202—nearly a third.

The results show that 95 per cent of the respondents declared they believe cigarette smoking is a health hazard.

As to their own habits, 80 per cent said they have smoked at some time in their lives. At present, however, 52 per cent do not smoke, and many who continue to smoke use cigars and pipes. Only 22.5 per cent are now smoking cigarettes, and 89 per cent of these consider the habit a health hazard. Significant, too, is the fact that thoracic (chest) surgeons and pathologists, specialists most likely to get frequent...
good looks at the lungs, rank at the very bottom of cigarette smokers.

Slightly more than half the respondents said they had changed their smoking habits. Of these, two-thirds changed by stopping entirely and the remainder either cut down, switched from cigarettes or, much less frequently, switched to filter cigarettes.

Only 14.5 per cent of these doctors attributed their changed habits solely to the U.S. Public Health Service report on smoking and health, which came out shortly before the survey; 43.4 per cent were influenced by earlier reports and 33.8 per cent by other factors. Many cited more than one of these reasons.

Among physicians advising all patients not to smoke, the number ranged from a low of 33.7 per cent by psychiatrists to a solid 68 per cent by pediatricians, closely followed by 66.5 per cent for thoracic surgeons.

Some trends appear to be related to age. Older doctors are less inclined to believe cigarette smoking is dangerous than younger doctors, but are more likely to advise all patients to stop smoking. A higher proportion of doctors over 60 have smoked at some time, but more also have quit and the highest proportion of nonsmokers is in this age group.

When Modern Medicine's survey on smoking is compared with previous state surveys of doctors' smoking habits, a substantial reduction of smoking, particularly cigarettes, is evident during the past 10 years.

In a survey of New Jersey physicians in 1953, 60.8 per cent were smokers. Studies of cigarette smoking among Massachusetts physicians were made in 1954 and 1959, and among Rhode Island physicians in 1963. The percentage of cigarette smokers each survey was: 1954—51.8 per cent; 1959—38.5 per cent; 1963—33.0 per cent; and the present Modern Medicine survey, 22.5 per cent.

Thousands of doctors added comments or sent letters along with their ballots which suggested ways in which the smoking problem could be further discouraged. They ranged from increasing taxes on tobacco out of proportion to its value, waivers on life insurance, which would be disadvantageous to smokers to prohibition of advertising.

On the whole, however, most physicians assumed a personal responsibility in the areas of public education and public example. As one physician summed it up:

"The majority of the medical, nursing, dental and allied professions must cooperate to show its (smoking) many dangers. It isn't only a problem of cancer, but many others as well. If doctors will not smoke in the presence of their patients, prohibit smoking in their offices, prohibit patients from smoking in hospitals, the biggest part of the problem is licked."

EDITOR'S NOTE: The survey upon which this material is based was conducted in the February 3 issue of MODERN MEDICINE. A ballot card was attached to the cover of the issue, which was received by 192,000 U.S. physicians (all those in active practice). Statistical breakdowns of replies to the basic questions are attached in chart form. Tabulations were based on the first 56,004 responses received.

Research experience would indicate that additional tabulation of the subsequent returns will not alter the percentage figures more than a fraction of one per cent.

Wendell Weed
Executive Editor
Modern Medicine
DATES AND EVENTS


April 14-16—American Industrial Health Conference, Pittsburgh, Pa.

April 14-16—Southeastern Child Care Association Convention, Asheville.

April 15-18—American Society for Public Administration, New York, N. Y.

April 21-22—Diet Therapy Institute, sponsored by the N. C. Dietetic Association, Flowers Bldg., Duke University, Durham.

April 22-24—Southern Branch, APHA, Floridan Hotel, Tampa, Fla.

April 23-24—N.C. Tuberculosis Association Convention, Raleigh.

April 23-24—N.C. Dietetic Association Spring Meeting, Hotel Sir Walter, Raleigh.

April 24—Nurses Cancer Conference, Cabarrus Memorial Hospital, Concord.

April 26-May 2—Mental Health Week.

April 27-May 10—Retarded Children’s Week.

April 28-30—State Convention for N.C.

Congress of Parents and Teachers, Raleigh.

April 30-May 1—President’s Committee on Employment of the Handicapped, Washington, D. C.

May 2-6—Medical Society of the State of N. C., Annual Meeting, Greensboro.

May 3-9—Special Week on Aging.

May 7-8—Western N. C. Public Health Association Convention, Asheville.

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Physicians Show Concern about Smoking and Health

February, 1964
United States Senator Edmund S. Muskie from Maine was the closing speaker of the final session at the 1964 National Health Forum held in Pittsburgh, Pa., in March. This helpful session had as its theme “Health Needs in Our Changing Environment.” The Forum is sponsored by the National Health Council which has in its membership some 70 National health and health-related organizations. Members of the panel shown above are from the left: Dr. Norton Nelson, New York, Chairman of the Forum Committee; Dr. Paul M. Gross, Duke University, Durham, Panel Moderator; Ruth Church Gupta, California; Edward C. Logelin, Chicago; and Senator Muskie. See article on page 2.
Implications for Action—Citizen Responsibilities

by Ruth Church Gupta
President, Federation of California Business and Professional Women's Clubs

When Europeans discovered this continent, they found a beautiful countryside. The scattered tribes of Indians lived in harmony with nature and didn't try to change it. Fishing and hunting, the primary occupations of the Indians, didn't destroy the land. In the intervening centuries, "civilization" has come to our land and with it the means for man to utilize and take advantage of all nature has to offer. Explosive development of urban areas came hand in hand with industrial expansion. Ribbons of highways and railroads slash across mountains, rivers, lakes and deserts alike. Rather frightening is the knowledge that the population of this country increases at the rate of three million or more per year. Where will all the people live? Will they tear down all our forests to build homes? Will they fill our air and waters with their wastes and destroy these precious natural resources?

Undoubtedly, it is people who create the problems. Who else, then, but "people" will solve them?

The Constitution of the United States very wisely establishes our government on a framework of balance of power among the Executive, Legislative and Judicial. The makers of the agenda for this morning’s discussion very wisely recognized the balance of power.

Berwyn F. Mattison, M.D., New York, Executive Director, American Public Health Association is seen in conversation with James H. Sterner, M.D., Medical Director, Eastman Kodak Company, and a former president of the National Health Council. These leaders participated in the 1964 National Health Forum held in Pittsburgh.
A scene during one of the General Sessions of the National Health Forum held in Pittsburgh, Pa., in March.

among the interests of government, industry and the public. Should any one of these groups fail in its responsibility, our best interests cease to be served.

We look to industry to develop, produce and distribute new products and new techniques to improve our standard of living. We look to government to make the necessary laws and regulations to curb excesses by industry and individuals, when such excesses are harmful to the general welfare. We also look to government to provide financing, when necessary, to develop projects of public interest. Some people might think it is also the duty of government to look after the interests of the public, and therefore the public as such has no separate responsibility.

How wrong that is! Our government is based on the principle that citizens will think for themselves. When citizens fail to think and to act, they fail their responsibility to the principles of freedom. As one individual it's very easy and self-satisfying to say, "What could just my opinion do? You can't fight City Hall." I am here to say not only can you fight City Hall, but you have an obligation to do so if you think you are right, and the so-called "powers that be" in City Hall are wrong, or "mis-guided", as we say.

As a matter of fact, there's nothing City Hall, or a state legislature or Congress, listens to more than the voice of the constituent. And if that voice has gathered together some like-minded "voices" and put on an organized drive—woe is City Hall! Particularly if it's a group of women. Never underestimate their power—not their determination when they have a "cause". It's popular to laugh off a clubwoman as a naive and confused Helen Hokison type—but don't be fooled. The typical clubwoman is more apt to have the solid training in parliamentary maneuvers that she learned in the PTA, and the foundation of knowing her way around all the boards and commissions which her league of women voters work taught her. And through the business and professional women or toastmistresses, she's pretty apt to be able to get up on her feet and express herself rather eloquently.

In the field of public health it might
seem that trained health officers, sanitary engineers, chemists, doctors, etc. are better able to know what's good for the public than a group of busy-body women's clubs or other civic-minded groups. But strangely enough, it takes an alert and informed public to keep the experts in line—or at times to prod them into action.

If you ask any man or woman casually if he or she thinks the air and water should be kept pure, the answer will be obvious. On the other hand, if you ask an executive in a manufacturing firm, or a civil servant, the same question, the question might be countered with, "How pure do you mean?" As you know, it is theoretically possible, if sufficient money is spent, to have pure air and water. The cost would probably bankrupt us, and as a matter of fact it would be fruitless because that degree of perfection would not be economically feasible. Someplace in-between is a workable compromise. The degree of perfection will be in direct ratio to the concern of the public—how much are

The Health Bulletin
First Published—April 1886
The official publication of the North Carolina State Board of Health, 608 Cooper Memorial Health Building, 225 North McDowell Street, Raleigh, N. C. Published monthly. Second Class Postage paid at Raleigh, N. C. Sent free upon request.

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Vol. 79 March, 1964 No. 3

Environmental Health Emphasized At National Health Forum
The 1964 National Health Forum in Pittsburgh, Pa., emphasized environmental health. One of the more outstanding exhibits portrays this emphasis.
they willing to pay? When you go out to dinner, you select a restaurant and a menu which is within your means, and reasonably satisfies your taste. If we had an unlimited credit card on which we never had to make that awesome monthly payment, we'd settle for no less than the best—California wine, eastern oysters, mid-western steak, southern pecan pie—or whatever you consider the most exquisite cuisine.

Join me for a moment thinking about the beautiful San Francisco Bay, which is separated from the Pacific Ocean by the Golden Straits. Not only is it an incomparable natural harbor and an economic asset worth millions, but an aesthetic diorama truly worthy of the master builder. The Great Valley of California is drained by the Sacramento and San Joaquin Rivers, which flow into the Bay, and eventually into the Pacific Ocean.

When the shores of the Bay were first settled by the Gold Rush Pioneers a little over 100 years ago, water pollution was no problem—the amount of water and the tidal action were far in excess of the amount necessary to dilute the industrial and sanitary sewage entering the waters of the Bay. As the population grew into the millions, and industry was attracted to our shores, we began to notice the deterioration of our waters. Cities collected wastes sporadically and dumped them into the tidal waters at will, knowing the tides would take them away. That worked all right for a small population, but it doesn't work when the population in that same small area is three to four million. It has taken the combined efforts of industry, government and an aroused public to put into effect a strong program to stop the deterioration of our waters and to upgrade the water quality so that this valuable natural resource will properly serve the various beneficial users of the waters—the fish and aquatic life, the recreational users, the industrial users, and the maintenance of the Bay as a natural wonder for us all to behold.

Such a program, of course, is very expensive—if you consider expense only in terms of the tax and industrial dollars spent to build and maintain treatment plants, without regard to the assets those dollars were converted into. Public health officials could point out the need until kingdom come, but nothing would be done unless laws are passed to insure proper protection for all, and unless someone decides to spend the money to build the plants.

The average member of the public is not aware of the dangers present in polluted waters. The average member of the public is not even aware the waters are in danger of becoming polluted until they become unsightly or the stench becomes unbearable. By then it may be too late to salvage the water and the fish life that was destroyed. The public can be made aware of the danger by the experts, but the

Peter G. Meek (right) serves as Executive Director of the National Health Council which held one of its most successful Forum meetings in Pittsburgh, Pa., during March. He is shown with Levitte G. Mendel, his associate who is well known in North Carolina and is an appreciated occasional visitor.

March, 1964
experts need the interested layman to create a climate for change.

Sometimes, though, the public gets aroused before the experts do. Are you satisfied with the explanations, for example, by the producers of detergent as to the absence of proven harm from the use of detergents? Ninety per cent of the household cleansers, we are told, are now synthetic detergents. After sluicing off the grease from our dishes or laundry, the suds disappear down the drain. And we shut our minds to where they go. When old fashioned soap goes down the drain and into sewage treatment plants, it is attacked by bacteria or chemicals and is lost.

You know, I am sure, that when detergent goes into the sewage it is only partially removed by treatment, and then goes back into the rivers and streams—only to show up again downstream. When you draw a glass of water in my mother's home, you think for a moment you've tapped a beer barrel—you should see the head of foam! She has to have a separate source of bottled water for drinking. Somehow, as a housewife and member of the public, I'm not convinced that detergents are harmless—no matter how much the manufacturers spend on advertising to convince me otherwise. When I see what a dash of detergent does to a greasy dish, I visualize my stomach and wonder if an unseen detergent is dissolving it out too!

I'm glad tests are being conducted to see if new detergents can be adequately treated in sewage treatment plants. But I'm just a little impatient and wish they had done a little more testing before they convinced the consuming public the detergents are essential to cleanliness.

Abatement of water pollution is everyone's job. But unless "everyone" puts pressure on, only bare minimum action seems to result. It's human nature to ignore the problem—we tend to think that when we pull the chain and flush it down the drain the problem will go away. It only goes downstream as a problem for our neighbors.

Even though there have been many developments in the control of water pollution, constant vigilance by the public is necessary. Sometimes it seems one department of government doesn't know or care what's going on in the next door department of government. Otherwise, how could it happen that one arm of government plans a recreational area immediately downstream from the sewage discharge point of a growing metropolitan area?

Deterioration of the air we breathe has become a national scandal. When a housewife sees the plants in her garden turn brown from something in the air, she has visual evidence of the destructive effect of bad air. We can't peek inside our lungs, but it isn't difficult to understand that our bodies too must suffer from this same air. The public has been amazingly complacent about doing something about air pollution. Our neighboring city in southern California, which San Franciscans like to ignore, was an early victim of air pollution. When the valleys and mountains of Los Angeles attracted millions to settle there and escape the severe climates of the east and middlewest, and when automobiles became the only method of transportation in that vast wasteland, the air became unbearable. There is a conspiracy between the absence of prevailing winds and something called an inversion layer, which apparently spells smog as the result. All I know, is that whenever I have to visit that city I come home with a terrible sinus condition, and it takes several days of living in the healthy climate of San Francisco to recover.

The city of Los Angeles and the state of California have taken action, how-
ever, because the public pressure was so great that action was mandatory. Strict regulations on industry prohibit the discharge of pollutants into the air. Householders are prevented from the indiscriminate burning of leaves and trash. And finally, state law now requires devices to be placed on automobiles which are designed to reduce the pollution from exhausts. Yet there is still air pollution. There is still damage to crops. There is still evidence of adverse effects on humans with a sensitivity to lung diseases. Although millions of dollars have been spent on research, there is still need for a public awareness of the problem, and effective public pressure for a solution.

While our neighbor, Los Angeles, may be said to be holding its own, communities on the threshold of serious air pollution problems should take note. They should take action now to ward off the harmful effects of air pollution by preventing it, rather than waiting to eliminate it. Industry, one of the principal contributors to air pollution, will not resist regulation of its discharges into the atmosphere. But it probably will not take unilateral action. Industry will wait until pressure is applied. That's where the public's role comes into play. You will have clean air if you act now.

One of the subjects in the category of environmental health that baffles the public the most is the increased use of chemicals in the production and distribution of food. Innocently, we purchase our food in the beautiful displays of our local grocer. Grateful that the hazards of eating which exist in some of our neighboring countries are absent, we hastily rinse the foods before eating or preparing. We are totally ignorant of the amounts of chemical that may be taken into the body from these foods. Is there a cumulative danger from the ingestion of chemicals in these small quantities over the years? Doesn't the public have a right to be protected from this chemical onslaught?

Industry tells us, when they market a new drug—"We have no evidence it is harmful." The public must demand that drugs not be marketed until they have been proved not to be harmful. There is a constant weeping about the delays to progress which occur because manufacturers are required to do so much testing. Research is being done constantly to expedite the research, and this is good, so long as the testing is thorough. But sometimes it takes a couple of generations to find out the real effects, and unless studies are done on a long range basis, the knowledge is lost.

Automobiles are instruments of death in thousands of cases each year. Automobiles are also a prime factor in the mobility of our population, our greatly increased wealth, and our broadened personal horizons. We don't urge that automobiles be banned as killers. Instead, we try to conquer the unintelligent and inhumane use of them. The same is true of the use of chemicals of all kinds. Perhaps we don't know the ultimate effect on human life, or plant and animal life, of the persistent use of pesticides, for example. DDT has been detected at great distances from places it has been used. It has been found in plant foods, in fish, fowl and human beings. Has there been a proper assessment of the levels of pesticides in human beings and in plant and animal life? Are the laws sufficiently air tight to prevent catastrophe? Rachel Carson has been accused of gross exaggeration, but no one denies that her work, "Silent Spring", was an effective jolt to the public and therefore to government and industry, as well.

Should products requiring the skill of a chemist to use, be available on the grocery shelf? Pharmaceutical prod-
ucts, far less toxic than the average pesticide, are obtainable only by prescription. The public had to insist on the safeguards we take for granted in our food and drug laws. The public must likewise insist on safeguards in the sale and use of dangerous pesticides.

We are told that 10,000 new chemical compounds are developed each year. No matter how much research is done, no matter how much inspection is done, and no matter how much the public gets concerned, the problems resulting from the unwise use of chemicals will increase, not decrease. It merely means the burden is a bit heavier each year on industry, on government, but most particularly on the public. Public awareness that there is a problem, education about the dangers of unwise use of chemicals, and support of government officials who want to devote the resources of government to the protection of the public—these are all essential.

I find that along the women's club circuit there has been more fear and less understanding generated over radioactivity than any other of the environmental health problems. No doubt the ladies of a couple generations ago were equally squeamish about the dangers of electricity, particularly when brought right into the house. You can't see it or smell it, but you know it spells danger.

The proven connection between exposure to radiation and the upsetting of the genetic code, of course, alarmed us, and understandably so. I well recall the caution about wearing a watch containing radium on the dial. X-Rays are accepted as beneficial, and yet their indiscriminate use can be deadly. We are far too complacent about X-Rays because we have been lulled into a sense of security about their always being properly handled. A couple of years ago I worked with a group of X-Ray technicians who were trying to get our state legislature to impose more stringent controls on the activities of persons using X-Ray equipment. They had evidence that untrained persons were being employed to take X-Rays of patients, without proper supervision. Properly supervised, any grown person can be taught to perform the duties required. If supervision is improper, and if training is incomplete, there can be great danger to an innocent patient, as you well know. This was a case of a very small segment of the public being aroused. The legislature was not convinced it was as serious as the technicians said it was, and the law was not changed at that time. However, an impact was made, and efforts have been made in California to minimize any hazards from faulty X-Ray equipment, and, hopefully, the medical profession has taken a new look at the supervision and training of their medical assistants handling X-Rays. The public must become more aware of the potential hazards in X-Rays, so that it can protect itself. Unnecessarily repetitious exposures to X-Ray radiation, for example, may result when a person is involved in litigation over a personal injury. As an attorney in private practice of law, I must say that X-Ray pictures look fine before a jury when broken bones or slipped discs are involved. But sometimes enough is too much. The public must know the risks so they will not be lulled into disaster. Sometimes a little learning is a dangerous thing, too. I heard about one woman in her sixties who refused to have X-Rays taken of her pelvic region because she was told it might be harmful to her grandchildren!

More dramatic is the problem of exposure to radioactive fallout from the testing of nuclear devices. I firmly believe that were it not for the strong public pressure that developed because of the fear of the effects of fallout, we
would not as a nation have adopted a policy of ceasing testing, nor would we have entered into a treaty with other nations agreeing not to test nuclear devices.

Although great strides have obviously been taken to eliminate the dangers of polluted water, air, food, etc., the problems will always be with us. You might think the simple solution is to have more planning by city, state and Federal officials. It is easy to think that if all planning were done for us, without bothering to ask what we want, it would be all turned over to a group of experts in huge "think factories" in our nation's capitol, error would be eliminated. But the price we'd pay in the loss of freedom would be too great, even if this were an efficient way to handle our problems. You can't beat the advantages of local responsibility for carrying out programs. The farther away, physically, the governmental body is from the problem being dealt with, the more reliance is put on the professionals. With all due respect to their ability to solve specific problems, there's a missing element—concern for the private individual, his rights, his feelings, his preferences. When decisions are made locally, and true public hearings are held at the local seat of government, the public has the opportunity to appear and listen and speak up, and be, in fact, effective in influencing the decision.

Take the example of the planning of freeways. It seems to make a lot of sense, on paper at least, to say that safety on the highways can best be obtained by following blindly the opinions of engineers. The engineers can plan most efficiently when they plan an entire state or Federal road system for the benefit of the motoring public. Sure—the network of highways the experts plan will get you from border to border without a stop light or a left turn. Very safe. However, what if these highways happen to cut through the beautiful, ancient, irreplacable redwoods, or across incomparable Lake Tahoe, or annihilate a historic relic of our pioneer forefathers. Who is going to speak up on behalf of the public and of future generations—the same motoring public for whom the safety is designed. The motoring public wants safety, but also wants to preserve the values of our scenic beauty—our rapidly disappearing natural scenic wonders. Why should two thousand year old redwoods be replaced by modern Chinese walls or pyramids and tombs of concrete ribbons designed solely to speed traffic? In weighing relative values, it doesn't mean safety is to be scrapped—but it might be necessary to spend a few dollars more to skirt around some of these irreplacable natural wonders.

To completely scramble a metaphor, the public must be a watchdog, sometimes with a foot on the accelerator and sometimes on the brake.

Every segment of society has a spokesman for its special interest. Society as a whole, including future generations, has many watchdogs, and many spokesmen. Be grateful for the "little old ladies" who attend the meetings of town councils and the boards of supervisors, who have speakers at their afternoon meetings, who hold conventions and write voluminous resolutions. These same folk are helping to keep the public informed about the problems of environmental health. Parents and teachers are bringing these subjects to the attention of children as never before.

Public servants, not only employees of government, but employees of the various non-profit organizations dedicated to the welfare of the public, have a great obligation by reason of their position. They have the responsibility to disclose and report facts to the public, not
merely to present their personal viewpoint.

The important thing to remember is that in our country, the responsibility for government is vested in a real sense in the individual. That individual must care about his government as he cares about himself. What he cannot do himself, he must delegate to persons he elects to office. He must devote great care and consideration to the selection of his representatives at all levels of government, and he must keep in constant touch with them to communicate his wishes during their term of office. And he must vigorously check upon his delegation of power. So long as the public upholds its responsibility, both government and industry will do right by the public.

Substantial Population Gains Made

Both the United States and Canada experienced a substantial growth in population during 1963, bringing the total for the two countries to nearly 210,000,000 by the end of the year. In the United States, the population increase was 2,670,000 and raised the total, including the Armed Forces overseas, to 190,820,000. This increment of 1.4 percent compared with an average annual increase of 1.7 percent in the ten years since January 1954. Canada added over 330,000 inhabitants last year, bringing its population to 19,100,000. However, the increase of 1.8 percent in 1963 was well below the average annual increment of 2.4 percent recorded in the past decade.

The dominant factor in the recent population growth of the United States has been the unprecedented number of births.

Opportunities for Special Education Teachers

Children who have unusual educational needs such as the mentally retarded or the handicapped, must have teachers qualified to deal with their specific problems.

An extensive program at the University of North Carolina School of Education is being offered this summer for graduate students and teachers with "A" certificates interested in Special Education.

"It is the largest summer program in the history of the School," said Dr. Hardwick Harshman, director of Special Education.

"This summer, for the first time, we are offering a special program in speech therapy. Between three and four percent of our school children are in need of professional speech therapy. With our new program, we hope to help meet the need for trained personnel."

Outstanding teachers for the summer session include Dr. Harshman, Dr. Wayne L. Sengstock, assistant professor of education; Dr. James J. Gallagher, associate director and professor of education, Institute for Research on Exceptional Children, University of Illinois; Dr. Murray M. Halford, director, Speech and Hearing Center, Temple University; Dr. Lucia C. Morgan, associate professor of English; and Grady Thomas, director, Speech and Hearing Clinic at N. C. Memorial Hospital.
A Ford Foundation grant of $37,950 has been awarded the American Association of Homes for the Aging, it was announced recently by the Rev. Canon Herbert Lazenby, Association President. This grant, the third of three annual awards, brings Ford Foundation support of the Association to a total of $140,000 since it was founded in 1961.

The Association, sponsored by the National Council on the Aging, was established with the assistance of the Ford Foundation to advance the welfare and progress of the nation’s voluntary non-profit and governmental homes for the aging.

According to Lester Davis, Executive Director, Ford Foundation support enabled the Association to double its membership last year; as a result, it now has approximately 550 member homes serving well over 65,000 residents.

The Association has provided the leadership for the development of a sound and equitable plan for accreditation of institutional care, a goal toward which 14 other national professional organizations are working.

The Association was also able to inaugurate a program of informational exchange for homes, including national, regional, and state conferences, as well as a series of periodical publications. In 1963, it published the first Directory of Non-Profit Homes for the Aged to be produced in more than 20 years.

The grants from the Ford Foundation, the only source of support other than membership dues, have also made it possible for the Association to represent non-profit homes for the aging and interpret the point of view of these institutions before Congress and to governmental agencies on legislation and regulations which bear on the recognition, status, and financial aid of homes.

The Association, in addition, has initiated plans to meet such other urgent needs of homes as group purchase of insurance, technical consultation services, local and regional institutes and workshops, an expanded professional publications program, personnel recruitment and development, and central purchasing services.

National organizations working with the American Association of Homes for the Aging include the National Association of Methodist Homes and Hospitals, the National Association of Jewish Homes for the Aged, The Division of Institutional Ministries of the American Baptist Home Mission Societies, the Board of Social Missions of the United Lutheran Church in America, The United Church Board for Homeland Ministries, the Catholic Hospital Association, the National Conference of Catholic Charities, the National Presbyterian Home and Welfare Association, and regional offices of national voluntary and public agencies.
To: All Members, North Carolina Public Health Association  
From: Martin P. Hines, President  
Subject: NCPHA Awards - Request for Nominations

The highlight of our annual meeting is the Awards Banquet where individuals and organizations are recognized who have made outstanding contributions to public health in our state. I know that we have many members who are worthy of these honors and I hope that you will help us by submitting their names (with supporting statements if possible) to Dr. W. F. Mayes, Dean, School of Public Health, University of North Carolina, Chapel Hill, North Carolina. Dr. Mayes and the Awards Committee will meet in late April for the consideration of nominees so please send in your nominations now!

The list of awards given is as follows:

REYNOLDS AWARD - awarded to an individual for outstanding contributions to public health in North Carolina during the past year for meritorious service above and beyond the call of duty.

MERIT AWARD - given to a local health department or group for outstanding contributions or activities during the past year.

WATSON S. RANKIN AWARD - awarded to an individual in recognition of outstanding contributions to public health in North Carolina over a period of several years.

DISTINGUISHED SERVICE AWARD - awarded to an individual in other organizations or professions who have made significant contributions to public health in North Carolina.

CITATION OF MERIT - awarded to individuals who have made a significant achievement during the past year.

SERVICE PINS - service pins are awarded for the completion of twenty-five years of full-time work in public health or related field in North Carolina within the calendar year prior to the year of the meeting.

I should also like to take this opportunity to urge you to make plans now to attend the NCPHA Convention in Asheville, September 23-25. It is going to be our best!

MPH/Jko
As individuals, most of us see only small personalized samples of the public health programs going on throughout the State. We get a needed copy of a birth certificate from the Vital Statistics Section of the State Board of Health. We see the list of restaurants rated as to their sanitary practices by the sanitarian of the local health department. Well baby clinics at the health department may involve someone we know. We may know of the sanitation standards for migrant labor camps. The crippled children's program of the State Board of Health may give new hope and straightened limbs or clearer speech to some handicapped child we know. You may learn that counsel of the sanitary engineers may help to clear up an air pollution problem in your city caused by smoke or industrial fumes.

These and other activities give us as individuals only glimpses of the record of public health which is in helpful round-the-clock operation over the State. Much more is being done than most individuals know.

The record of public health over the years in North Carolina is outstanding. Nearly 50,000 people each year are added to North Carolina's population and quite properly expect adequate health services to be made available to them. Appreciation for these services can be best understood when it is known that in addition to funds provided through the State Board of Health, the local communities contribute 80% of the financial support for local public health programs. These funds are provided by County Commissioners who reflect the approval given these programs by people in the communities where the services are rendered. State and Federal appropriations constitute the remaining support.

Over 1,700 people are at work through local health departments and the State Board of Health to assure the continuing good health of North Carolinians. A total of 1,325 are at work in local health departments as public health physicians, public health nurses, health educators, sanitarians and other staff personnel.

Over 400 people serve on the staff of the State Board of Health to give consultation and assistance in a wide variety of health programs throughout the State. On the State staff are 14 medical doctors, 11 public health nursing consultants, 25 public health dentists, 22 engineers, 19 sanitarians, 56 professional and technical laboratory personnel, 1 veterinarian, 4 nutritionists, 10 x-ray technicians and personnel in a number of other specialties. In addition, there is a large number of professional personnel assigned to North Carolina by the United States Public Health Service for limited periods of service, and who work in programs for the control of communicable disease, venereal disease, water pollution and in other health areas.

A total of $7,855,000 is budgeted for the current fiscal year for programs administered by the State Board of Health. Among these programs are programs...
for the control of cancer, heart disease, chronic disease, tuberculosis, venereal disease and other diseases. Other programs included are accident prevention, dental health, nutrition, crippled children, maternal and child health, food and lodging sanitation, and local health administration.

The crippled children program brought health services to 17,765 children in 1963, including children in every county in the State. This program, with a budget for the current year of over a million and a quarter dollars, provided hospitalization and the professional services of surgeons, physicians, psychiatrists, nurses and many other health career specialists. Diseased or abnormal conditions dealt with in the crippled children program included congenital defects, disease of bone or organ of movement, rheumatic fever, club foot, cerebral palsy, cleft lip or palate, burns, hearing and speech defects, and other disabilities.

The maternal and child health program of the State Board of Health has contributed to a dramatic reduction in infant and maternal mortality over the past dozen years. In 1940, infant mortality was 57.6 deaths per 1,000 live births. In 1962, this had been reduced to 30.3 infant deaths per 1,000. Maternal deaths in 1940 were 51.2 deaths per 10,000 live births; while in 1962 this had been reduced to 4.7 maternal deaths per 10,000 live births.

The budget of the State Board of Health will provide $1,800,000 during the current fiscal year to aid in the services provided through local health departments.

Supporting North Carolina’s important and valuable travel industry are the services of sanitarians and engineers of the State Board of Health and local health departments who maintain food and lodging sanitation standards across the State.

These then are facts to give added perspective to the individual contacts the average citizen has with the diverse program of public health in North Carolina.

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THE HEALTH BULLETIN
March, 1964
We Are Paying the Price for Increasing the Life Span

Wilbur J. Cohen, assistant secretary of the Department of Health, Education and Welfare, has predicted that "this decade will not close without every aged person in this country having complete access to medical care without having to bend his knees to welfare agencies to get the care he needs."

In considering some of the problems facing today's older person, Mr. Cohen pointed out that hospital costs have risen 8 1/2 percent in the last year alone and have doubled within the last ten years. If costs continue to rise, he said, in 1972 hospital costs would average $70 per day.

"I have become convinced that improvement of programs for our senior citizens is a major challenge," he said. "Up to now, our senior citizens have not been getting their fair share of the kinds of opportunities they need.

"Today we have almost a 10th of our population in the upper-age brackets. Every day of every year, there are a thousand more Americans in the 65-and-over age group.

"Too often this growing number of senior citizens—our parents today, ourselves and our children tomorrow—lacks sufficient funds. Too often they lack lives of meaning and value.

"Too often they suffer ill health through lack of proper care. Half or three quarters of the people with chronic ills can be helped toward greater physical independence.

"Many of our elderly people are inadequately housed. Too often they suffer loneliness and boredom because they do not have meaningful leisure-time activities.

"As a nation we are paying the price for one simple fact, and this is that fact:

During much of this century and all of past centuries, our goal was limited to enabling people to become senior citizens—to conquer the diseases and deprivations which cut life short. We were not farsighted enough to see that the attainment of this goal would bring new needs and new problems. Our task now is to make a realistic assessment of where we are and build upon this.

"Already much has been done to reinforce, with Federal action and support, the work being done by private and public agencies.

"Take income. In 1961 and again in 1962, amendments were made to the Social Security Act to improve the income of our older people.

"Or take health. Federal appropriations for construction of nursing homes and other health and medical facilities are at an all-time high. In 1962, more than $30 million were invested by the Federal Government in medical research related to older people. The amount was almost doubled in this past year alone. An Institute of Child Health and Human Development has now been authorized, and the study of the aging process will be an important part of its work.

"The Community Health Services and Facilities Act of 1961 is another landmark. As far as the aged are concerned, it is one of the most important health measures ever passed by the United States Congress. It opens the way for a whole new approach to the care of the chronic conditions that now afflict 80 percent of our older population."

March, 1964 THE HEALTH BULLETIN
DATES AND EVENTS
April 26-May 2—Mental Health Week.
April 27-May 10—Retarded Children’s Week.
April 28-30—State Convention for N. C. Congress of Parents and Teachers, Raleigh.
April 30-May 1—President’s Committee on Employment of the Handicapped, Washington, D. C.
May 2-6—Medical Society of the State of North Carolina, Annual Meeting, Greensboro.
May 3-9—Special Week on Aging.
May 7-8—Western N. C. Public Health Association Convention, Battery Park Hotel, Asheville.
May 7-9—N. C. School Food Service Association Convention, Charlotte.
May 7-24—16th World Health Assembly, Geneva.
May 11-14—National Geriatrics Society, Toronto.
May 13-20—Seminar on the Role of the Hospital in the Public Health Programmes, Manila.

May 18-20—American National Red Cross, New York.
May 21-24—N. C. Vending Association Convention, Asheville.
May 24-27—American Society for Personnel Administration, St. Louis.
May 24-27—National Tuberculosis Association, Los Angeles, Calif.

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What Science Knows About Aging

Why do we grow old, anyway?

See Page 2
What Science Knows About Aging

by Howard Curtis

Why do we grow old, anyway? In experiments with animals, scientists are discovering provocative clues to the riddle of longevity. Here, they are described by the chairman of the biology department, Brookhaven National Laboratory.

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EVERYONE has known from earliest childhood that he will eventually grow old and die, and although none of us enjoys the thought, we all have learned to accept it as inevitable. Yet, we are all aware of the fact that some persons age much faster than others: One man may be relatively "young" at age 70 and another quite "old" at 60. What are the factors responsible for these differences? And what are the chances that, in the future, ways may be found to allow almost everyone to live a happy and productive life for 100 years or more? And what makes us grow old anyway? These and similar questions are being attacked by gerontologists today.

It may seem trite to start a discussion of the subject by defining aging, but the truth is that today even gerontologists, scientists who specialize in the study of old age, cannot agree on a definition of aging. Certainly aging is not merely something which leads to death, for acceptance of this idea would lead to such absurd conclusions as: Automobiles are causing aging in Americans because they are decreasing life expectancy. A great many diseases fall into this same category, and even cancer and heart disease, usually considered degenerative diseases, may be considered as accidents. The many symptoms of aging such as graying hair cannot be taken as causes of aging.

Having eliminated most things usually thought to be associated with aging, what is left? Perhaps the best way to express it is to say that aging is a process of deterioration which leads to an increased susceptibility to disease, or a decreased ability to withstand stress. This is not very satisfactory, but it is the best that can be offered now.

Theories of aging. All plants and animals are composed of a great many living cells; each cell is an almost self-sufficient entity in itself. If the whole animal ages, then it is natural to suppose that all of the cells of that animal also age. Yet many experiments have shown that this is not necessarily so.
The late Dr. Alexis Carrel, at the Rockefeller Institute for Medical Research, kept a heart taken from a chicken embryo beating and growing in a culture dish for more than 25 years. The heart in the natural environment of the chicken grows old, but in the very unnatural environment of the laboratory the heart cells seem to live indefinitely. This and other experiments have led some scientists to the conclusion that individual cells are not responsible for aging. However, it is known that a paramecium, a single-celled organism, will "age" in spite of cell division until it is rejuvenated with a different type of cell division.

Thus there have been two schools of thought: One postulates that the individual cells of an animal wear out, and the other that the whole animal somehow piles up deleterious products in its tissues to such an extent that the cells become unable to perform their normal functions efficiently. We now believe that both ideas are correct in their ways, but that both must be modified and combined to conform to the very considerable amount of additional experimental evidence accumulated in recent years.

Experimental breakthroughs. In this, as in many fields of science, it took the application of a new technique to achieve a breakthrough. In this case it was a discovery made in connection with the research on the atomic bomb during the war. Researchers noticed that mice that were exposed to some of the radiation emanating from an atomic reactor might apparently be unaffected by the exposure, but much later they seemed to grow old and die sooner than normal mice. Subsequent work showed that they did not merely die of some specific disease entity, but seemed to grow old prematurely. This gave a patent goal with which to test the various theories of aging, and our group set about this several years ago, using mice as the test animals.

One of the oldest ideas about aging is that stress of any kind, including diseases, leaves its mark on an individual and reduces his life expectancy. Biologist Raymond Pearl’s "Rate of Living" theory of aging is based on this idea, and accordingly radiations would be just another stress. After an extensive series of experiments using a variety of stresses, we concluded the idea is untenable. Stress, per se, does not cause aging, so some other aspect of the radiations must have been causing the animals to grow old.

A possible clue lay in a discovery made in 1927 by Dr. H. J. Muller, who found that X rays cause mutations in the germ cells of fruit flies. These are permanent changes in the nucleus of these cells, so, as the nucleus replicates itself during cell division, the change is perpetuated.

In an extensive series of experiments we examined the chromosomes of the somatic (body) cells of mice with a micro-
scope under a wide variety of conditions. The chromosomes, residing in the cell nucleus, contain the genes which control the entire function of the cell. It was found that as an animal ages normally the number of cells carrying abnormal chromosomes (mutations) increases steadily. Also, all the radiation procedures which can be used to accelerate aging also increase the mutations, and to roughly the same extent.

Further, some strains of mice are quite short-lived, and these develop mutations quite rapidly; other strains are long-lived and develop mutations slowly. All these experiments have led us to the conclusion that one of the most important reasons why people age is that the cells of the body acquire mutations.

But it was then found that this was true for only certain of the body cells, liver or muscle cells, for example. In others, such as the bone marrow cells, radiation will cause many mutations, but if one examines the mice some months later the mutations have disappeared. And if one looks for them in these organs in old mice one does not find them. The difference lies in the fact that the bone marrow cells are continuously undergoing cell division, while the liver cells practically never do (although they retain the ability to do so). In a group of cells undergoing division, the cells carrying mutations are weaker and lose out to the normal cells in the struggle for survival.

Thus the organs having non-dividing cells (e.g. liver) develop mutations which they are powerless to throw off, and the organ becomes weaker as the mutations accumulate. But organs having continually dividing cells (e.g. bone marrow) can rid themselves of the faulty cells and continue to function as long as they are well supported.

These interpretations are predicated on the idea, which has been substantiated many times, that mutations are deleterious to the welfare of the cell. The exceptions to this rule are very rare, and need not concern us here. We can now see why liver function, for example, declines with advancing years, but the bone marrow (blood-forming organs) functions well into extreme old age.
It should not be inferred that radiations cause the mutations responsible for natural aging. The natural background radiations of our environment, caused by cosmic rays, etc., are very much too weak for that. The cause of these mutations is not yet known. Radiations were used here only as a tool to cause a change in the numbers of mutations to assess the effect on the aging process.

Aging and Defective Cells

Interpretations. When we critically examine an older person we can see the consequences of these defective cells. Blood vessels which carry nutrient to all parts of the body have cells in the vessel walls which go to pieces and cannot repair themselves. Thus a small volume of tissue is deficient in nutrients and performs poorly. This is true for all parts of the body. There are special cells in the hair follicles responsible for the color of the hair, and as they go bad the hair becomes colorless. Muscle cells tend to go bad, and coupled with the poor blood vessels, cause muscular weakness. The cells of the skin die, leaving behind a residue called collagen, which gradually shrinks and causes the wrinkled skin of old age.

But in the midst of this rather gloomy picture there is a bright spot. The brain cells seem exceptionally stable, and whereas we lose a few as we grow older, there seems to be such an excess that thought processes can continue with very little decrement until late in life. It is only necessary to keep the mind active to keep it working well.

All of this casts some interesting light on cancer which is usually considered to be a degenerative disease of old age. Organs with dividing cells may develop cancer and the others are not subject to it. Thus bone marrow is a very common site for cancer (leukemia, etc.), whereas cancer involving brain cells is unknown (cancer of the brain involves supporting cells). It is very attractive to speculate, and this idea is very old, that cancer is caused by a mutation. In the present context this would be a very rare mutation which has a selective advantage for survival in competition with its normal neighbors, and thus would crowd out the normal cells. The work discussed here would support, but by no means prove, this idea. According to this unified concept, mutations cause cancer in some organs and aging in the others.

One of the interesting aspects of this work is the finding that the mutation rates in normal cells of the body are very high. Many lines of evidence indicate that these rates are many orders of magnitude higher than those found, for example, in the offspring of mice. It is not now possible to say why germ cells have very stable chromosomes and somatic cells very unstable ones. Or perhaps they are equally unstable but the very complex process involved in sexual reproduction somehow acts
as a screen to allow only perfect cells to complete the reproductive process.

An interesting correlation comes from the well-known observation that, in both mice and men, the offspring of old mothers have more congenital defects (mutations) than the offspring of young mothers. If the age of the father has an effect in this regard, it is very small. The germ cells of the mammalian ovary form when the individual is young and wait, sometimes many years, before fertilization. On the other hand, the germ cells of the male are formed continually by cell division. Thus the female germ cells do not have a chance to throw off mutations, but male ones do. Whereas this concept is certainly not proved, it fits well with the present theory.

Death is certainly a tragedy for the individual, but a moment's reflection will convince one that it is a biological necessity. The fact that the mutation rate of the somatic cells is very much higher than that of the germ cells appears to be nature's method of ensuring the death of the individual and the survival of the species.

Possibilities for the future. It is quite true that medical science in this century has literally added decades to the life expectancy of the average American. But this has been accomplished by decreasing the incidence and severity of disease. There is no evidence whatever that the maximum life span has been changed. Clearly, one must proceed along different lines if the aging process of man is to be changed.

Whereas there has been little definite accomplished along these lines yet for man, there is ample cause for optimism. First, experiments performed nearly 25 years ago by Dr. C. M. McCay of Cornell University showed that when the diet of rats is severely restricted in calories, the animals live as much as 50 percent longer. More recent experiments have confirmed this and shown that death from all causes is markedly delayed even by moderate caloric restriction. Further, the animals are much more healthy and lively than those eating all they want. It is now becoming well established that frankly obese persons have a decreased life expectancy, but cardiovascular accidents are usually thought to be the cause of this. We certainly need to know much more about the subject of diet and longevity.

The other possibility is that of preventing the development of mutations. At first thought, this might appear hopeless, but on reflection there is plenty of room for optimism. It is a question of stabilizing the molecular structure of the chromosomes, and in plants we can do this reasonably well. We know that the structure of the chromosomes of some mouse cells is quite stable and of others quite unstable. Armed with this information, and more which will doubtless be forthcoming soon, it does not seem too optimistic to expect that ways will be found before long for retarding the aging process.

6 THE HEALTH BULLETIN

April, 1964
The President of the Association reviews the public health scene, comments on it in passing, and offers suggestions for future action. Association members and other readers will no doubt be interested in the activities of the Association as presented here.

**Dr. Norton is State Health Director, North Carolina State Board of Health, Raleigh, N. C., and was serving as President of the American Public Health Association when he made this address.**

*This paper was presented before the Second General Session of the American Public Health Association at the Ninety-First Annual Meeting in Kansas City, Mo., November 12, 1963. (Published in the March, 1964 American Journal of Public Health and the Nation’s Health.)*

Our Continuing
Top Health Need—FRONTIERSMEN

by J. W. R. Norton

**WHEN** elected as your President a year ago, I began the enjoyable and stimulating task of reading the addresses of all the Presidents, from Stephen Smith to Glen King. It has been a year of work and fun as your president and I shall always be grateful to those whose devoted service and sacrifice made it possible.

For me as the latest speaker in a panel of ninety-one, it has been exciting, though frustrating, to find so much of public health so well covered in these ninety years.

Stephen Smith, in that first presidential address on May 1, 1873 in Cincinnati, quoted those familiar association objectives as “the advancement of sanitary science, and the promotion of organizations and measures for the practical application of public hygiene.”

His own appraisal of the health and social conditions faced by those hardy public health Frontiersmen of nearly a century ago is an example of the current discernment shown in each presidential address through these nine decades.
Hear Dr. Smith's appraisal:
"On every hand we witness the most prodigal waste of human life. Inheriting as a birthright health and longevity, we find that man lives but a moiety of his days. Of the children born, what vast percentages never see the anniversary of their birth! What other large percentage dies under five years! How few, comparatively, reach the age of ten! At twenty the generation has dwindled to an insignificant minority, and at thirty-three to forty-five it disappears altogether. And even during his short and uncertain life, what physical evils cling like an inheritance to man's body, soul, and estate. His form is distorted with every conceivable deformity, and disease in protean shape preys upon every structure. His mind is often dwarfed to that of the meanest animal, and his moral perceptions may be so dulled and perverted that he has no knowledge of right and wrong. He voluntarily destroys every vestige of manhood by yielding to the most degrading passions, and by poisonous compounds of his own invention reduces himself to the condition of a helpless or an infuriated brute. He wrests from his fellow by fraud and chicanery the just allotments of property, and in turn has his own estate torn rudely from his grasp by the rapacity of a neighbor."

**First President Showed Vision**

Yet Stephen Smith in that first presidential address showed the prophetic vision and confidence which characterize the true pioneer everywhere:

"The outlook, from our present standpoint, of the future of sanitary reform in this country is exceedingly favorable. An agitation has evidently begun which is daily taking on larger and yet larger dimensions. State and municipal boards of health are being rapidly organized in all parts of the country; the medical profession is beginning to manifest a deep interest in sanitary science as a department of study, and medical societies in all the states are earnestly discussing the various questions relating to its practical application."

And Wilson Smillie invites attention to Austin Flint's emphasis in 1872 on "Conservative Medicine"—by which he meant rehabilitation as the responsibility of the private physician and the health officer.

The experience of reading these discerning and prophetic APHA Presidential Addresses does give me a chance to start off with a constructive suggestion: Let's see that these addresses are made available in a volume or volumes to become more readily accessible to all our members.

Ira Hiscock, in 1956, provided a suggestion for my title when he said, "In a 'small' world where disease and poverty recognize no frontiers, health is basic for peace and prosperity."
In this address, "Our Continuing Top Health Need—Frontiersmen," I propose to give some of the Association highlights for this year and also to suggest a few of the many health areas in which pioneering is needed at this time, and these two parts will be handled in reverse order.

In a visit to Brazil and Peru last April and May, I was impressed with the urgent need today for Frontiersmen to move into the interior areas to develop and utilize the vast untapped material resources of those two great countries.

In many parts of the world today there are conditions which parallel those of nearly a hundred years ago to which Stephen Smith and others gave eloquent expression. We must assume our proper share of responsibility to see that basic public health safeguards and preventive programs are shared in these places of greatest need. We have a debt to discharge in this, for our hard-earned health progress has been helped by many vital contributions from other countries. Scientists and medical and health leaders in other countries join ours in continuing to discover new disability preventives, new ways to better health and we are reaping the benefits.

Even when we count the "unsung heroes" it is amazing how few have participated in pushing back our health frontiers. Our outlook and interest must increasingly include all human beings and there must be free interchange of scientific wisdom and qualified personnel.

Lack of Uniformity of Progress

Health progress has decidedly lacked uniformity. Malnutrition, poverty, disease, illiteracy, and other disabling conditions involve at least two-thirds of humanity. We must put less emphasis on boasting of progress and infinitely more on the pioneering of Frontiersmen while less than a third of the peoples of the world enjoy today's optimum effectiveness. While we are yet unable to eradicate diseases and other disabling conditions we cannot relax our eternal vigilance anywhere.

Our needs and shortages everywhere, even in our own country, continue to involve the most elementary violations of health necessities, such as, pollution of soil, water, air and food. Pesticides, detergents, manufacturing processes, radiation, and atomic energy have vast potential for good and we should be able to assure health safeguards in their use. These shortages continually add new hazards to our working and traveling environment. Even in our more progressive areas there continues a disheartening lag in the general application of newly acquired vital health information. We look confidently to the behavioral scientists to speed up and strengthen our communications and motivations.

Our Association and the Public Health Service as well are overlooking a strong supportive group by not utilizing more
actively the Public Information Specialists in our 50 states. An annual general conference of this personnel perhaps during the time of our Association meeting or of the State and Territorial Health Officers would help public health programs to become better understood and to be given more adequate public support.

Frontiersmen in public health are needed for we have come only a little way relatively in the long struggle to postpone death, reduce non-effectiveness and assure the utmost in efficiency and longevity for each individual.

Among the more exciting frontiers today are oceanography, outer space and also the sciences more closely related to the health and happiness of mankind. And in promoting these sciences we find the primary career purpose for those of us in the American Public Health Association.

The New and the Old

While moving very properly into new and promising areas of health service we must not neglect the old tested and proved essentials. A less narrow interpretation of Emerson's six programs and Hiscock's nine goals of 1956 is needed. Primary priority should be given to providing adequate local public health services for the fifty million people in our nation still without them. Certainly our health department personnel must include and more actively promote mental and emotional health, better nutrition, fluoridation, community planning (including recreation and health and medical care), better training and education, family planning, occupation (including migrant) and traveling health, better housing, progressive patient care including rehabilitation, training and research, to name only a few.

We in public health must not feel alone in our attack on conditions which breed non-effectiveness.

Our voluntary health agencies provide a most useful service not duplicated elsewhere in the world. They have supported research, stimulated interest and service in neglected areas, and recruited voluntary and professional health workers. Perhaps a way can be found to decrease their fragmentation and increase coordination among public and voluntary agencies and save some funds expended in overhead or duplicated services.

One observes, in reading our Association's Presidential Addresses, that occasionally some suggestions which were "made ahead of their time" or were otherwise shunted aside may later have become timely and appealing. We are still hoping for the day when mankind becomes willing to spend as much to save life as to destroy it. The pesticide menace would disappear if we could eradicate parasitism—one of the worst forms of which is human. Continuing population explosions emphasize the obvious necessity for effective family planning to assure each child a reasonable share in the opportunities for healthy
development. When our number one health problem—namely traffic killing and crippling—becomes as widely intolerable as the deaths and disability from filth diseases became fifty years ago, the traffic barbarity will begin to disappear even more speedily than the filth diseases were conquered.

**Advances Illustrated in North Carolina**

There has been commendable public health pioneering in each of the fifty states. We honor the Frontiersmen who have led out in these achievements. You will be reminded of your own state's public health progress as I list, by your indulgence, a few such advances in my native North Carolina.

We developed our first County Health Department (Guilford) in 1911, the first strictly rural in the United States (Robeson) in 1912 and since July 1949 have had full coverage for our one hundred counties.

As an integral part of our maternal and child health program for saving mothers and babies we have had a planned parenthood program since March 1937.

Harnett County began the first County Health Department diabetes control program in June 1946, and in October 1958 that County Medical Society developed a Medical Review Board to screen applicants and recipients for Welfare funds based on disability in the two categories, Aid to the Permanently and Totally Disabled and Aid to Dependent Children.

In North Carolina we are well along with our radiation protection program and are formally starting, by 1963 Legislative action, the air pollution study and control work which has been in unofficial operation since 1957.

Our Research Triangle Park of 5,000 acres, begun by former Governor, now Secretary of Commerce, Luther Hodges, is about equi-distant (12 miles) from three great universities—Duke University and the University of North Carolina of Raleigh and of Chapel Hill.

The North Carolina Fund (14 million dollars), conceived by Governor Terry Sanford, was established July 1963 by the Ford, Reynolds and Babcock Foundations as matching funds to break the cycle of poverty, school dropouts, disability and frustration.

Our University School of Public Health has been in the forefront of health progress in our State and its new and adequate building was dedicated April 1963 under the deanship of Dr. Edward G. McGavran.

Health Careers for North Carolina, a three-year $300,000 project, was launched early this year to work toward making available the many hundreds of additional personnel needed by health professions in the State.

While it is natural to invite attention to such progress in each of our states, it is sobering to consider some trends in public
health which seem to violate the very spirit and example of the Frontiersmen—trends that sap the strength which acceptance of personal responsibility develops in individuals and organizations.

Failure to adapt political representation in the states to shifts in population has caused municipalities to seek direct dealing with Washington. Recognition of this neglect has sensitized municipalities to develop a feeling of neglect in the health field even though our rural people in most states are still provided the least and poorest health services. The neglect of local and state responsibilities, and the usurping of main tax sources by federal, and to some extent state governments, has led to over-centralization. Municipal leaders should see that in by-passing the states, their action can lead to inordinate confusion and complexity and eventually to further federal domination. Health is much too personal to be administered from Washington. Its administration through sound local health department leadership is both democratic and effective.

I cannot agree with those who are actively attempting to discredit local health departments and consider them obsolete, even though there are many shortcomings to overcome. Half the states have not given local health organization an adequate trial and have concentrated their major efforts on state administration and on meeting the pressing needs of their big cities. Their rural people feel that they have been forgotten.

Those who consider that the general hospital renders the local health department outmoded seem to overlook the fact that most hospitals lack even the first steps toward extending their services out into the community through outpatient and mental patient services. It will be desirable to develop various organizational arrangements to determine the best ways of providing economically the quality health-medical-hospital services we need for all our people.

**Tendency to Fragment Health Services**

Frontiersmen in public health will need to re-evaluate the trend to segment and fragment our services. Unfortunately, there has been a recent movement to assign new health services, or even to split off segments of operating health services, to more politically oriented, or at least more unified, agencies. Unless we in public health discharge our full responsibilities in health matters, other agencies not health oriented will be asked to assume our proper tasks. Welfare departments, schools and other agencies cover the full geographical area in each state and are ready to fill the gaps wherever there is incomplete or inadequate local health department coverage.

This fragmentation from the main-stream of public health is made easier since our group is made up of many disciplines,
each public health worker according identification and loyalty to one of these disciplines. If we are to strengthen public health and assure the logical continuing assignment of public health responsibilities, every one of us in public health must give first organization loyalty to public health. And this is worth repeating by each of us to those not here.

A reasonable concern for the interests of others must not obscure our acceptance of individual responsibility. Getting and holding good jobs require skills, education and good health and these must continue to depend, in some degree, on initiative, hard work and responsibility. Even as individual initiative seems increasingly penalized it becomes more vitally needed. Boasting of past progress and hoping for the uniformly ideal as a result of the all-out effort of only a few is the downward road to decline and decadence.

It is unbecoming for us to continue with 33 of 96 affiliate presidents and secretaries who are neither fellows nor members of APHA! In the future we hope it will become more acceptable to expect that all officers of affiliates and Branches should be fellows or members of APHA.

**Progress of APHA Programs**

Let us turn now from these general aspects of the Frontiers we face as public health workers, and toward a brief consideration of a few specific highlights of progress made during the past year in the programs of the American Public Health Association. And I suggest that for the future we invite our Executive Director or the Chairman of our Executive Board to make the report on Association Highlights before a General Session of our annual meetings.

Progress along a number of fronts has characterized the work of the American Public Health Association during 1963. There has been increased membership, a larger budget, the growth of special projects, vigorous activity in the Regional Branches, the establishment of the New England Public Health Association, added interest and achievement in the first year's operation of the Association sponsored National Commission on Community Health Services, and a general strengthening of the legislative base of public health through the enactment of national and state legislation. These and other areas of the work of the Association will be presented in greater detail in papers before this Annual Meeting and in reports distributed here and after this meeting adjourns.

The Association membership and fellowship has increased by 535 to 14,206 during the year ending September 1, 1963. The fastest growing of our 14 Sections were Mental Health and Food and Nutrition.

Our total budget for the current year, as approved by the Executive Board, was just over a million and a half dollars—
slightly over $100,000 more than expenses for 1962. Even with the growth in membership, programs, and particularly in special projects the basic APHA Staff has not increased. The increasing costs, however, have led the Executive Committee to recommend for action at this meeting by the Council an increase in membership and fellowship dues for next year. An increase in registration fees for nonmembers is needed and more support from Sustaining and Agency members will be sought.

If time permitted, I would wish to tell of the good work of the new Membership Committee; the excellent projects developed during the year; and the positive advances made by the Western Regional Office in service projects, as well as the significant strides of our Southern Branch.

New England too has moved a step toward strengthening its two state affiliates (Massachusetts and Connecticut) and eventually a closer tie by the other four state groups with APHA.

The Association contributed substantially to the important meeting of the Second National Conference on Public Health Training. Also, our Association now has the opportunity to eliminate triplication, and expand its responsibilities in the field of accreditation for public health teaching.

Progress continues in our traditional fields as well. The revised Diagnostic Procedures and Reagents may be inspected at our Association Booth. The Diagnostic Procedures for Viral and Rickettsial Diseases revision will be published in 1964. John Gordon's Committee promise the Golden Anniversary, Tenth Edition of "Communicable Diseases in Man" in 1965.

The National Commission on Community Health Services, conceived by this Association and funded through our efforts, is jointly sponsored by the National Health Council. This extensive four-year study is now in its first year of operation. See that your viewpoints are conveyed to this Commission during its considerations and before its final report.

### Annual Meeting Totals 435 Sessions

As usual, a great deal of time and effort has gone into the preparation of an outstanding program for this Annual Meeting. This involves, here at Kansas City, for APHA and the 36 related organizations the amazing number of 220 scientific sessions involving 700 program participants and a total of 435 individual sessions of one kind or another when we add in the organizational and other meetings over and above the scientific sessions. Our APHA staff under Berwyn Mattison's able leadership and the local committees deserve our special gratitude for their part in thus helping to provide convenient opportunities to extend our professional horizons and motivations.

An innovation this year is the first meeting of the new Conference of Radiologic Health Specialists.
The Joint Committee on Study of Education for Public Health is now in its third year under the able leadership of Bill Shepard. The new Health Laboratory Science journal, developed by the Laboratory Section and beginning in 1964, will be noted with interest as one illustration of an expanding publication program of the Association.

**APHA Has Legislative Concerns**

The Washington Office of our Association has had a busy year. Liaison has been maintained by the Director of that Office with the Public Health Service and Children's Bureau as well as with a number of Congressional Committees dealing with health matters. We can report with considerable satisfaction that several significant bills on which APHA testified favorably have been enacted into legislation.

Our Association members have been interested in basic laws permitting and supporting health departments and their personnel and programs. State and local boards of health are responsible for regulations and policies. We have been most fortunate when Presidents, members of Congress, State Legislatures, and Health Board members have promoted health with ability and devotion.

We still have among deficiencies to be corrected by these faithful workers; fifty million Americans without, or with inadequate, local health departments; federal matching formulas more favorable to welfare salvage operations than to more economical preventive health services; less strict accountability for tax funds spent in some areas than in others; and we need urgently passage of the companion bills which provide permissive flexibility for one-third of the categorical health grants according to the varying and changing needs of fifty states. I refer to S. 1051 and H.R. 6195 or similar bills.

**Teamwork Needed by Modern Pioneers**

Every public health worker, of official and voluntary agencies, should be informed on, and support, our national professional organization along with our Branches and Affiliates. Following the example of our teacher groups each of us in public health everywhere should give his primary professional loyalty, not to one or another in our confederation of the various professional discipline groups, but to his organization of public health workers in his State, his Region and to APHA. Only when at least most of us do this shall our purposes and goals be reached. Only by this unity, in this highly organized world, can our modern pioneers advance most effectively along the many health frontiers.
DATES AND EVENTS

April 30-May 1—President's Committee on Employment of the Handicapped, Washington, D. C.
May 2-6—Medical Society of the State of N. C., Annual Meeting, Greensboro.
May 3-9—Special Week on Aging.

May 7-8—Western N. C. Public Health Association Convention, Asheville.

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Mrs. L. F. (Iola Reynolds) Norton on her 91st birthday
California
Seat Belt
Survey Is
Encouraging

There has been an encouraging increase in the number of seat belts installed in California cars, according to a survey conducted by the State Department of Health in cooperation with the State Department of Motor Vehicles. Purpose of the survey was to determine how many drivers actually have seat belts and what kinds of motorist are most likely to have them.

The following facts were disclosed:
1. The 23.4% seat belt ownership among East Bay motorists is nearly twice as high as 1962 estimates for the nation as a whole.
2. Seat belt ownership is directly related to educational background and occupation of motorists. Four in ten motorists with a college education have seat belts, compared to only one in ten among those who have gone no further than grade school. Among men, the level of ownership ranges from 43% among professionals to 13% among those in the unskilled labor category.
3. Late models are much more likely to be equipped with seat belts than older models. Fully 2 out of 3 motorists who drive 1962 or 1963 model sports cars or convertibles have seat belts.
4. Seat belt ownership is low among drivers who are divorced or separated. This may reflect a general pattern of personal and social disorganization among these groups. Other health studies show that divorced and separated people also have higher rates of illness, accidental death, suicide, and alcoholism.

An encouraging result of the study is that the level of seat belt ownership is above average for certain "high-risk" groups, such as motorists who drive a great deal and single men in their early 20's.

Data for the survey, carried out in May, 1963, with financial assistance from the USPHS, were obtained from more than 7,500 motorists who were given questionnaires at Department of Motor Vehicle field offices in Oakland, Berkeley, Alameda, and San Leandro. The survey was the first phase of a more intensive study into the use of seat belts. The continuing study will focus on attitudinal and personality characteristics which relate to ownership and, more importantly, the use of seat belts. Information from the later phase will be used in developing promotional programs.

—California's Health
Volume 21, Number 19
April 1, 1964
North Carolinians died in greater numbers in accidents on the highways, in homes, on farms, and in other places during the first three months of 1964 than in the corresponding period in 1963.

In 1964, motor vehicle accidents accounted for the greatest number, 389 deaths; home and farm accidents, 234 deaths; all other accidents caused 147 deaths. Increases occurred in all three major classifications with the greatest increase in the motor vehicle group.

Applications for the scholarship offered by the North Carolina Public Health Association are now being accepted. The scholarship, in a maximum amount of $2,400, is awarded for a year of advanced study in any area of public health and carries an obligation to serve with a North Carolina public health agency for at least two years. There is no age or experience limit, so this scholarship should be of special interest to those who are ineligible because of age or length of experience for Federal traineeships.

Applications must be on prescribed forms which may be obtained from Doctor William P. Richardson, School of Medicine, University of North Carolina, Chapel Hill, North Carolina 27515. The applications must be returned to Doctor Richardson not later than July 1, 1964.

The National Center for Health Statistics has announced that North Carolina is now fully qualified to participate in the Marriage Registration Area based upon the results of a test of registration completeness and conformance with certain prescribed standards. It is anticipated that North Carolina will strive to maintain the high quality of its marriage statistics program and will contribute many ideas, as well as data, toward improving our national program.

Newest in the family of the "10 Little . . ." Series are "Ten Little Boaters" and "10 Little Swimmers". These attractive brochures are available from Imagination, Inc. Just in time for your Spring and Summer Water Safety Programs, these animated, easy to read leaflets are factual and inexpensive. Prices are on a sliding scale ranging from 8¢ each for 100 to 400 copies, down to 3¢ each for as many as 5,000. These and other leaflets on safety are available from IMAGINATION, INC., 4032 Maryland Avenue North, Minneapolis 27, Minnesota.

An animal itself is a laboratory, and so is man. As we learn more about animals, we learn more about ourselves. Without laboratory animals, the development of new drugs would cease to be a humane scientific occupation and become a terrifying gamble. Each of us is deeply indebted to the rabbits, rats, dogs, guinea pigs, mice, and monkeys of the laboratory—each of us who needs or may someday need newer medical compounds.

—Harry J. Robinson, M.D., in MERCK REVIEW, Spring, 1963
A HANDBOOK OF HEART TERMS is a new booklet prepared by the Heart Information Center of the National Heart Institute defining, in non-technical language, terms used in the cardiovascular field. It has been designed to help professional people and the lay public to a better understanding of heart terms and to facilitate communication in this field.

It was prepared after a sample survey of members of the medical and para-medical professions, science writers, and other groups of potential users indicated a need for such a booklet. Cardiologists and physicians may find it useful in interpreting technical concepts to laymen, and members of other professions dealing with the subject of heart disease might wish to use it as a reference.

Copies are available from the Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 30¢ per copy or $22.50 per 100. Single copies may be requested from Heart Information Center, National Heart Institute, Bethesda, Maryland 20014.

Dairy Month
Well Observed

June is DAIRY Month celebrates its 28th anniversary as a nationwide promotion saluting the dairy industry in 1964. For a quarter-century plus three years, it has been a time of recognition by the nation of the dairy industry's vital contribution to America's economy, health and welfare.

June is DAIRY Month has grown into the largest single dairy food sales and information campaign in the food field. The government, allied industries, agricultural equipment manufacturers and suppliers, banks, power companies, etc., all join in a "milk toast" salute to the dairy industry during June is DAIRY Month.

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The Health Bulletin
First Published—April 1886
The official publication of the North Carolina State Board of Health, 608 Cooper Memorial Health Building, 225 North McDowell Street, Raleigh, N.C. Published monthly. Second Class Postage paid at Raleigh, N. C. Sent free upon request.

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Vol. 79 May, 1964 No. 5

THE HEALTH BULLETIN May, 1964
Between ninety and one hundred thousand American citizens will die this year from accidents. Almost thirty-thousand of these will die in their homes where they are presumably safe. Even to many in health careers, these facts may come as a surprise.

Indeed, the National Safety Council is right in its contention in the Golden Anniversary Report to the Nation, of 1962, the paradox of our age lies at our doorsteps. This report clearly states: "Home—man's sanction of peace and security, protected by law against intrusion even by the state—is the site of more injuries each year than any other place. Accidental death here ranks only second to the highway."

More children, one through fourteen years, die from accidents than all diseases combined. More die from accidents than from not just one disease, but more than from gastro-enteritis, pneumonia, childhood disease and all other diseases put together.

Sixteen thousand senior citizens suffer death from accidents in their home. Over ten-thousand will die from falls alone. Home indeed, is where the vulnerable ones are, the young and the old.

Almost all personnel in health fields will now agree that health of the children and the aged and all human beings is more than simply absence of disease. Health is a state of ease or absence of "dis-ease." Certainly, no other phenomenon in our society causes more loss of life and limb and material goods than does accident. Since this is true, positively all those interested in public health need must be interested in accident prevention. Accident prevention needs must become a prime interest of all physicians, health officers, sanitarians, nurses, health educators and secretaries.

Accidents can be prevented.
A near-science of safety exists. Industry and government alone, and these only a part, have given evidence of recognition of the science of safety by backing conviction with dollars to turn possibilities into reality.

This concept has its disbelievers and its scoffers. The idea that most of our infectious diseases could be prevented had its disbelievers and scoffers, too. Due to the conviction backed by action of personal interest in the health of the public, few now will scoff the idea that tuberculosis, enteritis, venereal diseases, poliomyelitis and other major killers of fifty years ago can be prevented. Fewer and fewer scoff the conviction that cancer and cardiovascular diseases can be prevented.

That accidents, the nation’s major killer, can be prevented is a fact not yet accepted by our citizenry and indeed by many in the health fields that have contributed so much in prevention of infectious diseases; convincing people that the problem of accidents has a solution is of primary importance.

Private physicians, public health directors, sanitarians, nurses, health educators and secretaries have distinctive opportunity in accident prevention. With opportunity comes an obligation that must be fired with burning desire that provokes action. Many of the concepts, projects and programs in disease prevention can be oriented into accident prevention.

What specifically can you do now? You can start in your action program when you leave where you are and get into your automobile. You can stay where you are until you are sober and rested. Then you can obey the signs of the roads and all traffic laws. You may well remain aware that at least 76 million motor vehicles are registered in our nation and over 38,000 motor vehicle fatalities will occur this year.

When you get home, remember that your haven of happiness may be a hell of hazards. You and your loved ones could become a newspaper item along with nearly thirty-thousand that will die from accidents in their home, sweet home this year.

Remove or fasten your scatter rugs, the magic carpets of death. Put handrails on all your steps and stairways, by your bath tubs, and even by the commode, if you have a senior citizen in your home. Provide for your grand old ones adequate lights, including flash lights and light switches by the bed.

Instruct your elderly ones to sit on the edge of the bed before arising and to stand a moment after coming to the feet. Nearly twelve-thousand persons will die from falls in their homes this year. Over ten-thousand of these will be senior citizens, sixty-four years and above.

Nearly six-thousand persons will die from fires, burns or injuries associated with fires.

See that your fire places have fire screens.

Have your heating and wiring systems inspected immediately and yearly.

See that any gasoline, cleaning fluid, oily rags, or other inflammables in your home are safely stored.

Remember, that only the clean house can be safe from fire.

Over three-thousand of our citizens will die this year from suffocation, either from ingested objects or mechanical smothering. The big majority of these will be tots and toddlers who fall victims of objects left in the floor, peanuts on the table, or plastic bags, sheets left within reach. Some of the little ones will hang themselves or smother to death in old ice boxes or other enclosures when they are unattended. You may well look at your home situation.

Likely, almost two-thousand persons will die from poisoning, either by
liquids or solids, which they accident­
ally take in their homes. These poisons
will not be bizarre or exotic. They
will be common household items, as
aspirin, pesticides, and cleaning agents
designed for the comfort and not the
death of man. Sad to say, death by acci­
dental poisoning increases year by year.
See that your medicines, even aspirin,
are stored in a central, safe, and well­
lighted place.

Do not permit medicines to be taken
from their original containers and insist
that labels be readable and read.

Do not keep or permit sleeping pills
to be kept by the bed. Frequently hyp­
notic, sleeping medications do cause
persons in a hypnotic state to take fatal
doses.

If you have a senior citizen in your
home, you may well mark with a red X
all their potentially dangerous drugs.
You may also well consider whether
your senior citizen is capable of ad­
ministering his or her medicine.

Pesticides demand the same respect
as medicinal chemicals. Good packaging
and labeling are of little value if the
package and instructions are not re­
spected. To engender this respect is
your obligation in your home.

What of the firearms in your home
when you arrive there? Will the guns
be broken down? Will ammunition and
firearms be stored separately? Over a
thousand persons will die of firearm
accidents in or on the premises of
the American home this year.

Now what will you find when you
go to your office that may reflect
your conviction that accidents can be
prevented? The National Safety Council
unequivocally says that if todays acci­
dent prevention knowledge were fully
accepted and fully applied, the nation's
accident rate would be halved.

Will you find in your office safety
posters or other safety displays?

Will you have a good stock of all
conceivable safety pamphlets and other
literature? Throughout the day and
week, will you be putting this data in
the hands of a housewife with an in­
fant, a tractor driver, a teenager or a
Boy Scout with a cast on his arm and a
bent-up bike?

Will your professional magazines
have your red lines on possible safety
articles indicating your reading safety
material?

Most importantly, will your files have
data on finished or unfinished safety
projects, programs, and particularly re­
search? No field in "disease" preven­
tion so needs research. Any data, be it
ever so small will make a contribution.
Further, research that involves people
is one of the most effective education­
al tools.

Now, finally, as public health per­
sonnel, what kind of rapport do you
have or will you establish with safety
organizations in your community? Your
concepts in prevention, your projects
and programs in health education your
know-how in engineering can easily be
oriented in the field of accident preven­
tion. You can make a great contribu­
tion to all agencies and organizations
interested in safety. These groups can
help you in your primary role regard­
less of what it is and now in your
secondary role in accident prevention.

What is your primary objective? To
save lives and to make the living more
comfortable, you agree. The fields
of accident prevention are white. The
laborers are few.

Motto in Dr. Norton's office

IF YOU WANT TO GET THE BEST
OUT OF A MAN, YOU MUST LOOK
FOR THE BEST THAT IS IN HIM.

BERNARD HALDANE
A Grateful
Family Honors
91 Year Old Mother

On the occasion of the 91st birthday of Mrs. L. F. (Iola Reynolds) Norton of Laurinburg all eight children gathered to do her honor and pay their tributes of love and respect. Mrs. Norton is the mother of Dr. J. W. Roy Norton, North Carolina's State Health Director for the past sixteen years.

With the children came the husbands and wives and some of the seventeen grandchildren and fourteen great-grandchildren.

Friends and relatives joined in the festivities surrounding the celebration of this birthday milestone in the long and active life of this remarkable woman. Though confined to her wheelchair, Mrs. Norton is interested and informed about all principal matters of concern to her community and the world. She still operates the Norton farm near the Sneads Grove community.

With her children about her on that birthday occasion, she is pictured here. Those in the picture, from the left, are: (Ann) Mrs. Robert L. Chambers, Durham; (Mary) Mrs. J. Fred Thompson, Laurinburg; (Roy) J. W. R. Norton, Raleigh; (Eula) Mrs. Roy M. Bender, Aberdeen; (Maurice) Maurice L. Norton, Laurinburg; (Ruby) Mrs. F. B. Bishop, Aberdeen; (Elva) Mrs. Forest Purser, Hadley, Pa., Route 2; and (Harriet) Mrs. Frank Steed, Laurinburg.

(See story on page 10.)
91-Year Old Charmer Says
“Each Year Gets Better”

by Mrs. Florence W. Gilkeson, News Editor,
The Laurinburg Exchange

The qualities of serenity and curiosity are rarely so gracefully combined as in the life and personality of Mrs. L. F. Norton.

“I love people,” Mrs. Norton said Tuesday on her 91 birthday.

This alert and gracious lady, though confined to a wheelchair, has not retired and still operates the Norton farm near the Sneads Grove community.

In many ways Mrs. Norton defies the traditional concept of the elderly, for she is wide-eyed with interest in people and the affairs of her community. She has refused to get old.

What’s Going On

Interviewed about this milestone in her long life, Mrs. Norton was more anxious to ask intelligent questions about the proposed merger of county and city high schools than to talk about herself.

The school merger proposal is just one of the never-ending questions of community growth and progress which Mrs. Norton has followed avidly through the years. Whether it be changes in agriculture or industry, education or culture, Mrs. Norton is definitely interested and ready to learn more.

The learning process simply never came to a halt for this lovely person.

A South Carolina girl who moved to North Carolina as a child, Mrs. Norton is a successful mother who raised eight children to become successful as parents themselves and as professional men and women.

Mrs. Norton has strong opinions about how to raise children, opinions based on her lifetime philosophy and experience. She surrounded her family with an aura of education and interest in the life of the community. For the Nortons life was far more than food, clothing, and shelter.

Iola Josephine Reynolds was born at Fork Shoals, Greenville county, S. C., on Feb. 11, 1873. Later the family moved to Scotland county, where her father was employed as overseer for Morgan Mills.

Eight Children

In Scotland county Miss Reynolds met farmer L. F. Norton who became her bridegroom when she was 23 years old. Their eight children, two boys and six girls, had all arrived on the scene when they moved into their present home—a rambling white house situated at the end of a short unpaved road off the Laurinburg-Sneads Grove road. That was about 50 years ago.

Today the house remains a picture of homely comfort and timeless charm, reflecting the perceptive character of its occupants all these years.

First born to the couple was a daughter, Eula, who is today Mrs. Roy M. Bender of Aberdeen. Dr. J. W. Roy Norton, presently State public health director, came next. Dr. Norton’s name is known throughout the Western Hemisphere since he has just served a term as president of the American Public Health Association. This includes all public health workers in the two Americas.

Elva (Mrs. Forrest Purser), Hadley, Pa., Ruby (Mrs. F. B. Bishop of Aberdeen), Maurice, Harriet (Mrs. Frank) (Continued on page 14)
Western N. C. Public Health Association Meets in Asheville

Dr. H. W. Stevens enjoys fellowship at the Milk Bar with Miss Virginia Haire, (left) president, and Mrs. W. Fred Mayes.

A Registration Welcome Deluxe
From the Buncombe County Health Department

Mae Silver     Claudine Montieth     Peggy Pembroke
W. F. E. Loftin, M.D., (left) talks about personnel matters with E. Clark Edwards, Chief Personnel Officer of the State Board of Health during a lull in the meeting of the Western N.C.P.H.A. Dr. Loftin is from Marion and is Health Director for McDowell County.
Dr. Martin P. Hines, (left) president of N.C.P.H.A. confers with Roddey Ligon, assistant director of the Institute of Government at the Western NCPHA.

(On the page at the left — Nancy Wheeler, Boone, and Faye Reeves, Sparta, on the Battery Park Hotel mezzanine balcony.)

William A. Broadway, (right) chats with Dave Moody during an intermission.

Dr. W. Fred Mayes presides over an Erudite Panel.
91-YEAR OLD CHARMER
(Continued from page 10)

Steed of Laurinburg, Ann (Mrs. Robert L. Chambers of Durham), and Mary (Mrs. J. Fred Thompson of Laurinburg) complete the family. Only one of the eight, Maurice, became a farmer, following in Father Norton’s footsteps. Several of the girls, when they were not raising families, became teachers.

There are 17 grandchildren and 14 great-grandchildren.

The children, their children and their children’s children appeared on the scene Sunday afternoon when friends and relatives were received by Mrs. Norton at a birthday tea.

By Tuesday the home was filled with bouquets, gifts and greeting cards—all honoring a lady whose prestige grows with each year. Among the congratulatory messages was a very special one—a greeting card bearing the signature of President Lyndon B. Johnson.

It’s a winning smile which Mrs. Norton shares with visitors when she confides: “Each year gets better.”

Tuberculosis An Airborne Disease

The communicability of tuberculosis as an air-borne disease was re-emphasized during a recent outbreak in a Tennessee high school. Following the discovery of a far advanced, active case of tuberculosis in a 17-year-old white male pupil, it was found that 31.2% of the students were tuberculin positive. Previous tests of 10th grade students in that county had shown less than 3% with reactions of 10 millimeters or more. The percentage of reactors increased as association with the index case increased. Indeed, 90% of the boy’s close school contacts were found to be tuberculin positive.

Since there is an increasing proportion of young people in the population who have never been exposed to tubercle bacillus, the potential for explosive outbreaks of infection and of disease, such as this one, is great.

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James F. Donnelly, M.D. .................................................................................. Director, Personal Health

May, 1964

THE HEALTH BULLETIN
A Farewell to Charles L. Harper

Charles L. Harper, for the past four years Director of the Administrative Services Division of the State Board of Health, resigned in May to accept a position with the District of Columbia Department of Health in Washington, D.C.

In the new position which he assumed May 18, Mr. Harper will serve as Associate Director of Health for Administration. In this place, he will be responsible for implementing a budget in excess of fifty million dollars a year and the personnel administration of a 400 member staff, in addition to other responsibilities. Dr. Murray Grant is the District's Health Director.

Above—Mrs. J. W. R. Norton presides at the punch bowl in Mr. and Mrs. Harper's going away party.

At right—Dr. Norton presents a gift of framed colored pictures of North Carolina.
DATES AND EVENTS


July 5-10 American Physical Therapy Association, Denver, Colo.

August 2-14-6th World Assembly in Haifa, Jerusalem and Tel-Aviv, Israel, (The American Physicians Fellowship)

August 7-14 International Congress on the Scientific Study of Mental Retardation, Copenhagen.

August 16-29 American Veterinary Medical Association, Chicago, Ill.

August 24-27 American Hospital Association, Annual Meeting, McCormick Place, Chicago, Ill.

August 24-28 International Conference on Water Pollution Research, Kyoto.

September 20-26 International Conference on Social Work, Athens.

September 23-25 N. C. Public Health Association Annual Meeting, Battery Park Hotel, Asheville.


September 27-October 1 Water Pollution Control Federation, Bal Harbour.

October 3-4 Society of Public Health Educators, New York.


October 5-9 Association of Management in Public Health, New York, N. Y.

October 5-9 Association of Public Health Physicians, New York, N. Y.

October 7-10 National Association for Retarded Children, Oklahoma City.
North Carolina was one of the three states receiving a National Award for its educational programs in connection with the 1963 Cleaner Air Week. The presentation of this Award to the State Board of Health was made early this year in the office of Governor Terry Sanford. Clinton R. Milstead, Fairfield, Ala., (second from the right) represented the National Cleaner Air Week Committee. From the left those in the picture include: Dr. John S. Rhodes, member of the State Board of Health and immediate past president of the Medical Society of the State of North Carolina; J. M. Jarrett, Director of the Sanitary Engineering Division which implements the State's legal authority for air pollution control; Governor Terry Sanford; Mr. Milstead; and Dr. J. W. R. Norton, for the past sixteen years North Carolina's State Health Director and the immediate past president of the American Public Health Association. (See page 3)
Dr. Millard B. Bethel, director of the American Medical Association's department of environmental health, based in Chicago, took over the post as Wake County Health Director June 1.

A native of Kentucky, Dr. Bethel lived in North Carolina for 26 years before taking the AMA post.

Dr. Bethel served as professor of public health administration and assistant dean of the University of North Carolina School of Public Health from 1959 to 1963.

He was Charlotte's health officer from 1945 to 1959 and Mecklenburg County health officer beginning in 1953.

Prior to that he was health officer for Cabarrus County from 1939 to 1945.

Dr. Bethel received his undergraduate degree from Vanderbilt University, his MD from the University of Tennessee in 1936, and his master's in public health from UNC in 1941.

The job he left in Chicago is a newly-created "public health arm" of the AMA. He was the first nationwide director of the program, which he said was designed by the AMA to help educate the public in health matters.
State Board of Health Congratulated on Receiving National Award for Air Pollution Control Efforts

Governor Terry Sanford congratulated the State Board of Health recently on receiving a National Award for conducting an outstanding program in air pollution control during the past year.

Clinton R. Milstead, Fairfield, Ala., represented the National Air Pollution Control Association which made the award in a ceremony in the Governor's office. In presenting the award to Dr. J. W. R. Norton, State Health Director, Milstead commended the State's leadership, industry and the news media for their cooperation and for the outstanding results achieved. Only two other states—Connecticut and Texas—received this award, he said. Milstead is a Director of Public Relations for the United States Steel Corporation.

The State Board of Health, to which the 1963 General Assembly gave the official responsibility for promoting air hygiene, has served helpfully as requested in this matter for several years. During the past year, much educational work has been done during the 1963 Cleaner Air Week and several city-wide and county-wide air pollution surveys have been conducted and results published.

Governor Sanford said, "Under the leadership of our State Board of Health, North Carolina's program of air hygiene is becoming increasingly effective in clearing the air and reducing the hazards brought about by air pollution. In doing this job there are many opportunities for municipalities, counties, private industries and citizens generally to become informed of air pollution hazards.

"We need to realize the public health hazards of air pollution, the extensive economic damage to vegetation and to livestock and the depression of property values. All of us working together can surely find ways to keep for North Carolina the pure air of which we so rightly boast."

Among those attending the ceremony representing the State Board of Health were Dr. John S. Rhodes, State Board member and immediate past president of the Medical Society of the State of N.C.; J. M. Jarrett, Director of the Sanitary Engineering Division which implements the air hygiene law; J. S. Ameen and Ed Owens, Sanitary Engineers; and other officials.
Health Bulletin

Beginnings

In 1886 the Board began the publication of a monthly medical bulletin, the first of its kind by any state board of health in the United States. Among other things it contained health reports that had been sent in from the counties that had health organizations.

The Bulletin, edited by Dr. Wood, was the voice of the State Board, and it was given a wide circulation among the influential citizens, newspapers, health officers, mayors of cities and towns, and all who were likely to be interested in the promotion of the State's health affairs.

It was a success from the first. At the annual meeting of the Medical Society that year, the president, Dr. J. W. Jones, had this to say: "The first issue of the "Bulletin" of the North Carolina Board of Health is before you. We consider it a necessity to the successful work of the Board and the best means of getting and giving information. It is a medium of communication with our Governor, Legislature, the people, the doctors and sanitary workers all over the world. It will go out as a monthly messenger of glad tidings, with healing in its wings, with words of truth and notes of cheer, or sounds of alarm if danger comes nigh."

Dr. Donald D. Weir of Chapel Hill announces that Robert Pace has been named Executive Director of the North Carolina Chapter, The Arthritis and Rheumatism Foundation. Pace was formerly central area director and camp director for the North Carolina Society for Crippled Children and Adults, Inc.—the Easter Seal Society. Dr. Weir is chairman of the Board of Directors of the North Carolina Chapter.

The Division of Occupational Health of the Department of Health, Education and Welfare recently called the attention of State health directors to the potential toxicity and hazards connected with the operation of coin-operated drycleaning machines.

Thirty-four cases of Rocky Mountain Spotted Fever were reported in North Carolina during 1963. Only the coastal region was spared. As in 1962 almost 3/4 of the patients were pre-school or school-age children with males slightly predominating. The cases reported were almost exclusively among white persons.

The seasonal distribution describes a bell-shaped curve with 80% of the cases having their onset in July, August or September. These are the months when child-tick contact is most likely to occur.
Air—
An Unlimited Resource?

by
Joseph S. Ameen, S.M.
Sanitary Engineer
N. C. State Board of Health

AIR? Why there's plenty of air!!!!—An accepted fact taken for granted during many centuries.
A shortage of air?—"It could never happen."
Yet it is happening as our supply of clean air is dwindling each day from misuse of this valuable resource. Even though there is the same quantity of air over our cities and farmland, the quality is diminishing in the same manner as our water resources have done over the years.
This can be simply explained by one word "Pollution".
As fire destroys our forests, pollution destroys the quality of the air we breathe. While man may live for six days without water, he can only survive for six minutes without air. Therefore, our supply of air may rightfully be considered our most valuable resource.

What is Air Pollution?
Air Pollution is legally defined by Mr. Samuel Rogers, Legal Counsel of the Public Health Service as "the presence in the ambient air of substances put there by the activities of man in concentrations sufficient to interfere directly or indirectly with his comfort, safety or health or with his full use and enjoyment of his property".
To the citizens of a community, it means filth in the air to cause the soiling of laundry, soiling of a newly painted house, soiling of a freshly washed car, or the discomfort in breathing or the decrease in visibility.
But this definition had far more meaning to 63 persons in the Meuse Valley of Belgium in 1930, or to 20 persons in Donora, Pennsylvania in 1948, or to 22 persons in Pozo Rico, Mexico in 1952, or to those 4000 persons in London, England in 1952 or to untold numbers in New York City, London, and Tokyo in recent years, for all of those people this definition had a real meaning, Death. Yes, death caused by the discharge of tons upon tons of small solid matter of microscopical size and gaseous compounds into the atmosphere in uncontrollable amounts which under certain climatic conditions failed to be dispersed into the atmosphere and be carried away, but lingered over these cities for several days to so interfere with health that it took the lives of many. This provokes one to ask, "How can these things be when there is such a large supply of air in the atmosphere?"
When a person gives thought to the air which he breathes, he thinks of it as being a pure substance consisting only of nitrogen, oxygen, carbon
dioxide, water vapor, and a small amount of other inert gases. He thinks of it as being odorless and invisible and this air he calls "pure". However, if the air has an odor, he says the air "stinks" or if the air contains considerable amounts of smoke or other fine particles of solid matter, he then classifies it as being "smokey" or "dirty".

Man's Activities Pollute the Air

But to man's surprise, community air contains a variety of material which has been discharged into the air from man's own activities. In the use of fuels in home heating for man's comfort, combustion products such as sulfur dioxide, oxides of nitrogen, and particulate matter are discharged into the community air. In the operation of his automobile for his own pleasure and necessity, man discharges sulfur oxides, oxides of nitrogen, aldehydes, and hydrocarbons into the air.

From industrial processes, a large amount of gaseous material and dust are emitted into the air. All of these materials combine in the atmosphere over the community to cause air pollution. To all this conglomeration mixed with the ambient air, man ties his lifeline—the air he breathes. During the period of one day, man breathes some 6,000 gallons of air in order to get the necessary 1,200 gallons of oxygen necessary to sustain life. This amount of air in a period of a year will only weigh about 30 pounds. Yet, the protective mechanisms of the respiratory system will filter out about 1 1/2 pounds of dirt before the air reaches the alveoli sacs of the lung. Efficient as these mechanisms may be, particles of less than micron size may penetrate deep into the respiratory system.

Air Pollution Regulations are Not New

Again, this provokes one to ask, "Is this problem of air pollution new?" The answer is "No". It has been a problem for many centuries. History records the first instance of air pollution as existing in England as early as 1257. At that time Queen Eleanor was forced to move from her palace to a country estate each winter because of air pollution in London. In 1273, Edward I had the first anti-smoke ordinance enacted to clear the air in London. This ordinance forbade the use of "sea coal" which gave off black, sooty smoke that was considered deleterious to human health. One of the King's subjects was put to death for violation of this ordinance. In 1306, Parliament passed a law to try to rid London of smoke, but this law was of little success.

So one may see that air pollution is an age-old problem and may reach the conclusion that where you have people in an urbanized society, air pollution will be a potential threat to the community for it results from man's activities.

New Urgency Demanded By Our Nation's Progress

At the 1958 National Conference on Air Pollution, Dr. Leroy Burney, Surgeon General of the Public Health Service stated, "The unprecedented growth of our cities and industries in recent years lends new urgency to the consideration of health problems related to the urban environment. Pollution of the air is one of these complex and potentially serious problems of modern living."

Air pollution problems become more severe at a rate relatively greater than the rate of increase in population. Nationwide, every metropolitan area with a population greater than a million is considered to have a major air pollution problem, while only 70 percent with a population of one-half to one million is considered to have a major air pollution problem, while only 30 percent have problems of moderate severity. It is estimated that 40 percent of all communities with populations of 2,500 to 50,000 are...
plagued with air pollution of more than a general nature.

Air Pollution Endangers Health
Polluted air does more than cause man discomfort. It endangers his health. This is not only indicated by the previous mentioned episodes where many deaths occurred, but by various medical statistics the world over. In England, where poor grades of coal are used as a fuel in heating and with the large occurrence of adverse weather conditions which tend to hold the pollution over the cities for extended periods, the lung cancer rate is found to be the highest in the world with chronic bronchitis being the nation's third largest cause of death.

An extended study in California revealed that the death rate for lung-associated diseases such as asthma, bronchitis, and emphysema, rise along with increased population and increased productivity of the state. One of the physical effects of respiratory ailments is the strain which is placed upon the heart. By rendering the oxygen-carbon dioxide exchange less efficient, the heart is forced to work harder to satisfy the body's demand for oxygen. The minor "insults" of air pollution may be tolerated without too much difficulty, but major episodes such as occurred in London or New York City where the concentration of pollution was held over the city for extended periods by adverse meteorological conditions, may overwhelm the already weakened systems of many persons.

Extra Costs Imposed
Air pollution also imposes extra economic costs upon the citizens in terms of corroded metals, damaged buildings, crops and livestock, and lowered real values. Where air pollution problems exist, people pay more than they realize in added laundry and cleaning bills, and painting costs. They experience more rapid deterioration of personal property, and the inconvenience and annoyance of living in an offensive environment.

Air pollution can and must be prevented if we are to keep our communities a healthful environment in which to live. The task that confronts us is a serious and challenging one but it must be accomplished for we know not what the future may bring. Again, Dr. Burney's statement is appropriate, "Today we are dealing with processes and products which were unheard of prior to World War II. In 10 more years, still more new substances will have been added to our environment. I need only refer to a few examples—the petrochemicals and other synthetics, the soaring future of nuclear technology and high energy fuels. This, then, is the new environment we are creating. 'The wind bloweth whither it listeth'. Air—and therefore polluted air—respects no boundary lines, geographic, political, professional, or disciplinary."

Some years ago at the International Conference on Air Pollution in London, Dr. John D. Porterfield, Deputy Surgeon General of the Public Health Service, stated, "As a matter of cold, hard fact, we are closer to putting a man on the moon than we are to creating a thoroughly healthy and pleasant en-

(Continued on page 10)
Malaria Cases Down in State

Only eleven cases of malaria were reported during 1963 in North Carolina as contrasted with thirty-four cases during 1962. This, however, does not reflect the national picture. There was a significant increase in reported cases of malaria nation-wide. The increase is believed to be due partially to improved methods in reporting, but probably also represents a real increase in the number of cases of malaria seen in this country.

There was a two-fold increase in the number of civilian cases as compared to the previous year. Thirty-five cases of malaria occurring in merchant seamen were reported. Twelve represent a single outbreak of imported malaria, which occurred aboard a merchant vessel calling at U.S. ports.

The West African countries, Thailand, Viet Nam, Korea and Pakistan were the most common areas of acquisition of malaria for the cases reported in this country. Five cases of malaria originated in United States. Two were induced. (one by blood transfusion and the other by human "guinea pig" experimentation.) The other three were unable to be classified.

The investigation of suspected indigenous cases of malaria and also transfusion-associated malaria was greatly enhanced by the introduction this year of the fluorescent antibody test for malaria as an epidemiologic tool. Utilizing this procedure and conventional epidemiologic techniques, an absence of clearly demonstrated indigenous malaria in the United States during 1963 has been shown.

Air—An Unlimited Resource?
(Continued from page 7)

virement on this earth for man to live in—closer in know-how, closer in time, closer in probability of achievement." However true this statement may be, it need not be if everyone in a community strives together for a common goal, that of cleaning the air.

Dr. O. L. Ader, Health Director of the Durham County Health Department, stated that, "Air Pollution is everyone's problem. It can be controlled by rigid legislation, but we believe that we have the community spirit to abate this problem with a minimum of regulation." This statement is appropriate for many communities in North Carolina for such community spirit does prevail.

What Can Be Done?

Dr. Ader suggested several things that could be done to prevent pollution of the air. These suggestions were: use a high quality of fuel for good combustion, use good combustion practices; eliminate all open burning trash dumps whereby solid waste disposal would be disposed of by properly constructed incinerators or sanitary landfills; better cooperation between municipalities and the public in trash pick-up service as a means of elimination of back yard burning as a potential source of pollution; proper and frequent tuning of motor vehicles to reduce this important source of air pollution; and finally the solicitation of the aid of the entire community to work toward this common goal.

Yes, the limits placed upon the quality of air are imposed by each citizen of the community. The air which you will breathe tomorrow is determined by your attitude and actions today, for it takes the cooperation of everyone to keep the air clean and pure. Pure air is our greatest resource, let's keep it that way.
By Lula Belle H. Rich  
Chief, Health Education Section  
N. C. State Board of Health

One of the major fields within the health careers is public health, with its emphasis on community health, prevention of disease and disability, and protection of people from environmental health hazards. In North Carolinian today there are 1,324 positions in local health departments and 404 positions in the State Board of Health. These numbers grow gradually and there are always vacancies. Those who go into public health take the community as their patient. Health problems which are too big for individuals to cope with alone, problems which affect large numbers of people, communicable diseases, community-wide efforts at health promotion and disease prevention—these are the concern of public health workers.

Positions in public health range from those requiring only high school graduation to those requiring a medical education plus special public health training. Most positions require training beyond high school. There are positions in local, state, and federal health agencies.

A WHO'S WHO IN PUBLIC HEALTH would include:

Public Health Physician: A licensed medical doctor, usually with additional Public Health training, who administers Public Health programs.

Public Health Nurse: A registered nurse with additional training in Public Health, who gives nursing care in the home, teaches families nursing care, organizes clinic services, and works with schools.
Sanitarian: A college graduate with a science major, who solves many environmental health problems, largely of a biological or chemical nature; he trains restaurant workers in sanitation.

Sanitary Engineer: A graduate sanitary engineer, who has responsibility for sanitary operation of community water supplies, sewerage systems, swimming pools, and for the elimination of air pollution.

Public Health Educator: A college graduate with subject emphasis in the biological and social sciences and a Master's Degree in Public Health, who encourages, through educational means, more effective individual and group action to maintain and improve the health of people throughout the community.

Industrial Hygiene Engineer: A college graduate in chemistry, or chemical engineering, who assists industries in protecting their workers from health hazards.

Public Health Veterinarian: A Doctor of Veterinary Medicine, who protects the health of people from diseases transmissible from animals to man.

Nutritionist: A college graduate with a major in home economics and additional training in dietetics, the social sciences, and education, who teaches people about food needs, and helps individuals with special problems get proper diets.

Physical Therapist: A graduate of a college with an accredited physical therapy program, who helps in the physical rehabilitation of people with injuries or diseases affecting muscles, joints, nerves and bones.

Clinical Social Worker: A college graduate with a Master's Degree from an approved School of Social Work, who gives casework services to health department patients.

Public Health Dentist: A licensed dentist, usually with an additional degree in Public Health, who promotes the preventive aspects of dental care and works to solve community-wide dental problems.

Public Health Dietitian: A college graduate with major in Institutional Management and a year of internship, who gives dietary consultation to institutions in the management of their food service departments.

Dental Hygienist: A college graduate with a major in dental hygiene (or a high school graduate with an additional two years' training, leading to a certificate in dental hygiene), who cleans teeth under the supervision of a dentist and teaches and promotes individual and community dental health.

Dental Assistant: A high school graduate with vocational training as a dental assistant, who assists the dentist as he examines and treats individual patients.

Chemist, Bacteriologist, Medical Technicin: Graduate chemists, bacteriologists, and medical technologists, who assist in identifying diseases of public health significance through laboratory procedures.

VD Epidemiologists: A college graduate, who investigates, under medical supervision, the spread of venereal diseases and educates the public regarding VD prevention.

X-ray Technician: A high school graduate with additional one to two years' training in x-ray technology, who serves in health department clinics or on mobile units.

Secretaries, clerks, accountants, administrative personnel, custodial personnel, and others are also employed by health departments.

(Acknowledgment is made to the Health Education Division of the Charlotte-Mecklenburg County Health Department for the description of occupations.)
Surgeon General Luther L. Terry (left) was a visitor to Dr. Norton's office and spoke to the State Staff in recent weeks.

Some Recent Visitors of Note

Mrs. Clarice R. Ludwig and her husband from New York conferred with Dr. Norton earlier this year in connection with the guidance Dr. Norton gave the group of directors of health from India. Mrs. Ludwig is Division Head of the Special Projects Department, Institute of International Education.
Survival Gains Noted
In Most Areas of World

RECENT advances in medical practice, improvements in environmental sanitation, and a rise in general standards of living have made life safer for people in most areas of the world. The largest gains in survival have been recorded in childhood and early adult life,* but moderate progress has also been made in increasing longevity beyond the middle years. The latest data on expectation of life at age 45 in 51 countries, together with available figures for an earlier period, generally for the years around 1940, were made available in a table published by the Statistical Bulletin. In interpreting these data, it should be borne in mind that the registration of deaths in the developing areas, as a rule, is less complete and less accurate than it is in industrialized countries.

The greatest gains in lengthening life among middle-aged people occurred, for the most part, in areas which formerly had the least favorable experience. In Puerto Rico, for example, the expectation of life at age 45 rose from 24.7 years in 1939-41 to 31.9 years in 1960, an increase of more than 7 years in two decades. Almost as dramatic has been the progress in Spain, where the figure increased from 24.2 years in 1940 to 30.2 years in 1960, or at a rate of 0.3 years per annum. Gains of about this magnitude also occurred in Venezuela, Mexico, Ceylon, and Guatemala. India is a notable exception to the general pattern, the rise in expectation of life at age 45 averaging less than one tenth of a year annually between 1921-31 and 1941-50.

Progress has also been comparatively slow in the United States, where the remaining lifetime at age 45 rose from 26.9 years in 1939-41 to 29.6 years in 1962, an increase of little more than one tenth of a year per annum. Similar gains were recorded in New Zealand, Canada, and most of the European countries.—Excerpt from Statistical Bulletin, Metropolitan Life Insurance Co.
'OH, YOU JUST WANTED TO DUMP RAW SEWAGE. WE THOUGHT YOU WERE GOING TO FLUORIDATE!'
DATES AND EVENTS

July 5-10 — American Physical Therapy Association, Denver.

July 19-25 — National Farm Safety Week.

August 2-14 — 6th World Assembly in Haifa, Jerusalem and Tel-Aviv, Israel.
(The American Physicians Fellowship)

August 7-14 — International Congress on the Scientific Study of Mental Retardation, Copenhagen.

August 16-20 — American Veterinary Medical Association, Chicago, Ill.

August 24-27 — American Hospital Association, Annual Meeting, McCormick Place, Chicago, Ill.

August 24-28 — International Conference on Water Pollution Research, Kyoto.

September 20-26 — International Conference on Social Work, Athens.

September 23-25 — N. C. Public Health Association Annual Meeting, Battery Park Hotel, Asheville.


September 27 - October 1 — Water Pollution Control Federation, Bal Harbour.

October 3-4 — Society of Public Health Educators, New York.


October 5-9 — Association of Management in Public Health, New York.

October 5-9 — Association of Public Health Physicians, New York.

October 7-10 — National Association for Retarded Children, Oklahoma City.

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Mountain Nurse
Something Good From Madison County
(See story on page two and following)
Our subject is Mrs. Anna Fox, a public health nurse in Madison County, North Carolina which borders on the North Carolina-Tennessee line. Madison County is as mountainous and rugged a region as can be found in the Eastern United States. The elevation is very high and if the county were flattened out it would be about twice the size it now appears on the map. The French Broad River runs through the middle of the county and part of it is covered by Pisgah National Forest. It is isolated by high peaks which surround it. One of these is Mt. Mitchell, highest peak east of the Rockies. Madison is located about 30 miles north of Asheville.

Mrs. Fox is an RN who graduated from Presbyterian Hospital in Knoxville. She has four children including one daughter named Hope who is now training to be a nurse at Berea College, Kentucky. Mrs. Fox is a native of Madison County and returned to nursing after her children were grown. Her husband is a farmer (primarily cattle).

Until 1949 Madison County had no Health Department. Back then when the Health Department was organized Mrs. Fox agreed to become the first Public Health Nurse in the county. Although she does not have an impressive title, she has carried a heavy load of responsibility.

The Health Director of Madison County is a woman doctor, Dr. Margery Lord from Asheville. Dr. Lord has been both conscientious and active in her program for the needs of these people. Since the County Health Department could not possibly afford a full-time doctor (their total budget for the 59-60 year was only a little over $23,000.) Dr. Lord visits the clinic a day each week.

Among the many programs which Mrs. Fox has helped to put into effect are the various clinics such as maternity, child health, immunization and x-ray. The clinics are held at the new Health Center building just outside the county seat of Marshall and local doctors donate their time. An eye clinic is held every other month with the assistance of the local Lions Club.

Babies from this area are now born in the Asheville Memorial Mission Hospital attended by a doctor. In 1950 there were about 275 home deliveries in the county. This number dropped to 25 in 1959 and this year there will be just a handful born at home and these will be attended by the practicing doctors in the county. “We no longer have midwives practicing,” says Mrs. Fox. The days of nurses on horseback are gone forever in the Southern Appalachian. Road building programs since the end of World War II have made virtually every cove in the mountains accessible by car or jeep. Although she does not ride horseback to reach her families, Mrs. Fox sometimes has as much as a half mile walk to reach homes which are a little distance off the road. A day interspersed with a few walks like this can give her plenty of exercise particularly when the going is up the side of a mountain.
Mrs. Anna Fox, a Madison County public health nurse, crosses a rickety footbridge on a visit to a patient.
The Madison County Health Center, a modest but modern brick building located a few miles outside Marshall, N. C., is headquarters for Mrs. Anna Fox.

Children in a rural school are examined regularly. Mrs. Fox also administers tests for tuberculosis, sends cases to a physician for examination.
The shy girl at left was referred to a public health physician because she was underweight; she was found to have a congenital heart defect and underwent surgery at Duke University hospital.

Here Mrs. Fox informs the mother that she will be able to accompany her daughter to Durham when she goes for surgery.
Jeep takes Mrs. Fox and her colleague home. Heavy downpour sometimes makes a ford such as this impassable, necessitates wide detour.
Mrs. Fox calls on a 72-year-old farmer who has high blood pressure and other chronic ailments generally associated with old age. Mrs. Fox and a colleague regularly visit 172 patients at home, of whom 74 have cardiac diseases, 35 are children with rheumatic fever and 30 are diabetics.
Log cabin at which Mrs. Fox makes a house call is not very different from the type familiar to homesteaders in the last century. Significant difference is television aerial which relieves mountain loneliness.

Mrs. Fox checks on a patient who was sent to an eye clinic. Majority of people in area live in dilapidated wooden shacks with primitive sanitation. The average yearly income for a family in this region is $1500.
Immunization Clinics, which give shots for diphtheria, whooping cough, tetanus, typhoid, smallpox and polio, are held at the Health Center twice each week.
The Arthritis and Rheumatism Foundation

By Robert Pace, Executive Director
North Carolina Chapter

The Arthritis and Rheumatism Foundation is one of the national voluntary health agencies. As with most of its fellow agencies, it is devoted exclusively to a major health area—the problem of arthritic diseases. Our motto is “care today—and a cure tomorrow.” Presently we do not know the causes of arthritis and there is no known cure. Leading doctors are engaged in research which will eventually find the answers. Much of this research is being financed by grants from our Foundation.

We were organized in 1948 by a group of doctors and laymen interested in a more effective way of meeting the challenge of the nation’s greatest crippler—arthritis. We sponsor professional and lay education to correct and combat false ideas and propaganda about arthritis. In many areas we sponsor clinics for indigent arthritis sufferers. Our hope is that the North Carolina Chapter can develop several of these clinics as we expand our scope of activity and service.

We are presently conducting a nationwide campaign against quackery. This campaign is being headed by Jerry Walsh, Handicapped American of the Year, who suffers from arthritis himself. More than one billion dollars is spent each year on fake medicines and cures. This money is completely wasted. We seek to encourage legislation to curb those who are rightly called “misery merchants.”

The most important thing for arthritis victims is early diagnosis and treatment. In most cases, crippling can be prevented—if a competent physician is consulted and his advice followed. The longer one waits after the onset of arthritis, the more difficult it is for a doctor to control the disease. The most important advice that we can give to everyone is: consult your physician regularly for check-ups and follow his advice.

Arthritis can strike at any age. It is not an old age disease. The most crippling form strikes hardest between the ages of eighteen and forty-five and three out of four victims are women. Other forms tend to strike more men. Free pamphlets written by doctors for laymen are available from our Chapter upon request as part of our public education program. Requests should be directed to Drawer 311, Chapel Hill.

We need and solicit public support as we work to serve the people of North Carolina, especially the two hundred thousand who are arthritis sufferers.
Mrs. W. Kerr Scott Named

Mrs. W. Kerr Scott of Haw River has been named Honorary Chairman of the North Carolina Arthritis and Rheumatism Foundation according to Robert Pace, Executive Director of the Foundation.

The former First Lady, widow of the late Governor and United States Senator W. Kerr Scott, known affectionately throughout the state as “Miss Mary”, will head an impressive list of Sponsors for the Foundation in its work in North Carolina.

In announcing Mrs. Scott’s selection, Pace said, “We are deeply honored that Mrs. W. Kerr Scott has consented to serve as honorary chairman of our Foundation. No name means more to the people of North Carolina than that of Scott, a name that stands for service in all causes seeking the betterment of our state. As always, ‘Miss Mary’ said ‘Yes’ when asked to serve.”

The Arthritis and Rheumatism Foundation seeks through medical research to find the causes of and a cure for arthritis, the disease which afflicts 12,000-000 Americans and 290,000 Tar Heels.

Traffic Safety Stressed

Traffic safety can be promoted by mass communications if a few simple rules are followed, psychologist Dr. Harold Mendelsohn of the University of Denver told participants in the South-eastern Regional Safety Communication Seminar sponsored by the National Safety Council and the North Carolina Traffic Safety Council recently concluded at the Institute of Government at the University of North Carolina.

The rules that Dr. Mendelsohn laid down to the Seminar participants are (1) Most people are slow to adopt new ideas; the less education, the more slowly. (2) Personal influence is more effective in promoting attitudes than the outside influence of the mass media. (3) People are most influenced by people who are their equals in status than by their socio-economic superiors. (4) Personal participation improves communication, so that formal meetings and conversation do more to change attitudes than books or lectures. (5) The attention people will give to new ideas depends on what Dr. Mendelsohn calls the “fraction of selection,”—the expectation of reward must be high and the effort required must be low. (6) Communication builds on attitudes that already exist; it is hard to create new attitudes, so the person’s existing personality pattern must be exploited. (7) You can sell ideas through the mass media like advertising only if you use them properly in conjunction with training programs and legislation.

An address, “Public Health Views Its Shared Responsibilities for School Health”, presented before the First General Session, Ninth National Conference on Physicians and Schools, Conrad Hilton Hotel, Chicago, Ill., by Dr. J. W. R. Norton is being published in the September issue of the JOURNAL OF SCHOOL HEALTH.

July, 1964 THE HEALTH BULLETIN
For the Laboratory Section there will be a visit to the City Health Department Laboratory at Otisville, New York and there will be opportunities to visit other health department facilities and observe programs.

A visit to the World's Fair is tentatively planned for Friday, October 9, and delegates will see, among other things of special interest to them, how health and safety services are maintained for an expected seventy million visitors. Monday will be a pleasant time at the World's Fair. The children will be back in school and the weather will be comfortably cool.

So come prepared for a stimulating meeting in a stimulating city and then join the post-convention European Tour about which there is much more below. The April and subsequent APHA journals will publish hotel information and a reservation form. The August journal, not September as formerly, will carry the preliminary program. This is because the meeting is a full month earlier than ordinarily. This is a good time to make hotel reservations.

Registration fees for the meeting will be $10.00 for Association members and for members of the Public Health Association of New York City and the New York State Public Health Association. The fee for non-members will be $15.00 for the entire meeting and $6.00 for one day. Non-members who complete a membership application form and pay their dues at the time of registration may take advantage of the member's registration fee.

And now about that European tour! stimulated by invitations from agencies in four European cities and urged by certain Association members, the Association office has been prevailed upon to arrange a European tour following the 92nd Annual Meeting in New York City.

The cities invoked are London, Copenhagen, Geneva and Paris. The agencies inviting the group to visit them and to participate in scientific programs arranged by them are:

LONDON—The London School of Hygiene and Tropical Medicine. Professor W. S. Walton, Public Health Department, will arrange a program on an informal basis devoted to public health problems and progress in England.

COPENHAGEN—The Regional Office for Europe of WHO will receive the delegation in Domus Medicus, meeting room of the Danish Medical Association. Dr. P. Van der Kelside, the Director, and Dr. L. Hesselvik, Chief of the Health Services, will arrange the program.

GENEVA—The invitation comes from the Director General of WHO, Dr. Marcolina Candau. He and his associates are planning a full day program at WHO headquarters.

PARIS—The International Children's Centre and its Director General, Dr. Etienne Berthet, are our professional hosts in a half day session devoted to the work of this famous center. These are the chef d'oeuvres of the trip and its scientific objectives. But a European trip without sight-seeing and without hospitality and the opportunity to renew acquaintances and make new friends among our colleagues in other countries would fall far short of its true potential.

The Royal Society of Health of which many APHA members are also members, invites the delegates to a cocktail reception at its headquarters on one evening when they are in London. The very address of the Royal Society—90 Buckingham Palace Road—is interesting and romantic. Similarly the name Palais des Nations where Dr. Candau will host a cocktail party on an evening when the group is in Geneva opens vistas to the imagination.

July, 1964

THE HEALTH BULLETIN 15
The "Old Wives Tale" admonition to "Never eat oysters in any month which is spelled without an 'R'" has definite merit. The history of mussel poisoning generally shows that the summer months appear to be the most dangerous.

Although paralytic shellfish poisoning does not affect a great percentage of the population, it presents a real threat to the public. There is no antidote for this deadly poison. Artificial respiration and the use of apomorphine to induce vomiting have alleviated some of the symptoms in some victims. These methods cannot be depended upon to prevent deaths since the poison is absorbed rapidly by the human body.

The toxicity of shellfish is caused by a very strong poison which may be classified with strychnine. The poison's source is red plankton, the "Red Tide," which appears in the summer months. The poisonous plankton are eaten by the shellfish which in turn become toxic. This condition exists only so long as the shellfish feed on the "Red Tide" since the poison is not retained permanently.

Symptoms resulting from the consumption of toxic shellfish may include numbness, prostration, paralysis, respiratory difficulties, backache, headache, dizziness, abdominal cramps, vomiting, and nausea. The "exact amounts of toxin which may cause illness or death are not known. There have been several outbreaks of cases of paralytic shellfish poisonings which have afforded invaluable information for establishing harmful levels of toxicity.

Governor Terry Sanford's excellent series of newspaper articles written to help broaden our understanding of the needs and programs for retarded children have been put in a booklet entitled, "The Forgotten Children."

Mrs. Ethel Nash, senior editor of a recent book on "Marriage Counseling in Medical Practice," will become the American Association of Marriage Counselors' first president from North Carolina when she is installed at the annual meeting in 1965. A former vice president of the group, she will succeed Dr. Aaron L. Rutledge of Detroit.

The organization, founded 25 years ago, now has some 500 members in the United States and Canada in addition to foreign affiliates in Australia, Britain, France, Germany, New Zealand, Sweden and Switzerland.

Standards for public swimming pools have been prepared by the Sanitary Engineering Division of the State Board of Health. These are now in booklet form and may be secured from this Division, Post Office Box 2091, Raleigh, North Carolina. The North Carolina 1963 General Assembly enacted legislation which authorized the State Board of Health to "Establish Recommended Minimum Standards for the Design, Construction, Operation and Maintenance of Public Swimming Pools."

Many conferences were held with engineers, contractors, recreation officials, representatives of health agencies and others concerned with such standards in order to arrive at the minimum standards recommended. It is the desire of the State Board of Health that these standards be adopted by the Local Health Departments.
APHA Meets In New York In October

October 5-9 are the dates and New York City is the place of the 1964 Annual Meeting—the Association's 123rd. Most of the sessions will be held in the brand new New York Hilton which offers excellent and attractive rooms and exhibit space.

The Program Committee had its first meeting in February and while the actual content is still to be decided upon the Section Secretaries came up with many interesting topics.

Among these topics are: Newer Aspects of Control of Community Air Pollution; Geographical Aspects of Leukemia Clusters; Smoking Cessation Patterns; Role of Public Health in Genetic Counseling; Medical Care Bureaucracy; Public Health and the Battle for the Public Interest; Urban Environmental Health Planning and the Re-emergence of Disease Caused by Commercial Foods.

As possible topics for the Monday and Friday morning General Sessions the Committee expressed interest in population problems and the President's program to eliminate poverty, particularly as poverty is related to health.

The Conference on Radiological Health which arranged some of the best attended sessions at the Kansas City Meeting, is also planning a new and stimulating program. The sessions of many other related organizations meeting regularly with APHA will add interest and variety to the proceedings of the week.

Following the President's address on Tuesday night, the Sedgwick Memorial Medal will be presented. A pleasurable innovation this year will be the appearance of Cornelia Otis Skinner in one of her incomparable one-woman performances. Miss Skinner is a Vice-Chairman of the Plays for Living Committee of the Family Service Association of America. The evening will close with a reception to the President.

On Thursday evening the Bronfman Prizes for Public Health Achievement for 1964 will be presented.

Incidentally, two of the Plays for Living will be presented by professional performers under the auspices of the Health Education and other Sections later in the week. They are on homemaker service and on stroke. All the plays are written by professionals from the theatre in conference with authorities from the specific field of consideration. This collaboration assures scientifically sound content and at the same time “good theatre.”

The Local Committee under the chairmanship of Dr. George James, Commissioner of Public Health of New York City, is busy with plans for the reception of what is anticipated to be an unprecedented number of delegates and scientific and recreational trips and occasions in conjunction with the Meeting.

(Continued on Page 15)
Health Council Program
Nearing Completion

Program Chairman George P. Harris has announced some of the plans being made for the Annual Meeting of the N. C. Health Council to be held December 8 in Winston-Salem at the Jack Tar Hotel.

The theme for the all-day meeting will be "Health Care Planning—A Community Responsibility."

A panel discussion on area-wide planning will be a feature of the morning session, followed by a speaker from the U. S. Public Health Service.

Problems of aging and retirement will be presented by an interesting speaker at the luncheon session.

After lunch "What's New" will be the focus of interest in a panel discussion in such fields as mental health, care of the aging, transportation of the sick and injured, publicity in the health field. The annual business session will close the afternoon session.

How to Help Adults with Aphasia is an invaluable handbook on speech and language rehabilitation and psychological problems of the adult who has had a stroke. Written by Thomas Douglas Houchin, Ed. D., and Phyllis Janes Delano, Ed. D., the aim of this book is to help laymen become teachers of adults who have speech and language difficulties with related psychological problems resulting from having had a stroke. The publication may be ordered from: Public Affairs Press, 419 New Jersey Avenue, S. E., Washington 3, D. C. The cost is $2.50 per copy.

A free booklet entitled "Heart Disease Caused by Coronary Atherosclerosis" is available from the North Carolina Heart Association, 1 Heart Circle, Chapel Hill, North Carolina (27514).

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Registration fees for the meeting will be $10.00 for Association members and for members of the Public Health Association of New York City and the New York State Public Health Association. The fee for non-members will be $15.00 for the entire meeting and $10.00 for one day. Non-members who complete a membership application form and pay their dues at the time of registration may take advantage of the member’s registration fee.

And now about that European tour! Stimulated by invitations from agencies in four European cities and urged by certain Association members, the Association office has been prevailed upon to arrange a European tour following the 92nd Annual Meeting in New York City.

The cities involed are London, Copenhagen, Geneva and Paris. The agencies inviting the group to visit them and to participate in scientific programs arranged by them are:

LONDON—The London School of Hygiene and Tropical Medicine. Professor W. S. Walton, Public Health Department, will arrange a program on an informal basis devoted to public health problems and progress in England.

COPENHAGEN—The Regional Office for Europe of WHO will receive the delegation in Domus Medicus, meeting room of the Danish Medical Association. Dr. P. Van der Kelside, the Director, and Dr. L. Hesselvik, Chief of the Health Services, will arrange the program.

GENEVA—The invitation comes from the Director General of WHO, Dr. Marcelina Candau. He and his associates are planning a full day program at WHO headquarters.

PARIS—The International Children’s Centre and its Director General, Dr. Etienne Berthet, are our professional hosts in a half day session devoted to the work of this famous center. These are the chef d’ouvrres of the trip and its scientific objectives. But a European trip without sight-seeing and without hospitality and the opportunity to renew acquaintances and make new friends among our colleagues in other countries would fall far short of its true potential.

The Royal Society of Health of which many APHA members are also members, invites the delegates to a cocktail reception at its headquarters on one evening when they are in London. The very address of the Royal Society—90 Buckingham Palace Road—is interesting and romantic. Similarly the name Palais des Nations where Dr. Candau will host a cocktail party on an evening when the group is in Geneva opens vistas to the imagination.
DATES AND EVENTS

September 19—North Carolina Mental Health Association State Board meeting, Queen Charlotte Hotel, Charlotte.

September 20-26—International Conference on Social Work, Athens.


September 27-October 1—Water Pollution Control Federation, Bal Harbour.

September 28-October 1—American Psychiatric Association, Mental Hospital Institute, Statler-Hilton Hotel, Dallas, Texas.

October 3-4—Society of Public Health Educators, New York.


October 5-9—Association of Management in Public Health, New York.

October 5-9—Association of Public Health Physicians, New York.

October 7-10—National Association for Retarded Children, Oklahoma City.

October 8-11—National Council on Family Relations, Deauville Hotel, Miami Beach, Fla.

October 18-24—Second Annual Community Health Week, sponsored by the AMA.

October 20-22—American Nursing Homes Association, Miami Beach, Fla.

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July, 1964
Royalty of the North Carolina 4-H Health Pageant are shown here shortly after the coronation ceremonies in Raleigh. Selected as health king and queen were C. G. Sorrell of Durham, and Brenda Ann Templeton of Olin. Pictured with the new king and queen are their runners-up—Larry Horne, Laurinburg (far left) and Vickie Lee, Kinston (far right). (See story on page 2.)
The North Carolina 4-H Health Pageant was presented in the William Neal Reynolds Coliseum in Raleigh, N. C., July 21, 1964, by the Chatham County Extension staff, entitled, "Smile A Long While". One hundred and fifty boys and girls from the 100 counties in North Carolina competed on the basis of their 4-H health records.

All of the approximate 100,000 4-H'ers in North Carolina carry the health project to improve their personal, family, and community health.

C. G. Sorrell of Durham and Brenda Ann Templeton of Olin were selected as the health king and queen for North Carolina. The runners-up were Vickie Lee of R.F.D. # 4, Kinston, and Larry Horne of R.F.D. # 2, Laurinburg. Forty other boys and girls were awarded blue ribbons for their 4-H health projects.

Brenda Ann has traveled throughout Iredell County distributing needed information to industries and giving 4-H health demonstrations and exhibits. C. G. has given health demonstrations, exhibits, and lectures to the home demonstration clubs, Kiwanis Club, and many other civic organizations throughout Durham County.

Brenda and C. G. will receive all expense paid trips to Chicago for the National 4-H Club Congress in November. $500.00 scholarships will be awarded to the National 4-H Health winners.

Dr. George W. Paschall, Jr., president-elect of the North Carolina Medical Society, and Dr. Darden J. Eure, president, North Carolina Dental Society, were in charge of the coronation.
TRY to think of a day in recent years when you didn't receive at least one letter, some kind of a letter," Paul Jacobs challenged the March meeting of the American Orthopsychiatric Association in Chicago. "The mailbox is one of our connections to our fellows, a connection the poor don't have . . . make no mistake about it, the poor are not like us and are separated from us in small but significant ways I had forgotten and have only rediscovered while living as one of them."
Mr. Jacobs had come to the AOA meeting fresh from working as a dishwasher in San Francisco, looking for work in a depressed town in New York, being a "swamper" in a laundry, living with an unemployed coal miner in West Virginia and as a defeated habitué of flophouses and employment offices. To address the AOA, he had temporarily slipped out of the disguise of the permanent pauper and into the tweed suit, sensible tie, and sharp prose of the controversial writer that he actually is. After the meeting, he was to start on a new post—migrant farm worker.

"That's right, the poor just don't get any mail, not even advertising circulars," Mr. Jacobs continued as we rode in a cab to TV station WBKB. He was to be interviewed on Chicago's popular "Kup's Show," and I was going along to learn what I could about his life among "The Permanent Paupers," the title he gave his paper.

"They eat differently, too. You know, I almost lost my 'cover' when I was working as a dishwasher. I like salads, so I used to make myself a good salad for lunch, until I noticed the rest of the help staring at me. They were eating survival food—mashed potatoes, spaghetti, or french fries drowned in ketchup, and cream pie. They wanted to know what I was eating all that grass for, so I stopped.

"How did I get started as a pauper? It wasn't easy, believe me. I'm on the staff of the Center for the Study of Democratic Institutions and of the University of California; so I had financial support, but I had to live as though I hadn't any. That meant no credit cards, practically no money, no mail. I tried to eat on $1.25 a day. Once I ran out of money completely and had to walk four miles to borrow some.

"No, not having money wasn't what made it so hard for me; it wasn't the dingy furnished rooms or starchy meals, either. What bothered me the most was becoming a part—ever for a little while—of this huge group of defeated people. I didn't like living on the wrong side of the American dream, I guess."
Let's face it, that dream says that unemployment is the same as unworthiness and laziness, and I could read it in the eyes of the clerks in the employment offices and in the attitude of the landlady the day the $5.00 weekly rent was due. What was worse, the men I worked with—I mean the men I was unemployed with—had it written all over their faces, too. That's right, they had docilely accepted their role as failures; they were so unsure of themselves that they weren't willing to assert their rights even when they knew their rights were being violated. Some of them became very passive and bewildered. A lot of them live in a kind of fantasy world of 'if only's'—if only they had got to the employment office a little earlier or stayed a little later, if only they hadn't got married when they did, and so on!"

In Michael Harrington's best-selling book, The Other America, there is a line that I could half recall: "... it almost seems as if the affluent society had given out costumes to the poor so that they would not offend the rest of society with the sight of rags.”

"Yes, Mike was talking about the 'Invisible Poor' and he is so right. During the depression, you couldn't avoid seeing the poor; now it's different. They aren't actually starving, the city streets aren't filled with ragged beggars or naked children with bloated bellies; and the superhighways go right over the poor little country valleys."

I wanted to know what he thought psychiatrists ought to be doing about poverty.

"Well, I'm not exhorting them to become more 'aware' of the problem of poverty. How could anybody who reads not be aware of it, with practically every big city paper running articles and features on poverty? Poverty's become very 'sexy' in America. Everybody's trying to do something about it, and your readers know all about the relationship between poverty and mental illness. More than I'll ever know.

"I'd urge them to assert the authority their special competence gives them—to speak up, to do more research, to help in prevention. And not just as a special professional right, but as a professional obligation. In other words, I think the psychiatrists and the social scientists ought to be doing more in behalf of the poor. Not just as professional 'behalfers' either. What is said for and about the poor comes from the 'behalfers,' from people who speak on behalf of the poor, but who aren't poor them- selves.

"A lot of 'behalfers' can't seem to avoid developing a scornful attitude toward the poor—I know, I've been on the wrong side of it too often in the past year and a half. It doesn't do either side any good, believe me."

August, 1964

THE HEALTH BULLETIN 5
Judging from the sessions I was able to attend, the Ortho's are very much concerned with poverty. Jacob's paper was the sharpest, and the most talked about, but it wasn't the only one on the agenda. Altogether there were about ten papers on poverty, some dry, some lively.

Raymond Hilliard, with years of experience behind him as Director of Chicago's Department of Public Aid, bluntly started off his paper with "Poverty, ignorance, and racial injustice, the ugly, inseparable trio, disfigure the image of America and, if ignored for any longer, will wreck our nation." Dr. Benjamin Spock gave a disturbing account of how uncomfortable it is to be part of civil rights demonstrations: "... one feels like a two-legged squirrel in a public cage ... shorn of purpose and dignity ... acutely conscious of being in the minority." He urged professional people to get involved without getting obsessed.

There were other papers dealing directly with poverty: "The Effect of Poverty on Personal Achievement"; "The Non-Culture of Poverty"; "Poverty and the Behavior of Low Income Families"; "Developmental Effects of Poverty on Children of Hard Core Urban Families"; "A Comparison of the Child-Rearing Environment of Upper-Lower and Very Low-Lower Class Families"—these last by psychiatrists Edgar H. Auerswald and Eleanor Pavenstedt, So at least some of the Ortho's are doing the research on poverty that Mr. Jacobs calls for.

And they are conscious of the danger of becoming mere "behalfers," too. Their president, Gisela Konapka, in her opening address dwelt at length on the need for social agencies to give their clients more independence, more say in what is being done for them and to them, more chances to make their own mistakes, even to help one another. More opportunities to retrieve their pride. "... we in the mental health field must say ... that our central task relates to restoration and enhancement of this old and value-laden concept, DIGNITY, or the unique value of each person."

Robert L. Dean
Varicose Veins: A Common Problem

Varicose veins are probably the most common of circulatory disorders and they affect both men and women. The word “varicose” simply means swollen.

You can understand the why’s and how’s of varicose veins better if you know something about the circulation of blood through the body.

Probably no system of transportation is as wonderful as the circulatory system which carries blood to every part of your body. The heart, of course, is its center and dynamo. It sends blood out through the arteries and is the depot to which the blood returns through the veins.

On its way back from the legs to the heart, the blood has a long uphill climb. Three things help in this upward journey. Blood pressure, stronger in the arteries, is much diminished in the veins but still gives some push to the blood. The movement of leg muscles during normal activity or exercise helps massage the blood upward through vein walls. The third aid is a very ingenious antigravity device: tiny cup-like valves which section off the veins and maintain one-way traffic. These valves open to let the blood travel upward, then close tightly so that blood will not fall back.

Varicose veins develop when vein walls or valves become weakened. Some people may be born with weak valves or weak vein walls. But diseases, injury, overweight, tight clothing, pregnancy and other stresses can also damage or put greater pressure on the veins, according to the North Carolina Heart Association.

When walls of the veins are weak, in time they may give way under the pressure of blood and sag outward at the site of the valves. As a result, the valves cannot close tightly to regulate the flow of blood. This, in turn, further increases the pressure of blood against the vein walls, which may balloon out and become “varicose.”

Standing or sitting for long periods is hard on people with varicose veins because blood accumulates in the lower legs and puts greater pressure on the veins. This is one reason why doctors recommend that such persons put their feet up—at the office (if they can get away with it), at home watching television or doing sit-down chores. Even if you don’t have varicose veins it’s a good idea to walk around every half-hour or so during a long plane or train trip. Interrupt long motor trips to let the whole family get out and stretch their legs.

Periodical medical check-ups are advisable for people with varicose veins, the state heart group says. Let your doctor decide whether or not you need treatment. If your veins seem to be getting worse, your doctor can prevent serious damage if you see him soon enough. A free booklet entitled “Varicose Veins” is available from the North Carolina Heart Association, 1 Heart Circle, Chapel Hill (27514).
SIGNING THE PACT—James T. Ramey of the Atomic Energy Commission signs the joint agreement between the AEC and the State while Governor Sanford waits his turn with the pen. Behind them is former Congressman Carl T. Durham of Chapel Hill who presided at the ceremony.
The Role of North Carolina in Radiation Control

Remarks by Commissioner James T. Ramey
U. S. Atomic Energy Commission

Governor Sanford... I am honored to have the privilege of being here today and of having the opportunity to participate in the signing of this agreement under which the State of North Carolina will assume part of the Atomic Energy Commission’s regulatory authority and responsibility over atomic energy materials.

This agreement, this shifting of authority and responsibility from the Federal Government to the State of North Carolina, is, in large measure, a tribute to a great American, my long-time friend, my one-time boss, an outstanding North Carolinian, your chairman of today’s ceremony, the Honorable Carl Durham.

In fact, his foresight led him to introduce legislation in 1957 which recognized the proper interests of the states in protecting the public health and safety of their own citizens from the hazards of radiation. This was the forerunner of the legislation which he sponsored with Senator Clinton P. Anderson of New Mexico in 1959, making possible the transfer of authority which is taking place today.

And, it was another North Carolinian who assumed the leadership within the Atomic Energy Commission working toward this program which permits the transfer of responsibilities to the states. I speak of former Commissioner John Graham.

North Carolina over the years has demonstrated a broad interest in the uses of atomic energy. In fact, as most of you know, the reactor at North Carolina State was the first non-AEC owned and operated reactor in the United States. Not only has your state been interested in the promotion of the peaceful uses of atomic energy but it has also shown an early interest in the problems of radiation protection. I am told that among your activities in this field, you established early in 1958 a committee on radiation protection advisory to the State Board of Health. You also organized a state radiological emergency team in that year.
In 1959, I understand you established the North Carolina Atomic Energy Advisory Committee, consisting of some 35 members appointed by the Governor. This is a very active committee and we were saddened when the news reached us of the loss of your chairman, Mr. Agnew Bahnson. North Carolina lost an outstanding citizen and the atomic energy program lost an able friend.

Your North Carolina Space and Technology Research Center in the Research Triangle is being watched by other states as an example of state interest and involvement in scientific programs. Indeed, the Research Triangle Institute, dedicated to regional and national service through advancement and application of scientific knowledge, is an example to the nation and an organization of which you can be proud. The Atomic Energy Commission has been sponsoring research at the Regional Radioisotopes Research Laboratory in the Triangle for a number of years. In other ways, too, people and institutions in North Carolina are contributing significantly to the increase of knowledge about atomic energy. The commission, for example, is investing nearly a million dollars a year in physics research at Duke University.

The transfer of certain regulatory responsibilities from the Atomic Energy Commission to the State of North Carolina is just one phase of the larger objective of the commission to divest itself of much of its control over the development of the peaceful uses of atomic energy.

Consider where we stand today in the transition of nuclear power from the government laboratory to a commercial reality. Ten years ago, substantially all industrial capability in nuclear energy work was confined to AEC plants and laboratories. As peaceful applications advanced and commercial industrial capabilities increased, the commission provided to private industry various materials and services that could be obtained from no other source. However, the commission did so with the understanding that these would be provided only so long as industry itself could not perform these functions on a reasonably competitive basis. This policy has worked so effectively that today private industry can furnish a large percentage of the supplies and services needed for peaceful applications of nuclear energy.

Consider also the recent, rather encouraging, events in the atomic power field. Earlier this year, the Jersey Central Power and Light Company announced the procurement of a 500,000 to 600,000 KW atomic power plant at a truly amazing low investment cost of about $130 per kilowatt. This plant has been estimated to provide electric power at from 4 to 4.5 mills per kilowatt hour. In discussing this plant at a recent meeting of the National Coal Association, Mr. Al Tegan, President of General Public Utilities Corporation, stated:

We believe that our decision to build Oyster Creek was based on cold, hard figuring as to how we could achieve the lowest cost for delivering electricity to our customers in New Jersey.

In order to compete with nuclear power, he stated further:

It seems to us that the present target delivered price for coal on the Eastern Seaboard has to be on the order of 20¢ per million BTU's (to compete with nuclear power).

Since fuel costs in this Southeast area of the United States are apparently in the 25 to 30 cents per million BTU's range, it seems likely that nuclear power will be seriously considered by your utilities for future generating capacity.
The transfer of regulatory authority which we are agreeing to today involves much of the regulatory responsibilities of the commission. The commission, however, retains a part of its authority. The law presently requires that the commission continue to control the construction and operation of such facilities as nuclear reactors, the export and import of atomic energy materials, the reprocessing of nuclear fuels, and the ocean disposal of atomic wastes.

This agreement to transfer regulatory authority is the logical extension of a number of significant steps your state has taken to protect the public health and safety. It is an important and significant step. You are assuming responsibility over approximately 180 licenses — no small responsibility — but one for which we know that you are well prepared.

The Atomic Energy Commission has been continually following the progress of the state programs in this area. Certain problems or potential problems have emerged, including maintaining compatibility between Federal and State programs; providing for adequate workmen’s compensation for radiation injuries; and the applicability of the Department of Labor’s Walsh-Healey regulations in the field of radiation protection. All of these matters will require careful study and also cooperation between the Federal Government and the states.

Not only must there be this close cooperation between Federal and State programs, but it is of the utmost importance that your regulatory program be continuously coordinated with the programs of other states which assume similar regulatory responsibility. On our part, we will do our utmost to cooperate with you and assist you. Our best wishes go with you in this new and important undertaking.

Remarks by Dr. Baker


Governor Sanford and Guests, your State Board of Health, under the able direction of Dr. Norton and his staff, has spent 7 years preparing for this moment.

We hope the program we have for you is an effective and economical one and adequate to meet the needs.

Health administrative officers have been trained in scientific details of physics, chemistry, biology, toxicology, law, medicine, and public understanding.

The details for the plan for radiation protection have been developed in coordination with neighboring states, the southern states, and federal agencies.

In the past 7 years, 16 professional workers have completed 51 scheduled organized training courses or seminars.

Some at our universities, but in the main, at the Atomic Energy Commission and Public Health Centers.

Since receiving, some 2 1/2 years ago, planning funds for this program, your State Board of Health, through the work of Dr. Wilson, has recruited qualified personnel — provided them with further training — and has secured equipment and set up reasonable health standards and procedures to provide effective protection against radiation.

The workers are trained and equipped to check air, water, food and fallout if such should occur.

The various phases of the program, and they are numerous, are coordinated through professional personnel pointing toward two goals; first, guidance to employees who work in areas exposed to radiation, and the routine protection of the people working in these fields.
This section of the program is well developed and has been in operation for some time.

The second phase is the development of a program to meet emergencies should serious radiological dangers occur. This mass protection phase of the program likewise has been developed but not yet tested.

North Carolina has been fortunate in that you as Governor and Administrative Officer of the State have been ever alert in keeping up with changes and needs, and I am certain that the State of North Carolina, as a result of your efforts, is one of the best prepared States to receive a grant such as it is our privilege to accept today.

In closing and with all due credit to our professional personnel within the State Board of Health and recognition of the interest and cooperation of the board itself and those who have helped us, the people of the State of North Carolina have one man and one man only to thank for our being able to prepare to meet the needs of this program, as well as many other programs that have developed in the world during the past 3½ years.

If North Carolina has ever had a more alert, capable, far-sighted administrative officer than we have had during your term of office, I do not know when it was.

Governor Sanford, not only do the present citizens of the State of North Carolina owe you thanks for what you have done, but the future will prove that generations to come can look back with respect and deep appreciation not only for your efforts but for your success in carrying through to fulfillment if not all, at least most of your dreams.

Your State Board of Health, through your appointees thereto, one of which I am proud to be, extend to you the gratitude of the people of North Carolina.

Dr. Norton
Expresses
Gratification
in Undertaking
New Responsibility

The administrative staff working under the Governor and the North Carolina State Board of Health is gratified to undertake this new and increased responsibility for protection and advancement of the public health. Our whole community progress and well-being demand that we take prompt and maximum advantage of all technological advances. To that end the beneficial uses of radiation, like the uses of so many other modern and improved tools, such as electricity, for instance, will be increasing all around us almost daily. This can continue with safety to our people because we shall all be working in close harmony to control radiation as only one of several such valuable new resources available to us. Our health protection capabilities are abreast, and we must keep even a little ahead of the many advancing helpful uses of radiation. Since mid-1960 we have been collecting background and current air sampling information and operating the 24-hour emergency service for radiation accidents. We now have 32 air sampling stations and for about a year the Charlotte and Raleigh-Durham weather stations have done 24-hour air sampling. Water supplies and consumer food are also being checked for safety.
Our staff and the many professional, industrial, agricultural, educational, and research personnel with whom we shall continue to work are mindful of the public's interests. With modest confidence, we can accept the new challenges to assist and promote safety along with scientific and economic progress.

Now, as State Health Director, it is my privilege to report our acceptance of this responsibility. At the same time I wish to express appreciation for the many supports and assistance given by so many people to make us ready for our undertaking. We shall appreciate even more their future help, as we strive to justify their past and future confidence.

J. W. R. Norton, M.D.
State Health Director

Regulations
Filed As
Public Record

In accordance with G.S. 130-9 Section (a) (1957, c.1357, s.1), the North Carolina Regulations for Protection Against Radiation have been filed as a public record in the State Board of Health and copies will be sent to each local health department within the State.

The statute requires also that the Regulations shall be published in the State Board of Health Bulletin. This has been achieved as indicated on the face of the Regulations, by publication as a "Supplement to the State Board of Health Bulletin".

Health Notes

The School of Education at the University of North Carolina at Chapel Hill has received a grant of $65,800 for the 1964-65 academic year from the U. S. Office of Education for the preparation of professional personnel in the education of mentally retarded children.

The grant, according to Dr. Ralph C. M. Flynt, Associate Commissioner for Educational Research and Development, U. S. Office of Education, comes under the provisions of Section 301 of Public Law 88-164 to assist colleges and universities in the development and expansion of programs for the training of professional personnel in the area of mental retardation.

The funds will be used to provide five traineeships and seven graduate fellowships in preparing promising persons for positions as teachers, supervisors, instructors in college and university programs, and research workers in the area of mental retardation.

Warnings are made regularly about keeping potentially poisonous chemicals out of the reach of children. And regularly there are reports of children becoming accidentally poisoned.

Because this happens even when parents are very cautious, the Children's Hospital Medical Center in Boston put out an announcement last week urging parents to equip the family first-aid kit with a kind of universal antidote—a syrup called Ipecac, which tastes good (cherry-flavored) but will induce vomiting and clearance of the poison from the system. It can be obtained by prescription and should be administered only under direction by a doctor.

August, 1964

THE HEALTH BULLETIN
These leaflets and a number of other titles can be secured at small cost from IMAGINATION, Inc., 4032 Maryland Avenue, North, Minneapolis 27, Minn. Other subjects include: "10 Little Hunters"—"10 Little Tasters"—"10 Little Smokers"—"10 Little Bike Riders"—"10 Little Drivers"—"10 Little Boaters"—"10 Little Farmers"—"10 Little Goblins" and "10 Little Swimmers."

MEMBERS OF THE NORTH CAROLINA STATE BOARD OF HEALTH

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<td>Durham</td>
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<td>John R. Bender, M.D.</td>
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EXECUTIVE STAFF

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<tr>
<td>J. W. R. Norton, M.D., M.P.H.</td>
<td>State Health Director</td>
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<tr>
<td>Jacob Koomen, Jr., M.D., M.P.H.</td>
<td>Assistant State Health Director</td>
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<tr>
<td>J. M. Jarrett, B.S.</td>
<td>Director, Sanitary Engineering Division</td>
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<td>Fred T. Foard, M.D.</td>
<td>Director, Epidemiology Division</td>
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<td>Robert D. Higgins, M.D., M.P.H.</td>
<td>Director, Local Health Division</td>
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<tr>
<td>E. A. Pearson, Jr., D.D.S., M.P.H.</td>
<td>Director, Oral Hygiene Division</td>
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<td>Lynn G. Maddry, Ph.D., M.S.P.H.</td>
<td>Acting Director, Laboratory Division</td>
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<tr>
<td>Charles L. Harper, M.S.P.H.</td>
<td>Director, Administrative Services</td>
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<tr>
<td>James F. Donnelly, M.D.</td>
<td>Director, Personal Health</td>
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"Smoking and The Heart," a new leaflet in the health information series of the Public Health Service, U. S. Department of Health, Education, and Welfare has been issued by the National Heart Institute. The publication is the first in a planned series dealing with various aspects of the Report on Smoking and Health of the Advisory Committee to the Surgeon General of the Public Health Service, issued in January. It also cites evidence associating cigarette smoking with coronary heart disease, from a Public Health Service study conducted by the National Heart Institute in Framingham, Massachusetts, on the development and progression of heart disease.

Mrs. Winthrop Rockefeller, Honorary Chairman of the second annual New Year's Eve Event for Mental Health, will be guest speaker at a luncheon to be held at the Sir Walter Hotel in Raleigh on September 15th.

The next State Board meeting of the North Carolina Mental Health Association will be held in Charlotte, Queen Charlotte Hotel, on September 19, 1964.

Community Health Week

The second annual Community Health Week will be observed across the nation October 18-24.

Dr. F. J. L. Blasingame, executive vice president of the American Medical Association, said most of the 2,000 medical societies and more than 20,000 public and private health agencies will commemorate the occasion by holding special community health programs.

The spotlight will be on health progress, medical advances and the health services and facilities available in each community.

Community Health Week also will pay tribute to the more than two and one-half million physicians, nurses, druggists, technicians and others who follow full-time careers in the health field and to the millions of others who have part-time jobs in the field or serve with voluntary health agencies.

The Public Health Service, U. S. Department of Health, Education, and Welfare, has announced the award of 10 grants or contracts totaling nearly $260,000 to support demonstrations and studies relating to cigarette smoking and its effects on health.

The awards are in line with the judgment of the Surgeon General's Advisory Committee on Smoking and Health that cigarette smoking is a health hazard warranting "appropriate remedial action." They also are the first projects directly resulting from the Surgeon General's commitment to undertake a long-range program of public information and education based on the Advisory Committee Report.

Most of the announced projects are to help design appropriate methods of reaching various population groups with the most effective smoking and health information. None are in North Carolina.
DATES AND EVENTS

October 20-23—North Carolina State Nurses Association Convention, Queen Charlotte Hotel, Charlotte.
October 22-30—American Occupational Therapy Association, Denver.
October 25-27—North Carolina Conference on Family Relations, Hotel Jack Tar, Durham.
October 25-27—American Heart Association, Hotel Chalfonte-Haddon Hall, Atlantic City, N. J.
October 29-31—Gerontological Society, 17th Annual Meeting, Leamington Hotel, Minneapolis, Minn.
November 7—District IV Health Careers Congress, Memorial Auditorium, Raleigh.
November 8-19—Mental Retardation Week.
November 9—Conference of State and Territorial Health Officers, Washington, D. C.
November 9-11—American Association of Homes for the Aging, Statler Hilton, Washington, D. C.
November 9-12—American Dental Association, San Francisco, Calif.

November 18-21—National Association for Mental Health, Annual Meeting, Jack Tar Hotel, San Francisco, Calif.
November 20-24—National Society for Crippled Children and Adults, Detroit.
December 1-2—National Social Welfare Assembly, Annual Meeting, New York, N. Y.
December 26-31—World Medical Association, 18th General Assembly, U. S.

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Health Staff Member Elected President of State Employees Association

Dr. Edwin S. Preston (left), Public Relations Officer of the State Board of Health, is shown being congratulated by Judge Dan K. Moore upon his election to the presidency of the North Carolina State Employees Association. The occasion was the Banquet session of the Annual Convention of this 12,000 member organization held September 12 in Durham at the Jack Tar Hotel. Judge Moore was the featured speaker of the Banquet. Looking on at center is Melville Broughton, Jr., Raleigh attorney, who introduced Judge Moore. This is the first time in the history of the Association that a member of the State Board staff has been named president.—JWRN.
Communicable Disease Nine-Month Comparison

<table>
<thead>
<tr>
<th>Disease</th>
<th>January through August 1964</th>
<th>January through August 1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>0</td>
<td>2****</td>
</tr>
<tr>
<td>Infectious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis</td>
<td>428</td>
<td>763</td>
</tr>
<tr>
<td>Measles</td>
<td>1,151</td>
<td>1,502</td>
</tr>
<tr>
<td>Meningococcal Infections</td>
<td>68</td>
<td>55</td>
</tr>
<tr>
<td>Poliomyelitis</td>
<td>9*</td>
<td>3</td>
</tr>
<tr>
<td>Rocky Mtn. Spotted Fever</td>
<td>30**</td>
<td>21</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>948</td>
<td>1,039</td>
</tr>
<tr>
<td>Typhoid</td>
<td>17**</td>
<td>6****</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>105</td>
<td>96</td>
</tr>
</tbody>
</table>

* 3 1963 Onsets
** 9 1963 Onsets
*** 2 1963 Onsets
**** 1 1962 Onset
***** 3 1962 Onsets

Accident Toll Mounts

The accident toll continues to mount in North Carolina. According to information released recently by the Public Health Statistics Section of the State Board of Health, accidents claimed 252 more lives in the first seven months of 1964 than in the corresponding period in 1963.

Increases in the number of deaths are seen in all three major accident classifications: motor vehicle, home-farm, and other (non-motor transport, occupational, public place). Below is a comparison of the two years 1963 and 1964 for the first seven months of each year:

<table>
<thead>
<tr>
<th>Category</th>
<th>1963</th>
<th>1964</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicles</td>
<td>709 deaths</td>
<td>889 deaths</td>
</tr>
<tr>
<td>Home-Farm</td>
<td>449</td>
<td>471</td>
</tr>
<tr>
<td>Other</td>
<td>375</td>
<td>425</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,533 deaths</td>
<td>1,785 deaths</td>
</tr>
</tbody>
</table>

New Pamphlet on Lung Cancer Available

"Cancer of the Lung," a pamphlet on the most common cause of cancer deaths among American men, was issued recently by the Public Health Service, Department of Health, Education, and Welfare. Prepared by the Service's National Cancer Institute to give the public a clearer understanding of this highly malignant disease, the pamphlet is the fifth in a new series of 10 publications dealing with cancer of different body sites.

Fifty years ago, lung cancer was rare. But last year in the United States, about 43,000 persons died from it. More than 37,000 of the victims were men. The total death rate is more than 10 times what it was in 1930, and the trend shows no sign of reversing itself.

As cases of lung cancer have increased, the search for its causes has been intensified. In a section on smoking, the pamphlet describes some of the laboratory evidence and statistical studies that led the Surgeon General's Advisory Committee on Smoking and Health to conclude that the effect of cigarette smoking far outweighs all other factors related to lung cancer in men and that the data for women, though less extensive, point in the same direction.

The eight-page pamphlet also discusses other factors related to lung cancer, its symptoms, diagnosis, treatment, and prevention, and the nature of cancer in general.

The other four pamphlets in the series already available are on cancer of the breast, uterus, skin, and bone.

Single copies of "Cancer of the Lung" (PHS Publication No. 1173) are available without charge from the Public Health Service, Washington 25, D. C.
Cancer Facts

All Should Know

Cancer is a frightening word among Americans today. It's a frightening disease. Millions of American families have had experience with cancer. Millions of words have been written about cancer in the public press. Most of us know something about cancer. But how many of us really know what cancer is?

During the process of cell division—the basis of normal body growth and repair—cells become differentiated into the specific kinds needed for each organ or body function, says a new pamphlet of the American Medical Association.

Each kind of cell divides into its own kind, equipped to do the job it was designed to do. Under certain conditions not yet completely understood, some cells do not differentiate in this way. They multiply in irregular and disorderly fashion and compete with normal cells for nutrition and space. These cell masses are called tumors.

Tumors that remain localized are benign and may not be troublesome unless they mechanically interfere with some body function. Tumors that grow rapidly and spread or destroy tissue are known as malignant tumors. Collectively, these are called cancers.

Unrestrained growth of cancer cells will infiltrate vital organs and destroy the individual if not checked. Slow growing cancers may take months to spread beyond control. More malignant types spread so rapidly that they become incurable in a few weeks.

Surgical removal of the cancer and destruction of the tumor with some form of radiation are the primary methods of treatment. A few types of malignancy, particularly leukemia, react quite well to newly discovered drugs and chemicals. Drug treatment holds much hope, but it is not yet perfected and surgery and radiation are still the major treatments, possibly supplemented by carefully selected drugs.

If treated promptly and properly, some cancers are highly curable. One-third of all cancers in the United States are being cured today and more than one million Americans alive today have been cured of cancers. However, almost 300,000 Americans will die of cancer this year. Of this total, almost 100,000 might have been saved through early detection and treatment.

The cause of cancer in man is not known. Some cancers may follow some form of physical irritation, such as friction, heat, sunlight, x-rays and other forms of radiation. Chemical irritants may include infections, tars, certain of the heavy metals, hormones and certain dyes. There is no evidence that heredity is a factor.

Know and heed the American Cancer Society's Seven Danger Signals:
1. Unusual bleeding or discharge.
2. A lump or thickening in the breast or elsewhere.
3. A sore that does not heal.
4. Change in bowel or bladder habits.
5. Hoarseness or cough.
6. Indigestion or difficulty in swallowing.
7. Change in a wart or mole.

If any one of these symptoms persists for longer than two weeks, see your doctor. These symptoms do not necessarily mean you have cancer, but they are a warning sign that it might be fatal to ignore.
Ford Foundation
Spurs Program for Aged

A major expansion of the national service program of the American Association of Homes for the Aging (AAHA) will be supported over a three-year period by a Ford Foundation grant of $120,000, it was announced recently by the Rev. Canon Herbert C. Lezenby, Association President.

The Ford Foundation funds will be made available to the Association through its sponsoring organization, the National Council on the Aging.

According to Dr. Lezenby, the program to be developed will enable AAHA to "intensify and broaden its role as interpreter and spokesman for all non-profit Homes and many other related long-term care facilities for the aged."

Founded in 1961 with the assistance of its first Ford Foundation grant, AAHA now has a membership of more than 550 non-profit and governmental Homes for the aged serving close to 70,000 residents.

Dr. Lezenby said AAHA plans to work with the State Associations of Homes, other national health and welfare organizations and private and public agencies in the field of aging to provide such services as group purchase of insurance, central purchasing, technical consultation on construction and financing, personnel recruitment and development, additional regional institutes and workshops, technical publications and directories, and a program of public education to interpret and clarify services provided in the modern facility for the aged.

Dr. Lezenby said that AAHA programs have already "had a dynamic and wholesome impact on the problems of institutional care for the aging."

Among the Association’s accomplish-
Abandoned Refrigerators Are Dangerous

The Public Health Service, U. S. Department of Health, Education, and Welfare, today warned the public to be especially alert to the hazard of idle and abandoned refrigerators and ice boxes.

“So far we have reports of 13 children killed by suffocating in unattended, temporarily idle, or abandoned refrigerators,” declared Dr. Paul V. Joliet, Chief of the Public Health Service’s Division of Accident Prevention.

“Triple tragedies in Maryland, Illinois, and California have focused attention on the problem,” Dr. Joliet said. “Three children were found dead in an unused back porch refrigerator in Chicago, three were in an idle refrigerator in Baltimore, and three were in a freezer temporarily out of service in Los Angeles.”

Parents should be aware that an empty and idle refrigerator is a menace to the life of a child, unless special action is taken to prevent entry or guarantee ventilation, he advised. Most refrigerator entrapment accidents occur to children under six. Dr. Joliet said that if a refrigerator is to be junked, discarded or abandoned, the doors should be removed or the appliance should be carted away and destroyed.

The refrigerator temporarily out of use also is a death trap. He suggested that upright units be placed so that the door stands against the wall. An added precaution to make the box “child proof” would be to encircle the box with strong filament tape or a simple chain secured with a padlock. Some owners may prefer to attach with plastic cement a small wooden block which will prevent complete closure of the door and insure a fresh air supply inside the box. The block can be removed when the appliance is to be restored to service.

Dr. Joliet said that in recent years the Federal Government and many municipalities and States have enacted laws designed to prevent entrapment within refrigerators. No deaths have been reported involving a refrigerator manufactured since 1958, he noted.

The Division of Accident Prevention, which has been working closely with State and local health and medical officials and industry and trade association groups on this problem, has in production educational manuals explaining to individuals and program planners how to prevent refrigerator entrapment.

“Clean Water” Filmstrip Available

“Clean Water is Everybody’s Business” is the title of a new filmstrip and speaker’s guide now available from the Public Health Service of the U. S. Department of Health, Education, and Welfare.

The filmstrip shows how people depend on clean water and how its misuse can pollute a vital resource. The presentation explains how municipal wastes are treated, what is provided by the Federal water pollution control program, and what State and local governments may do in solving water pollution problems.

Additional information is also provided to help the teacher localize the presentation and adapt it to the particular situation he may find in his own community.
Progress is
Being Made
in Evaluating

the Impact
on North Carolina

of
Neurological
and Sensory
Diseases
Of major importance in the planning, development, and organization of community health services is some appreciation of the magnitude of the various categorical groupings of diseases and defects. The neurological and sensory diseases represent a category of diseases and defects whose major signs and symptoms involve the brain, vital centers, and nerves of the body.

The impact of a particular disease upon North Carolina's population can be measured in terms of:

Deaths due to that disease
Sickness caused by the disease
Permanent Disability due to the disease
Economic Loss resulting from the disease
Health Personnel and Facilities employed in treatment of patients
Other indexes such as use of health insurance, etc.

Death generally is the best recorded of all the influences which a disease may have on a population group due to the required death registration. Since many diseases rarely cause death while being responsible for many cases of illness, the picture obtained from a review of death data is at times incomplete.

Except in the case of certain communicable diseases, there is no required reporting for most cases of disease experienced by the population. This means that in most instances data regarding the number of cases in a civilian population group must be based on estimates obtained from applying rates of other studies as are data regarding disability and economic loss.

For planning purposes an important determination revolves around the "net effective demand for health service," or, stated in more concrete terms: how many patients will use this service tomorrow if it becomes available? An estimate of this latter figure can be based on assessment of the patients with certain diagnoses known to health organizations and programs.

The staff of the Neurological and Sensory Disease project was concerned largely with estimating the net effective demand for services by those with neuro-sensory disorders. Much of the data was based on a review of death records and disease reports from the North Carolina State Board of Health, patient data from the North Carolina State Commission for the Blind, the Division of Vocational Rehabilitation, the three teaching hospitals in the state, the Memorial Mission Hospital in Asheville, and from other selected health studies. Both the Hospital Care Association and the Hospital Saving Association made records available as did a number of other cooperating organizations and individuals.

Deaths

The neuro-sensory category is responsible for approximately 5600 deaths per year in North Carolina with cerebro-vascular accidents (strokes) responsible for 5000 of these. Cancers and other malignancies involving the nervous system ranked second in importance followed by congenital malformations of the brain and nerves. In a typical year, epilepsy caused 74 deaths; cerebral palsy caused 45 deaths; Parkinsonism deaths numbered 33; muscular dystrophy and atrophy, 41 deaths; and multiple sclerosis, 20 deaths.

Sickness

Due to incomplete records on the health status of the entire population, only estimates can be made of the prevalence of neuro-sensory diseases in the population of North Carolina. (See Table 1 on next page.)

Economic Loss

The total loss resulting from the care and treatment of those with neuro-sensory diseases, time lost from work, and related costs can only be estimated.
It is known, however, that during the three year interval 1959-1961 the Hospital Care Association paid out $425,000 in claims to victims of these disorders. During the year 1958 the Hospital Saving Association of Chapel Hill paid for 23,000 days of hospital care for 2850 patients with these diseases.

Effective Demand
Data provided by the Duke University Hospital, N. C. Memorial Hospital, and the Bowman-Gray School of Medicine and Baptist Hospital indicated that during 1961 a total of 2133 residents of North Carolina with one or more neuro-sensory diseases received treatment. In the field of epilepsy and convulsive disorders, Bowman Gray saw 145 resident patients; Duke, 369 patients; and UNC, some 268 patients.

Parkinsonism cases seen in the three centers numbered 145 while 66 multiple sclerosis patients were seen. Muscular atrophy patients numbered 81, muscular dystrophy patients totaled 56 and 19 myasthenia gravis patients were seen that year.

The Crippled Children's Clinic program of the N. C. State Board of Health in a recent year saw 4500 children with various neuro-sensory diseases with some 1300 of these representing children with the late effects of acute poliomyelitis.

During 1960-62 some 1050 cases involving patients with neuro-sensory diseases were closed by the North Carolina Division of Vocational Rehabilitation. A total of 301 cases had hearing impairment; 136 had epilepsy and the convulsive disorders; 119, cerebral palsy; 118, visual impairments; 117, mental retardation; there were 93 with spinal cord lesions and 85 with speech disorders.

Summary
Although complete data regarding the total impact of the neurological and sensory diseases upon the state of North Carolina is difficult to obtain, best available information shows some 5,600 deaths, an estimated 546,000 cases and untold thousands of dollars of economic loss resulting from these diseases in the state each year.

A number of special reports dealing with various aspects of this problem have been provided to members of the advisory committee to the Neurological and Sensory Disease Developmental Project and will be used by them in the development of state-wide planning recommendations.

### ESTIMATED PREVALENCE OF SELECTED NEUROLOGICAL AND SENSORY DISEASES

<table>
<thead>
<tr>
<th>Percentage of Population</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerebral Palsy</td>
<td>0.3</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>0.6</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>3.0</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>0.07</td>
</tr>
<tr>
<td>Muscular Dystrophy</td>
<td>0.1</td>
</tr>
<tr>
<td>Parkinsonism</td>
<td>0.1</td>
</tr>
<tr>
<td>Vascular Disease of the Brain</td>
<td>1.2</td>
</tr>
<tr>
<td>Blindness</td>
<td>0.27</td>
</tr>
<tr>
<td>Hearing Impairment</td>
<td>0.5</td>
</tr>
<tr>
<td>Speech Disorders</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>546,600</td>
</tr>
</tbody>
</table>
Homes for Aging to Cooperate In Mental Impairment Study

The American Association of Homes for the Aging (AAHA) has recently announced its cooperation with the Council of Jewish Federations and Welfare Funds in a national nonsectarian study of mental impairment of the institutionalized aged. Supported by a grant of $224,640 from the National Institute of Mental Health, the three-year study is aimed at evaluating current standards and practices and developing improved methods of preventing or treating mental disturbances of persons in homes for the aged and other long-term care facilities.

Director of the study is Dr. Alvin I. Goldfarb, consultant on psychiatric services to the aged of the New York State Department of Mental Hygiene. Co-Director is Morris Zelditch, former head of Community Services of the Council of Jewish Federations and Welfare Funds and a member of the Advisory Committee of AAHA. Other members of the study group will include a research psychiatrist, medical and psychiatric social work consultants, social scientists, and an examining team of geriatric specialists.

According to Lester Davis, AAHA's Executive Director, the Association's participation in the study "provides a broad representation and diversity of licensed or community-sanctioned non-profit homes, which will enable the investigators to compile comprehensive and systematized information on the nature of mental disturbance or impairment, and the methods now used for medical, psychiatric and social treatment.”

To obtain such information in the study's first phase, he said, a questionnaire will be sent to 250 of the AAHA-member homes.

The second phase, Mr. Davis stated, will consist of site visits by an interdisciplinary research team to a sampling of "the most modern homes of those surveyed", where executive and staff members will be interviewed on problems of management and programs for handling and treatment of mentally impaired residents.

The third phase of the study will focus on a series of examinations and case record reviews from 10 to 15 homes selected by the investigators.

The American Association of Homes for the Aging is the national membership organization of non-profit voluntary and government Homes for the aged. Founded in 1961 with a grant from the Ford Foundation, its programs of technical assistance and staff training, public information, liaison with governmental and other agencies in the fields of health, welfare, housing and rehabilitation, are directed toward helping Homes for the aged to provide more effective service to the growing number of persons who need residential care.

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Pain in the leg and thigh muscles on walking may mean that arteries which supply these muscles have become narrowed by disease. People with this symptom should see the doctor for a heart and health check-up, the North Carolina Heart Association says.
Psychiatrists Study Wife-Beating Husbands

Wives who endure physical abuse from their husbands for years finally seek outside help when one of their children usually the eldest son, interferes, a recent study indicates.

This pattern of behavior emerged in a study of 12 marriages in which the husbands had beaten their wives periodically during 12 to 20 years of wedded life.

The study was reported by Drs. John E. Snell, Richard J. Rosenwald and Ames Robey, Framingham, Mass., in the August issue of Archives of General Psychiatry, published by the American Medical Association.

The couples lived in a predominantly middle-class suburban area, according to the article. The men were referred for psychiatric consultation after court appearances on charges of assault and battery filed by their wives. However, the wives were also interviewed since the husbands proved reluctant to talk to psychiatrists.

The average age of the wives was 37 and they had been married for an average of more than 13 years, the authors pointed out.

"One sees, therefore, that these women were not young brides in the throes of early marital adjustment, but tended rather to be women of mature years whose marriages had shown considerable stability," they commented.

"In no case was the husband's violence of recent onset. Each wife admitted readily that fighting had existed throughout her marriage."

Therefore, the central question became why, after 12 to 20 years had these women chosen this particular time to appeal for help outside their families, the authors said.
Tiny Opossums

— A Dozen To The Teaspoon — Serve as Research Tool

Tiny opossums, so small that over one dozen fit into a teaspoon when newborn, are the biological "tools" being used for the screening and testing of drugs on developing mammalian embryos under the terms of the first research contract let by the National Institute of Child Health and Human Development (NICHD), of the Public Health Service, U. S. Department of Health, Education, and Welfare.

The $48,500 contract with the Marquardt Corporation of Van Nuys, California, runs for one year and is designed to demonstrate the usefulness of the embryonic-fetal opossum as a research tool. Scientists working on the project hope that it will lead to new techniques which would help to evaluate the effects of a variety of influences that may alter mammalian development.

The opossum is a unique animal for research because its young are born approximately 12 days after conception at a stage of development which can be compared to an 8 to 10 week old human embryo.

Immediately after birth, the tiny opossum struggles over the mother's abdomen and into a pouch similar to that of the kangaroo. There it attaches itself firmly and continuously to one of the mother's thirteen nipples which are no bigger than the head of a pin.

During the 60 to 70 days following birth the baby opossums develop in the maternal pouch through many fetal stages. Finally they reach a stage of development similar to that of a human nursing infant. The opossums' unique fetal development is observable, therefore, without the barrier of the placenta which most mammalian species utilize during their development in the uterus.

Under the screening project drugs will be administered to the fetus independently of the mother, after the fetus is delivered and in the pouch. The development of defects or abnormalities as a result of the administration of drugs will then be observed during the animal's fetal life.

Marquardt was selected for the study because of its prior research with opossums under company-sponsored research programs. Its life science personnel have developed a proprietary technique by means of which the embryonic fetus may be detached from the nipple and fed artificially.

Prior to the development of these techniques, only very limited use of the opossum as a laboratory animal for evaluating potential hazards to mammalian development was possible.

The work will be done at Marquardt's Bioastronautics facilities in Van Nuys.

The principal investigator is Dale L. Carpenter, senior research aerospace zoologist and head of Marquardt's Biology Projects.

The NICHD was established to investigate normal and abnormal developmental processes in human beings of all ages.

The North Carolina Heart Association will hold its 16th Annual Meeting and Scientific Sessions at the Jack Tar Durham on May 19-20, 1965. The announcement was made by Dr. J. Logan Irvin, of Chapel Hill, chairman of the state heart group's annual meeting planning committee.
National Council on Aging Offers Resources To All Candidates

Candidates for public office are being offered the resources of the National Council On the Aging to assist in "informed discussion" of the problems and opportunities facing older people.

The offer is being made in a letter from Garson Meyer, President of NCOA, to Republican and Democratic candidates for the U. S. House of Representatives, U. S. Senate, and in this year's gubernatorial races.

"During the coming campaign," Mr. Meyer wrote, "there will be much discussion on such problems as housing for older people, health and medical care programs, employment and retraining of older workers, community and state planning and related areas."

As a national planning and research organization in this field, Mr. Meyer noted, NCOA has extensive library facilities and experienced professional staff.

"It is our belief," the NCOA letter said, "that the greatest benefit can be derived from informed discussion of the problems and opportunities of older people. If, therefore, during the course of your campaign our facilities can be of help in this direction, we invite you to call upon us."

The National Council On the Aging is a non-profit, non-governmental agency that has engaged for many years in work in the field of the aging. It is a non-partisan organization with a board of directors made up of representatives from all segments of the national community.

As you perhaps know, the National Council On the Aging is a national planning and research organization in the field of problems of older people. It is a non-profit, non-governmental agency devoted to the definition of the problems older people face and to the search for a solution to those problems. It is, of course, entirely non-partisan.

Our library facilities are extensive and our professional staff has a high degree of experience and competence in such areas as housing for older people, protective services, health and medical care, employment and retraining of older workers, community and state planning, retirement planning and policies, and related fields.

We believe that during the coming campaign there should and will be much discussion of these and similar problems. The number of older persons in our population is rapidly increasing. More and more people in all age brackets are becoming increasingly aware of the necessity for greater activity at all levels.

Numerous programs are in operation in the governmental and non-governmental sectors of our country and range from community activity to federal programs on a comprehensive scale.

It is our belief that the greatest benefit can be derived from informed discussion of the problems and opportunities of older people. If, therefore, during the course of your campaign our facilities can be of help in this direction, we invite you to call upon us.

We will do what we can to respond factually and informatively, and without partisanship, to your inquiries.

Sincerely yours, Garson Meyer, President
Ben Eaton, Jr. Returns To State Board Staff

Ben Eaton, Jr. has returned to the North Carolina State Board of Health to serve as the Director of the Administrative Services Division. Mr. Eaton held this position five years ago before taking a leave of absence to travel to Kabul, Afghanistan, as tax advisor to the Royal Government there. Having served as assistant commissioner of the North Carolina Revenue Department for over 15 years, he was well qualified in this field of tax administration. His work was under the sponsorship of the Public Administration Service of Chicago, Illinois.

Upon completion of his assignment in Kabul, Mr. Eaton then went to the National Agrarian University of Lima, Peru, as administration advisor with the North Carolina State College Mission to Peru.

In his duties as Director of the Administrative Services Division Mr. Eaton coordinates the activities of the Budget, Personnel, Public Relations, Film Library, Public Health Library, Supply and Service, Emergency Health Services, and Central Files sections of the State Board of Health. This position was formerly held by Charles L. Harper, who is now Associate Director of Administration for the District of Columbia Department of Health in Washington, D.C.

Mr. Eaton was born in Winston-Salem and attended R. J. Reynolds High School. He received his A. B. and LL.B. degrees at the University of North Carolina at Chapel Hill. Mrs. Eaton is the former Melba McMahon. They have two sons, Ben, III, who is in the Episcopal Seminary in San Juan, Puerto Rico, and Marshall Feimster, who is regional representative of Banker's Life Insurance Company at Charlotte.

"Cleaner Air Week" Is Successfully Observed

For more than 15 years, Cleaner Air Week, observed this year Oct. 25-31, has served a unique function in making the American public aware of air pollution and its control. Although maintaining clean air requires full-time effort on the part of all of us, a single week of concerted activity helps to remind us of our individual and collective responsibilities. It reminds us that air pollution control is everybody's business.

With the passage of the federal Clean Air Act in December, 1963, Cleaner Air Week assumes even more importance. Many more people than ever before will be involved in the protection of our air resources. In a number of communities, air pollution abatement activities will be undertaken for the first time. As these embryonic programs develop, it is important that all involved understand each others problems. Effective programs require a maximum of cooperation among government agencies, the public, and industry.

Any community can have the degree of clean air for which it is willing to pay. To make the decision, however, all members of the community must have the necessary facts. To a considerable extent, the technical, economic, and political information is available. Cleaner Air Week will have served its major function if it can make these factors known to the public.

September, 1964
Three New Migrant Labor Films are Released

Release of three new migrant health education films is announced by the Migrant Health Branch, Division of Community Health Services, Public Health Service. Designed primarily for use with English-speaking domestic seasonal farm workers and their families, all three are discussion-type films, each complete in itself for separate showing.

The films are also intended for use with growers, crew leaders, camp managers, and others engaged in the employment or housing of migratory workers. The purpose of the films is to present to these groups the various facets of health problems often faced by workers while living in camps and to stimulate discussion of the responsibilities of the various groups in working toward solutions.

Under the broad title, Seasonal Farm Worker Health Series, the films focus on a clean and safe environment; personal hygiene, and safe food, respectively. With only three or four basic principles stressed in each film, particular emphasis is placed on practical steps seasonal farm workers and their families can take to safeguard their health while living in camps.

Each film has an all-Negro cast and runs approximately ten minutes.

In order to increase their effectiveness, a discussion guide accompanies each film.

Produced for the Service's Migrant Health Branch by the PHS Audiovisual Facility, the films are on free loan from Public Health Service, Audiovisual Facility, Atlanta, Georgia 30333.

The set of three films may be purchased through the Atlanta Facility for $36.64.

MEMBERS OF THE NORTH CAROLINA STATE BOARD OF HEALTH

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lenox D. Baker, M.D.</td>
<td>Durham</td>
</tr>
<tr>
<td>John R. Bender, M.D.</td>
<td>Winston-Salem</td>
</tr>
<tr>
<td>Ben W. Dawsey, D.V.M.</td>
<td>Gastonia</td>
</tr>
<tr>
<td>Glenn L. Hooper, D.D.S.</td>
<td>Dunn</td>
</tr>
<tr>
<td>Oscar S. Goodwin, M.D.</td>
<td>Apex</td>
</tr>
<tr>
<td>D. T. Redfearn, B.S.</td>
<td>Wadesboro</td>
</tr>
<tr>
<td>James S. Raper, M.D.</td>
<td>Asheville</td>
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Replantation of Severed Arms Considered Worthwhile

Replantation of severed arms is a worthwhile procedure for certain patients under certain circumstances according to two Boston surgeons.

The restoration of arms in two patients, a 12-year-old boy and a 44-year-old man, was reported by Drs. Ronald A. Malt and Charles F. McKhann in an issue of the Journal of the American Medical Association.

"Functional recovery in the arms has now made it clear that replantation in selected cases is a worthwhile procedure," they said.

The boy, whose right arm was re­joined below the shoulder in 1962, can lift 10-pound weights and write his name, they reported. He has sensation in all five fingers. He also can move his shoulder and elbow although he does not have full extension. The boy currently is wearing a splint until further surgical procedures are carried out sometime in the near future.

The other patient, whose right arm was severed just above the elbow in 1963, is now working full-time as a machinists' supervisor, according to the report. Strength is increasing in the fingers and movement of the shoulder is only somewhat restricted. However, no independent movement of the elbow is possible. Further reconstruction procedures also are planned for this patient.

Replantation of a totally amputated extremity is largely the applied synthesis of existing knowledge, the surgeons commented. By 1944 the surgeon's attitude and skill were "unquestionably adequate," they said, although replantation was not performed in two major wars. Replantation became an established laboratory procedure in the present decade, and well-trained surgeons repaired combinations of injuries of the extremities so severe that attempts to distinguish the degree of separation of a limb were "mostly matters of semantics," they pointed out.

Although the trained surgeon has the ability to perform a successful arm replantation, the authors warned that the magnitude of the subsequently required reconstructive procedures means that the hospital must have the resources to provide the patient better function than he could achieve with a good artificial arm.

If the hospital has the necessary facilities, they said, "we believe that indications for replantation currently exist in the actively productive person with a severed arm, no detectable injury to vital internal organs, no urgent problem with respect to the other arm, and a positive desire for his own limb at the expense of unpredictable periods of hospitalization and unpredictable end result.

"With advances in surgical science, the indications will undoubtedly be broadened."

The authors are affiliated with Massachusetts General Hospital and Harvard Medical School.
If you do NOT wish to continue receiving The Health Bulletin, please check here and return this page to the address above.

DATES AND EVENTS

November 7—District IV Health Careers Congress, Memorial Auditorium, Raleigh.


November 8-19—MENTAL RETARDATION WEEK

November 9—Conference of State and Territorial Health Officers, Washington, D. C.

November 9-11—American Association of Homes for the Aging, Statler Hilton, Washington, D. C.

November 9-12—American Dental Association, San Francisco, Calif.

November 18-21—National Association for Mental Health, Annual Meeting, Jack Tar Hotel, San Francisco, Calif.


December 1-2—National Social Welfare Assembly, Annual Meeting, New York, N. Y.


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Replantation of Severed Arms Considered Worthwhile 15
A Session of the Royal Society of Health was held during the days of the meeting of the American Public Health Association in New York. Presenting an outstanding program, this Session had as one feature, an address by the Right Honorable the Lord Cohen of Birkenhead, (right) of London, England, President of the Royal Society of Health. Dr. J. W. R. Norton, State Health Director, presided during this Session. (See page 2 for other details.)
John C. Snyder, M.D. (right), Boston, Mass., Dean of Harvard School of Public Health, delivered the closing address of the First General Session of the APHA. He is shown with John D. Porterfield, M.D., Berkeley, Calif., President of the Association, following his address.

American Public Health Association Meets In New York

The Royal Society of Health held a meeting in New York during the days when the APHA met there. Dr. J. W. R. Norton, North Carolina's State Health Director and a member of the Society presided. Shown in the picture are program participants P. Arthur Wells, Secretary of the Royal Society of Health; The Right Honorable the Lord Cohen of Birkenhead, President of the Royal Society of Health; Marion W. Sheahan, R. N., New York; Horace E. Gilby, London, Chairman of the Council, the Royal Society of Health; and Dr. Norton.
The new President of the American Public Health Association is Dwight F. Metzler, C. E., Topeka, Kans., Executive Secretary, State Water Resources Board.

Surgeon General Luther L. Terry (center) participated on a panel which considered "Health Manpower" at one of the sessions of the APHA in New York. Other panel participants included: Peter G. Meek, New York, Executive Director of the National Health Council who discussed the recruitment program of this organization and John T. Herron, (right) Arkansas State Health Officer.
The Honorable Robert F. Wagner, Mayor of the City of New York, gave a most informative address of welcome at the APHA meeting in which he outlined some of the recent health projects which the City of New York has promoted. He is shown leaving the platform after his address.
WHEN I received Dr. Norton's invitation to deliver the keynote speech at your Annual Meeting—an invitation I was delighted to accept—I spent some time thinking about your chosen theme, "Community Health Horizon." The first thought that popped into my mind was the title of James Hilton's extremely popular novel of the 1930's, Lost Horizon. I wondered briefly if our community health horizon is really lost, as it sometimes seems to be when we are grappling with an unending succession of new challenges.

Then I decided that it is not lost, but merely blurred because of the speed with which we are hurtling through changing times. Two or three decades ago the horizons for the public health profession—the term "community health" had not yet gained much currency—were quite clear. We knew where we were going. We developed the means for getting there. And, to a remarkable degree, we achieved our goals. The history of public health is essentially a success story. We have every right to be proud of it.

But today, partly as a result of our own success, the conditions have changed. Clearly, the horizon of public health, or community health, is determined by the health needs of the public, the shape and size of the community, and the avail-
able medical knowledge and skills for meeting these needs. All three of these factors are changing dramatically from year to year, and even from day to day.

The greatest change of all, of course, has taken place in the size and composition of the public we serve. The population is "exploding" toward 200 million before the end of the decade and will probably approach or surpass the staggering total of 300 million during the professional lifetime of many of you. It is changing in age-composition, with a rapidly increasing proportion in the above-65 bracket. It is becoming better educated, and gradually raising its economic standards of living.

Moreover, it is raising its levels of expectation in terms of health care. People read about the wonders of modern medicine. Naturally enough, they want their share. And they expect these marvels to be conveniently accessible when needed. All of these factors conspire to produce a greatly increased demand for health services of all kinds.

The challenge to the health professions is further complicated by the shift in priority of medical needs—from the communicable to the chronic illnesses, from acute, short-term care to long-term care. And these changes in priority force us, in the public health profession, to take a brand new look at our old definitions and assumptions.

In an age dominated by chronic disease and long-term illness, what is the new meaning of "preventive medicine"? Most of today's major causes of death and disability are not yet preventable, in the traditional sense. But many are detectable in their early stages, and curable or reversible. Prevention in this context becomes prevention of disability, and the methods of preventive medicine are essentially diagnostic and curative.

Or consider the area of accidents—one of the nation's great medical problems today. At least 500,000 children, and probably more, ingest potentially poisonous substances each year. Accident victims occupy 50,000 hospital beds on any given day. Accidents hospitalize 2 million people each year and cause 8 million more to spend at least one day in bed. They cost the nation 85 million lost work-days and 12 million lost school days each year. The average age at death of accident victims is 43 years, and accidents are the leading killer of all Americans between ages 1 and 35. Clearly this is a health challenge—a medical challenge—of the highest priority.

Where does public health fit in this picture? Where does its province begin and end? And if it doesn't enter the picture at all, what right does it have to the term "public health"?

Meanwhile, equally fundamental changes are taking place in the nature of the community. What is a community, in the United States of 1964? Two-thirds of our public—some 120
million people—live in 185 metropolitan areas, covering a small fraction of our land area. The southeastern region has thus far been less exposed to the mixed blessings of metropolitan growth than most other areas, but here in North Carolina you are, I know, experiencing some of the related growing pains of the city.

Some of these growing pains relate to new distributions of population and their effect on distribution of health services. Others relate to the health aspects of the environment.

Industry is growing by leaps and bounds and creating many new chemicals. Water pollution is increasing and becoming more complex. Air pollution has suddenly emerged as a serious problem. Processes of food production and handling are changing, and many other developments are taking place to alter the nature of our living environment.

The challenge to all of us in public health is to make comprehensive assessment of the effects of these hazards and to apply protective measures and controls.

The third dramatic change to which we must adjust is the forward sweep of scientific knowledge in medical and related fields. Thanks to the massive research effort of the past 15 years, our capability for prolonging life and reducing suffering is greater with every passing day. Our knowledge of prevention, of diagnosis, of treatment, and of rehabilitation—if universally applied—would create a fantastically productive society.

The catch, of course, lies in the phrase “if universally applied.” We are having a population explosion, a community explosion and a research explosion. Unfortunately, we do not yet appear to be having a service explosion which would bring the benefits of research to the expanding population. It is in this area—at the frontier between knowledge and application—that I would locate the community health horizon.

Let us examine this frontier, and then determine what we need to do in order to bring this new horizon into sharp focus.

All of us are thoroughly familiar with the gap, or time-lag, between discovery in the laboratory and application in the community. We pay plenty of lip service to these concepts. But lip service isn’t health service.

What’s the answer? How can we begin to narrow the gap, to shorten the time-lag? Clearly, no one would want to apply the brakes to research—to call a halt to scientific progress so that the forces of health service can catch up.

Rather, it seems to me, the answer is to mount an offensive in the service area, as vigorous and as well coordinated and as strongly supported as the research offensive of the past two decades.

I am convinced that such an offensive would re-shape the
health patterns of the nation. Our generation of health professionals has a unique opportunity, with unique scientific weapons at our disposal. Let me cite a few specific targets that are well within our capability.

More than 50,000 new active cases of tuberculosis are discovered each year, and a large reservoir of cases still exists. These numbers can be reduced to very near the vanishing point—provided we decide to do it.

There has been a disturbing resurgence of venereal disease in recent years, predominantly among teen-agers. Nothing stands between us and eradication of venereal disease, if we commit ourselves firmly to this purpose.

As recently as 1961 there were 13,500 reported cases of diphtheria, tetanus, whooping cough, and polio, with many more unreported. None of these diseases needs to figure at all in the disease pattern of the 1970's.

Rheumatic heart disease kills 20,000 people every year. By using the fluorescent antibody technique to identify the causative agent of streptococcal infections, and by applying massive antibiotic therapy to prevent the development of rheumatic fever, we can bring this toll close to zero in ten years.

Cervical cancer, which attacks 40,000 women every year and kills 14,000, can be eliminated as a major factor in the disease pattern by universal application of the Pap smear technique. Similarly, two-thirds of all cancers of the colon and rectum can be detected in the symptomless and highly curable state by application of the sigmoidoscop ic examination. Advances in mammography promise proportional reductions in the death rate from breast cancer.

Diabetes can easily be detected and controlled. Tonometry offers an uncomplicated means of discovering and reversing glaucoma in its early stages. Known and widely demonstrated rehabilitative techniques can restore thousands of the disabled—including a great majority of stroke victims—to independent, productive living. Well-tested safety devices, such as seat belts, can reduce our highway death toll by thousands and bring an even greater reduction in disabling injuries.

What would we need to start such an offensive?

First, we need manpower—adequate supplies of top quality professionals and technicians in all the disciplines essential to the delivery of the best in modern medical care.

Second, we need facilities—planned and designed so that the entire range of health services, both acute and long-term, are conveniently and economically accessible.

Third, we need new patterns of coordination among existing services, to avoid unnecessary overlaps and duplication of service in some areas while gaps exist in others.

Fourth, we need improved systems of communications, both
for the health practitioners and for the public, so that the professionals can keep abreast of new scientific developments and the public can keep aware of services available to them.

Fifth, we need to adapt the methodology of science to the community setting and mount vigorous programs of applied research in community health. I should like to discuss this point in a bit more detail, because I believe that community health research is one of the brightest rays of light on our new horizon.

We in the Public Health Service view community health research as a means toward an end—to help achieve an optimum level of health services—as contrasted with the research programs of NIH in which the advancement of biomedical knowledge is an end in itself. Our center of interest is the patient in the community. We want to examine scientifically the factors that influence delivery of services. We want to investigate the obstacles that block the efficient application of health knowledge, and find ways to eliminate these barriers.

Within this broad framework, we can envision a number of specific targets for scientific study. For example, we need:

1. Epidemiologic research, especially related to chronic diseases and accidents, to furnish data upon which efficient control programs may be based;

2. Research in methodology, to develop better tools for detecting and diagnosing chronic diseases in their early stages, and to adapt existing tools for ease and economy of application;

3. Research and experimentation in recruiting and training health manpower, so that we may attract and hold top quality personnel in today’s highly competitive market;

4. Economic research, to determine where the billions of dollars spent on health each year come from, how they are distributed among health services, and what value is delivered per dollar spent;

5. Behavioral research, to define the factors that cause people to seek medical care, that determine their choice of physician or service, that affect their adherence to prescribed courses of treatment;

6. Research in public administration, to elucidate existing relationships between private medicine and public community agencies, to identify jurisdictional barriers to effective organization for health service, to explore the potential role of various coordinating bodies.

7. Research in practical control methods for many environmental hazards and in effective means of assuring that available methods are applied.

These are a few of many promising avenues for scientific exploration in community health. We in the Public Health
Service are firmly convinced that research methodology and scientific thought can be as productive in the laboratory of the community as it has been in the research institution.

The task is doubly challenging, for the human community is a vastly complex organism which rarely if ever will sit still for controlled experimentation. But we have great confidence in the creative imagination of people like yourselves who wish to define, in productive and understandable terms, the community health horizon. We look to you for the project designs which will enable all of us to bring this horizon into focus.

Our objective is a community in which the benefits of scientific knowledge reach all the people. Such a community will have a full complement of health professionals and technicians, trained and kept up to date in the techniques of modern medical science. It will have a range of health facilities capable of delivering short-term or long-term care in settings appropriate to the needs of the patient. It will have a battery of services available outside institutional walls, and in the homes of the patients themselves. It will have, moreover, a vigorous program of preventive medicine and health maintenance. Its health resources—whether privately or publicly supported—will work effectively together, less concerned with "Who's in charge?" than with "Who can do the job most efficiently?"

Such a community may never exist, perfect and complete. But I believe that we can move every community forward toward this goal. And I believe that the public health profession can play a vital part in this advance.

Obviously we can't do it alone. And we can't contribute by sitting securely behind our traditional boundary lines, doing the old familiar jobs while new needs go unmet. We need to move out into the new world of public needs and aspirations for better health. We need to enter into active partnership with private medicine and other resources which are moving separately toward a common goal.

You in the State of North Carolina are especially well qualified to lead the way in this new offensive. You have one of the nation's great concentrations of educational excellence in the health professions—a coordinated system of schools which practice as well as preach teamwork. For many years you have had outstanding public health leadership—both state-wide and in many of your cities and counties. You have been quick to take advantage of new opportunities in the public health field—in long-term care, home nursing, neurological diseases and many other areas. I am pleased to know that you now have vigorous programs underway in radiological health, in accident prevention, and other of the newer public health fields.

I salute you on your many past and present achievements, and welcome your leadership toward the new community health horizon.
State and National public health leaders congratulate the new President of the
NCPHA, Dr. Isa C. Grant. Shown in the picture from the left are Dr. J. W. R.
Horton, State Health Director; Dr. Aaron W. Christenson, Assistant Surgeon-
General of the USPHS; Dr. Grant and Dr. Martin P. Hines, retiring President of
the Association.

North Carolina Public Health Association Meets

AWARDS PRESENTED AT THE NCPHA MEETING IN ASHEVILLE:
The Carl V. Reynolds Award: Given to an individual for outstanding contributions to public health in North Carolina during the past year for meritorious service above and beyond the call of duty.

The Carl V. Reynolds Award was presented to Dr. Hamilton Wright Stevens of Asheville, for his outstanding work in the field of public health, especially in his present position of Health Director for Buncombe County and as past President of the Southern Branch, American Public Health Association.

The Watson S. Rankin Award: Given to an individual in recognition of outstanding contributions to public health in North Carolina over a period of several years.

The Watson S. Rankin Award was given to Dr. Z. P. Mitchell for his devotion to the betterment of the health and welfare of the peoples and counties whom he has served as Health Director for almost forty years.

A Watson S. Rankin Award was also given to William S. McKimmon in consideration of his contributions to the State and municipalities through his work in the Engineering Section of the Sanitary Engineering Division, North Carolina State Board of Health.

October, 1964
The Merit Award: Given to a local health department or group for outstanding contributions or activities during the past year.

The Group Merit Award was given to the Alamance County Health Department for its imaginative and able leadership in all phases of work for which a local health department is responsible.

The Merit Citation: Given to an individual for outstanding contribution in working with a special project during the past year.

The Merit Citation was awarded to Jack D. Cobb for his civic and professional work for the people of Alleghany-Ashe-Watauga District Health Department.

The Merit Citation was given to Joseph S. Ameen in recognition of his enthusiasm, dedication and untiring efforts in the promotion of sanitary engineering and environmental health protection.

The Merit Citation was given to Mildred Louise Spivey for her outstanding accomplishments in the field of public health as a nurse and newspaper columnist.

The Distinguished Service Citation: This award given to recognize individuals in other organizations or professions who have made significant contributions to public health in North Carolina.

The Distinguished Service Citation was awarded to Senator John R. Jordan, Jr., for his deep understanding of the responsibility of government for the health of its citizens, and his personal and legislative efforts in behalf of improving health services.

Dr. H. W. Stevens, Buncombe County's Health Director, who was in general charge of plans for entertaining the NCPHA meeting in Asheville, is seen conferring with Dr. Isa C. Grant (center), newly elected President of the Association and Mrs. Corrina Sutton, the Association's treasurer.

NEW OFFICERS OF THE NORTH CAROLINA PUBLIC HEALTH ASSOCIATION:

President: Dr. Isa C. Grant, Elizabeth City.

President-Elect: Robert W. Brown, Asheville.

Vice-President: Dr. Ralph Boatman, Chapel Hill.

Secretary: Miss Lucy Lopp, High Point.

Treasurer: Mrs. Mildred Kerbaugh, Raleigh.

Past President: Dr. Martin P. Hines, Raleigh.

Number Registered for Asheville Meeting: 736

THE HEALTH BULLETIN

October, 1964
John R. Jordan, Raleigh attorney, was presented the Distinguished Service Citation award at the Banquet session of the NCPHA. Shown with him from left are Dr. James S. Raper, member of the State Board of Health; Dr. Isa C. Grant, newly elected President; Mr. Jordan and Dr. J. W. R. Norton, State Health Director.

A panel on the subject "The Health Educators' Contribution to the Public Health Team" was presented at a joint meeting of health directors and health educators during the NCPHA. Taking part in the panel from the left are Dr. H. W. Stevens, Dr. Isa C. Grant, Marshall C. Abbe and Dr. Melvin F. Eyerman.

Miss Caroline Stevens (right) was a surprise talent guest as soloist in the entertainment period of the Awards Banquet during the NCPHA. She is shown with her mother, Mrs. H. W. Stevens.

A symposium on "Communications Vital to our Public Health Image" was a feature of the closing session of the N. C. Public Health Association meeting in Asheville. Panel members shown include from the left (seated) Miss Frances E. Sellers, Nurse; Ed Rankin, speaker and panel moderator; Dr. Isa C. Grant newly elected President; (standing) K. J. Eyer, Sanitarian; Dr. Carl Hammer, Health Director; and Marshall C. Abbe, Health Educator.
Dr. Emil Palmquist, medical director of Region III of the USPHS, greets his North Carolina friends from the Exhibit Section at the APHA in New York.

Two former presidents of Southern Branch are caught in conversation during the meeting of the APHA in New York. Shown in the Exhibit Area are Dr. H. W. Stevens (left), Asheville; and Dr. Harry W. Bruce, Washington, D. C.

**MEMBERS OF THE NORTH CAROLINA STATE BOARD OF HEALTH**

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Berwyn F. Mattison, M.D., New York, Executive Secretary of the APHA, is shown on the dais during a program of the APHA.

Dr. Robert F. Young, Health Director for Halifax County and the APHA representative of the NCPHA, is shown as he listens intently to the speaker in one of the sessions of the American Public Health Association which met in New

Dr. Fred T. Foard enjoyed fellowship with many long-time friends at the APHA meeting. Here he is shown with Dr. Henry W. Kassel (right), medical director of Region VIII, USPHS, Denver, Colorado.
DATES AND EVENTS

November 7—District IV Health Careers Congress, Memorial Auditorium, Raleigh.


November 8-19 — MENTAL RETARDATION WEEK

November 9—Conference of State and Territorial Health Officers, Washington, D. C.

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December 1-2—National Social Welfare Assembly, Annual Meeting, New York, N. Y.


December 26-31—World Medical Association, 18th General Assembly, U. S.

1965

February 28-March 5—The National Council on the Aging, Hotel Shoreham, Washington, D. C.

March 11-13—N. C. Mental Health Association, Annual Meeting, Hotel Sir Walter, Raleigh.

March 21-24—N. C. Association of Nursing Homes, Velvet Cloak Inn, Raleigh.

April 5-9—Southern Branch, APHA, Jung Hotel, New Orleans, La.

April 25-May 1—NATIONAL LIBRARY WEEK

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New Officers of the NCPHA — 12
Coite Jones, Raleigh, president of the N. C. Tuberculosis Association, is shown thanking Betsy Palmer for her willingness to serve as this year's National Honorary Christmas Seal Chairman. (See related stories on page 2, and elsewhere in this issue.)
Judge Hubert E. Olive, a native Tar Heel and prominent figure in North Carolina political, religious, civic and social affairs, has been named State Christmas Seal Chairman for 1964.

Judge Olive practiced law in Lexington, N. C., during the periods 1920-1937 and 1947-1955. From 1937 to 1947 and from 1955 to the present he has served as Judge of the Superior Court of North Carolina.

Judge Olive was a member of the North Carolina House of Representatives from Davidson County in 1933. He has served also as chairman of the State Board of Elections and as Department Commander of the American Legion for the State of North Carolina.

A graduate of Wake Forest, Judge Olive is a member of Phi Beta Phi legal fraternity, has served six terms as president of the Board of Trustees of the college; has served as chairman of the Executive Committee Board of Trustees; and as president of the General Alumni Association of Wake Forest College.

An ardent Baptist, Judge Olive has served several years as chairman of the Board of Deacons, First Baptist Church of Lexington. He has taught the Men's Bible Class at the same church for about 40 years and the class voted to name itself in his honor.

Judge Olive is married to the former Ann Southerland of Henderson, N. C., has a daughter, Mrs. Lewis Hartzog of Lexington, and a son, Hubert E. Olive, Jr., who is now a practicing attorney in Lexington.
Tuberculosis Control and the State Board of Health

by
William A. Smith, M.D.
Chief, Tuberculosis Control Section

GENERAL

During the past year there has been no let up in interest in Tuberculosis Control throughout the State by either State, county or voluntary agencies. Chest X-ray surveys were conducted in 33 counties and surveys included the general population, industrial plants, high incidence areas selected by the local Health Director, schools and colleges in the Raleigh area as well as other areas, State Mental Institutions and prison camps. A total of 182,775 persons had X-rays of the chest.

In addition to the interpretation of the 70 mm survey films, the Central Office interpreted 30,743 miniature films for counties and over 2,500 miniature and 14 x 17 plates were interpreted by the Chief of Section at chest clinics. The number of miniature films sent to the Central Office from counties for interpretation remains about the same; namely, 30,000 annually.

Tuberculosis cases found through X-ray surveys have also steadily decreased since the fiscal year 1956-1957 to the extent that other measures for tuberculosis case finding must be substituted. Such measures will be directed toward improvement of clinic and follow-up services.

This Section owns 6 mobile X-ray units; 5 are used on occasion and we generally operate 4. These surveys are popular in counties and our schedule is always prepared a full year ahead; in fact, we cannot satisfy all applications.

Regularly scheduled chest clinics are available to citizens in 79 counties; Rockingham and Guilford Counties have 2 clinics and the Cherokee Indian Reservation has a clinic independent of the county clinic. Sixteen counties do not have clinics and at this writing clinics are in course of being established in 3 of these counties. The others use the nearest out-patient clinic of the 4 State Sanatoria. Five counties have consultant services rendered by a physician from the District Health Department. There are four sanatoria in the State, namely, the Eastern Sanatorium, Wilson; the Central Sanatorium, McCain; Gravely Sanatorium, Chapel Hill; and the Western Sanatorium, at Black Mountain; beds available, 1,527. This State, therefore, is well served with out-patient as well as hospital services.

MORBIDITY AND MORTALITY

There has been a steady down-trend in tuberculosis death in this State and in 1963 there were 176 deaths, death rate 3.7 per 100,000 population, which is well below the national rate; number of deaths in the United States 9,660, rate 5.1 per 100,000 population.

The new active cases, however, in the State have not decreased in proportion to deaths and, in fact, there has been an increase in active cases, all forms, in 1963 over 1962; 1962-1,344 cases; 1963-1,386. Pulmonary cases less primary active, 1962-1,003; pulmonary active cases less primary active cases, 1963-1,013.

It is interesting to note that the anticipated number of new active cases 6 years hence or in 1970 should be 1,358, all forms, or a rate per 100,000...
population of 26.9 as compared to 31.1 at this time. The rate desired for the country as a whole is 10 per 100,000 population. This figure has been suggested by the committee which comprised the Arden House Conference.

The number of deaths from tuberculosis anticipated in 1970 is 96 or a rate of 1.9 per 100,000 population as compared to 176 deaths in 1963 and a rate of 3.7 or in 1970 about 1/2 the number and rate as in 1963.

PRESENT POLICY TUBERCULOSIS CONTROL

The continued high rate of new active cases indicated that methods other than methods being presently used must be brought into play before tuberculosis can be effectively controlled and eliminated.

The policies to be pursued emphasize:

1. Sharpen the case finding program to focus attention on high incidence groups.

The following from United States Public Health Service policies:

2. "Improvement of services to unhospitalized patients, contacts, suspects—clinic laboratory and Public Health Nursing. This means general improvement of chest clinic services.

3. "Increased efforts to bring to examination all the close contacts of newly reported cases and contacts of first grade children who react to the tuberculin test.

4. "Establishment of an organized program of isoniazid prophylaxis to prevent the serious complication of primary tuberculosis in young children.

5. "Conduct tuberculin testing projects among all school children. This is to be followed later by emphasizing testing of first and ninth graders.

6. "Particular attention to people at risk who are:
   (a) "Tuberculin reactors under 4 years of age.
   (b) "Contacts of active cases.
   (c) "Tuberculin reactors with X-ray findings.
   (d) "Persons with inactive tuberculosis.
   (e) "Tuberculin reactors with diabetes; under steroid therapy; with silicosis; after gastrectomy.
   (f) "Tuberculosis suspects; those persons whose chest X-rays have shown some abnormality that suggests the possibility of tuberculosis."

Attention should also be directed to certain groups such as the older age group; non-whites who have a case rate 3½ higher than whites, but who, how-

(Continued on page 12)
The Voluntary Tuberculosis Control Association
by Coite Jones, Raleigh
President of the N. C. Tuberculosis Association

TB Association's Role—In this the 60th year of the voluntary tuberculosis control movement, I would like in retrospect to review what a tuberculosis association is, what it does and why.

The story of the tuberculosis association and its activities never ceases to fascinate and impress me. It is the story of a group of citizens who recognized the need for additional effort in TB control, and who came together in Atlantic City in 1904 and formed an organization to meet this need. Today that organization is known as the National Tuberculosis Association.

It is the story of farsightedness. The pioneers in the movement were aware that the money received from voluntary contributions could not possibly adequately finance the huge sums necessary for treatment, case finding, etc. So it was decided that the money would go farther being spent for promotion, education and demonstration through pilot studies.

It is the story of freedom—freedom to pioneer new approaches and to demonstrate new methods using the money donated through Christmas Seals and not being hampered by the restrictions placed on tax funds.

Education—Capitalizing on this freedom, TB associations from the beginning concentrated their efforts on education. The first president of the National Tuberculosis Association, Dr. Edward L. Trudeau, said in his inaugural address in 1904:

"The first and greatest need is education—education of the people and through them, education of the state. If every man and woman in the United States were familiar with the main facts relating to the manner in which tuberculosis is communicated and the simple measures necessary for their protection, not only might we reasonably expect as a direct result of this knowledge a great decrease in the death rate of the disease, but the people would soon demand and easily obtain effective legislation for its prevention and control."

Sixty years later, authorities in the tuberculosis field are still not ready to abandon this attack.

Betsy Palmer, star of stage, screen, radio, and television and panelist on "I've Got A Secret" on the CBS Television Network, is the 1964 National Honorary Christmas Seal Chairman. In accepting the National Tuberculosis Association's invitation to serve in this important public service role, Miss Palmer succeeds Ann Landers, the nation's most widely read human relations columnist. Jacqueline Kennedy, wife of the late President of the United States, served in 1962.

The blonde, brown-eyed Miss Palmer is, in private life the wife of Dr. Vincent J. Merendino, a New York physician. They have a daughter, Melissa, born March 19, 1962. They make their home in Englewood, N. J.
Dr. Joseph B. Stocklen, Controller, Chronic Illness and Tuberculosis for Cuyahoga County, Cleveland, Ohio, when discussing a model program of TB control at the 14th Annual Institute on Tuberculosis and Other Respiratory Diseases this summer at the Blue Ridge Assembly, stated, “The most important element in a tuberculosis program is education.” He further stressed that the public must learn enough to be aware of the TB problem and demand appropriations to meet the needs.

The Establishment of Sanatoriums—In the early 1900’s the TB association realized that the most critical need facing the country was the shortage of hospital beds. Accordingly, TB associations mounted a nationwide campaign aimed at securing necessary legislation and appropriations for building TB hospitals. This is not to say that the TB hospitals were built with Christmas Seal funds, but that the promotional and educational power of the associations helped to make this possible.

Public Health Nursing—It was the tuberculosis association that first demonstrated the value of public health nursing in North Carolina. When the value of public health nursing had been established, the official agency assumed the responsibility for providing that service, thus freeing the association’s funds to explore other functions or activities.

Case Finding—When the chest X-ray was first introduced as a screening tool, the TB association took the lead in financing projects in case finding, assisting health departments in the securing of equipment and establishing X-ray programs, and in promoting the mass X-ray surveys. This, too, has become accepted procedure, but in some instances is still awaiting the appropriation of official funds to free the association to pioneer other projects.

Welfare Funds—Securing welfare funds for the treatment of indigent tuberculosis patients has also been sought vigorously by tuberculosis associations in years past. Inability to hospitalize a tuberculosis patient on any grounds means exposing others to the disease which in turn infects others and creates more and more cases.

TB Association’s Role—Summary—Pointing up of ways to fight the enemy, keeping abreast of the latest developments in TB control and bridging the gap between medical science and the general public has been the role in which TB associations have been cast and in which they have functioned most effectively.

However, the tuberculosis association is not a perfected organization, by any means. To remain vital and worthy of community support and endorsement it must bear frequent and careful examination. It must make adjustments to progress, to widening horizons and to newly developing needs.

Other Respiratory Diseases—Recently the program of the TB association has been expanded to include other respiratory diseases such as emphysema, chronic bronchitis, etc. This was done only after careful consideration of the obstacles these diseases were presenting to the control of tuberculosis.

Our own Dr. David T. Smith of Duke University Medical Center refers to them as "lung cripplers." A crippled lung becomes an easy prey to tuberculosis. Its ability to fight off the disease is lessened.

Conclusion—In other respiratory diseases, many of them, we are about where we were 60 years ago in tuberculosis control. The cause must be found and treatment provided. As in tuberculosis control, a great need is education. Already some activities are being demonstrated. The people against tuberculosis have become the people against TB and RD.
Dr. T. Marvin Vick, Jr., (right), Raleigh, Minister of the Edenton Street Methodist Church and a former president of the N. C. Family Life Council, attended the Conference sessions and introduced Governor Sanford in the closing luncheon session. He is shown in Conference with the Rev. William B. Bobbitt, Jr., Charlotte, Associate Minister, Myers Park Methodist Church and Conference First Vice-President.

Family Life Conference Meets In Durham

Governor Terry Sanford gave a most appropriate and challenging message at the closing luncheon of the Annual Family Life Conference held in Durham. He is shown with a Family Life Education class from Lillington High School which attended sessions of the Conference including the luncheon. Mrs. Dorothy C. Hales, teacher of the class is shown on the front row, third from the right.
The State scene in the Conference theme "Making the Family Whole" was presented by a panel. From the left participants included: Dr. Catherine T. Dennis, Department of Public Instruction; Howard E. Manning, Chairman of the State Board of Public Welfare; Dr. Jacob Koomen, Assistant State Health Director; and Dr. Carlyle Campbell, President of Meredith College, panel moderator.

Discussion sessions at the Family Life Conference in Durham were vigorous and rewarding. Here is shown the session presided over by Dr. Ralph J. Bridgeman, Black Mountain, (far end of table), Marriage and Family Living Counselor.

Frances Jordan, Raleigh, Program Chairman for the Family Life Conference and Family Relations Specialist of NC State of the UNC at Raleigh, is shown in one of the few relaxed poses accorded a Program Chairman while the meeting was in progress.
Successful Family Life Conference
Encourages Family Life Emphases

Family Life Conference leaders review results of the recent Conference on the Family held at the Jack Tar Hotel in Durham. From the left those shown in the picture include: Miss Vergie Lee Stringer, Greensboro, newly elected Secretary of the N. C. Family Life Council; Mrs. Alice O. Pierce, Raleigh, newly elected President; Mrs. Kate B. Garner, Greensboro, newly elected Second Vice-President; Mrs. J. Leonard Middleton, Raleigh, retiring President; and Howard Williams, Durham, Chairman of the Local Arrangements Committee.
Rev. Rollin P. Gibbs, Statesville, Stewardship and Finance Director of the Western N. C. Conference of the Methodist Church served as Chairman of the Finance Committee of the Conference.

Between-Session Conferences were popular at the Family Life Conference. Here, in such a conference are Miss Shirley E. Callahan, Durham, (left) Director of Nurses for the Durham County Health Department, and Miss Kay Zeigler, Raleigh, Health Educator of the Medical Society of the State of North Carolina.

"The Morgan Session" at the Family Life Conference featured an address by Dr. Lucy S. Morgan, Chapel Hill, Professor in the Department of Health Education of the UNC School of Public Health. Dr. Mildren I. Morgan, Black Mountain, Family Life Consultant and a former President of the National Conference on Family Relations, presided at this session.
New Program of Research and Training in Family Life Started at Bowman Gray

Two private foundations have awarded grants totaling $170,000 to the Bowman Gray School of Medicine to support a new program of research and training in marriage and family problems.

The Mary Reynolds Babcock Foundation has voted $30,000 per year to the program for a maximum of five years. A one-year grant of $20,000 was received from the Public Welfare Foundation, Inc.

The program, now being formulated, will be designed to provide medical students, interns and resident physicians broader training in the area of family life problems. It will also foster research on marriage stress situations and marriage failures and their relationship to juvenile delinquency and illegitimacy.

Dr. Clark E. Vincent, professor of sociology, has been appointed to the medical school faculty to head the program, which will be staffed by the presidents or presidents-elect of four national professional organizations.

Dr. Vincent is president of the National Council on Family Relations. Associated with him are Dr. Frank R. Lock, president of the American College of Obstetricians and Gynecologists and president-elect of the American Association of Obstetricians and Gynecologists, and Mrs. Ethel Nash, president-elect of the American Association of Marriage Counselors, Inc.

Dr. Lock is professor and chairman of the Department of Obstetrics and Gynecology. Mrs. Nash is assistant professor of preventive medicine.

Although there has been increasing interest in the importance of the physician's role in the area of family life problems, relatively little is being done in the medical schools of the nation to prepare future doctors to cope with the problems they will face in this field.

Physicians are more frequently consulted by couples facing marriage stress situations than any professional group other than the clergy. However, only two medical schools in the United States provide formal educational opportunities for teaching students in this area. A required course in marriage and marriage counseling is given at the Bowman Gray School of Medicine and an elective course is available to seniors at the University of Pennsylvania School of Medicine.

Little training in this field has been provided for interns and residents.

The program at Bowman Gray will be directed by the Department of Obstetrics and Gynecology in cooperation with the Departments of Preventive Medicine and Psychiatry.
ever, account for fewer than \( \frac{1}{3} \) the total cases, and men who show a higher rate than women.

**RISK OF DEVELOPING DISEASE AMONG TUBERCULIN REACTORS**

The risk of persons developing tuberculosis who show a positive tuberculin test and who have healed lesions in the lung is twice that of those persons with normal lung X-rays; those persons who have a positive tuberculin test and suspicious shadows, the rate was 14 times as great. Persons who have a positive tuberculin test and who failed to return for X-ray show a much higher rate of disease than those who show a healed lesion or normal lung. This means that there should be an effective follow-up in tuberculin positive cases and particularly in those who have abnormal lung findings.

The size of the tuberculin skin reaction is of considerable importance particularly in the 15-24 year age group. Persons in this group with reactions from 12-17 millimeters in size had, in the Danish survey an annual rate twice as high as the total tuberculin positive normal-lung group, and those persons with 18-23 millimeters reactions had a rate more than three times as high. This emphasizes the value of effective follow-up in tuberculin positive cases and particularly in those who have abnormal lung findings.

SUMMARY

There are now over 600,000 persons in the United States who need treatment or follow-up for tuberculosis. In this State according to the Annual Report from counties there were 9,619 persons who were diagnosed as tuberculosis; 1,059 were in hospital, and 8,434 were at home; 634 of these were active; 3,251 persons who were at home were under drug treatment. It is estimated that our Public Health Nurses made approximately 75,000 nursing calls to cases, contacts, and suspects at home during 1963.

Tuberculosis active cases in the State have not declined during the past 5 years. The active pulmonary adult type case which is the most responsible for spreading the disease has ranged from:

<table>
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<tr>
<th>YEAR</th>
<th>Cases</th>
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<tbody>
<tr>
<td>1959</td>
<td>995</td>
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<tr>
<td>1960</td>
<td>1,010</td>
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<td>1961</td>
<td>942</td>
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<td>1962</td>
<td>1,003</td>
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<td>1963</td>
<td>1,013</td>
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There has, therefore, been a slight increase in this type.

The tuberculosis situation seems to be at a standstill or slightly up. The active case rate of 10 per 100,000 population in 6 years, which is the goal set by the Arden House Conference, cannot be reached at the present rate of decline. The outlook for tuberculosis elimination in this State in the foreseeable future is not particularly gloomy, but certainly not encouraging.

References:
- CDC Seminar on Tuberculosis, Tuberculosis in 1963: An Overview. Personal Correspondence, USPHS.
- Personal Correspondence, Dr. Robert F. Young, Health Director, Halifax County, Halifax, N. C.

Betsy Palmer served as 1964 National Honorary Chairman for Christmas Seal Campaign.
Air Pollution Is A Costly Luxury

In the early days of our industrial development, the belching smokestack was a symbol of progress and prosperity, a symbol of a young nation on the way to greatness. Today, we are learning that it is possible to have both prosperity and clean air. Indeed, we know that in many ways air pollution is the enemy of prosperity. We know that with our burgeoning technology it has come to mean many different kinds of contaminants, drifting and sifting across state and local boundaries, hastening the deterioration of buildings, damaging crops, injuring health.

Air pollutants come not only from the exhaust pipes, the carburetors, the crankcases, and the gas tanks of automobiles, trucks, and buses; they also come from home heating plants and backyard burning of leaves and trash; and from hotel and apartment incinerators.

They come from burning municipal dumps, burning auto bodies, and burning waste from building demolition; from commercial enterprises such as drycleaning and restaurant kitchens; from cement-mixing and asphalt-paving operations.

They come, in large volume, from oil refineries, power plants, steel mills, pulp and paper factories, and almost every other kind of factory.

Of immediate concern to us are the effects already being produced on man and property by local and regional changes in the air due to our loading it with harmful pollutants.

Agricultural losses alone in this country are estimated at approximately $500 million a year. Current estimates of total economic damage caused by air pollution run as high as $65 per person per year, or some $11 billion annually.

Costliest of all the penalties we pay for dirty air, of course, is the toll it exacts in human health. Contaminated air can actually shorten our lifespan.

The evidence is coming in slowly, as our research continues, but there is already enough to establish a definite link between air pollution and the frequency and severity of many diseases, mostly respiratory and mostly chronic. These include not only the common cold, chronic bronchitis, and bronchial asthma—but also 2 of our most dreaded and most rapidly-increasing diseases: Emphysema and lung
cancer.
Here, then, are three admonitions which experts in this field give:
1. We should not postpone action until emergency makes it compulsory.
2. We cannot purify the air after it is polluted.
3. We cannot clear the air without close cooperation among all levels of government, industry, and the public.

The State Board of Health has recognized the expanding problem of Air Pollution and the potential harmful effects on human health. To secure more information as to the extent of the problem and to determine to some degree the quality of the air we breathe, a study was made in August 1958-March 1959 with the assistance of the Public Health Service.

Thus in 1963, a request was presented to the General Assembly for legislation which would authorize the State Board of Health to engage in an Air Hygiene Program.

The General Assembly favored this request, and the State Air Hygiene Program Act was passed. Because of the late passage of the act no appropriation was made to carry out the provisions of the act. A request has been submitted to the Advisory Budget Commission for funds to implement this law.

With no special funds and by using limited engineering service, some work has been started. Six short-term sampling programs were conducted. A number of sampling stations were established. Assistance has been given local health departments in investigating complaints and helping to solve local problems.

With financial support from our 1965 General Assembly, we will be able to assign the personnel needed for this program and really begin to do something about protecting our air resources.

Air Hygiene was given statewide and nation-wide emphasis by the observance of "Cleaner Air Week" the last week in October.

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November, 1964
If you do NOT wish to continue receiving The Health Bulletin, please check here □ and return this page to the address above.

**DATES AND EVENTS**

1965

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<thead>
<tr>
<th>Month</th>
<th>Event</th>
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<tbody>
<tr>
<td>January</td>
<td>Conference of State and Territorial Mental Health Authorities, Washington, D.C.</td>
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<tr>
<td>February</td>
<td>Institute on Food Administration, sponsored by the N.C. Dietetic Association, Jack Tar Hotel, Durham.</td>
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<td>February</td>
<td>Annual Meeting, Health Careers for N.C., Queen Charlotte Hotel, Charlotte.</td>
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<td>February</td>
<td>Congress on Medical Education, Chicago, Ill.</td>
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<td>February</td>
<td>American Academy of Occupational Medicine, Columbus, Ohio.</td>
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<td>February</td>
<td>The National Council on the Aging, Hotel Shoreham, Washington, D.C.</td>
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<td>March</td>
<td>Annual Meeting, N.C. Mental Health Association, Hotel Sir Walter, Raleigh.</td>
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<td>March</td>
<td>American Mosquito Control Association, Tampa, Fla.</td>
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<td>American Society of Internal Medicine, Chicago, Ill.</td>
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<td>N.C. Association of Nursing Homes, Velvet Cloak Inn, Raleigh.</td>
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<td>March</td>
<td>American College of Physicians, Chicago, Ill.</td>
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<td>March</td>
<td>National Conference on Rural Health, Miami Beach, Fla.</td>
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<td>April</td>
<td>American Industrial Health Conference, Bal Harbour, Miami.</td>
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<td>Southern Branch, APHA, Jung Hotel, New Orleans, La.</td>
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Participants in Air Hygiene Workshop at Greensboro

A week-long workshop on Air Hygiene was held at Greensboro in the Fall, put on by the Training Staff of the Robert A. Taft Sanitary Engineering Center of the Public Health Service in Cincinnati, Ohio. There were 15 counties represented, in addition to one municipality, one industry, and several persons from the Guilford County Health Department Staff and the State Board of Health. Shown in the picture, from left, are: George Walsh, Cincinnati, Ohio, Chief of the Air Training of the Public Health Service; Owen Braugher, Greensboro, Supervising Sanitarian, Guilford County Health Department; Mrs. Carol Kearn, Greensboro, Public Health Nurse of the Guilford County Health Department; Dr. Jacob Koomen, Jr., Raleigh, Assistant State Health Director; and Dr. E. H. Ellinwood, Greensboro, Guilford County Health Director.
Accidental Poisoning

A Bulletin of the National Clearinghouse for Poison Control Centers contained an article, later reprinted in the *American Journal of Diseases of Children* on poisonings from camphor compounds, particularly Camphorated Oil.

To determine the current status of poisonings from these preparations, the National Clearinghouse for Poison Control Centers has recently reviewed the reports received from poison control centers for the years 1962 and 1963. The data indicates that the number of reported cases continues to increase, although there was some decrease in reports of serious illness. Twenty-eight percent of the patients involved in these accidents were symptomatic with over 10 percent having convulsions. One reported fatality in 1964 was an adult who ingested 2 ounces of Camphorated Oil, mistakenly believing it to be Castor Oil.

In reviewing these reports an attempt was made to learn more about the circumstances of these accidents. A great many involved small children who obtained the preparations because of improper storage. Another group occurred while the parent was medicating the child. The children in this group reached for the container when the bottle was put down momentarily while the parent performed some other task.

Of more serious consequence are the large number of cases in which the Camphorated Oil was mistakenly administered in belief that it was Castor Oil. However, in one instance Camphorated Oil was mistaken for cough medicine and in another for a nose drop. Of 194 reports of ingestion of Camphorated Oil for 1962, 22 cases of mistaken identity were reported; of 308 reports in 1963, 31 involved mistaken identity. Of special interest is the report that in several cases the product was purchased from a grocery store or pharmacy when the product desired was Castor Oil. These figures represent the minimum number of poisonings due to mistaken identity since some reports did not contain information on how the accident occurred. In some instances there are remarks on the report which would make one believe that in many cases there was unfamiliarity with the use of Camphorated Oil. We urge physicians, nurses, and public health workers to stress the hazards of self-medication as exemplified by the use of Camphorated Oil for Castor Oil. Because of the seriousness of the symptoms displayed from this particular product, all personnel employed by pharmacies should be instructed to make inquiries as to the expected use of Camphorated Oil when it is sold. They also should advise purchasers of its poisonous nature.

—Bulletin of National Clearinghouse for Poison Control Centers

**FLUORIDATION**

According to the situation in 1962, drinking water has been and is being fluoridated in 18 European communities with a total population of one million. Eight other communities are reported to be preparing fluoridation for three million people. The first results of fluoridating some European communities partially since 1952 as stated by dental research demonstrate that the reduction of dental caries is of the same order as that in the United States.

**LOVE GUIDES HEART**—Mrs. J. Spencer Love, of Greensboro, wife of the late Burlington Industries executive, will head the North Carolina Heart Association's statewide "Hope for Hearts" crusade next year, the state heart group announces. Goal for the 1965 N. C. Fund Drive, to be conducted in February, has been set for $615,000.
The Contribution of the Religio-Psychiatric Approach to Family Life

Address delivered by Smiley Blanton, M.D.

New York at the 1964 Annual Meeting of the N. C. Family Life Council

We must face the sad fact that almost a quarter of all marriages are dissolved because the partners cannot get along. This often results in severe psychological trauma to the children, because children require a home with a mother and father who have a happy relationship.

Why do so many marriages fail? What can we do to prevent these failures? These are stark questions we must try to answer.

The first thing we must do is explain the manner in which our personalities are developed, and the problems that are involved in growing up. In the last 80 years we have learned a great deal about the development of the personality that can be of help to us here. We have learned that the personality has three parts: (1) the conscious mind, which is reasoning and logical; (2) the unconscious mind, which is primitive, amoral, antisocial and completely selfish, and which drives for satisfaction regardless of cost; and (3) the conscience, itself partly unconscious. In the unconscious mind the primitive impulses of selfishness and aggression are the two fundamental drives that threaten the individual and his society. When these aggressive feelings are too strong, the unconscious elements of the conscience attack the conscious ego, and we have all sorts of problems in our personal lives, particularly in marriage.

Let us go back and study the infant. The newborn baby is completely self-centered in a state of complete selfishness, or narcissism. Soon he passes through the stage in which he must love something—the stage of object love—usually his mother or a mother figure. Since he cannot be given everything he wants, he often feels resentful; he shows rage when he is frustrated and gives the love object not only love but a certain amount of hate as well.

The manner in which the love object
loves the child determines his personality. If he is not loved enough, he develops a great deal of resentment toward the love object and toward the world in general. On the other hand, if he is loved too much, he develops a great deal of resentment in order to defend himself against this overwhelming affection.

The problem we face is the necessity of modifying childish selfishness, of curbing childish aggression, of relieving anxiety, so that we can reach a mature level of functioning. That many people fail to do this is evidenced in their immature relationships with others. Immaturity is the main cause of marriage failures.

An example of this immaturity is the case of a man I saw when I first began to work with Dr. Norman Vincent Peale many years ago. A large, powerful fellow, he was employed as a special policeman by several warehouses. When I saw him his weight had fallen from 220 to 170 pounds. He said he was worried about his wife, who was pregnant, afraid she was going to die in childbirth. They had been married 15 years, and she was about six months pregnant at this time, for the first time.

The social worker who investigated the case felt that this man was worrying about finances as well as about the fact that his wife was 37 years old and might have a hard time at the birth. We spoke to the obstetrician, and he said she was in very good condition, and there was no reason for anxiety.

It seemed clear to me that there was some deep, unconscious anxiety involved. We found that the expectant father was an only child. His father had died when the patient was very young, and he had supported his mother until she died five years previously. We concluded from our study of this man that he was really upset because his wife, for 15 years a mother figure to him, had now become pregnant.

We did not have much time to treat him, because the baby was due in three months, but we gave him intensive therapy and were able to dissolve his mother fixation on his wife and make him realize what a wonderful thing it would be to have a child—that his home would be a joyous place. By the time of the birth he was able to accept fatherhood as a happy event.

Another case involved a man who had been married for 12 years and had four children. As far as his wife was aware, he was quite happy. One day she received a note from him saying he had gone to a hotel and was suing for divorce.

What could cause such strange behavior? After we studied his case we could understand. His father died when he was a child, and his mother never

The Health Bulletin
First Published—April 1886
The official publication of the North Carolina State Board of Health, 608 Cooper Memorial Health Building, 225 North McDowell Street, Raleigh, N. C. Published monthly. Second Class Postage paid at Raleigh, N. C. Sent free upon request.

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Vol. 79 December, 1964 No. 12
remarried. Mother and son were very close, so much so that when he went to college, she took a cottage nearby so she could have a place for him to entertain his friends.

In spite of all this he did not seem over-attached to her. When he finished college, he went some distance away to work. He married a suitable girl, but all the time in his unconscious there apparently was a severe conflict because of his real attachment to his mother, not so much to the flesh-and-blood mother as to his image of his mother. Often in such cases, after a man has been married for some years, and has had children, he develops a devastating conflict that increases as the years go by, his defenses are weakened, and he finds it impossible to go on being married. His wife is now a mother, and he finds it shocking to have intimate relations with her. He also demands that he be treated as though she were his mother, which is very irritating to her.

I agree that such an explanation may seem bizarre, but you must accept the fact that when you study human behavior, you will find that it does not always fit into the categories of common sense.

The wife persuaded the man of whom I have been speaking to take treatment with a skillful marriage counselor. The ink-blot test showed that he had a strong mother fixation that resulted in a feeling of anxiety and resentment when he was with his wife. In every marriage there is behavior that irritates and causes friction. This man was able to bring his problem into the open during the counseling hour, including a long list of the things his wife had done that had offended him or made him angry. Most of the matters he complained about were just plain foolish.

I am happy to say that this man and his wife were able to work out their differences and proved to be one of our most successful cases.

A man came to see us at the American Foundation of Religion and Psychiatry complaining of his wife's extravagance, her lack of love and her lack of consideration for him.

We are familiar with the fact that the complaints people bring us about trouble in the family are rarely the true problem. We listen and try to find out the real trouble. In this case the wife's story seemed to reveal it.

She said her husband had never wanted a child. He told her they had each other and that was enough. Children would interfere with the beautiful relationship they had—they couldn't travel, couldn't go out, at least while the children were young, and so he ob-

IVES FOR LONGER LIVES—Cherrill Ives, that is. The 11-year old Heart Funder, of Chapel Hill, met with well-known folksinger and actor Burl Ives (no kin) when he recently visited NCHA state headquarters in Chapel Hill to record public service radio spots promoting the state's 1965 Heart Fund campaign.
those of others; if we could do all this, or even part of it, we would have fewer difficulties and family conflicts. We would have happy homes in which children could grow up with the love of God in their hearts, rather than resentment. We would have a good deal less juvenile aggression and crime, which, in part at least, are the results of family conflicts.

It all boils down to the fact that the way we treat our children in the home, and the way we teach them, modify the innate selfishness and aggression that are in all of us. Only through the power of love can we restrain the childish impulses that are always with us.

My advice to all who are planning marriage

So my advice to all those who are planning marriage is to get to know themselves and, through self-understanding, to recognize the emotional factors in their prospective mates. Premarital counseling can be of great help in this respect.

After you are married, have respect for your spouse. Avoid the tendency to dominate or overprotect. Beware of a passive attitude, an attitude of submission. Do not have disagreements about the possession and spending of money. When the children arrive, teach them to recognize that real love (respect and feeling) should be for oneself at first and then for others, and that they should have patience toward other people. Teach them dignity, a sense of humor, good judgment and the value of avoiding useless arguments.

If these behavior patterns are followed, they will grow to be understanding adults with all the best attitudes toward their spouses, their children and, not least, their in-laws.

Interagency Council
Formed On
Smoking and Health

Twelve national education and health agencies have formed a National Interagency Council on Smoking and Health to promote public health through cooperative activities designed to reduce the health hazards of smoking.

The national groups participating as voting members of the interagency council are American Association of School Administrators, American Cancer Society, American Dental Association, American Heart Association, American Public Health Association, Association of State and Territorial Health Officers, National Congress of Parents and Teachers, National Tuberculosis Association, U. S. Office of Education, U. S. Public Health Service, U. S. Children's Bureau, and Department of Classroom Teachers.

Earlier this year the U. S. Surgeon General’s report on smoking and health identified smoking as a “health hazard of sufficient importance in the United States to warrant appropriate remedial action.” The report cited research findings regarding the relationships between smoking and cancer, heart disease, and other diseases.

The newly formed council met in Washington last month to approve its constitution and by-laws. Four additional groups, now awaiting approval of council membership by their governing bodies, attend the parley as observers: Association for Supervision and Curriculum Development, National Association of Independent Schools, National Association of Secondary School Principals, and the National Education Association.
"Technology and the Aging"

An hour-long tape recording reviewing the impact of technology on the older worker is now available to the general public, it was announced by the National Council On the Aging. "Technology and the Aging" is highlighted by a summary statement on the status of America's 18,000,000 older citizens by President Johnson. Secretary of Labor W. Willard Wirtz is the principal speaker. Other participants include spokesmen from labor unions, business, mass media, government, education and community organizations.

The program is an "oral textbook" designed to assist members of trade unions, business organizations, community groups and other organizations with ways to help the older worker, according to the NCOA announcement. Libraries, schools of business, and sociology departments of colleges and universities would also find it of value.

Divided into three main sections, the first part reviews the major factors affecting the older worker in the technological age. Part two is a report by local leadership on the effects of the shutdown of the Studebaker plant at South Bend, Indiana. The final section offers proposed solutions by the participating experts.

"This taped program is a synthesis of the best ideas and recommendations from top experts in the field," Geneva Mathiasen, Executive Director of the National Council On the Aging, stated. It is a taped-recorded summary of selected reports and discussions of the NCOA's annual meeting which was devoted to the problem of the effects of technological change on older workers.

Mrs. Mathiasen said the Council is making this program available to interested organizations "because we believe it will help them understand the realities of the problem. We hope many organizations will use this education program as a basic blueprint for action programs to assist the older person in their organization or community."

Participants in "Technology and the Aging" in the order of their appearances include: Dr. Juanita M. Kreps, Department of Economics, Duke University; Charles E. Odell, Director, Older and Retired Workers Department, United Automobile Workers of America, AFL-CIO; Edwin F. Shelley, Vice-President, U. S. industries.

Other national experts include: Edwin C. Berry, Executive Director, Chicago Urban League; Hobart Rowen, Business Trends Editor, Newsweek Magazine; William G. Caples, Vice-President, Inland Steel Company; Minnesota Senator Eugene J. McCarthy; Jack Conway, Executive Director, Industrial Union Department, AFL-CIO; and Dr. Harold L. Sheppard, Federal Coordinator for the South Bend Project.

In the introduction of "Technology and the Aging" President Johnson states: "Many of our citizens have reached their senior years without adequate means to solve their economic, social and medical problems."

The President's statement is an extract from a talk delivered earlier this year to representatives of organizations working in the field of the aging.

The National Council On the Aging is a non-partisan private membership organization which provides leadership, consultation and program materials to individuals or groups working with older people. It is a non-governmental, non-profit, tax exempt agency.

"Technology and the Aging" may be purchased by writing to the National Council On the Aging, 49 West 45th Street, New York, New York 10036. The cost of the tape-recording is $20.
Take Stroke--for Example

As quickly as one can say, "What's up, Doc," knowledge in the cardiovascular field is changing. To appreciate how fast modern medical research is moving, glance at the historical timetable of any disease--stroke, for example.

Stroke is not a new disease. In the Old Testament, it is recorded that Nabal became as stone for 10 days before he died (I Samuel XXV, 37). Early physicians observed the signs of stroke and offered quite fanciful explanations of its cause. In the fifth century B.C., Hippocrates taught that strokes were caused by a loss of phlegm in the brain which resulted in a drying-out of the nerves.

Two thousand years later, North Carolina's Cherokee Indian was blaming the raccoon spirit for strokes and heart attacks. Then, in 1658, a German scientist was the first to discover that a stroke could be caused by brain hemorrhage. Today, three centuries after that discovery, we know that, in addition to hemorrhage, other kinds of interference with the blood supply to the brain also cause stroke. But more important, in the past 10 years or so, modern medical research has given us ways to diagnose and treat many types of stroke--knowledge which has been sought for about 3,000 years.

Until recent years, there was relatively little that could be done for the hundreds of thousands of persons who suffer strokes each year. Today there are many methods of treatment, some to prevent strokes from occurring or recurring, others to lessen the damage done by strokes. Within this generation, research has developed more weapons against strokes than were available throughout all preceding medical history: effective drugs, surgical procedures, improved techniques for diagnosis, rehabilitation and retraining programs that help restore the stroke patient to useful living.

Some strokes come on without warning. These strokes are sometimes due to cerebral hemorrhage—that is, the rupture of a blood vessel, with blood pouring into delicate brain tissue. Since cerebral hemorrhage is often associated with sustained high blood pressure, new drugs which lower elevated blood pressure to more normal levels help to reduce the threat posed by this type of stroke.

By far the largest number of strokes are caused by clots which clog arteries and block the blood supply to the brain. In persons considered to be susceptible to such strokes, doctors may prescribe anticoagulant drugs which help prevent clot formation.

A new concept of how these "heart attacks of the brain" develop is based on recent evidence that from 25 to 40 per cent of strokes may result from blockage of arteries in the neck which lead to the brain, rather than of arteries within the brain itself. To look for signs of such blockage, the doctor may apply his hand or a stethoscope to the patient's neck where the blood rushes through these large neck arteries.

Abnormal vibrations or unusual sounds thus detected may suggest that an obstruction is developing which could eventually result in a stroke. It is now possible for surgeons actually to remove such obstructions or put in an artery graft as a bypass channel for

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the blood. In this way an impending stroke may be prevented in some instances.

Before specific treatment for a stroke can be started, the doctor must of course diagnose the condition. The patient's medical history and blood pressure readings provide helpful clues. Other methods the doctor uses in making his diagnosis of stroke include examination of spinal fluid, which may help to distinguish between the hemorrhage and clot-caused types of stroke. An x-ray technique called arteriography or angiography—in which a substance injected into the blood stream shows up on the x-ray film—may pinpoint trouble spots in the blood vessels (such as obstructions suitable for removal by surgery).

Although prevention of stroke is the ideal goal, there is also a good deal the doctor can do for the patient who has had a stroke. Soon after the attack, the doctor may suggest exercise and massage to prevent or minimize damage to the muscles which have been paralyzed. In this, the patient's family can be extremely helpful; indeed, the family's wholehearted cooperation with the doctor plays a vital role in the patient's recovery. When rehabilitation is begun promptly and carried out faithfully, even severely paralyzed patients can make remarkable progress in regaining functions impaired by a stroke.

Doctor and family may call on other resources in the community to help in the patient's rehabilitation. The North Carolina Heart Association may be able to help in finding and suggesting resources for specific cases.

With recent research developments, stroke is no longer hopeless; and further research—increased in scope and intensity—undoubtedly will uncover more ways to help even larger numbers of stroke patients.

**Up and Around**

"Up and Around," a booklet to aid the stroke patient in learning activities of daily living, has been issued by the Heart Disease Control Program of the Public Health Service, U. S. Department of Health, Education, and Welfare.

The new booklet is intended to help doctors, nurses, therapists, and families teach the stroke patient how to take care of his daily needs. Beginning with such activities as sitting up in bed and moving from a bed to a wheelchair, the series of more than 100 pictures and brief text moves on to directions for dressing, walking, climbing stairs, and getting in and out of an automobile.

"Up and Around" supplements the widely-used companion booklet "Strike Back at Stroke," PHS Publication No. 596, which emphasizes prevention of further disability of the stroke patient by means of proper positioning in bed, range-of-motion exercises, and similar early restorative measures. Both booklets are to be used under a physician's direction, according to Public Health Service recommendation.

"In general, the patient should do as much for himself as he possibly can as soon as he can," the introduction to "Up and Around" states. "However, the doctor should decide when it is safe for the patient to start relearning these activities and what precautions are necessary. These activities should not be attempted before the doctor prescribes them."

Single copies of "Up and Around" are available without charge from the Public Health Service, Washington 25, D. C. Copies may also be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at fifty cents each or $37.50 per hundred.
North Carolina was represented at the Third Annual Meeting and Conference of the American Association of Homes for the Aging in Washington, D. C. From the left, those shown in between session fellowship are Willard S. Farrow, Charlotte, Administrator of Methodist Home and Wesley Nursing Center; Don Penley, Charlotte, Administrative Assistant of Wesley Nursing Center; and Wm. W. Hawthorne, Galveston, Texas, Administrator of Moody House.

Third Annual Conference of the American Association of Homes For the Aging

Washington, D. C.
Session

Winners of Awards of Honor and the chairman of the Award Committee at the President's Breakfast session of the Third Annual Conference of the American Association of Homes for the Aging held in Washington, D. C. From the left, these are: Hobart Jackson, Philadelphia, Pa.; Richard York, Grey Gables, Ojai, Calif.; Mrs. Jean Wallace Carey, New York, Award Committee Chairman; Dr. and Mrs. Julius Weil, The Montifiore Home, Cleveland Heights, Ohio.
Leaders of the National Council on the Aging as they were seen at the closing Luncheon Session of the Third Annual Meeting of the American Association of Homes for the Aging held in Washington, D. C. Garson Meyer of Rochester, N. Y., Special Technical Adviser, Eastman Kodak Company, is President of the National Council on the Aging and Ollie A. Randall of New York is Vice President. The National Council on the Aging will hold its 1965 Annual Meeting in Washington, D. C., Feb. 28-Mar. 5. The presentation of the annual Ollie A. Randall Award to an individual or organization for outstanding service to older people is one of the features of the March meeting.

Beverly Diamond, New York, Consultant with the National Council on the Aging, and Lester Davis, New York, Executive Director of AAHA, are seen before the AAHA exhibit at the Third Annual Conference of the American Association of Homes for the Aging held in Washington, D. C.

An informal scene at the President's Breakfast during the Third Annual Meeting of the American Association of Homes for the Aging held in Washington, D. C. Seated are Robert Zachow, Spokane, Wash., Administrator of Riverview Terrace, a Retirement Home, and John Butz of Washington State, Deputy Assistant to U. S. Senator Magnuson. Standing is the Rev. Canon Herbert C. Lazenby, Seattle, Wash., Executive Director, Episcopal Community Relations, Diocese of Olympia, and President of the American Association of Homes for the Aging.

December, 1964
14th Southern Water Resources Conference to be Held in April

The 14th Southern Water Resources (formerly known as the Southern Municipal and Industrial Waste Conference) is to be held April 14, 15 and 16, 1965. Sponsored by Duke University, North Carolina State of UNC at Raleigh, and University of North Carolina, the Conference will meet in the Department of Environmental Sciences and Engineering at the School of Public Health at the University of North Carolina in Chapel Hill.

The theme of the Conference on April 14 and 15 will be "Evolving Techniques and Methodology for Optimizing Water Utilization and Waste Control." A new feature of the Conference this year will be Research Day on April 16.

Additional information and complete programs will be available after January 1, 1965, by writing Professor Charles M. Weiss, Box 899, Chapel Hill, North Carolina.

Portable Stoves

A 13-year-old California boy died from carbon monoxide poisoning last year, he was sleeping in a station wagon heated by burning charcoal briquettes in a habachi. A similar camping tragedy occurred in New York State when briquettes were burned in a portable barbecue to heat a cabin.

Habachis and other barbecue equipment burning charcoal briquettes or similar commercial fuels are not intended to be used for indoor heating. Burning charcoal briquettes indoors without proper ventilation results in a high concentration of carbon monoxide. Carbon monoxide gas is a deadly poison. It gives no warning of its presence. You can neither see nor smell carbon monoxide gas. It has no color and no odor.

Portable barbecue equipment cannot be vented for safe use indoors. Unvented heaters have been outlawed in California since 1951 because some 60 residents died annually from carbon monoxide poisoning or lack of oxygen.

—San Diego’s Health
Charlotte’s Ninth Occupational Health Conference Set For March

James A. Nelson, Occupational Health Council Chairman and Douglas Aircraft’s Director of Administration, announced that Governor George Romney of Michigan has tentatively accepted an invitation to be the keynote speaker at Charlotte’s Ninth Occupational Health Conference on MOTIVATION set for March 1965. Plans for the Conference were revealed at a recent luncheon meeting of the management-medical group held at the Charlotte Town Mall under the auspices of Heart Services of Charlotte and Mecklenburg County, one of the 45 United Appeal services.

Robert A. Earle, Chairman of the Heart Services Committee on Aging, moderated a panel composed of Jack Burney, Research Director, N. C. National Bank; Florence Leslie, Head of Industrial Relations, Union Carbide; Al Bechtold, Personnel Director, Lance, Inc.; and Maribelle Scoggin, Heart Services executive director. Panel topic was “Preparation for the Retirement Era of the 70’s.” Burney pointed out expected shifts in the population structure which will result in an actual shortage in the 45-49 age group while the age groups beyond 50 will show proportionately greater increases as 1980 approaches. He presented this as a challenge for deliberate planning by the industrial and civic community to utilize this heretofore unavailable man and woman-power.

Maribelle Scoggin reported results of an August survey of “preparation for retirement practices of local companies” which revealed that 77% of local firms reporting have a pension plan for employees and 38% have a counseling program for employees scheduled for retirement.

Florence Leslie of Union Carbide reported that good employee communications seemed to be the key to their up-to-now successful retirement program and that many of their workers, especially women, sought earlier retirement than required by company policy. She cautioned against “underestimating our employees” in terms of their ability to plan for themselves. Al Bechtold of Lance, Inc. described similar experiences with their workers in the snack food industry.

Robert A. Earle announced plans for a second series of seminars on “Preparation for Retirement” to be held early in 1965. The series, to be conducted by Heart Services, will cover such topics as wills and estate planning, investments, home and family relationships, work and use of leisure time and health and medical problems.
DATES AND EVENTS

February 3-4 — Institute on Food Administration, sponsored by the N. C. Dietetic Association, Jack Tar Hotel, Durham.

February 5-6 — Annual Meeting, Health Careers for N. C., Queen Charlotte Hotel, Charlotte.

February 5-10 — Congress on Medical Education, Chicago, Ill.

February 16-18 — National Council of Churches, Section on Family Life, Louisville, Kentucky.

February 17-19 — American Academy of Occupational Medicine, Columbus, Ohio.

February 28 - March 5 — The National Council on the Aging, Hotel Shoreham, Washington, D. C.

March 11-13 — Annual Meeting, N. C. Mental Health Association, Hotel Sir Walter, Raleigh.

March 14-17 — American Mosquito Control Association, Tampa, Fla.

March 19-21 — American Society of Internal Medicine, Chicago, Ill.

March 21-24 — N. C. Association of Nursing Homes, Velvet Cloak Inn, Raleigh.

March 22-26 — American College of Physicians, Chicago, Ill.

March 26-27 — National Conference on Rural Health, Miami Beach, Fla.


April 4-9 — American Industrial Health Conference, Bal Harbour, Maine.

April 5-9 — Southern Branch, APHA, Jung Hotel, New Orleans, La.

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