

# PUBLIC HEALTH REPORTS

VOL. 34

APRIL 4, 1919

No. 14

## MAKE DAYLIGHT SAVING CONTRIBUTE TO HEALTH.

Now that daylight saving has again added an hour of daylight to the late afternoon, health officers everywhere should endeavor to make this contribute to general health and welfare by impressing on the people the desirability of spending the extra hour in the open air. In many instances part of the time might well be spent in walking home from work rather than riding in crowded street cars. The suburbanite may find health and pleasure by cultivating a patch of garden. Even the tenement dweller of the large cities may profit by spending some of his leisure time in the parks or, where this is not feasible, on the roof of his house. In some communities organized hiking has been conducted successfully and has contributed largely to the promotion of outdoor life.

## LEARN TO ENJOY OUTDOOR LIFE.

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### DELOUSING.

#### METHODS USED BY QUARANTINE OFFICERS OF THE PUBLIC HEALTH SERVICE.

In connection with the interesting article on trench fever, published on another page of this report, and especially in view of the prevalence of typhus fever in various parts of Europe, it may not be amiss to describe briefly the delousing procedures ordinarily carried on by the quarantine officers of the United States Public Health Service. The procedure here described was carried out with success in dealing with the threatened introduction of typhus at El Paso in the winter and spring of 1916-1917 and is still being successfully employed there.

All persons coming to El Paso from Mexico who are considered as likely to be vermin infested are sent through this plant for disinfection.

The men and women are separated, men entering one side of the building and women and small children the other. In suitable rooms all clothing is removed and pushed through an opening in the wall into the disinfecting room, where the bundles are placed in

the steam-chamber carriage run out to receive them. Shoes, hats, belts, and other articles injured by steam are dropped through another opening into a large laundry basket and, when necessary, are exposed to cyanogen.

Persons having money or valuables place such articles in a small cotton bag tied with a string and having a numbered brass check attached. The duplicate number of this check, attached to a card, is given to the owner, who puts it around his neck while bathing.

After all clothing has been removed and passed into the disinfecting room the naked person passes in front of a male or female attendant, as the sex requires, before entering the baths. This attendant examines the head to see if lice are present. If head lice are found, the hair of the men and boys is clipped with No. 00 clippers, the hair dropping onto a newspaper, which is then rolled up and burned. Women with head lice have a mixture of equal parts of kerosene and vinegar applied to the head and hair for half an hour with a towel covering the head. The dilute acetic acid loosens the eggs from the hair and the kerosene kills or stupefies the adult lice, which are removed by washing the head and hair with warm water and soap. If necessary, the process is repeated to dislodge all eggs or nits.

After being passed by the attendant a soap mixture is sprayed upon the body from an elevated reservoir and the person proceeds to the baths. The soap container is a 5-gallon can with a spout in the bottom to which rubber tubing is attached, a clip similar to that on a fountain syringe controlling the spray. The soap is made by boiling 1 part of soap chips in 4 parts of water and then adding 2 parts of kerosene oil. This jellies when cold, and 1 part of this soap jelly is added to 4 parts of warm water, making a good liquid soap at a very small cost.

The attendant watches the bathing process, and when the bath is finished the persons being treated pass into other rooms and wait for their clothing, which is handed back to them from the "clean end" of the steam chamber. No identification checks are placed on the clothing bundles; each person picks out his own bundle.

When the clothes in bundles are passed into the disinfecting room, they are at once placed in the carriage of the steam chamber, and as soon as this is filled the chamber is closed. A vacuum of 10 to 15 inches is created in the chamber, and live steam is then introduced until the pressure gauge shows 20 pounds, which gives a temperature of 259° F. This is maintained for 10 minutes to insure penetration of all bundles, after which time the chamber is opened.

The creation of a second vacuum of 10 inches and holding it for 10 minutes will dry the clothes completely, but in the dry climate of El Paso this is unnecessary.

After the persons are dressed they pass into another room, where they reclaim any bundles they may have had. They are inspected by the foreman in charge of the plant, and all are vaccinated.

The time required for sterilization of clothing is from 25 to 35 minutes, depending on the amount of clothing in the chamber. The effectiveness of this process was determined by wrapping a thermometer inside bundles of clothing placed in different parts of the chamber load, top, bottom, middle, and ends, until the operator learned from such tests exactly how long to expose the clothing. Lice and their eggs are killed by a very short exposure to 212° F., but the higher temperature is easily obtained and is held to insure efficiency.

In connection with this subject the Public Health Service has recently issued the following interesting and instructive reprints which deal with effective methods of killing lice. Copies of these publications may be obtained free of charge by writing to the United States Public Health Service, Washington, D. C.

293. Methods of Destroying Lice. Extract from a report in the British Medical Journal. August 6, 1915.

370. Destroying Lice on Typhus Fever Suspects. By S. B. Grubbs. October 20, 1916.

489. Carbon Tetrachloride Vapor as a Delousing Agent. By M. H. Foster. October 25, 1918.

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## TRENCH FEVER: A SUMMARY FROM THE LITERATURE.

By MAURICE BUCHHOLTZ, Acting Assistant Surgeon, United States Public Health Service.

### Definition.

Trench fever is a blood infection communicable from man to man by means of the louse and possibly other parasites. There are no pathognomonic signs or symptoms recognized. It is not fatal, but the morbidity resulting from it exceeded that from any other disease on the Western Front. Many are permanently unable to resume their former duties, and some pass back to civil life incapacitated—a charge on the State. The disease may arise and spread wherever the body louse is prevalent, provided persons already infected are sent there from endemic areas.

### Symptoms.

The onset of the disease is usually sudden, but in some cases a gradual onset is observed. The disease is characterized by recurrent pyrexia, headache, giddiness, pain in the back and limbs (chiefly in the legs, and of considerable severity), a slow pulse in comparison to the degree of fever, conjunctival congestion, sweating, polyuria, a moderate degree of leucocytosis at the height of the fever, with evidence of blood infection and involvement of the spleen and, in