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EMERGENCY MINIMUM SANITATION STANDARDS

CONTENTS

INTRODUCTION

General.—These Emergency Minimum Sanitation Standards constitute the third edition of the Sanitation Code for State or Local Adoption. The first edition was released in December 1940, and the second edition in May 1941, under the latter title. In this third edition the title has been changed to Emergency Minimum Sanitation Standards Recommended for State or Local Adoption, because this title expresses more correctly the purpose for which these Standards are intended.

It is realized that the development of Standards having general applicability is difficult. These Standards have been reviewed by interested official agencies and many suggested changes have been made. Nevertheless, it is probable that conflict with State or local legislation in some instances may be encountered which would prevent adoption of these Standards without modification. In such instances it is hoped that these recommended Standards will serve as a guide in the preparation of applicable State or local regulations.

War emergency.—Reference is made in various places in these Standards to materials that should be used or are preferable. It is realized, however, that during the war emergency some of the materials specified may not be obtainable. Use of substitutes will be necessary, therefore, in such instances in accord with the program of conservation of critical materials for the direct war effort.

SHORT ENABLING FORMS SUGGESTED FOR LOCAL AND STATE ADOPTION OF THESE MINIMUM STANDARDS

For use in case of local adoption:

"Be it ordained by the (city, county, district) or (name of political subdivision) that the Emergency Minimum Sanitation Standards recommended by the U. S. Public Health Service [1] shall be in force within the ---------- of ---------- and its police jurisdiction from and after ---------- ------from the date of adoption of these Standards."

For use in case of adoption by the State Board or Department of Health: [2]

"Under authority of (give authority here) the (name of State) (name of official health agency) hereby promulgates the Emergency Minimum Sanitation Standards recommended by the U. S. Public Health Service,[1] which shall be enforced by all local health authorities having jurisdiction in all or parts of such areas as may from time to time be designated by said (name of official health agency) and by the said (name of official health agency) in all parts of such areas which are without local health service."

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[1] Political subdivisions in which adoption of legislation by reference is not considered legal should adopt the Emergency Minimum Sanitation Standards, parts I to IX, which follow.

[2] The phraseology of this paragraph should conform to the legal usage of the State concerned.

Part I

WATER SUPPLIES

SECTION 1. *General.*—Every drinking, culinary, and ablutionary water supply which is hereafter constructed, or extensively reconstructed, or every existing water supply which in the opinion of the State health department is unsafe, or subject to the danger of contamination by reason of unsatisfactory location, protection, construction, operation, or maintenance, shall be made to comply with the requirements of these Standards. No such water supply shall hereafter be constructed or reconstructed without the approval of plans and specifications by the State department of health and without a written permit from said department.

SECTION 2. *Public water supplies.*—All water supplies available to the public shall comply with the requirements of the State department of health, and shall meet the requirements of the United States Public Health Service for common carrier water supplies.

SECTION 3. *Quasi-public and private surface water supplies.*—Surface water supplies shall comply with the requirements of the State department of health and shall meet the requirements of the United States Public Health Service for common carrier water supplies.

SECTION 4. *Quasi-public and private ground water supplies.*—Ground water supplies shall comply with the requirements of the State department of health and shall meet the requirements of the United States Public Health Service for common carrier water supplies, and the following requirements:

Item 1. *Location of water source with respect to potential contamination.*—Every well or spring shall be located and constructed in such manner that neither underground nor surface contamination from any cesspool, privy, or other possible source of pollution can affect such water supply. The horizontal distance from any such possible source of pollution shall be as great as possible, but in no case less than 50 feet, except as provided under item 2, or except as otherwise specified by the State or local health officer. If bacteriological examinations or other evidence indicate actual or potential pollution, the distance shall be increased or the location of the water supply changed, as may be required by the health officer.

The top of every pump room floor, pump platform, or cover of a ground water supply should not be less than 2 feet above the highest known water level of any lake, pond, stream, or any body of surface water, the water of which at the highest level would approach within 50 feet, measured horizontally, of such ground water supply. Wher-

ever possible the ground water source should be located on higher ground than any source of contamination.

Item 2. *Sewerage near wells or springs.*—No floor drain, soil pipe, main drain, or other pipe which is directly connected to a storm or sanitary sewer, or through which water or sewage from any source may back up, shall be located nearer than 20 feet to any well, spring, or other source of water supply. All pipes and drains or parts thereof through which sewage or waste water flows, or into which sewage or waste water may back up, which are located within 50 feet of any such water supply, shall be constructed of extra heavy cast-iron soil pipe or cast-iron water pipe with leaded joints, or be of equivalent construction in the opinion of the State department of health or local health department having jurisdiction.

Item 3. *Leakage from toilets and sewers.*—No toilet, sewer, soil pipe, or drain shall be located over or where leakage therefrom can reach any water storage basin, reservoir, source of water supply, or pump room.

Item 4. *Pits near water supply.*—There shall be no pits or unfilled space below level of ground surface, any part of which is within 10 feet of such water supply, except well, pump, or valve pits conforming to the requirements of item 9.

Item 5. *Well casing or lining.*—All that part of the suction pipe or drop pipe of any well within 10 feet of and below the ground surface, and preferably within 20 feet, shall be surrounded by a watertight casing pipe extending above the ground, platform, or floor surface as the case may be, and covered at the top as required by items 7 and 8. In certain types of wells, and frequently in reconstructing old wells, the above-mentioned watertight casing may be of smaller diameter than an existing or newly installed lower casing below the ground surface, and not connected thereto. In such instances the lower casing shall be cut off at least 10 feet below the ground surface and the annular space at this cut-off point, between the lower and upper casings, shall be closed with a suitable watertight cover over which shall be placed a compact earth fill to prevent settling at the ground surface: *Provided*, That a dug well, in lieu of such casing pipe, may be provided with a substantial watertight lining of concrete or vitrified tile, with outer concrete lining 6 inches thick, or other suitable material. Such lining shall extend down for a distance of at least 10 feet and shall extend up to the well platform or pump room floor with a watertight connection. In such case the platform or floor shall have a suitable sleeve pipe surrounding the suction pipe or drop pipe and projecting above as herein provided for a casing pipe. With the approval of State health authorities, the impervious lining of dug wells in particular instances may be of lesser depth.

Item 6. *Cover or floor.*—Every well, spring, or other structure used

as a source of water, or for the storage of water, shall be provided with a watertight cover; such covers and pump room floors shall be constructed of concrete or similarly impervious material so as to provide proper drainage from the cover or floor and prevent contamination of the water supply. Such cover or floor shall be constructed so that there are no copings, parapets, or other features which may prevent proper drainage, or by which water can be held on the cover. Well casings shall project at least 6 inches above ground level or the top of this cover or floor, and the cover or floor shall slope away from the well casing or suction pipe in all directions. Dug well linings shall extend at least 6 inches above the ground surface and cover installed thereon. The cover shall be watertight, properly grouted in place, and its edges shall overlap at least 2 inches over the walls or curbings of such wells.

Item 7. *Hand pump head and base.*—Every hand-operated pump shall have the pump head closed by a stuffing box or other suitable device to exclude contamination from the water chamber. The pump base shall be of solid one-piece recessed type of sufficient diameter and depth to admit the well casing as hereinafter provided. The top of the casing or sleeve of every well equipped with such a pump shall project into the base of the pump at least 1 inch above the bottom thereof and shall extend at least 6 inches above the level of the platform, well cover, or pump room floor on which the pump rests. The pump shall be fastened to the casing or sleeve by means of a flange connection, and shall not be attached to the platform. The annular space between well casing and suction pipe shall be closed to prevent entrance of contamination. In wells located where frost heaving occurs, or in wells constructed with a buried concrete slab, the well casing, where it passes through the concrete well cover slab, shall be incased in suitable plastic and impervious material not less than one-half inch thick. (A high-grade roofing cement or similar material which remains plastic at low temperatures, and is readily applied by troweling, is a suitable material.)

Item 8. *Power pump base.*—Where power pumps are placed directly over the well, the pump shall have a solid, watertight, metal base without openings, to form a cover for the well, recessed to admit the well casing, and the well casing shall project into the base at least 1 inch above the bottom thereof, and at least 1 inch above the level of the foundation on which the pump rests, which in turn shall be at least 5 inches above the top of the cover or floor; or, in lieu of such base, a separate watertight metal cover or other watertight closure in which the casing projects in like manner may be used. Where power pumps are not placed directly over the well, the well casing shall extend at least 6 inches above the floor of the pump house. The annular space between well casing and suction pipe shall be closed to

prevent entrance of contamination: *Provided*, That the base or cover may have an air vent constructed as hereinafter prescribed.

Item 9. *Well, pump, valve, and pipe pits.*—No wellhead, well casing, pump, pumping machinery, valve connected with the suction pump, or exposed suction pipe, shall be located in any pit, room, or space extending below ground level, or in any room or space above the ground which is walled in or otherwise enclosed, so that it does not have free drainage by gravity to the surface of the ground: *Provided*, That this shall not apply to a dug well properly constructed as herein prescribed, nor to private supplies serving an individual dwelling.

The requirements of this item shall be enforced only for water supply structures which are installed subsequent to the adoption of these Standards, but existing pits may be accepted provisionally only if constructed in accordance with the requirements of the State department of health.

Item 10. *Manholes.*—Manholes may be provided on dug wells, reservoirs, tanks, and other similar water supply structures. Every such manhole shall be fitted with a watertight collar or frame having edges which project at least 6 inches above the level of the surrounding surface, and shall be provided with a solid watertight cover having edges which overlap and project downward at least 2 inches around the outside of the frame. Such covers shall be of standard design whenever possible to eliminate special fittings. The cover shall be kept locked at all times except when necessary to open the manhole.

Item 11. *Vent openings.*—Any reservoir, well, tank, or other structure containing water for any such water supply may be provided with vents, overflows, or water-level control gages constructed so as to prevent the entrance of birds, insects, and contaminating materials. Openings or vents shall face downward and shall be not less than 2 feet above the floor of a pump room, the roof or cover of a reservoir, the ground surface, or the surface of other water supply structures.

Item 12. *Air-lift systems.*—The air intake for any air-lift system or mechanical aerating apparatus shall be at least 6 feet above the floor surface if indoors, and 10 feet above the ground if out-of-doors, and at such elevation as to prevent flooding. The air intake shall be so constructed as to prevent the entrance of birds, insects, and contaminating materials. Every air-lift system shall be equipped with effective oil traps, tanks, or filters to prevent oil or other contaminating materials from entering the water.

Item 13. *Lubrication of pump bearings.*—Pump bearings situated in any well below the pump-room floor shall be lubricated either with water from the well or some other approved source, or lubricated in such other manner as may be approved by the State department of health.

Item 14. *Priming of power pumps.*—Water for priming pumps on any water system shall be taken directly from the reservoir or distribution system which is supplied with water from the original source of water supply or from another supply approved by the State department of health. Priming devices shall be so constructed as not to expose the water to dust, drippings, or other sources of contamination.

Item 15. *Priming of hand pumps; buckets.*—Hand-operated pumps shall have cylinders submerged so that priming shall not be necessary. No pail and rope, bailer, or chain-bucket systems shall be used.

Item 16. *Treatment or abandonment of unsatisfactory ground water supplies.*—Ground water supplies which do not comply with the bacteriological requirements recommended by the United States Public Health Service for common carrier water supplies shall be treated by methods approved by the State department of health; if it is impossible to secure compliance with said requirements, said water supply shall be abandoned. All abandoned wells shall be sealed to protect the water-bearing formation against possible contamination:

(*a*) Drilled, cased, and driven wells shall be completely filled with neat cement grout, concrete, or clean puddled clay.

(*b*) Dug or bored wells shall be completely filled with clean puddled clay or its equal after as much as possible of the curbing is removed.

SECTION 5. *Disinfection of new or accidentally contaminated water supplies.*—New water supplies and water supplies which may have become contaminated accidentally or otherwise shall be thoroughly disinfected with chlorine before being placed in use. The rate of chlorine-water mixture flow shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the pipe shall be at least 50 p. p. m. Treated water shall be retained in the pipe long enough to destroy all nonsporeforming bacteria. The period shall be at least 3 hours and preferably longer, as may be directed. After the chlorine-treated water has been retained for the required time, the chlorine residual at pipe extremities and at other representative points shall be at least 5 p. p. m. If the residual is less than 5 p. p. m., the disinfection procedure shall be repeated until a 5 p. p. m. residual is obtained, as required above. Upon completion of the disinfection process the water containing residual chlorine should be flushed from the system and water samples should be collected for bacteriological examination. The supply should not be used until the tests show that the water conforms to the bacteriological requirements of the United States Public Health Service Drinking Water Standards.

SECTION 6. *Connection with unsafe water sources forbidden.*—There

shall be no cross-connection, auxiliary intake, bypass, backflow connection, or other arrangement including overhead leakage whereby unsafe water, or water from a source that does not comply with these requirements, may be discharged or drawn into any drinking, culinary, or ablutionary supply which does comply with these requirements.

Item 1. *Definitions.*

(*a*) *Cross-connection.*—Any physical connection whereby the approved supply is connected with any other water supply system, whether public or private, either inside or outside of any building or buildings in such manner that a flow of water into the approved water supply is possible either through the manipulation of valves or because of ineffective check or back pressure valves, or because of any other arrangement.

(*b*) *Auxiliary intake.*—Any piping connection or other device whereby water may be secured from a source other than that normally used.

(*c*) *Bypass.*—Any system of piping or other arrangement whereby the water may be diverted around any part or portion of a water purification plant.

(*d*) *Backflow connection.*—Any system of piping or other arrangement whereby the public water supply is connected directly with a sewer drain, conduit, pool, storage reservoir, or other device which does or may contain sewage or other waste or liquid which would be capable of imparting contamination to the approved water supply.

Item 2. No plumbing fixture or device shall be supplied directly from an approved water supply system through a flushometer or other valve unless such valve is installed in a manner such as to reduce to a minimum the possibility of polluting the water supply.

Item 3. No plumbing fixture, device, or construction shall be installed which will provide connection between a distribution system for an approved drinking, culinary, or ablutionary water supply and a drainage, soil, or waste pipe so as to permit or make possible the backflow of sewage or waste into the water supply system.

Item 4. Water from any drinking, culinary, or ablutionary supply complying with these requirements may be supplied to any other system containing water of questionable quality only by means of an independent line discharging at least two pipe diameters and not less than 6 inches above the rim of storage units open to atmospheric pressure or by other methods approved by the State department of health.

SECTION 7. *Outlets from unsafe water supplies required to be sealed or labeled.*—All outlets from water sources which do not comply with these requirements shall be sealed, or, at the discretion of the State or local health officer having jurisdiction, be provided with a permanent and easily readable tag or label reading "UNSAFE WATER. DO NOT

DRINK." Removal of said label or tag, except by permission of the health officer having jurisdiction, shall be deemed a violation of these requirements.

SECTION 8. *Distribution and storage.*

Item 1. *Plumbing.*—All plumbing installed for water supply purposes shall comply with the requirements of the Plumbing Manual, National Bureau of Standards Report B. M. S. 66, November 1940, a copy of which shall be on file at the office of ....., or its equivalent in the opinion of the State department of health, or as otherwise provided by law. During the war emergency the Emergency Plumbing Standards for Defense Housing (issued by the Division of Defense Housing Coordination, Office for Emergency Management, Washington, D. C., 1942) shall be adhered to insofar as use of substitute materials in place of critical materials such as copper and brass and other critical items is concerned.

Item 2. *Plumbing fixtures.*—All plumbing fixtures shall comply with the Federal Specification for Plumbing Fixtures, March 30, 1940, WW–P–541a, a copy of which shall be on file at the office of ...., or its equivalent in the opinion of the State department of health, or as otherwise provided by law. The requirements of this specification with respect to air gaps and backflow preventers shall be strictly enforced.

Item 3. *Common drinking cups.*—The use of common drinking cups is forbidden.

Item 4. *Drinking fountains.*—Drinking fountains shall meet the following requirements adopted by the Joint Committee on Plumbing of the American Public Health Association and the Conference of State Sanitary Engineers, and shall comply with Federal Specification WW–P–541a of March 30, 1940.

(*a*) The fountain should be constructed of impervious material, such as vitreous china, porcelain, enameled cast iron, other metals, or stoneware.

(*b*) The jet of the fountain should issue from a nozzle of nonoxidizing, impervious material set at an angle from the vertical such as to prevent the return of water in the jet to the orifice or orifices from whence the jet issues. The nozzle and every other opening in the water pipe or conductor leading to the nozzle should be above the edge of the bowl, so that such nozzle or opening will not be flooded in case a drain from the bowl of the fountain becomes clogged.

(*c*) The end of the nozzle should be protected by nonoxidizing guards to prevent the mouth and nose of persons using the fountain from coming into contact with the nozzle. Guards should be so designed that the possibility of transmission of infection by touching the guards is reduced to a minimum.

(*d*) The inclined jet of water issuing from the nozzle should not touch the guard and thereby cause splattering.

(*e*) The bowl of the fountain should be so designed and proportioned as to be free from corners which would be difficult to clean or which would collect dirt.

(*f*) The bowl should be so proportioned as to prevent unnecessary splashing at a point where the jet falls into the bowl.

(*g*) The drain from the fountain should not have a direct physical connection with a waste pipe, unless the drain is trapped.

(*h*) The water supply pipe should be provided with an adjustable valve fitted with a loose key or an automatic valve permitting the regulation of the rate of flow of water to the fountain so that the valve manipulated by the users of the fountain will merely turn the water on or off.

(*i*) The height of the fountain at the drinking level should be such as to be most convenient to persons utilizing the fountain. The provision of several steplike elevations to the floor at fountains will permit children of various ages to utilize the fountain.

(*j*) The waste opening and pipe should be of sufficient size to carry off the water promptly. The opening should be provided with a strainer.

Item 5. *Water distribution lines.*—The distribution system shall be designed and constructed so as to prevent leakage of water due to defective materials, improper jointing, corrosion, settling, impacts, freezing, or other causes. Adequate valves and blow-offs shall be provided so that necessary repairs can be made with a minimum interruption of service.

(*a*) *Leakage test.*—Newly laid pipe lines, before covering, shall be tested under a hydrostatic pressure 50 percent in excess of the normal operating pressure after expelling all air from the pipe. The duration of each pressure test shall be at least 30 minutes.

All exposed pipes, fittings, valves, hydrants, and joints should be carefully examined during the open trench test. All joints made with lead showing visible leakage should be recaulked until tight. Where the joints are made with sulfur compound or with cement and show seepage or slight leakage only such joints as may be defective should be cut out and replaced. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of this pressure test should be removed and replaced with sound material, and the test should be repeated until the pipe installation is satisfactory.

Suitable means should be provided for determining the quantity of water lost by leakage under normal operating pressure. No pipe installation should be accepted until or unless this leakage (evaluated on a pressure basis of 150 pounds per square inch) is less than 100 gallons per 24 hours per mile of pipe per inch nominal diameter for

pipe in 12-foot lengths, 75 gallons for 16-foot lengths, and correspondingly varied for other lengths of pipe. In calculating leakage, allowance should be made for added joints in the pipe line above those incidental to normal unit lengths of pipe.

(*b*) *Water pressure.*—The piping system shall be designed and installed to maintain a positive pressure in all its parts under normal usage at all times.

(*c*) *Dead ends.*—The system should be designed so as to afford effective circulation of water with a minimum of dead ends. All dead ends of sizes larger than 1½ inches in diameter shall be equipped with blow-offs.

(*d*) *Jointing materials.*—Jointing materials shall be free from oil, greasy substances, or tar and shall be disinfected and kept free from contamination and applied dry. They shall be of a character such as not to foster the growth of coliform bacteria.

(*e*) *Water lines near sewers.*—Water and sewer lines shall be laid in separate trenches and at least 10 feet apart. Where a water service pipe crosses a street sewer at less than 6 feet vertically above the sewer or is within 10 feet of it horizontally, all that part of the water pipe lying within these distances should be constructed of copper or brass pipe connected to the iron pipe with a brass fitting. In such cases it is preferable to use copper or brass pipe from the water main to the house, and the house sewer should be constructed of extra heavy cast-iron pipe with watertight joints. Where critical materials cannot be obtained, due to the war emergency, extra heavy iron pipe should be used in place of copper and brass pipe.

(*f*) *Stream crossings.*—Where it is necessary to lay water supply lines across streams, an overhead crossing should be made whenever this is feasible. If overhead crossings cannot be provided, special precautions should be observed to prevent the entrance of surface water into the water supply line, and to prevent damage to the line by currents, ice, floating objects, anchors, dredges, etc. Laying the line at least 5 feet below the bottom of the body of water, use of flexible watertight joints, and cradling the pipe in concrete are items requiring consideration in such installations. If the crossing is a vital part of the water supply system, consideration should be given to construction of underwater crossings in duplicate to assure continuity of service.

(*g*) *Sanitary conditions surrounding water pipes and pipe laying.*—Where avoidable, water pipes shall not be laid in water or where they can be flooded with water or sewage in laying. When necessary to lay water pipes below the water table or in wet ground, additional protection shall be provided for the joints, to insure watertightness to the satisfaction of the State or local health officer having jurisdiction. New water mains shall be flushed thoroughly through hydrants

or other approved means to remove all dirt and foreign matter. The mains shall then be disinfected in accordance with the procedure set forth in section 5 of this part of the Standards. New mains should not be put into service until satisfactory bacteriological results are obtained as required in section 5.

Item 6. *Storage.*—All reservoirs, cisterns, and storage tanks shall be of watertight construction and made of concrete, steel, or wood: *Provided*, That when such reservoirs or storage tanks are buried in the ground or located underground, wood shall not be used therefor. All such storage units shall be properly covered to avoid contamination and shall be so located or protected that there will be no danger of contamination by surface drainage or flooding.

SECTION 9. *Bacteriological examinations.*

Item 1. *Collection of samples.*—Water samples for bacteriological examinations shall be collected in accordance with the directions accompanying the sterilized bottles obtained from the State department of health or other laboratories approved by the State health officer. Care should be taken to obtain a sample that is truly representative of the water to be tested and to see that no contamination occurs at the time of filling the bottles or prior to examination. Samples should be collected preferably by trained personnel.

Item 2. *Shipment of water samples.*—The samples shall be labeled definitely as to source, date, and time of collection. All samples should be examined as promptly as possible after collection. The time allowed for storage or transportation of a bacterial sample between the filling of the sample bottle and the beginning of the analysis should not be more than 6 hours for impure waters and not more than 12 hours for relatively pure waters. During the period of storage, the temperature should be kept between 6° C. and 10° C. Any deviation from the above limits shall be so stated in making reports.

Samples of any disinfected water supply must be freed of any disinfecting agent within 20 minutes of the time of their collection. (In freeing samples of chlorine or chloramines, the procedure given in the Standard Methods for the Examination of Water and Sewage, eighth edition, 1936, published by the American Public Health Association, par. A–1, option 1, or par. A–2 shall be followed.)

Part II

SEWAGE AND INDUSTRIAL WASTES, AND EXCRETA DISPOSAL[1]

SECTION 1. *Requirements when discharged into surface waters.*—All sewage and industrial wastes which are discharged into any surface water shall be treated in such manner as will conform with the requirements of the State department of health. No sewage or industrial

[1] The provisions of this part of these Standards are in accord with the Recommendations of the Joint Committee on Rural Sanitation (Public Health Reports, vol. 58, No. 11, March 12, 1943—Reprint No. 2461).

waste treatment plant which discharges effluent into any surface water shall be constructed or reconstructed hereafter without the approval of plans and specifications by the State department of health, and without a written permit from said department.

SECTION 2. *Requirements when used for irrigating purposes.*—All sewage or sewage effluents used for irrigating purposes shall be treated in such manner as will conform with the requirements of the State department of health. No sewage or sewage effluents shall be used for irrigating purposes without a written permit from said department.

SECTION 3. *Requirements for connection to sewers.*—Where there is an established sewerage system, all premises within 300 feet of a sewer main or lateral shall be connected therewith provided the sewer main or lateral is in a street or alley abutting the property and accessible by gravity flow.

SECTION 4. *Requirements when discharged into the soil.*—No excreta or sewage shall be introduced hereafter into the soil except in compliance with the following requirements:

A—Requirements for water carriage systems.

Item 1. *Influent sewers.*—(*a*) *Type:* Influent sewers used to conduct sewage from a building to a private sewage treatment plant shall be constructed of cast iron, vitrified clay, or other approved sewer pipe with bitumen or oakum and cement joints, or other types of joints approved by the health officer having jurisdicton (root-proof joints, preferably). In no case shall such sewer be nearer than 20 feet to a well, spring, other source of water supply, or suction line from such sources. All such sewers, drains, and pipes, or parts thereof, which are located between 20 and 50 feet (or such greater distance as may be specified by the State department of health) from a well, spring, other source of water supply, or suction line from such sources, or within 10 feet horizontally of any drinking water supply line under pressure, or within 10 feet of any roadway crossing, shall be constructed of extra heavy cast-iron soil pipe, or cast-iron water pipe, with tested watertight lead joints. (*b*) *Size:* Such influent sewers shall be not less than 6 inches in diameter for vitrified clay or concrete sewers and not less than 4 inches in diameter for cast-iron sewers. (*c*) *Grade:* Such influent sewers shall be laid to a minimum grade of not less than 12 inches per 100 feet. (*d*) *Cleanouts:* Cleanouts shall be provided at every change in line in excess of 45° and at every change in grade in excess of 22½° (cleanouts are desirable within 5 feet of the septic tank where tanks are located more than 20 feet from the building. An economical cleanout can be provided by inserting a T in the line with the vertical leg extending to ground level and plugged with a brass cap. If the sewer line is deeper than 4 feet below the ground surface, manhole construction would be required for cleanout purposes.)

Item 2. *Grease interceptors.*—Septic tanks shall be designed to provide storage for grease or else grease interceptors of a type approved by the State department of health, and conforming with local or municipal codes where such are in force, shall be installed between the building and treatment plant for all except small residential installations. The grease interceptors shall be located as close as practicable to the point at which the grease enters the influent sewer and shall be easily accessible for cleaning. Grease interceptors shall be cleaned as often as necessary to insure their proper operation, but at intervals of not more than 30 days in any case.

Item 3. *Septic tanks.*—Septic tanks shall comply with the following requirements: (*a*) *Location:* Septic tanks shall be located at least 50 feet, or such distance as may be specified by the State department of health, from any well, spring, or other source of water supply, and, if possible, upon ground at a lower elevation; (*b*) *Capacity, proportions, and materials:* Every septic tank shall have a capacity of at least the average volume of sewage flowing into it during a period of 24 hours, but in no case less than 500 gallons. The length of the tank shall be at least twice the width, and the tank shall have a water depth of at least 4 feet. Cylindrical tanks and small tanks with limited sludge space, cast in one piece or in sections, are not recommended. Septic tanks shall be built either of concrete or other material not subject to excessive corrosion or decay and approved by the State health officer; (*c*) *Manholes:* All septic tanks with solid covers shall be provided with at least one manhole, 24 inches or more in diameter, located over the inlet to the tank. The manhole shall extend to the surface of the ground if the earth fill above the tank is more than 12 inches deep; (*d*) *Inlets and outlets:* The inlet and outlet ends of a septic tank should be provided with submerged inlets and outlets or with baffles located about 12 inches from the inlet and outlet walls. Inlet baffles should extend 12 inches below the liquid level, and outlet baffles 15 to 18 inches below the liquid level, and they should project not less than 6 inches above the liquid level. The invert of the inlet shall be at an elevation 3 inches above the invert of the outlet; (*e*) *Freeboard:* The vertical distance between the flow line and the under side of the tank cover shall be not less than 12 inches for tanks of 500 gallons capacity.

Item 4. *Dosing tanks and automatic siphons.*—Dosing tanks and automatic siphons of a type approved by the State department of health shall be used in all cases designated by the State department of health. All proposed installations of septic tanks of 1,000 gallons or more shall be brought to the attention of the State department of health by the health officer, and an opinion requested as to whether dosing tanks and automatic siphons shall be required.

Item 5. *Subsurface disposal systems.*—Subsurface tile systems, where used, shall comply with the following requirements: (Other types of subsurface systems of a larger capacity than tile, or seepage pits which are approved by the State department of health, may be used.) (*a*) *Location:* Subsurface tile systems shall be located at least 100 feet, or such distance as may be specified by the State department of health, from any well, spring, or other source of water supply, and, if possible, upon ground at a lower elevation (a minimum distance of 50 feet from drilled wells will be permissible when the casing extends watertight to a depth of 50 feet or more); at least 25 feet, or such distance as may be specified by the State department of health, from any stream or other body of surface water, and at least 10 feet from dwellings and property lines; (*b*) *Dimensions of tile trenches:* Where climatic conditions permit, the subsurface tile trenches shall be from 18 to 24 inches deep, preferably 18 inches (greater depths may be necessary to prevent freezing in cold climates; in such cases, other designs, using seepage pits, should be considered); shall be from 18 to 24 inches wide; shall be provided with a 10-inch depth of washed gravel, crushed shell or stone, slag, rock spalls, or clean run-of-bank gravel; shall have a distance between laterals equivalent to at least three times the trench width and not less than 6 feet center to center of tile; shall have a maximum length of any one lateral of not to exceed 100 feet, and at least 2 lines of tile should be provided; total length of tile lines shall be prescribed by the State health department. The total length of subsurface tile trench required may be determined for each installation from the following:

Approximate length of 4-inch tile required when the sewage flow is 50 gallons per capita per day[1]

Nature of soil:	*Feet per person*
Clean coarse sand or gravel	15
Fine sand or light loam	20
Fine sand with some clay or loam	30
Clay with some sand or gravel	80
Heavy clay	Unsuitable

At least 75 feet of tile should be provided for a dwelling used for temporary occupancy such as a summer camp, and not less than 100 feet of tile should be provided for a dwelling to be occupied throughout the year, regardless of the number of persons or soil conditions.

If there is doubt relative to soil conditions, the lengths of tile to be provided should be determined by the percolation test described below:

METHOD OF MAKING PERCOLATION TEST

1. Excavate a hole 1 foot square and to the depth of the proposed

[1] From Bulletin No. 26, New York State Department of Health, "Rural Water Supply and Sewage Disposal System."

disposal trenches. This depth in most instances will be approximately 24 inches and should not exceed 36 inches.

2. Fill the hole with water to a depth of at least 6 inches, and allow this water to seep away. Judgment is required in determining how soil conditions at time of test vary from year-round average conditions. Where soil appears exceptionally dry, or where soil conditions are questionable, greater depths of water may be used or the test may be repeated. In no case shall tests be made in filled or frozen ground. Where fissured soil formations are encountered, tests should be made only as directed by and under the supervision of a representative of the State health department.

3. Observe the time in minutes required for the water to seep away completely. This time divided by the total number of inches of water placed in the hole gives the average time required for the water to drop 1 inch. With this information, the effective absorption area required for each individual system may be determined from table 1.

TABLE 1.—*Data for determining field requirements from percolation tests*

Time required for water to fall 1 inch (in minutes)	Effective absorption area required in bottom of disposal trenches in square feet		
	Residences (per bedroom)	Camps (per person)	Schools (per person)
2 or less	52	13	9
3	60	15	10
4	72	18	12
5	80	20	13
10	105	24	18
15	126	32	21
30	180	45	30
60	240	60	40
Over 60	Special design using seepage pits or sand filter trenches.		

NOTE.—A minimum of 150 square feet should be provided for each individual family dwelling unit.

(*c*) *Tile size:* The subsurface tile shall have a diameter of not less than 4 inches; (*d*) *Position and grade of tile:* The subsurface tile lines shall be laid with not less than 6 inches of filter material below the bottom of the tile, and on a grade of 2 to 4 inches per 100 feet. Open joints of ¼ to ½ inch should be provided between tile sections; (*e*) *Nature of effluent to be discharged to tile:* Septic tanks must be operated so that sludge shall not enter the subsurface tile system. The ground water level must be below the level of the trench bottom.

Item 6. *Other methods of sewage treatment.*—Other methods of sewage treatment, where permitted or required by the State health officer, shall be installed only in accordance with plans and specifications which have been approved specifically for each installation by the State department of health.

B—Requirements for approved earth pit toilets.

Pit toilets hereafter constructed, or required by the health officer having jurisdiction to be reconstructed, shall comply with the following requirements:

Item 1. *Location.*—Pit toilets shall be located at least 50 feet, or such distance as may be specified by the State department of health, from any well, spring, or other source of water supply and, if possible, upon ground at a lower elevation. Consideration should be given to the direction of prevailing winds to reduce fly and odor nuisances. The privy pit should not encroach within 6 feet of any building line or fence to allow for proper construction and maintenance. In cavernous or loosely stratified formations where water supplies may be polluted, chemical toilets or concrete vault toilets may be required by the State or local health officer having jurisdiction.

Item 2. *The pit.*—The pit shall have an original minimum capacity of not less than 50 cubic feet and shall be so excavated that the cribbing, when inserted, shall make a firm, uniform contact with the earth walls on all sides.

Item 3. *Pit cribbing.*—The pit cribbing shall extend 1 to 2 inches above the original ground line, and to the full depth of the pit, unless in tight clay or rock formation, in which case the lower section of the cribbing may be omitted.

Item 4. *Sills.*—In case of concrete slab privies, concrete sills shall be placed around and just outside the top of the pit cribbing, on which to set the slab. These sills shall be at least 5 inches wide and extend down at least 4 inches to firm earth. In case of wood floor privies and if concrete sills are not used, there shall be constructed a mud sill of durable wood of 4- by 6-inch pieces.

Item 5. *Pit mound.*—An earth mound at least equal to the thickness of the concrete sill shall be constructed, with a level area of 18 inches extending away from the slab. The floor of the building should be at least 6 inches above the surrounding natural ground level.

Item 6. *Seat riser.*—The bench or seat riser shall have an inside clearance of not less than 21 inches between the front and rear walls, and not less than 12 inches between the side walls. The top of the seat shall be not less than 12 or more than 16 inches from the floor. The seat riser shall be so constructed and bonded with the floor as to prevent seepage through the riser upon the floor. (Impervious materials such as concrete are believed to be most suitable for the riser.)

Item 7. *Seat cover.*—The seat opening shall be covered with a lid, hinged so as to provide a clearance of not less than 3½ inches horizontally between the back of the seat opening and lid when raised. The lid shall be so constructed and installed that when closed it will exclude flies.

Item 8. *Floor and riser.*—The floor and riser shall be built of impervious material or tongue-and-grooved lumber, in a manner to exclude flies. The floor and bench, or riser, for a single unit shall cover an area of at least 16 square feet.

Item 9. *Superstructure.*—The house shall be rigidly constructed and shall provide privacy and protection from the elements. Except where climatic conditions prohibit, the building shall be ventilated by leaving a 4-inch opening at the top of the walls just beneath the roof. The building should be covered preferably with a single-plane roof having a pitch of 1 in 4 and an overhang of not less than 5 inches front, 13 inches back, and 9 inches on each side, with a facing board not less than 6 inches wide extending around the entire margin of the roof.

Item 10. *Maintenance and operation.*—The following shall be considered defects in pit toilet installations: (*a*) Evidence of caving around the edges of the pit; (*b*) signs of overflow or other evidence that the pit is full; (*c*) seat covers open; (*d*) uncleanliness of any kind in the toilet building; and (*e*) evidence of light entering pit except through seat when seat cover is raised.

C—Requirements for approved vault toilets.

Vault toilets may be approved by the State health officer where earth pit toilets might contaminate water supplies. All such vault toilets which are hereafter constructed or are required by the health officer to be reconstructed shall comply with the following requirements:

Item 1. The requirements for seat riser, seat cover, floor and riser, superstructure, maintenance and operation for concrete vault toilets shall be as stated under items 6, 7, 8, 9, and 10, of section 4B, "Requirements for approved earth pit toilets."

Item 2. *The construction features of vault.*—The vault shall be built of brick, stone, or concrete, preferably the latter, with walls and bottom of vault at least 6 inches thick. Special precautions shall be taken to secure a watertight vault; construction joints shall be avoided. The vault shall not extend more than 4 feet below the original ground level to facilitate cleaning, and the vault walls shall extend at least 6 inches above the original ground level. A tight-fitting trap door shall be provided over the vault, outside the building, to allow removal of the vault contents. The trap door shall be so constructed and installed that when closed it will exclude flies. The vault capacity may be determined by allowing 6 cubic feet of space per person per year.

Item 3. *Disposal of wastes from vault toilets.*—The wastes from vault toilets shall be buried as far as possible from wells or other sources of water supply, or disposed of in other places where water supplies will not be polluted, and where nuisances will not be created. The

wastes shall not be discharged into streams, ponds, or other bodies of water, or onto the surface of the ground.

D—Requirements for approved chemical toilets.

Chemical toilets may be approved by the State health officer in areas where pit toilets might contaminate water supplies, or where a sufficient volume of water for the operation of flush toilets is not available. Chemical toilets should be used only where there is assurance of constant maintenance and where safe disposal of the final product is assured. All such chemical toilets which are hereafter constructed or which are required by the health officer to be reconstructed shall comply with the following requirements:

Item 1. *Tanks.*—Chemical toilets shall have a receiving tank of impervious and not easily corrodible material with an easily accessible opening for cleaning. The thickness of the tank metal shall be not less than 12 gage. The tank shall be equipped with an agitator for the purpose of mixing solids with the chemical charge.

Item 2. *Toilet bowls.*—The toilet bowl shall be constructed of impervious and not readily corrodible material and shall be elevated above the receiving tank sufficiently to avoid splashing the user.

Item 3. *Vent.*—The tank and bowl shall be vented with screened pipe at least 4 inches in diameter, preferably constructed of cast iron, and shall extend at least 2 feet above the roof line. Vent pipes on chemical toilets, when installed in the vertical tube forming the toilet bowl, shall be installed at an angle of not over 30° from the vertical, in order to minimize difficulties from clogging and corrosion.

Item 4. *Chemical charge.*—A chemical having a high phenol coefficient shall be diluted with the proper amount of water and added to the tank; the contents of the tank shall be removed and replaced with a new chemical solution as often as may be necessary to maintain sanitary conditions.

Item 5. *Toilet rooms.*—Chemical toilets shall be located in rooms which are well-lighted and ventilated and which are not directly connected with living or working quarters. Chemical toilets or tank cleanouts should not be located in basements.

Item 6. *Disposal of chemical toilet wastes.*—The wastes from the chemical tanks shall be buried as far as possible from wells or other sources of water supply, or disposed of to other places where water supplies will not be polluted and where nuisances will not be created. The wastes shall not be discharged into streams, ponds, or other bodies of water or onto the surface of the ground. (Neither sludge nor liquid effluent from chemical toilet tanks should be discharged to a sewerage system where treatment processes are involved. Otherwise the chemical constituents of the sludge or liquid effluent may

seriously interfere with the biological action upon which such treatment processes depend.)

SECTION 5. *Requirements for comfort stations.*—All comfort stations which are made available for use of patrons of establishments, or for the use of the general public, shall comply with the following requirements:

Item 1. *Water pressure.*—The pressure and volume of water shall be sufficient to insure effective flushing of toilets and urinals.

Item 2. *Construction and cleanliness of toilets and urinals.*—Toilets and urinals shall be constructed of vitreous or other approved material, the surface of which is smooth, hard, impervious, and not easily corrodible, shall be of rim flush type, and shall be properly vented and trapped. All joints shall be tight. The construction shall be such as to provide ample flushing action to insure cleanliness. Installations made subsequent to the adoption of these Standards shall be constructed in a manner approved by the State department of health to prevent backsiphonage of the toilet or urinal contents. All toilets and urinals shall be kept clean and in good repair.

Item 3. *Toilet rooms.*—All toilets and urinals shall be located in well-lighted and well-ventilated rooms and shall be conveniently accessible to approved handwashing facilities. All toilet rooms shall be kept clean and in good repair.

Item 4. *Approved hand-washing facilities.*—Approved hand-washing facilities shall comply with the following requirements: (*a*) *Lavatory:* The lavatory shall be composed of vitreous or other approved material, the surface of which is smooth, hard, impervious, and not readily corrodible. Taps connected with said lavatory shall be so installed as to discharge at least one inch above the level at which the lavatory will overflow upon the floor; (*b*) *Water supply:* The water supply used in connection with said lavatory shall comply with the requirements of part I of these Standards entitled "Water supplies;" (*c*) *Soap and towels:* Soap in a suitable dispensing container and single-service paper towels or some other form of individual towel service approved by the health officer shall be provided.

Item 5. *Protection against freezing.*—All fixtures shall be properly protected against freezing.

Item 6. *Minimum plumbing requirements.*—All plumbing shall comply with part VIII, section 3, of these Standards.

Part III

MILK AND MILK PRODUCTS

SECTION 1. The production, transportation, processing, handling, sampling, examination, grading, labeling, regrading, and sale of all milk and milk products, the inspection of dairy herds, dairies, and milk

plants, the issuing and revocation of permits to milk producers and distributors, and the placarding of restaurants and other establishments serving milk or milk products shall be regulated in accordance with the terms of the unabridged form of the 1939 edition of the Milk Ordinance and Code Recommended by the United States Public Health Service, a certified copy of which shall be on file in the office of the (_____): *Provided*, That the words "city of (_____)" in said unabridged form shall be understood to refer to _____[1]: *Provided further*, That in section 7, item 1*r* of said unabridged form the abortion-testing requirement shall be effective within (time) _____ after the adoption of this ordinance: *Provided further*, That section 8 of said unabridged form shall be replaced by section 2 below.

SECTION 2. From and after the date on which these Standards take effect, no milk or milk products, except grade A pasteurized, shall be sold to the final consumer, or to restaurants, soda fountains, grocery stores, or similar establishments: *Provided*, That when any milk distributor fails to qualify for this grade, the State or local health officer having jurisdiction is authorized to revoke his permit or, in lieu thereof, to degrade his product and permit its sale during a temporary period not exceeding 30 days or in emergencies such longer period as he may deem necessary.[2]

Part IV

FROZEN DESSERTS

SECTION 1. The production, manufacturing, mixing, preparing, processing, pasteurizing, freezing, packaging, transportation, handling, sampling, examination, labeling, and sale of all mix and frozen desserts, the inspection of all establishments engaged in the production, processing, and distribution of mix and frozen desserts, the issuing and revocation of permits to frozen desserts plants, the grading and regrading of frozen desserts plants, and the displaying of grade placards shall be regulated in accordance with the terms of the unabridged form of the 1940 edition of the Frozen Desserts Ordinance Recommended by the U. S. Public Health Service, a certified copy of which shall be on file in the office of (_____): *Provided*, That the words "municipality of _____" in said unabridged form

[1] Insert name of community or, in cases of State adoption, the words "such areas as may be designated by the State department of health."

[2] Emergency Sanitation Standards for Raw Milk for Pasteurization were approved by the U. S. Public Health Service Sanitation Advisory Board on December 4, 1942, and are recommended by the U. S. Public Health Service as a basis for the acceptance of interstate shipments of milk for pasteurization during the war emergency by areas experiencing milk shortages. The Standards are similar to those for grade A raw milk for pasteurization of the Milk Ordinance and Code Recommended by the U. S. Public Health Service (Public Health Bulletin No. 220, 1939 edition) with such modifications as were considered necessary to render them applicable to different climatic conditions and to reduce the use of critical materials.

shall be understood to refer to _____[1] *Provided further*, That in said ordinance all parentheses signs, which enclose words referring to grading, shall be understood to be deleted; *Provided further*, That the provision for production control of ingredients derived from milk, contained in the footnote to item 25*p* of said ordinance, shall not apply: *Provided further*, That section 8 of said ordinance shall be replaced by section 2 below.

SECTION 2. From and after the date on which these Standards take effect no mix or frozen dessert shall be sold for ultimate consumption within the jurisdiction of these Standards unless it has been manufactured and frozen in a plant conforming with the grade A requirements of said code: *Provided*, That when any frozen desserts plant fails to qualify for grade A, the State or local health officer having jurisdiction is authorized to revoke the permit or, in lieu thereof, to degrade the plant and permit its operation during a temporary period not exceeding 30 days, or in emergencies such longer periods as he may deem necessary.

Part V

EATING AND DRINKING ESTABLISHMENTS

SECTION 1. The inspection, grading, regrading, and placarding of eating and drinking establishments, the issuing and revocation of permits for the operation of such establishments, the sale of adulterated, misbranded, or unwholesome food and drink, and the enforcement of these Standards shall be regulated in accordance with the terms of the unabridged form of the 1943 edition of the Ordinance Regulating Eating and Drinking Establishments Recommended by the U. S. Public Health Service, a certified copy of which shall be on file in the office of the (_____): *Provided*, That the words "city of _____" in said Public Health Service ordinance shall be understood to refer to _____[1]: *Provided further*, That in said ordinance all parentheses signs, which enclose words referring to grading, shall be understood to be deleted: *Provided further*, That the term "approved sources" in section 6, item 14, second sentence, shall be taken to mean exclusively grade A pasteurized milk and milk products, and ice cream and other frozen desserts manufactured in grade A frozen desserts plants: *Provided further*, That the term "approved sources" in section 6, item 14, last sentence, shall be taken to mean shellfish shippers who have been certified by the State authorities, or whose names appear upon the current list issued by the U. S. Public Health Service: *Provided further*, That section 7 of said ordinance shall be replaced by section 2 below.

[1] Insert name of community, or in cases of State adoption, the words "such areas as may be designated by the State department of health."

SECTION 2. From and after the date on which these Standards take effect no restaurants shall be operated within the jurisdiction of these Standards, except grade A restaurants or approved itinerant restaurants: *Provided,* That when any restaurant fails to comply with this requirement the State or local health officer having jurisdiction is authorized to revoke the permit or, in lieu thereof, to degrade the restaurant and permit its operation during a temporary period not exceeding 30 days, or in emergencies such longer period as he may deem necessary.

Part VI

SWIMMING POOLS AND BATHING PLACES

SECTION 1. All swimming pools and bathing places which are hereafter constructed or extensively reconstructed, or which, in the opinion of the State or local health officer having jurisdiction, require reconstruction, shall conform in their construction or reconstruction and in their operation and maintenance with the recommendations of the 1940 report of the Joint Committee on Bathing Places of the Conference of State Sanitary Engineers and the Engineering Section of the American Public Health Association, a certified copy of which shall be on file in the office of the (----------). This report is entitled: "Design, Equipment, and Operation of Swimming Pools and other Public Bathing Places" and is published by the American Public Health Association. All existing pools and bathing places which in the opinion of the State or local health officer having jurisdiction require no extensive reconstruction shall conform in their operation and maintenance with the above recommendations.

Part VII

REFUSE—GARBAGE—RUBBISH—ASHES

SECTION 1. *Definitions.*

Item 1. *Refuse.*—The term "refuse" shall include garbage, rubbish, ashes, and all other putrescible and nonputrescible wastes except sewage, from all public and private establishments and residences.

Item 2. *Garbage.*—The term "garbage" shall include all putrescible wastes, except sewage and body wastes, including vegetable and animal offal and carcasses of dead animals, but excluding recognized industrial byproducts, and shall include all such substances from all public and private establishments and from all residences.

Item 3. *Rubbish.*—The term "rubbish" shall include all nonputrescible wastes, except ashes, from all public and private establishments and from all restaurants.

Item 4. *Ashes.*—The term "ashes" shall include the waste products of coal and other fuels used for heating and cooking from all public and private establishments and from all residences.

SECTION 2. *Accumulation of garbage.*—No owner or lessee of any public or private premises shall permit to accumulate upon his premises any garbage except in covered containers approved by the health officer. Such containers shall be constructed in such manner as to be strong, not easily corrodible, rodentproof, insectproof, and shall be kept covered at all times except when garbage is being deposited therein or removed therefrom.

SECTION 3. *Collection of garbage and other refuse.*

Item 1. *Collection interval.*—All garbage and other refuse shall be collected sufficiently frequently to prevent nuisance, but at least once in ..... days.

Item 2. *Permits.*—No person, firm, or corporation shall collect garbage or other refuse who does not possess a permit from the health officer having jurisdiction. Said permit shall be issued only upon the payment of an annual permit fee of $..... per collecting vehicle and only after said health officer has satisfied himself that the licensee is capable of complying with the requirements of these Standards; the permit may be revoked by the health officer when he deems such action is necessary for the protection of the public health.

Item 3. *Type of collection vehicles.*—The collection of garbage and other refuse shall be by means of covered vehicles approved by the health officer having jurisdiction.

SECTION 4. *Disposal of garbage and other refuse.*—All disposal and salvaging of garbage and other refuse shall be by a method or methods specifically approved by the State department of health: *Provided,* That said method or methods shall include the maximum practicable rodent, insect, and nuisance control at the place or places of disposal: *Provided further,* That no garbage shall be fed to hogs unless said garbage has first been heated to at least 212° F. and held there at least 30 minutes in apparatus and by methods approved by the State health officer: *Provided further,* That animal offal and carcasses of dead animals shall be buried or cremated as directed by the health officer or other authority having jurisdiction, or shall be rendered at 40 pounds per square inch steam pressure or higher, or heated by equivalent cooking.

SECTION 5. (OPTIONAL) *Service charge and noncollection.*[1]

Item 1. *Rates for garbage service.*—There shall be charged, assessed, and collected from each residential unit within the city limits the monthly amount of $..... and from each business establishment within said city limits the amount of $..... The city secretary or clerk shall collect these fees either through the water department as a separate item on each water bill or by any other practicable means of collection.

[1] Suggested for use by municipalities.

Item 2. *Uncollected garbage declared a nuisance.*—No garbage or refuse shall be collected from any premises where the owner or lessee is in arrears for a period of 1 month. Fermenting, putrefying, or odoriferous garbage in containers, uncollected due to failure to pay garbage fees, shall be declared a nuisance.

Part VIII

THE SANITATION OF HABITABLE BUILDINGS

SECTION 1. *Definitions.*—The following definitions shall apply in the interpretation of the sections and items of part VIII, The Sanitation of Habitable Buildings:

Habitable building means a building containing rooms designed or occupied as the sleeping quarters for one or more persons.

Habitable room means a room occupied by one or more persons for sleeping, living, eating, or cooking, and includes a kitchen serving a dwelling unit, but does not include bathrooms, toilet compartments, closets, pantries, store rooms, or hallways.

A dwelling unit consists of one or more contiguous habitable rooms used for sleeping, living, cooking, and eating purposes by one or more persons forming a single household.

Free floor area is floor space not covered by beds, bureaus, clothes chests, lavatories, and other bulky or permanent fixtures or their horizontal projections.

Conversion means a change which results in the residential use of an existing structure; it includes alteration of or addition to the original structure which results in the formation of new habitable rooms or dwelling units.

SECTION 2. *Water supply.*—Water supply under pressure and complying with the requirements of part I of these Standards must be provided in each dwelling unit of every habitable building hereafter constructed or converted.

The water supplied to any habitable building must be drawn from an approved public source whenever available.

SECTION 3. *Plumbing.*—All plumbing in habitable buildings shall be designed to prevent the contamination within the structure of potable water and foodstuffs. It shall comply with the requirements of The Plumbing Manual, National Bureau of Standards Report B. M. S. 66, November 1940, or its equivalent in the opinion of the State department of health, or as otherwise provided by law. During the war emergency, the Emergency Plumbing Standards for Defense Housing (issued by the Division of Defense Housing Coordination, Office for Emergency Management, Washington, D. C., 1942)[1] shall be adhered to insofar as use of substitute materials in place of critical materials such as copper, brass, and other critical items is concerned.

[1] A copy will be furnished upon request to the Surgeon General, U. S. Public Health Service.

At least one water closet, bathtub, or shower bath, lavatory, and kitchen sink supplied by water under pressure must be installed in each dwelling unit of every habitable building hereafter constructed or converted.

In buildings used as dormitories the following minimum numbers of fixtures shall be provided:

1 water closet for every 10 men or 8 women.
1 lavatory for every 6 persons.
1 urinal closet for every 25 men.
1 bath tub for every 40 men or 35 women.
1 shower head for every 8 men or 10 women.
1 laundry tray for every 40 men or 35 women.
1 drinking fountain for every 50 persons.
1 slop sink for every utility room.

The house sewer of every habitable building must be connected with a public sewerage system whenever one is available within 300 feet in a street or alley abutting the property and accessible by gravity flow.

SECTION 4. *Heating and ventilation.*[2]—Every habitable building shall be equipped with heating equipment capable of maintaining every habitable room thereof at a temperature of at least 70° F. whenever occupied unless year-round climatic conditions make such equipment unnecessary in the opinion of the State health officer.

In every habitable building windows opening to the outside air must be provided for ventilating all rooms except closets. The openable window area for ventilation purposes shall be at least 2½ percent of the floor area for existing buildings and 5 percent for habitable buildings hereafter constructed or converted: *Provided,* That mechanical ventilating systems may be substituted for or supplement natural ventilation using openable windows. When such mechanical ventilating systems are to be used, plans therefor shall be approved by the health officer having jurisdiction.

Openable windows, trapdoors, louvers, or their equivalent, having a clear openable area equal to at least 2 percent of the floor area, must be provided for all attics, basements, and cellars.

All heating appliances producing dangerous gases must be vented adequately to the outside and must have tight flue connections.

Water closets, urinals, bathtubs, and shower baths must be located in rooms separated from habitable rooms by floor-to-ceiling partitions and doors. Any rooms containing a water closet or urinal must have at least 10 square feet of free floor area and at least 100 cubic feet of air space for each water closet and each urinal.

SECTION 5. *Lighting.*—In every habitable building hereafter constructed or converted, every habitable room must be arranged so that

[2] Health officers shall be governed by the current Guide of the American Society of Heating and Ventilating Engineers in ascertaining compliance with the provisions of this section of the Standards (published by American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York City).

at noon on a clear winter day there will be natural illumination of a minimum intensity of 6 foot candles at the darkest point on a plane 30 inches above the floor, provided that measurements are taken at a time when the room is unfurnished.

There must be at all times a minimum of 2½ foot candles of illumination as measured on the floor or tread of all public hallways, stairways, and other passageways.

There must be available at all times in every compartment housing a water closet or urinal a minimum of 5 foot candles of illumination measured on a plane 30 inches above the floor.

SECTION 6. *Space requirements.*—No habitable room for single occupancy shall have less than 40 square feet of free floor area, all of which shall have a minimum ceiling height of 7 feet.

No habitable room for double occupancy shall have less than 60 square feet of free floor area, all of which shall have a minimum ceiling height of 7 feet, and in no case shall there be less than 400 cubic feet per person.

SECTION 7. *Insect and rodent control.*—Every habitable building which is located in an area in which flies and mosquitoes have not otherwise been effectively controlled must have all openings to the outside equipped with screens of not less than 16 meshes to the inch, which are so maintained as to prevent effectively the entrance into the building of flies and mosquitoes: *Provided,* That all outside screen doors shall open outward and be self-closing: *Provided further,* That effective means other than screens may be substituted therefor when specifically approved by the health officer having jurisdiction.

Every habitable building hereafter constructed or converted shall be designed to be, and must be kept, ratproof.[3]

All enclosed spaces within double walls, between ceilings and floors, or beneath floors, which provide harborage and potential breeding places for rodents shall be either (*a*) eliminated by removal of the sheathing or interior walls which form the enclosed spaces, or (*b*) all exposed edges of such walls, floors, and sheathing shall be protected by the installation of approved ratproof material. All openings in walls, floors, and ceilings through which pipes, electric cables, and other conduits pass shall be sealed properly with snugly fitting collars of metal or other approved material securely fastened in place and so maintained. Propagation of rats and invasion and infestation of the premises by them shall be prevented permanently.

For temporary war housing built under the auspices of the Federal Public Housing Authority, the ratproofing requirements of that agency shall apply in lieu of these requirements.

[3] A copy of model specifications for use in connection with the enactment of the ratproofing part of this section will be furnished upon request to the Surgeon General, U. S. Public Health Service.

SECTION 8. *Compliance.*—The following classes of habitable buildings must comply with the requirements of part VIII of these Standards: (*a*) Every existing habitable building which is occupied in whole or in part by a person or persons paying rent; (*b*) every habitable building hereafter constructed or converted.

All improvements specifically required in habitable buildings erected before these Standards went into effect must be made within a period of time to be specified by the health officer. The owner is responsible for compliance with these requirements.

SECTION 9. *Exercise of police power.*—If, in the opinion of the health officer having jurisdiction, any building used for human habitation is a menace to the physical, mental, or moral health of the occupants or the community, he may order the owner (*a*) to repair the building so as to make it comply with part VIII of these Standards; (*b*) to prevent its further use in violation of this section of part VIII of these Standards; or (*c*) to demolish it.

SECTION 10. *Enforcement.*—This part of the Standards shall be enforced by the State or local health officer having jurisdiction.

SECTION 11. *Separability.*—If, for any reason, any section or clause of part VIII of these Standards shall be declared invalid, the remainder shall not be affected thereby.

Part IX

TOURIST CAMPS, TRAILER CAMPS, CABIN CAMPS, CONSTRUCTION CAMPS, AND SIMILAR ESTABLISHMENTS

SECTION 1. All tourist camps, trailer camps, cabin camps, construction camps, and similar establishments shall comply with the following requirements:

Item 1. *Water supply.*—There shall be provided at each such establishment a water supply which complies with the requirements of part I of these Standards entitled "Water supplies."

Item 2. *Excreta and sewage.*—There shall be provided at each such establishment a method of excreta disposal which complies with the requirements of part II of these Standards entitled "Sewage and industrial wastes and excreta disposal."

Item 3. *Refuse.*—Every such establishment shall comply with the requirements of part VII of these Standards entitled "Refuse—garbage—rubbish—ashes."

Item 4. *Heating, lighting, ventilation, plumbing, screening, and overcrowding.*—All cabins and other inhabited buildings located upon the premises of such establishments shall comply with the requirements of part VIII of these Standards entitled "The sanitation of habitable buildings," insofar as they are reasonably applicable.

Item 5. At least one competent caretaker shall be responsible for the supervision of the camp and shall make necessary routine inspections

and exercise all duties necessary in the maintenance of the camp in accordance with the requirements of these Standards.

Item 6. It shall be the duty of all camp owners or managers, or other persons knowing or suspecting the presence of persons in the camp afflicted with any communicable disease, to report said condition immediately to the health officer having jurisdiction.

SECTION 2. *Recommended trailer camp rules and regulations.*[1]

Item 1. *Definitions.*—A trailer camp is herein defined as any tract or parcel of land, maintained, offered, or used for the parking or camping of house trailers, house cars, or similar portable units of habitation.

A house trailer is herein defined as any house car, house trailer, trailer home, or similar mobile unit which may be used for semipermanent or temporary living quarters.

Item 2. *Supervision.*—Every trailer camp shall have at least one competent attendant or caretaker whose duty it shall be to maintain the camp, its facilities, and its equipment in a clean, orderly, and sanitary condition. He shall also keep a record of all house trailers parked in the camp under his supervision including the name and address of the owner, the license number and State of origin of cars and house trailers, and the number of occupants of each unit.

Item 3. *Location and space.*—No trailer camp shall be so located that the drainage of the camp area will endanger any water supply. All camps shall be well drained and located in areas free from ponds, swamps, and similar places in which mosquitoes may breed.

Each car and house trailer shall together be allotted a space of not less than 700 square feet. Each unit shall abut or face on a driveway or clear unoccupied space of not less than 20 feet in width, which space shall have unobstructed access to a public street or alley. There shall be a space of at least 10 feet between every house trailer and any other house trailer, building, or other structure.

Item 4. *Water supplies.*—An adequate supply of safe water under pressure shall be provided in all parts of every trailer camp. At least one water supply outlet shall be provided for every two-house trailer unit and in no case shall a house trailer site be more than 100 feet from a water-supply outlet.

Special hoses shall be kept for the filling of water tanks on house trailers and shall be stored off of the ground under sanitary conditions when not in use. These hoses shall be used for no other purpose than the watering of house trailers and shall be so handled and used that they may not cause contamination of water either in house trailer tanks or in the water-supply system.

[1] The provisions of this section, excepting for minor modifications, are those given in a report by the Joint Committee on Summer Camps and Roadside Places, Conference of State Sanitary Engineers and Public Health Engineering Section, American Public Health Association, 1937.

The dipping of water from open springs, wells, streams, or lakes for water-supply purposes is prohibited.

Item 5. *Toilet, bathing, and laundry facilities.*—All plumbing in trailer camps shall comply with the requirements of part I, section 8, item 1, of these Standards.

Water-flush toilet facilities shall be provided in conveniently located, well-constructed buildings having good natural and artificial lighting, adequate ventilation, and floors of concrete or similar impervious material. Concrete curbings extending at least 6 inches above the floor shall be provided and the floor sloped to adequate drains. The interior walls and ceilings of such buildings shall be of smooth material painted with a light-colored paint.

Separate toilet facilities marked by appropriate signs shall be provided for males and females, at least 1 for each 15 persons or fraction thereof. At least 1 urinal shall be provided in each toilet building for males.

Toilet buildings shall be located so as to be within 200 feet of all house trailer camping spaces.

One lavatory shall be provided for every three toilets or toilets and urinals.

Separate showers with hot and cold water shall be provided for both males and females and the buildings containing them shall comply with the requirements of the second paragraph of this item. One shower head shall be provided for each 20 house trailers or fraction thereof. Wooden or cloth mats, grids, boards, or walkways are prohibited.

All floors in shower and toilet rooms shall be disinfected daily by the use of chlorine compounds or other materials in strengths approved by the State department of health.

A laundry room or building constructed as specified in the second paragraph of this item shall be provided with laundry trays and hot and cold running water.

Item 6. *Slop sinks.*—Slop sinks properly trapped and vented shall be provided in convenient locations, at least one within 200 feet of each house trailer camping space. All slop sinks shall be equipped with water faucets which shall be protected from backsiphonage. Slop sinks shall be so constructed and installed that they may be used for the cleaning of both cans and slop jars.

Item 7. *Disposal of sewage and other water-carried wastes.*—All sewage and other water-carried wastes shall be disposed of into a municipal sewer system wherever possible. In camps in which city sewer connections are not available, disposal shall be into a private system which includes a sanitary means of disposal, the operation of which creates neither a nuisance nor a menace to health, and which is approved by the State department of health.

A sewer connection shall be made available at each house trailer camping site for connection to the combined liquid waste outlet of the trailer. The type of connection used shall conform to all State and municipal plumbing code requirements and the rules and regulations of the State department of health.

No water-flush toilets may be used in trailers unless connected to the sewerage system in accordance with State and municipal plumbing code requirements and the rules and regulations of the State department of health.

Facilities shall be provided at each house trailer camp for draining the contents of chemical toilets and sewage storage tanks. Such facilities shall have concrete or equally impervious floors and shall be adequately screened against flies and other insects. The management shall provide for the thorough cleaning of those facilities at least once daily and oftener whenever necessary to maintain them in a clean, sanitary condition.

Wastes from sinks and refrigerators may be discharged into covered, metal receptacles and disposed of into slop sinks without being discharged on the surface of the ground unless specific approval for such surface discharge is obtained from the State department of health.

Item 8. *Garbage and refuse collection and disposal.*—Fly-tight metal containers shall be provided for the deposition of garbage and refuse, at least one for every two trailers; one for each trailer is recommended. At least one depository shall be located within 100 feet of each trailer camping site.

Garbage cans shall be emptied at least once every two days and shall not be allowed to become foul-smelling or breeding places for flies.

Garbage and refuse shall be disposed of in a manner approved by the State department of health.

Item 9. *Miscellaneous laws and regulations.*—In addition to the requirements set forth in these Standards, all house trailer camps and facilities shall be established and constructed in compliance will all existing State and local statutes, ordinances, codes, and regulations.

DENGUE FEVER IN HONOLULU

An outbreak of dengue fever was reported in Honolulu, Territory of Hawaii, during the latter part of July 1943, with about 40 cases, occurring in widely separated areas of the city, being reported up to August 11. Intensive mosquito eradication measures were immediately instituted, and by October 31 there were 147 persons engaged in field activities, including 52 Public Health Service employees. The Army and the Honolulu Chamber of Commerce have cooperated

in the control measures, which consist of inspection to determine mosquito indexes and breeding places, spraying, epidemiological studies, and educational measures. Epidemiological investigations are being conducted by Dr. J. R. Enright, Director of the Bureau of Communicable Diseases, of the Territorial Board of Health.

Up to December 4, a total of 1,250 cases of dengue fever had been reported in Honolulu. The largest number of cases occurring in any one week up to October 31 was 156 cases for the week ended October 21. According to Passed Assistant Sanitary Engineer (R) Wesley E. Gilbertson, there has been a definite increase in the number of cases among school children since the beginning of the school year. Every schoolroom in schools located in areas having the highest incidence has been sprayed twice daily.

There is stated to be a wide range in the severity of the disease, from very mild ambulatory cases to extremely severe bedridden cases, with delirium and mental disturbances. The mental and physical depression usually following attacks of the disease has been observed, but no other sequelae have been in evidence, with the exception of one patient who reported poor vision following the attack. To date, only one fatal case has been reported.

Mr. Gilbertson points out that previous outbreaks of dengue fever occurred in the Territory of Hawaii in 1903 and 1912. A uniform system of reporting communicable diseases had not been established by the Territorial Board of Health at the time of the 1903 outbreak, but Government physicians on some of the islands stated in their monthly reports that dengue was severe and widespread during that year. Cases were stated to have been occurring in Honolulu at the rate of about 10 new infections a day. It was also noted that the disease was similar to a fever reported prevalent 10 years previously, principally among the natives, and known as "Boohoo fever." The first mosquito campaign in Honolulu was inaugurated in 1904, according to the report of the Sanitary Commission (1912) created by an act of the territorial legislature in 1911. The implication regarding the role of mosquitoes in disease transmission was becoming more widely known about that time.

According to official records of the Territorial Board of Health there were 108 cases of dengue fever recorded in the Territory during the year ended June 30, 1912, of which 85 occurred in Honolulu. In view of the statements, however, made by local residents who were living there at that time, the incidence was probably very much higher. Reports of the Board of Health show that there were 3 cases of dengue reported during the next year and 11 cases during the next succeeding year. One case was reported in 1924.

It has been stated[1] that mosquitoes were first introduced into Hawaii in 1826, at Lahaina, Island of Maui, by a vessel arriving from San Blas, Mexico. These were *Culex quinquefasciatus*. It is said that there was no Hawaiian word for mosquito prior to that year, and that in 1903 the word "makika" was used to identify this pest. Apparently the *Culer* spread somewhat slowly for some time after its introduction to the Islands. In 1850 some areas about 50 miles from Lahaina were still mosquito-free, probably because of the intervening mountain range.

DEATHS DURING WEEK ENDED NOVEMBER 27, 1943

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Nov. 27, 1943	Corresponding week, 1942
Data for 89 large cities of the United States:		
Total deaths	8,621	8,500
Average for 3 prior years	8,413	
Total deaths, first 47 weeks of year	420,939	393,068
Deaths under 1 year of age	602	603
Average for 3 prior years	576	
Deaths under 1 year of age, first 47 weeks of year	30,060	27,165
Data from industrial insurance companies:		
Policies in force	66,063,813	65,271,636
Number of death claims	9,571	9,820
Death claims per 1,000 policies in force, annual rate	7.6	7.8
Death claims per 1,000 policies, first 47 weeks of year, annual rate	9.6	9.1

[1] D. L. Van Dyne, entomologist, Honolulu Advertiser, August 19, 1904.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED DECEMBER 4, 1943

Summary

A total of 4,489 cases of influenza was reported, as compared with 2,465 for the preceding week, 1,734 for the next earlier week, and a 5-year (1938–42) median of 2,478. The largest increases occurred in the South Atlantic, South Central, and Mountain areas. Of the current total, 3,940 cases, or 88 percent, were reported in 10 States, as follows (last week's figures in parentheses): Minnesota 273 (270), Virginia 651 (259), South Carolina 453 (331), Georgia 105 (30), Tennessee 155 (56), Alabama 270 (54), Arkansas 184 (89), Texas 1,298 (807), Colorado 238 (12), and Arizona 313 (155). The next largest number reported was 88 cases, in Nebraska. For the fourth quarter of the year to date 17,072 cases have been reported, as compared with 13,649 for the same period last year and a 5-year average of 12,054.

The incidence of meningococcus meningitis increased in all geographic areas except the west central. A total of 274 cases was reported for the country as a whole, as compared with 195 last week, 265 for the next earlier week, and 40 for the 5-year median. States reporting 12 or more cases (last week's figures in parentheses) are as follows: Massachusetts 13 (11), Connecticut 12 (6), New York (New York City, 22) 31 (24), Pennsylvania 33 (16), Illinois 14 (10), Michigan 23 (8), and California 25 (20). The cumulative total reported to date for the fourth quarter of the current year is 2,003, as compared with 613 for the same period last year and a 5-year median of 296.

A further reduction was recorded in the incidence of poliomyelitis for the country as a whole, but increases occurred in the Middle Atlantic, North Central, and Mountain areas. The total reported for the week was 141 cases, as compared with 150 last week, an average of 218 for the past 4 weeks, and a 5-year median of 112. The cumulative total for the first 9 weeks of the fourth quarter of the year is 2,814, as compared with 1,146 for the same period last year and a 5-year average of 1,822. States reporting the largest numbers

currently are California (29), Oregon (14), Utah (12), and New York (11).

Totals above the corresponding 5-year medians are also reported currently for measles and scarlet fever, while those of diphtheria, smallpox, typhoid fever, and whooping cough continue below the medians.

Deaths recorded in 87 large cities of the United States for the week totaled 9,565, as compared with 8,450 last week and a 3-year (1940–42) average of 8,742. The cumulative total for the year to date is 422,607, as compared with 395,054 for the corresponding period of last year.

Telegraphic morbidity reports from State health officers for the week ended December 4, 1943, and comparison with corresponding week of 1942, and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Median 1938–42	Week ended—		Median 1938–42	Week ended—		Median 1938–42	Week ended—		Median 1938–42
	Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942	
NEW ENGLAND												
Maine	1	0	0	1	------	3	132	1	38	3	2	0
New Hampshire	0	0	0	------	------	------	0	101	3	0	0	0
Vermont	0	0	0	------	------	------	0	157	19	0	0	0
Massachusetts	5	3	4	------	------	------	258	370	225	13	5	1
Rhode Island	0	2	1	1	1	------	66	1	1	5	8	0
Connecticut	0	0	1	52	8	3	9	201	73	12	1	1
MIDDLE ATLANTIC												
New York	10	18	18	[1] 14	[1] 11	[1] 4	352	227	373	31	15	5
New Jersey	1	5	11	17	14	13	366	31	22	10	5	2
Pennsylvania	8	23	23	5	6	------	242	760	289	33	7	5
EAST NORTH CENTRAL												
Ohio	17	24	24	1	9	13	417	22	25	9	3	1
Indiana	11	9	21	59	16	16	157	44	19	2	0	1
Illinois	7	24	42	18	8	10	132	31	31	14	3	2
Michigan[3]	9	10	12	7	1	1	465	56	133	23	0	0
Wisconsin	0	0	0	37	16	17	326	128	125	4	0	0
WEST NORTH CENTRAL												
Minnesota	15	9	3	273	2	1	603	7	61	2	0	0
Iowa	2	2	5	------	------	------	70	21	24	4	0	0
Missouri	5	4	10	21	5	2	9	6	9	5	3	0
North Dakota	2	0	2	23	16	16	187	1	1	0	0	0
South Dakota	2	12	6	------	------	------	59	29	6	1	0	0
Nebraska	12	7	4	88	5	------	7	59	2	0	0	0
Kansas	9	15	7	31	2	5	17	27	21	2	0	0
SOUTH ATLANTIC												
Delaware	1	0	0	------	------	------	15	3	3	1	0	0
Maryland[2]	7	6	6	6	15	5	24	8	8	8	4	1
District of Columbia	0	1	1	4	2	1	13	4	2	2	1	0
Virginia	9	23	32	651	187	145	388	13	13	8	7	2
West Virginia	7	10	10	1	14	8	228	4	4	4	0	1
North Carolina	20	37	63	1	3	3	99	5	136	3	0	1
South Carolina	7	16	16	453	322	322	26	3	7	2	0	0
Georgia	14	10	19	105	14	40	32	0	10	5	1	1
Florida	4	4	4	6	2	2	16	1	2	7	1	1
EAST SOUTH CENTRAL												
Kentucky	10	9	14	3	3	12	8	37	76	3	2	2
Tennessee	11	4	13	155	29	40	35	8	11	8	1	1
Alabama	11	16	29	270	58	58	109	5	19	3	1	1
Mississippi[2]	8	10	11	------	------	------	------	------	------	1	0	0
WEST SOUTH CENTRAL												
Arkansas	4	14	16	184	73	73	36	8	9	1	0	0
Louisiana	10	6	17	35	5	5	1	3	2	1	2	0
Oklahoma	6	17	21	29	60	87	2	3	3	3	0	0
Texas	50	45	53	1,298	769	359	66	16	17	4	3	1
MOUNTAIN												
Montana	1	2	2	2	------	8	112	15	15	2	0	0
Idaho	0	1	2	2	1	1	8	143	10	0	0	0
Wyoming	0	0	0	2	76	4	13	27	3	0	0	0
Colorado	4	10	10	238	50	33	84	10	41	3	1	1
New Mexico	1	2	2	21	1	2	4	4	3	1	2	1
Arizona	4	6	6	313	68	121	11	1	2	0	0	0
Utah[3]	0	7	0	1	3	9	8	362	62	0	1	0
Nevada	1	0	0	------	2	------	4	33	0	0	1	0
PACIFIC												
Washington	1	8	3	6	------	------	39	425	52	4	2	0
Oregon	7	1	3	4	29	24	78	235	28	2	2	1
California	33	29	29	51	22	63	101	61	160	25	4	1
Total	347	461	545	4,489	1,928	2,478	5,434	3,717	3,539	274	88	40
48 weeks	12,643	14,312	15,090	102,897	98,419	165,468	572,427	487,003	487,003	16,530	3,284	1,880

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended December 4, 1943, and comparison with corresponding week of 1942, and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever [3]		
	Week ended—		Median 1938–42	Week ended—		Median 1938–42	Week ended—		Median 1938–42	Week ended—		Median 1938–42
	Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942		Dec. 4, 1943	Dec. 5, 1942	
NEW ENGLAND												
Maine	0	1	0	23	1	12	0	0	0	1	1	0
New Hampshire	1	0	0	8	7	7	0	0	0	0	0	0
Vermont	1	1	0	0	1	4	0	0	0	1	0	0
Massachusetts	3	0	0	166	285	124	0	0	0	0	1	1
Rhode Island	0	0	0	6	7	6	0	0	0	1	1	0
Connecticut	4	0	0	45	39	37	0	0	0	0	0	0
MIDDLE ATLANTIC												
New York	11	7	7	298	225	230	0	0	0	10	5	8
New Jersey	1	3	2	81	65	101	0	0	0	0	2	2
Pennsylvania	4	3	3	200	162	196	0	0	0	4	3	7
EAST NORTH CENTRAL												
Ohio	4	2	3	320	238	240	0	0	2	3	4	4
Indiana	0	1	1	71	43	100	2	7	4	1	1	2
Illinois	9	3	3	176	217	292	1	1	1	3	1	4
Michigan [3]	5	1	1	139	91	231	2	0	4	4	2	2
Wisconsin	9	1	1	149	135	151	1	0	2	0	0	0
WEST NORTH CENTRAL												
Minnesota	0	1	1	84	73	73	0	0	9	0	0	0
Iowa	1	0	1	71	48	65	0	1	1	0	1	1
Missouri	6	0	1	43	54	66	0	1	5	0	3	4
North Dakota	0	0	0	7	10	14	0	0	0	1	0	0
South Dakota	1	1	0	29	29	29	0	0	0	0	0	0
Nebraska	1	3	2	28	15	15	2	0	0	0	2	0
Kansas	2	3	1	128	53	76	1	4	1	2	1	1
SOUTH ATLANTIC												
Delaware	0	0	0	1	17	21	0	0	0	0	0	0
Maryland [3]	0	0	0	58	36	50	0	0	0	1	3	5
District of Columbia	0	0	1	25	33	18	0	0	0	0	1	1
Virginia	0	1	1	49	58	54	0	0	0	1	3	6
West Virginia	0	0	1	77	46	64	0	0	0	0	1	3
North Carolina	0	1	0	132	111	101	0	0	0	0	0	1
South Carolina	0	0	0	11	6	13	1	0	0	0	0	0
Georgia	0	0	1	29	43	38	0	0	0	1	3	5
Florida	0	0	0	6	13	5	0	0	0	2	2	1
EAST SOUTH CENTRAL												
Kentucky	1	1	3	47	62	78	0	1	0	1	0	4
Tennessee	0	0	1	77	58	61	0	0	0	1	3	3
Alabama	1	1	2	17	44	39	0	0	0	1	1	1
Mississippi [3]	0	1	2	16	14	13	0	1	0	3	3	3
WEST SOUTH CENTRAL												
Arkansas	0	0	1	6	14	18	0	2	2	3	3	4
Louisiana	2	0	0	15	19	19	0	0	0	1	3	3
Oklahoma	4	0	0	10	20	24	0	0	0	1	4	4
Texas	6	19	3	52	40	58	3	0	0	2	5	8
MOUNTAIN												
Montana	0	0	0	28	10	20	0	0	0	0	2	1
Idaho	0	0	0	22	8	12	0	0	0	4	0	0
Wyoming	1	0	0	3	2	8	0	0	0	0	0	0
Colorado	3	0	0	25	25	25	1	0	0	1	4	3
New Mexico	1	1	0	10	17	15	0	0	0	1	2	3
Arizona	1	1	0	16	6	4	0	0	0	0	1	1
Utah [3]	12	3	0	45	27	24	0	0	0	7	1	0
Nevada	0	0	0	1	0	0	0	0	0	0	0	0
PACIFIC												
Washington	3	0	0	115	27	39	0	0	0	1	0	3
Oregon	14	1	0	52	10	17	0	0	1	1	0	1
California	29	18	8	227	153	153	0	0	0	3	5	3
Total	141	79	112	3,244	2,717	2,903	14	18	39	67	78	121
48 weeks	12,134	3,981	7,029	128,170	115,871	143,545	701	737	2,242	5,222	6,452	9,159

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended December 4, 1943, and comparison with corresponding week of 1942, and 5-year median—Con.

Division and State	Whooping cough			Week ended December 4, 1943								
	Week ended—		Median 1938–42	Anthrax	Dysentery			Encephalitis, infectious	Leprosy	Rocky Mt. spotted fever	Tularemia	Typhus fever
	Dec. 4, 1943	Dec. 5, 1942			Amebic	Bacillary	Unspecified					
NEW ENGLAND												
Maine	21	73	49	0	0	0	0	0	0	0	0	0
New Hampshire	2	19	5	0	0	0	0	0	0	0	0	0
Vermont	43	46	46	0	0	0	0	0	0	0	0	0
Massachusetts	138	258	207	0	0	0	2	0	0	0	0	0
Rhode Island	19	39	30	0	0	0	0	0	0	0	0	0
Connecticut	35	107	77	0	0	3	0	0	0	0	0	0
MIDDLE ATLANTIC												
New York	283	436	562	0	2	24	0	2	0	0	0	1
New Jersey	100	270	214	0	7	1	0	0	0	0	0	0
Pennsylvania	137	371	382	0	1	0	0	1	0	0	1	0
EAST NORTH CENTRAL												
Ohio	78	183	183	0	0	0	0	0	0	0	1	0
Indiana	35	15	19	0	0	0	0	0	0	0	1	0
Illinois	103	195	220	0	1	2	0	0	0	0	0	0
Michigan [1]	142	250	308	0	1	14	0	1	0	0	0	0
Wisconsin	117	195	195	0	0	0	0	1	0	0	0	0
WEST NORTH CENTRAL												
Minnesota	72	47	49	0	0	0	0	1	0	0	0	0
Iowa	21	31	26	0	0	0	0	0	0	0	0	0
Missouri	16	12	15	0	0	0	0	0	0	0	1	0
North Dakota	2	19	19	0	0	0	0	1	0	0	0	0
South Dakota	7	7	2	0	0	0	0	0	0	0	0	0
Nebraska	9	6	4	0	0	0	0	0	0	0	0	0
Kansas	28	29	29	0	0	0	0	0	0	0	0	0
SOUTH ATLANTIC												
Delaware	3	6	12	0	0	0	0	0	0	0	0	0
Maryland [1]	35	109	70	0	0	0	1	2	0	0	1	0
Dist. of Col	4	13	19	0	0	0	0	0	0	0	0	0
Virginia	82	34	58	0	0	0	[4] 48	0	0	0	1	0
West Virginia	29	33	18	0	0	0	0	0	0	0	0	0
North Carolina	200	55	136	0	0	0	0	0	0	0	0	20
South Carolina	43	13	24	0	0	2	0	0	0	0	0	6
Georgia	16	15	15	0	0	10	0	0	0	0	1	33
Florida	11	18	4	0	4	1	0	0	0	0	0	3
EAST SOUTH CENTRAL												
Kentucky	79	17	57	0	0	2	0	0	0	0	0	0
Tennessee	59	42	42	0	0	0	1	0	0	0	1	0
Alabama	9	31	13	0	0	0	0	0	0	0	1	33
Mississippi [2]	----	----	----	0	0	0	0	0	0	0	0	4
WEST SOUTH CENTRAL												
Arkansas	9	22	20	0	0	9	0	0	0	0	2	0
Louisiana	11	3	6	0	0	1	0	0	1	0	0	3
Oklahoma	0	5	5	0	0	0	0	0	0	0	0	0
Texas	156	173	69	0	4	500	0	1	0	0	0	20
MOUNTAIN												
Montana	15	20	9	0	0	0	0	0	0	0	0	0
Idaho	8	5	3	0	0	0	0	0	0	0	0	0
Wyoming	4	2	3	0	0	0	0	0	0	0	0	0
Colorado	61	11	17	0	0	0	0	1	0	0	0	0
New Mexico	5	16	18	0	1	0	0	0	0	0	0	0
Arizona	31	9	9	0	0	0	49	0	0	0	0	0
Utah [3]	11	11	20	0	0	0	0	1	0	0	0	0
Nevada	5	0	0	0	0	0	0	0	0	0	0	0
PACIFIC												
Washington	48	26	41	0	0	0	0	0	0	0	0	0
Oregon	37	8	24	0	0	0	0	0	0	0	0	0
California	97	220	182	0	4	6	0	2	0	0	0	0
Total	2,476	3,525	3,822	0	25	575	[4] 101	14	1	0	11	123
48 weeks	169,180	165,897	165,897	62	1,971	16,377	4,123	647	28	435	728	4,188
48 weeks, 1942	----	----	----	75	1,114	11,647	6,235	540	43	451	807	3,419

[1] New York City only.
[2] Period ended earlier than Saturday.
[3] Including paratyphoid fever cases reported separately as follows: Maine, 1; Florida, 1; California, 1.
[4] Exclusive of delayed report (included only in cumulative total) of 78 cases in Virginia.

WEEKLY REPORTS FROM CITIES

City reports for week ended Nov. 20, 1943

This table lists the reports from 86 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland	0	0	------	0	11	1	3	0	5	0	0	5
New Hampshire:												
Concord	0	0	------	0	0	0	0	0	2	0	0	0
Vermont:												
Barre	0	0	------	0	0	0	0	0	0	0	0	0
Massachusetts:												
Boston	6	1	------	0	3	2	14	1	30	0	1	14
Fall River	0	0	------	0	0	4	1	0	3	0	0	6
Springfield	0	0	------	0	1	0	0	0	4	0	0	2
Rhode Island:												
Providence	0	0	------	0	61	1	2	0	3	0	0	24
Connecticut:												
Bridgeport	1	0	1	0	0	0	1	0	2	0	0	2
New Haven	0	0	------	0	0	0	2	0	2	0	0	3
MIDDLE ATLANTIC												
New York:												
Buffalo	1	0	------	0	2	1	11	0	4	0	0	4
New York	10	0	5	3	149	25	49	6	124	0	4	70
Rochester	0	0	------	0	0	1	4	0	3	0	0	15
Syracuse	0	0	------	0	0	0	3	1	6	0	1	18
New Jersey:												
Camden	0	0	------	0	0	0	1	0	1	0	0	1
Newark	0	0	1	2	4	1	5	0	15	0	0	20
Trenton	0	0	------	0	0	0	3	0	1	0	1	0
Pennsylvania:												
Philadelphia	3	0	3	2	7	15	37	0	24	0	1	26
Pittsburgh	1	0	2	1	108	0	18	0	22	0	2	15
Reading	0	0	------	1	4	1	1	0	1	0	0	3
EAST NORTH CENTRAL												
Ohio:												
Cincinnati	2	0	------	0	0	0	3	1	21	0	0	5
Cleveland	0	0	3	0	12	8	11	2	64	0	0	30
Columbus	1	0	3	3	4	0	3	0	15	0	0	13
Indiana:												
Fort Wayne	0	0	------	0	0	0	1	0	0	0	0	0
Indianapolis	5	0	------	1	2	2	6	0	21	0	0	13
South Bend	0	0	------	0	24	0	0	0	0	0	0	1
Terre Haute	1	0	------	0	0	0	4	0	1	0	0	0
Illinois:												
Chicago	1	0	2	0	5	8	25	10	42	0	1	60
Springfield	0	0	------	0	0	0	0	0	2	0	0	1
Michigan:												
Detroit	5	0	1	1	6	9	13	0	58	0	0	44
Flint	0	0	------	0	9	0	0	0	1	0	0	7
Grand Rapids	0	0	------	0	2	1	0	0	10	0	0	2
Wisconsin:												
Kenosha	0	0	------	0	0	0	0	0	3	0	0	0
Milwaukee	0	0	------	0	5	0	0	1	52	0	0	41
Racine	0	0	------	0	1	0	0	0	4	0	0	14
Superior	0	0	------	0	136	0	1	0	0	0	0	5
WEST NORTH CENTRAL												
Minnesota:												
Duluth	0	0	------	0	11	0	2	0	3	0	0	18
Minneapolis	9	0	------	1	46	3	7	1	12	0	0	6
St. Paul	0	0	------	0	35	1	1	0	14	0	0	8
Missouri:												
Kansas City	0	0	------	0	1	1	6	0	13	0	0	2
St. Joseph	0	0	------	0	0	0	0	0	2	0	0	1
St. Louis	0	0	1	3	1	4	15	1	4	0	0	20

City reports for week ended Nov. 20, 1943—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
WEST NORTH CENTRAL—continued												
North Dakota:												
Fargo	0	0	------	0	7	1	1	0	2	0	0	0
Nebraska:												
Omaha	5	0	------	0	1	0	4	0	7	0	0	1
Kansas:												
Topeka	0	0	------	0	0	0	0	0	4	0	0	8
Wichita	0	0	------	0	4	0	3	0	3	0	0	0
SOUTH ATLANTIC												
Delaware:												
Wilmington	0	0	------	0	3	2	0	0	1	0	0	0
Maryland:												
Baltimore	4	0	1	0	6	7	8	2	15	0	1	25
Cumberland	0	0	1	0	0	0	1	0	0	0	0	0
Frederick	0	0	------	0	0	0	0	0	1	0	0	0
District of Columbia:												
Washington	1	0	------	0	10	5	15	0	11	0	0	7
Virginia:												
Lynchburg	0	0	------	0	305	0	3	0	0	0	0	16
Richmond	1	0	------	0	13	1	1	0	3	0	0	5
Roanoke	1	0	------	0	0	0	1	0	0	0	0	7
West Virginia:												
Charleston	0	0	------	0	14	0	0	0	8	0	0	0
Wheeling	0	0	------	0	0	0	1	0	1	0	0	0
North Carolina:												
Winston-Salem	0	0	------	0	0	0	0	0	5	0	0	0
South Carolina:												
Charleston	0	0	7	0	3	0	3	0	2	0	0	1
Georgia:												
Atlanta	0	0	1	0	1	0	6	0	2	0	0	1
Brunswick	1	0	------	0	0	0	0	0	1	0	0	0
Savannah	0	0	1	0	0	1	4	0	1	0	0	0
Florida:												
Tampa	1	0	------	0	0	0	3	0	2	0	0	0
EAST SOUTH CENTRAL												
Tennessee:												
Memphis	1	0	6	1	0	1	4	0	5	0	0	0
Nashville	1	0	------	0	1	0	3	0	6	0	0	8
Alabama:												
Birmingham	2	0	3	0	5	0	3	0	2	0	0	5
Mobile	0	0	2	1	0	0	1	1	1	0	0	0
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock	0	0	------	----	0	0	0	0	1	0	0	0
Louisiana:												
New Orleans	3	0	15	1	1	2	12	1	7	0	1	2
Shreveport	0	0	------	0	0	1	4	0	0	0	0	0
Texas:												
Dallas	5	0	1	1	0	0	1	0	5	0	0	11
Galveston	0	0	------	0	1	0	0	0	0	0	0	0
Houston	3	0	------	0	0	1	9	1	5	0	0	0
San Antonio	0	0	------	0	0	0	11	0	2	0	0	0
MOUNTAIN												
Montana:												
Billings	0	0	------	0	0	0	0	0	0	0	0	0
Great Falls	0	0	------	0	38	0	3	0	4	0	0	4
Helena	0	0	------	0	0	0	0	0	0	0	0	0
Missoula	0	0	------	0	0	0	0	0	4	0	0	0
Idaho:												
Boise	0	0	------	0	0	0	0	0	0	0	0	0
Colorado:												
Denver	3	0	22	0	3	0	5	2	11	0	0	19
Pueblo	0	0	------	0	26	0	1	0	2	0	0	7
Utah:												
Salt Lake City	0	0	------	0	3	1	3	0	8	0	0	0

City reports for week ended Nov. 20, 1943—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC												
Washington:												
Seattle	2	0	------	0	3	0	3	2	5	0	0	7
Spokane	0	0	------	0	8	1	1	0	13	0	0	11
Tacoma	0	0	------	0	2	0	4	0	7	0	0	0
California:												
Los Angeles	12	0	9	1	6	4	3	5	35	0	0	17
Sacramento	1	0	------	0	0	1	8	1	0	0	1	0
San Francisco	0	0	------	0	0	0	9	5	16	0	0	8
Total	93	1	91	23	1,114	118	395	44	802	0	14	689
Corresponding week, 1942	80	1	101	31	769	24	394	35	853	1	14	1,077
Average, 1938–42	108	------	122	[1] 24	[2] 657	------	[1] 344	------	737	3	25	1,131

Dysentery, amebic.—Cases: Boston, 2; New York, 2; Cleveland, 1; Atlanta, 1; Little Rock, 1; San Francisco, 1.

Dysentery, bacillary.—Cases: Buffalo, 16; New York, 12; Philadelphia, 2; Charleston, S. C., 2; Atlanta, 2; Los Angeles, 3; San Francisco, 1.

Dysentery, unspecified.—Cases: Baltimore, 1; San Antonio, 6.

Leprosy.—Cases: San Francisco, 1.

Typhus fever.—Cases: Atlanta, 8; Savannah, 1; Nashville, 1; Birmingham, 4; Galveston, 1; Houston, 1; Los Angeles, 1.

[1] 3-year average, 1940–42.

[2] 5-year median.

Rates (annual basis) per 100,000 population, by geographic groups, for the 86 cities in the preceding table (estimated population, 1942, 34,308,500)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Poliomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England	21.1	3.0	3.0	0.0	229.5	24.2	69.5	3.0	154.0	0.0	3.0	169
Middle Atlantic	6.7	0.0	4.9	4.0	122.2	19.6	58.9	3.1	89.6	0.0	4.0	77
East North Central	8.8	0.0	5.3	2.9	120.3	16.4	39.1	8.2	171.7	0.0	0.6	138
West North Central	27.4	0.0	2.0	7.8	207.2	19.5	76.2	3.9	125.1	0.0	0.0	125
South Atlantic	15.6	0.0	19.1	0.0	616.0	27.8	79.8	3.5	92.0	0.0	1.7	108
East South Central	23.8	0.0	65.3	11.9	35.6	5.9	65.3	5.9	83.2	0.0	0.0	77
West South Central	32.3	0.0	46.9	5.9	5.9	11.7	108.5	5.9	58.7	0.0	2.9	38
Mountain	24.1	0.0	176.9	0.0	562.8	8.0	96.5	16.1	233.1	0.0	0.0	241
Pacific	26.2	0.0	15.7	1.7	33.2	10.5	48.9	22.7	132.8	0.0	1.7	75
Total	14.1	0.2	13.8	3.5	169.3	17.9	60.0	6.7	121.9	0.0	2.1	105

TERRITORIES AND POSSESSIONS

Hawaii Territory

Honolulu—Dengue fever.—During the period November 1–15, 1943, 231 cases of dengue fever were reported in Honolulu, bringing the total cases reported to date to 1,070. During the period October 1–15, 1943, 221 cases were reported, and for the period October 16–31, 1943, 321 cases.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended November 6, 1943.—During the week ended November 6, 1943, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox		7	3	217	265	53	84	60	129	818
Diphtheria	1	24	10	59	1	2	2			99
Dysentery (bacillary)				3						3
Encephalitis, infectious						1				1
German measles		1		2	14		1	6	33	57
Influenza		2	2		19				8	31
Measles		2		269	503	19	2	13	11	819
Meningitis, meningococcus			1		2	1		1	1	6
Mumps		3		54	98	42	1	8	65	271
Poliomyelitis	1			2	3			1	2	9
Scarlet fever		9	2	100	99	40	17	24	39	330
Tuberculosis (all forms)		7	3	58	52	24		4	23	171
Typhoid and paratyphoid fever				23	2		1		16	42
Undulant fever				3	5					8
Whooping cough		20	1	192	136	22	11	8	13	403

EGYPT

Infectious diseases—First quarter 1943.—During the first quarter of 1943, certain infectious diseases were reported in Egypt as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	2		Mumps	734	11
Cerebrospinal meningitis	38	20	Pneumonia	1,940	1,442
Chickenpox	565	3	Puerperal septicemia	77	51
Diphtheria	591	223	Rabies	8	7
Dysentery	423	82	Scarlet fever	18	2
Erysipelas	568	60	Smallpox	31	2
Influenza	3,076	72	Tetanus	109	75
Jaundice, epidemic	2	1	Tuberculosis (all forms)	1,628	1,086
Leprosy	86	28	Typhoid fever	781	140
Lethargic encephalitis	1	1	Typhus fever	11,826	1,829
Malaria	4,696	192	Undulant fever	2	1
Measles	944	182	Whooping cough	762	52

Vital statistics—First quarter 1943.—Following are the numbers of births and deaths for the first quarter of 1943 for all localities in Egypt having a health bureau:

Number of live births	70,604
Births per 1,000 population	50.2
Number of stillbirths	1,209
Deaths, all causes	40,132
Deaths per 1,000 population	28.5
Deaths under 1 year of age	8,465
Deaths under 1 year of age per 1,000 live births	120

GERMANY

Infectious diseases—Week ended September 25, 1943, and January 1 to September 18, 1943—Comparative.—Cases of certain infectious diseases have been reported in Germany for the week ended September 25, 1943, and for the period January 1 to September 18, 1943, as compared with the same period of 1942:

Disease	Week ended Sept. 25, 1943	Jan. 1–Sept. 18, 1943	Corresponding period 1942
Anthrax		27	21
Cerebrospinal meningitis	30	2,032	2,237
Diphtheria	6,945	175,498	173,355
Dysentery	408	5,117	8,114
Inflammation of the brain	21	405	325
Malaria	19	561	619
Paratyphoid fever	184	3,725	2,849
Poliomyelitis	124	1,679	2,312
Psittacosis		16	3
Ptomaine poisoning	363	1,088	1,744
Scarlet fever	8,544	266,977	301,104
Trachoma	75	4,878	6,962
Tuberculosis (all forms)	2,222	110,513	110,675
Typhoid fever	703	11,733	5,851
Undulant fever (Bang's disease)		129	171
Weil's disease	6	72	24
Whooping cough	2,180	99,596	51,581

MEXICO

Cananea—Influenza.—A report dated November 19, 1943, states that for the month of October and November to date, 2,500 cases of influenza were reported in Cananea, Mexico. The disease is said to be disappearing. No deaths were reported.

Vera Cruz—Dengue fever.—A report for the week ended November 13, 1943, stated that an epidemic of dengue fever was present in Vera Cruz, where probably several hundred cases had been reported.

NICARAGUA

Poliomyelitis.—A report dated November 18, 1943, states that since October 23, 1943, 11 cases of poliomyelitis have been reported in Nicaragua, 9 of these cases having occurred in Managua.

TUNISIA

Infectious diseases—August 1943.—During the month of August 1943, cases of certain infectious diseases were reported in Tunisia as follows:

Disease	Cases	Disease	Cases
Diphtheria	11	Tuberculosis (all forms)	74
Dysentery	29	Typhoid and paratyphoid fever	94
Recurrent fever	1	Typhus fever	92
Scarlet fever	2		

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual prevalence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A cumulative table showing the reported prevalence of these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

(Few reports are available from the invaded countries of Europe and other nations in war zones.)

Plague

Indochina—Cochinchina.—For the period September 21–30, 1943, 1 case of plague was reported in Cochinchina, Indochina.

Smallpox

Guinea (French).—For the period October 11–20, 1943, 34 cases of smallpox with 4 deaths were reported in French Guinea.

Indochina.—Smallpox has been reported in Indochina as follows: September 21–30, 1943, 78 cases; October 11–20, 1943, 97 cases.

Sudan (French).—For the period October 11–20, 1943, 110 cases of smallpox with 4 deaths were reported in French Sudan.

Turkey.—For the month of September 1943, 524 cases of smallpox (including 10 cases reported in Istanbul) were reported in Turkey.

Typhus Fever

Greece.—During the year 1942, 405 cases of typhus fever (including 277 cases in Athens and Piraeus, and 57 cases in Salonika) were reported in Greece.

Hungary.—Typhus fever has been reported in Hungary as follows: October 17–30, 1943, 10 cases; November 1–13, 1943, 20 cases.

Rumania.—For the period October 8–15, 1943, 84 cases of typhus fever were reported in Rumania.

Slovakia.—Typhus fever has been reported in Slovakia as follows: October 17–30, 1943, 12 cases; week ended November 6, 1943, 12 cases.

Turkey.—For the month of September 1943, 72 cases of typhus fever were reported in Turkey.

Yellow Fever

Portuguese Guinea.—On November 10, 1943, an outbreak of yellow fever was reported in Portuguese Guinea. No figures were given.

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