It has long been established that free chlorine is a much better disinfecting agent than combined chlorine. A comparison of the effects of these two agents on the bacteriological quality of pool water substantiated this point (fig. 2). The data for this analysis were based on 819 samples of pool water (4,095 10-ml. portions) and 819 chlorine residual readings, submitted by the local sanitarians.

In interpreting figure 2, consideration should be given to the data in figure 3, which show that a comparatively small number of samples was submitted for high combined-chlorine residual readings. This portion of the curve in figure 2. therefore, is not as accurate as the rest. However, it should be pointed out that since no pools in West Virginia use chlorine-ammonia treatment, samples containing combined chlorine at concentrations of 0.5 and above probably contained some free chlorine. Furthermore, although uniform instructions were issued to all sanitarians on the methods by which free and combined chlorine should be determined. it is reasonable to assume that these instructions were misinterpreted by a few.

Summary and Conclusions

After 2 years of experience in operating a swimming pool classification program on a trial basis, the West Virginia State Department of Health reports the following results and conclusions:

- 1. The interest and cooperation of the local sanitarian are necessary to the success of the program.
- 2. Free chlorine has been verified as a better disinfecting agent than combined chlorine.
- 3. The number of fill and draw pools has been reduced 48 percent.
- 4. The number of Class AA and Class A pools has been increased 39 percent.
- 5. The number of Class C pools has decreased 29 percent.
- 6. The interest and cooperation of pool owners and operators have been very good.
- 7. The results obtained indicate that the program is worth while, and it is planned to continue it within the limits of existing facilities.



Onchocerciasis: The Blinding Filariasis

16 mm., sound, color, 17 minutes. 1951.

Audience: Physicians, medical students, specialists in tropical medicine.

Available: Loan—Apply Public Inquiries Branch, Public Health Service, Federal Security Agency, Washington 25, D. C. Purchase—To be arranged through Castle Film Division, United World Films, 1445 Park Avenue, New York 29, N. Y.

Serving both as a graphic introduction to onchocerciasis and as an interesting documentation of an epidemiological approach to the study of this important tropical disease, this film was produced jointly by the Laboratory of Tropical Diseases, National Institutes of Health and the Pan American Sanitary Burgan

It is divided into five main sections: etiology, epidemiology, clinical manifestations, diagnosis, and treatment.

The etiology section details the clinical and laboratory investigative techniques used, including biopsy sampling, microscopic and photomicrographic observation, and microgross examination of the Simuliidae. The epidemiology section documents the fly habits, larvae, pupae and adult stages, and collection-identification methods by dye

powder coloring. The section on clinical manifestations elaborates on the chronic aspects of the disease and discusses, by means of the perimeter and corneal microscope, the conditions of photophobia, conjunctival pigmentation, atrophy of the iris, and visual acuity. The diagnosis section includes biopsy and microscopic examination, particularly the characteristic protein reaction induced by oil of hetrazan. Surgical methods and methods of medication involving suramin sodium compounds, such as germanin, bayer 205, and antrypol, are portrayed in the treatment section.

The majority of the footage of the film was taken by Dr. Thomas A. Burch, in the Yepocapa area of Guatemala.



Directory of State and Territorial Health Authorities, 1952

Revised as of May 1, 1952, the directory lists all State and Territorial health authorities and the officials of the State agencies participating in grant programs administered by the Public Health Service. Health officials of each State are presented on the basis of the State's organizational pattern for carrying out the health activities incorporated in the comprehensive health program. The State agencies, other than health departments, listed are: mental health agencies, hospital planning and construction agencies, and water pollution control agencies. Public Health Service personnel in charge of functions closely associated with State health departments are also listed.

Directory of State and Territorial Health Authorities—1952. (Public Health Service Publication No. 75) 1952 revision. 61 pages. 20 cents.

for the general public

Snake Bite

The first part of this leaflet is devoted to information on the habits of snakes, where they rest, and when and how they attack. The reader is given advice on ways of protecting himself from possible snake bite. This is followed by detailed instructions for first aid treatment with emphasis on keeping the victim quiet. Getting the patient to a physician or hospital for antivenin as quickly as possible is stressed. The reader is also instructed on how to administer first aid if alone when bitten.

Snake Bite. Health Information Series, No. 10 (Public Health Service

Publication No. 188). Revised 1952. 2-fold leaflet. 5 cents; \$1.25 per 100.

Heart Disease

Because of advances in knowledge of heart disease and an increased demand for information on the Nation's leading cause of death and disability, the National Heart Institute and the Division of Chronic Disease and Tuberculosis, Public Health Service, have brought up to date and expanded three earlier leaflets to form a new series of four.

Heart Disease. The first in the series contains general information on the physiology of the heart, the current status of knowledge on heart disease and a brief discussion of the three common types, rheumatic heart disease, coronary artery disease, and hypertension, in terms of cause, manner in which they affect the heart, and the age groups involved. The reader is advised that symptoms of heart disease may or may not be apparent and the warning signs may indicate that something else is wrong. A physical check-up once a year is suggested and emphasis is placed on cooperation of the patient with his physician in the treatment of heart disease.

Rheumatic Heart Disease. leaflet contains a discussion of the cause of rheumatic heart disease. rheumatic fever, the streptococcal infection that usually precedes it, and the ways in which the heart itself may be damaged by the infection. The difficulty of diagnosis is pointed out, with a description of the various tests the physician will use in detecting the disease. The importance of the role of the parents in caring for a child during prolonged bed rest is stressed. Means of preventing recurrent attacks of streptococcal infection are suggested and the need for community health facilities is discussed.

Coronary Artery Disease. Presented as the story of Roger Franklin's heart attack, this leaflet gives information on the coronary arteries, how they function, and how coronary artery disease affects them. The manner in which nature develops collateral circulation following

coronary thrombosis is described, emphasizing the necessity for maintaining a balance between rest and activity, and the necessity for cooperation between the patient and his physician during treatment.

Hupertension. The fourth leaflet in the series begins with a description of the mechanics of high blood pressure, or hypertension - the tightening up of the arterioles, and the loss of the elasticity of the blood vessels. While it is explained that the reason for these changes is unknown, some probable causes are suggested. Variations in normal blood pressure and low blood pressure are discussed as in the first three leaflets, and following the doctor's advice in the course of treatment is stressed. A list of commonsense rules for the hypertensive patient are given at the end, the most general one being moderation in everything.

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Heart disease. Health Information
Series No. 63 (Public Health Service Publication No. 45). January
1952. 2-fold leaflet. 5 cents;
\$1.25 per 100.

Rheumatic Heart Disease. Health Information Series No. 67 (Public Health Service Publication No. 144). January 1952. 2-fold leaflet. 5 cents; \$1.25 per 100.

Coronary Artery Disease. Health Information Series No. 68 (Public Health Service Publication No. 145). January 1952. 2-fold leaflet. 5 cents; \$1.25 per 100.

Hypertension. Health Information
Series No. 69 (Public Health Service Publication No. 146). January
1952. 2-fold leaflet. 5 cents; \$1.25
per 100.

Publications for which prices are quoted are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Orders should be accompanied by cash, check, or money order and should fully identify the publication (including its Public Health Service publication number). Single copies of most Public Health Service publications Public Health Service publications to be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington 25, D. C.