

IX. ESSENTIAL SERVICES IN A COMMUNITY HYGIENE PROGRAM

The student may never have to control a water supply; do milk or food inspections; wrestle with waste disposal; or quarantine communicable diseases. It is believed that he should understand the hygienic principles involved and the method of their application as a basis for estimating the adequacy of the health protection in his own community.

"Life is the continuous adjustment of internal to external relations," Spencer. Air, water, and food are primary requisites of animal life and constitute three great channels of communication between life and its environment.

1. Water Supplya. Ownership of Supply

- (1) Public
- (2) Private

b. Amount of Supply

Based upon the requirements for physiologic uses of the individual and the amount needed for domestic and industrial purposes.

- (1) Individual. The average healthy man needs 1800 CC to 2100 CC in addition to the amount taken with food.
- (2) Domestic purposes, including cooking, bathing, dishwashing, laundry: 12-17 gals., a day per capita.
- (3) Per capita use. Abroad - 6-59 gallons
U.S. - - From 53 in Fall River to 250 in
Pittsburg.

c. Sources of Supply

The source from which a community secures its supply of water is of great hygienic importance.

- (1) Rain or snow water. Often used in rural areas. Secured from run-off of roofs and stored in cisterns. Soft-mawkish taste. Pure if properly protected.
- (2) Surface waters. Rivers, creeks, lakes, and impounding reservoirs. Frequently dangerous--always under suspicion. Should always be purified.
 - (a) Rivers. The most common supply. Danger from drainage from inhabitants.
 - (b) Lakes and ponds. Admirable supplies when kept free from human and industrial wastes.
 - (c) Impounding reservoirs. Used for storage and for purification.
- (3) Ground waters. From wells and springs. Apt to be hard.
 - (a) Wells. Polluted most frequently from surface drainage.

d. Protection of Supply.

This is an economic as well as a health problem.