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SURVEY OF PUBLIC HEALTH NURSING IN
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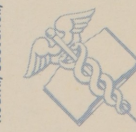
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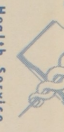
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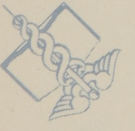
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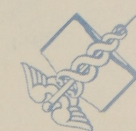
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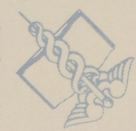
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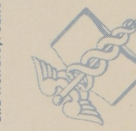
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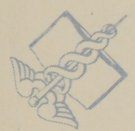
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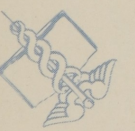
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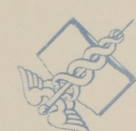
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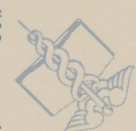
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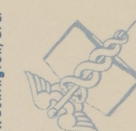
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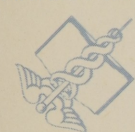
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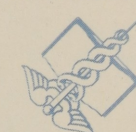
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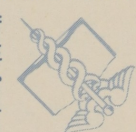
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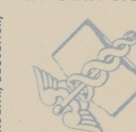
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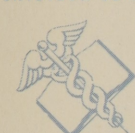
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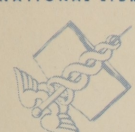
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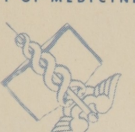
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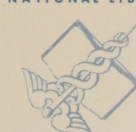
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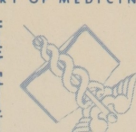
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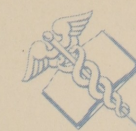
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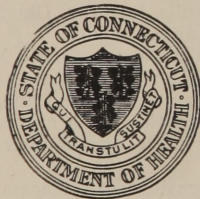
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Survey
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Public Health Nursing
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Connecticut

BY
HELEN F. BOYD

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LETTER OF TRANSMITTAL

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New York, N. Y.

DR. JOHN T. BLACK,

Commissioner of Health of the State of Connecticut:

Dear Sir:—

This survey of the public health nursing done in Connecticut was undertaken at your request and at the request of the Public Health Council of the State of Connecticut. I was enabled to undertake the work by the courtesy of the Nursing Committee of the Mayor's Committee of Women on National Defense, in New York, who released me from my work with them, and of the Nursing Committee of the General Medical Board of the Council of National Defense, who undertook the burden of my expenses for the two months of December and January.

The purpose of the survey was to find out how much public health nursing is being done in Connecticut, and to find out in so far as possible the field being covered in infant welfare work, school nursing, industrial nursing, and general visiting nursing. In view of the fact that the conditions induced by the war make it especially urgent that every measure be taken for the fight against tuberculosis, for the protection of infancy, and for safe-guarding the health of the people, a plan is drawn up for a state campaign to increase such work, where the survey shows the greatest need. Julia Lathrop, Chief of the Federal Children's Bureau, says in her fifth annual report:

“The pressing essentials of a reasonable child welfare program for the United States in war time may be condensed under four heads:

1. Public protection of maternity and infancy.

Essentials: (a) Public Health nurses and suitable medical attention; (b) The care of babies by their own mothers under decent home conditions.”

The scope of the investigation was necessarily limited as the survey had to be finished in two months. The number of public health nurses and the territory they covered was studied in proportion to the number of persons reached by these nurses. Little was done in considering methods of organization or of technique of the nursing personnel, as neither of these points could adequately be studied in the allotted time. Moreover, since it is now recognized by almost all that only a graduate nurse with special training in public health work should be engaged in the important task of public health nursing, it seemed best not to try to touch the finer points of the technique of field work. Out of the 272 public health nurses in the state, fifteen are not graduate nurses, and eleven of these are doing industrial work. This would seem to point to the natural death of such unscientific work, at least, in the field of general visiting nursing, infant welfare, tuberculosis and school nursing.

Short trips were taken to places which were considered examples of varying types of community. One was through the tobacco country

PUBLIC HEALTH NURSE SURVEY

from Hartford through Windsor Locks and Windsor to Suffield. Another was to the munition cities of Waterbury, Bridgeport and New Haven. The large textile mill town of Willimantic and the series of small mill towns from Putnam through Killingly, Plainfield and Norwich to New London were visited.

The group of congested mill towns: Ansonia, Derby, Shelton and Seymour were visited as having the problems both of congestion and foreign labor with high infant mortality rate. In all, twenty-three different towns were visited.

There is an amount of public health nursing work already started that shows a good growth during the past years, yet there are large stretches where no work of any kind is done. Even in these places it is not an uncommon thing to find that some group of interested citizens is considering the possibility of having a nurse. There has been a good foundation laid for further work.

The survey has been a pleasant task. It would have been impossible to have had so correct a list of nurses without the assistance of Mr. Godard and Miss Albaugh who were in charge of the State Military Census. Miss Corcoran of the Department of Factory Inspection, provided me with the latest list of industrial nurses, and invaluable assistance in planning the ground that could be covered by more public health nurses. The Board of Education gave me their 1917 list of school nurses. The public health nurses all over the state were most kind in furnishing the necessary information. Most of the work was done from Hartford, where I was allowed to make my headquarters, in the offices of the Department of Health, where the office force was most helpful. Heartly thanks are due all for their cordial co-operation. More than all, Dr. C. E. A. Winslow has given his time and interest to make this report of value for Connecticut.

Through the interest of the Committee on Medical Inspection of the Women's Committee of the State Council of National Defense, of which Dr. Kate C. Mead is chairman, and of the Committee on the Health and Welfare of Children, of which Mrs. W. E. D. Scott is chairman, both of which committees had taken as part of their war program the promoting of public health nursing in the state, it was possible to offer to the lecturers of the Granges and others interested, a lecturer who should address the individual Grange on the subject of public health nursing, using slides which Dr. Brown, of Bridgeport, has kindly offered to lend.

It is hoped that these committees will stimulate local interest so that specific localities where the survey shows the need, will as a war-time measure organize for the employment of a public health nurse who will be an important factor in conserving the health of the people and the lives of the babies.

Respectfully yours,

HELEN F. BOYD.

February 9, 1918.

A SURVEY OF PUBLIC HEALTH NURSING IN CONNECTICUT AND A PLAN FOR ITS FUTURE DEVELOPMENT.

Purpose.

In December, 1917, the survey of the public health nursing in Connecticut was begun at the request of Dr. John T. Black, State Commissioner of Health, and of the Public Health Council. The purpose was in direct response to the widespread feeling in the country, induced by the records of the foreign countries at war, that those of us who remain at home have two duties to perform. First, we must join heartily in every effort directed toward increasing the success of the armies abroad whether in releasing our men for service, or in conserving food and fuel that they may be provided. Second, that we at home must work to keep our own country in good condition—we must work harder than ever before to give each person, and especially each baby, in the country a chance to be healthy and happy. Only by doing this can we expect to be ready to cope with the problems that will come upon us in the reconstruction period that must inevitably follow the war.

Julia Lathrop, Chief of the Federal Children's Bureau, says in her fifth annual report, that one of the pressing essentials of a reasonable child-welfare program for the United States in war time is the public protection of maternity and infancy. (Last year 15,000 mothers and 300,000 children under five years of age died. Most of these deaths were preventable.) And the two essentials for carrying out this program are: (a) Public health nurses and suitable medical attention; (b) the care of babies by their own mothers under decent home conditions.

Field of the Survey.

Connecticut is a small state with only *1,355,492 inhabitants. It is, however, one of the most important states industrially. A competent authority says that Connecticut is making in the south central cities of the state, 75 per cent of the munitions that are being made in the country. The large textile mills, making threads and cloths of different sorts, are situated all along the swiftly running streams in the eastern part of the state. The tracts in the north central part of the state are cultivated to tobacco.

*Population estimated by applying ratio of school census of 1916 to national census.

It is these industries that have brought into the state the foreign laborers who make up such a large part of the population.

In the industrial cities like Waterbury, Bridgeport, New Haven and Hartford, almost every nationality is represented in the labor supply. The Poles and Italians predominate, with smaller districts of Lithuanians, Albanians, Germans, Russians, etc.

In the mill towns in the eastern part of the state there are large numbers of French, who have settled this part of the country during the past fifty years. In some towns one hears only French spoken on the streets and in the shops.

The tobacco country gets its labor in the summer from a floating population of Poles, Italians, and, during the past few years, of southern negroes. The winter work in the warehouse is done by the resident Poles and Italians. Women do a great deal of this work. The health officer and the visiting nurse in one small town whose entire industry is tobacco, reported that the Polish mothers work in the fields. In consequence they are unable to nurse their babies, or properly to care for their children. Moreover, they work all through their pregnancy and go back to work too soon after delivery. The law that forbids a mother to work in a factory four weeks before or four weeks after confinement, is not applicable to the agricultural worker.

A brief study was made of selected places to try and gauge the public health nursing needs of the towns and how the needs are being met. For this purpose, several rural townships in the tobacco country were visited; five of the towns where the munition manufactures have caused an unusual influx of foreign labor; a series of mill towns and three cities in the eastern section where the great textile industries are. In all twenty-three different townships representing the different sorts of communities were visited. The infant welfare work, general visiting nursing where bed-side care is given to the sick in their homes, tuberculosis, school nursing and industrial nursing were studied. This study does not include private nursing nor institutional work. Organization and methods were only slightly considered, as it was possible in the allotted time to find only the extent of public health nursing in the state.

General Visiting Nursing.

TABLE 1.

*Ratio of general visiting nurse to population of towns arranged according to their size.

Population of towns	No. of towns	Towns with less than 5,000 population per nurse	Towns with 5,000 to 10,000 population per nurse	Towns with over 10,000 population per nurse	Towns with no nurse
Under 5,000 ..	120	11	0	0	109
5,000-10,000 ...	21	1	6	0	14
10,000-15,000 ..	10	0	1	5	4
15,000-25,000 ..	8	1	2	5	0
25,000-75,000 ..	5	0	4	1	0
75,000-160,000 .	4	1	2	1	0
	168	14	15	12	127

*General visiting nurse includes the tuberculosis nurse, the infant welfare nurse, and the hospital social service nurse. Lists procured from State Military Census, National Organization for Public Health Nursing and Connecticut Organization for Public Health Nursing.

Table 1 shows that only fourteen of the 168 townships of Connecticut have anywhere nearly adequate general visiting nursing service. Only one large city, New Haven, is in the first class with one nurse per 4,600 population. Fifteen towns are taking fairly good care of their people in this direction, and 12 have begun to see the need of this work. 127 representing a population of 317,526, have no general visiting nurses, although a number are beginning to realize what the public health nurse can do for a community.

The general sickness needs of communities are being recognized more fully now than ever before. Sickness surveys have shown that about two per cent of the population are ill* during the year, each person with length of illness averaging six days in California to 7.9 days in Boston. Of this number hardly 10 per cent are cared for in hospitals. 90 per cent are sick in their homes. It is this 90 per cent that the general visiting nurse cares for.

But more important than the care of the sick, necessary as it is, is the preventive work that the public health nurse can do.

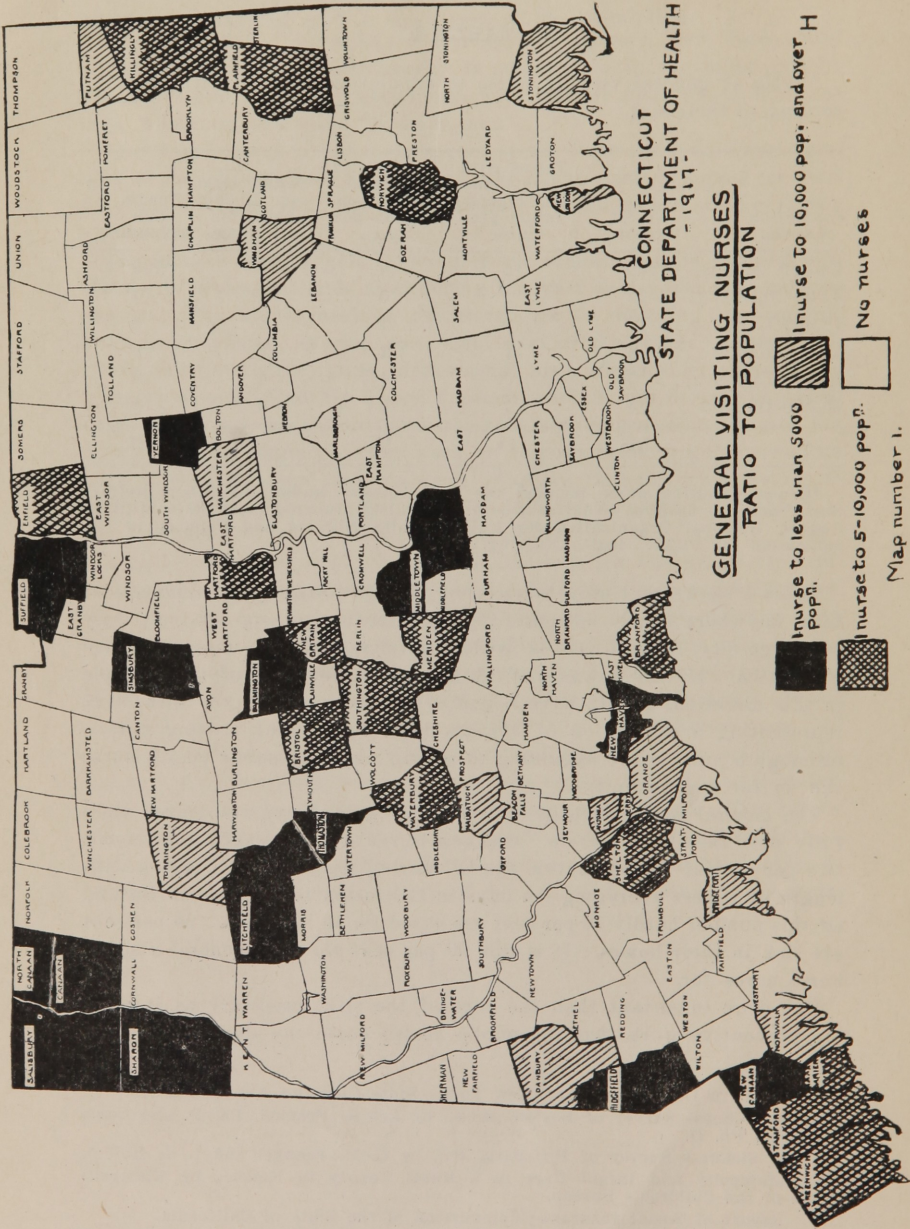
*Sickness in Dutchess County, New York—State Charities Aid Association.

2. A Sickness Survey of Boston, Mass., by Lee K. Frankel, Ph. D. and Louis I. Dublin, Ph. D.

3. A Sickness Survey of Pittsburg, Pa., by L. K. Frankel and L. I. Dublin.

4. Maternity and Infant Care in a Rural County in Kansas, by Elizabeth Moore of the Children's Bureau.

5. Report of Social Insurance Commission of the State of California.



Pre-natal Nursing.

First and foremost of the preventive work is the work for the babies, and first and foremost of the work for infants in its results is pre-natal nursing. The accompany diagram shows the remarkable results in Boston where pre-natal care was given at the Boston Dispensary. It shows how by giving pre-natal care and advice to mothers, about half as many babies die as when the mothers have no such help.* In all Connecticut there are only two nurses who are giving pre-natal advice with† adequate facilities for physical examination of patients, urine examinations and blood pressure examinations with follow-up work. This is being done from the New Haven Dispensary. In the Hartford Dispensary an obstetrical clinic has been started, but the doctor in charge withdrew to war duty and this vital work has been dropped. It is encouraging, however, to find on every side an awakened interest in the work. Every nurse is alive to the need of this service and each and every one is giving a good deal of pre-natal advice in an unsystematic way.

The possibility of improving the mortality among mothers has been demonstrated by the experience of the Metropolitan Life Insurance Company. At a time when childbirth mortality in the country as a whole was stationary, the death rate from this cause among women between fifteen and forty-four years of age was reduced in the period 1911-1916 by 10.7 per cent among its white policy holders, and by 20.4 per cent among its colored policy holders. "The more favorable condition among the insured females," says the company, "is in large measure the result of the extensive care given by the visiting nursing service of the company to policy holders during pregnancy and after childbirth."

The pre-natal nurse visits the patient, makes sure that she follows the simple rules of personal hygiene and diet, supplementing and enforcing the doctor's care. Practically, we too often find that women will call in the doctor only at the last moment for the delivery. The nurse can often use her influence to get such women to realize the need of care during pregnancy. Often she can use her skill in more serious conditions, as in the following case in New York:

Mary A., twenty-seven years old, had lost one baby by miscarriage. The visiting nurse found that Mary was five months pregnant, but could not persuade her to go to the dispensary nor to a doctor. Fearing that the first miscarriage had been due to kidney trouble, the nurse had Mary's urine examined. The urine showed a large amount of albumen.

*Michael M. Davis—The Beneficial Results of Pre-natal Work.

†Dr. J. Whitridge Williams gives the following:

Adequate care means:

1. A general physical examination, including an examination of heart, lungs and abdomen.
2. Measurement of the pelvis in a first pregnancy to determine whether there is any deformity which is likely to interfere with birth.
3. Continued supervision by the physician at least during the last five months of pregnancy.
4. Monthly examination of the urine, at least during the last five months.

Mary was at once sent to the hospital where she was immediately put on a careful diet. She yielded quickly to treatment and in due course of time a healthy boy was born. Undoubtedly, by the nurse's prompt action, Mary's health and the baby's life were saved.

The need of pre-natal care cannot be too much emphasized. Not only New Haven but the whole state needs it. It is the right of every mother to have the best possible care during the period of pregnancy.

Nursing Care at Time of Delivery.

In New Haven again there is a chance for mothers who attend the pre-natal clinic to have nursing care at the time of delivery. This function of the visiting nurse had been greatly neglected. All visiting nurses care for the mother and baby beginning the day after confinement, but seldom at the time of delivery. This is largely on account of the difficulty of having a nursing force that can be on call day and night. In some of the rural districts the nurse undertakes this work. It is a serious question whether she is wise to do so. No person can stand working both day and night. One nurse, for example, in a rural community in Connecticut had the care of a child fourteen months old, very ill with pneumonia, on whom she was making two visits a day as the child's condition was most critical. At about eight o'clock in the evening, she was called by the doctor to assist him at a difficult confinement. She returned to her home at five o'clock in the morning to snatch a few hours' sleep. At nine she visited her little pneumonia patient again and continued her daily round.

No person can stand hours of this sort. No association should ask a nurse to do both night and day work, no matter how willing she may be. Night work is hard under the most favorable conditions and when the day work is such that it cannot be neglected, night work should be prohibited. Skilled nursing care at delivery is what we must supply even though it means the expense of a day and night nursing force. This plan is practical as is being shown in a district in New York, where the nurses are on eight hour duty.

Infant Welfare Nursing.

Only sixteen nurses are specializing in infant welfare work, but a great deal is being done by the general visiting nurse in the course of her daily visits.

In 1915, the Federal Children's Bureau reported nine cities or towns in Connecticut having twelve summer and eight winter stations. Now eleven towns and cities have twenty-four summer and nineteen winter stations. Two of these stations still modify milk for the mothers. The rest teach the mothers in the homes, a method that has the double virtue of teaching the mothers the proper way to clean and sterilize their utensils and of conserving the nurses' time.

TABLE 2.

SHOWING INFANT WELFARE STATIONS BY CITIES.

Population of towns	Number Summer	Stations. Winter	Number Nurses.			
			Summer Part time	Summer Full time	Winter Part time	Winter Full time
Bridgeport	3	2	..	1	..	1
Greenwich	3	3	..	3	..	3
Hartford	3	2	..	3	..	3
Litchfield	1	1	1	..	1	..
Manchester	1	1	3	..	3	..
Meriden	1	1	..	1	..	1
Middletown	2	1	..	1	..	1
New Britain	1	1	..	..	..	..
New Haven	5	5	..	5	..	5
Stamford	1	1	3	..	3	..
Waterbury	2	1	..	1	..	1
Willimantic	1	..	..	1	..	..
Total	24	19	7	16	7	15

*“England has recognized the need of working for its infant and maternal welfare in spite of the demands of war. The local Government Board has taken the stand that in spite of the general need for economy, no economy should be exercised in this direction. It has estimated that to accomplish this, one full-time health visitor for every 500 births reported annually was necessary.” The health visitor in England does approximately the same work as our public health nurse. England has already one health visitor for every 800 births. In Connecticut, judging by the 34,490 births reported in 1916, there should be at least 68 public health nurses doing nothing else but following up the births as they are reported to the health authorities. As it is, we have only fourteen public health nurses who are specializing in infant welfare work. It would be impracticable to have specialized nurses doing this work in our scattered rural districts, but the public health nurses doing general work in the country districts could with advantage use this means of developing their infant welfare work.

An occasional association, as in Waterbury, is keeping track of all its babies until they are two years old, both the well babies that are cared for after delivery, and the sick babies. One association is making an attempt to follow the children through that neglected period from infancy, when they are under the care of the infant welfare nurse, to school age when they again come under the care of the school nurse.

*Infant Welfare in War Time, by Grace L. Meigs, M. D.

Again we find record of England's recognition of the need of this work. The local Government Board says: †“The war has had the effect of directing greatly increased attention to means for improving the health of mothers and their children during the first five years of life. During 1915, work with this object has been increased, though some local authorities still remain inert, and do not appear to realize that the truest national economy can only be secured by saving life and improving health by all possible means.”

Infant Mortality.

In the rural parts of Hartford county, the infant mortality rate is *107 against a rate from 76 to 94 for the rural parts of the other counties. In all probability the high death rate is due to several factors:

One is the midwife. In Connecticut, the midwife has to take an examination given by the state in order to be registered. There is no qualification of preliminary training and there is no subsequent supervision. The consequence is that she is a distinct menace. The Poles, Italians, Lithuanians, and Russians depend upon the midwife almost entirely. It is a long time before they will be Americanized enough to utilize a doctor at the time of confinement.

In New Haven, a typical case came to the notice of the Visiting Nurse Association of a woman who came under the doctor's care only when she was septic. She was in such a serious condition that she was immediately sent to a hospital where she was kept under treatment for weeks before she was well enough to be taken home. Another case was known where the patient had a hemorrhage before the birth of the child. The midwife did not call the doctor. When the patient had another serious hemorrhage after the baby's birth, the doctor was called in too late to save the patient's life. Surely the authorities should take the matter in hand and should insist upon preliminary training. At the same time, the local Boards of Health should be empowered to supervise the midwives in their communities. This work of supervision in New York City is quite successfully carried out by public health nurses who periodically examine the midwives' bags and teach them asepsis and antiseptis.

The lack of supervision of midwives leads to the practice of women who have not registered. Some of the lack of birth registration is due to these women. In 1916,* there were 5,365 unregistered or improperly registered births in Connecticut. Connecticut has 93.5 per cent regis-

†Great Britain Local Govt. Bd., Supp. containing Report of the Medical Officer, 1915, 1916, p. 34.

*The average of the crude infant mortality rate for 1915-1916, and ten months of 1917 are used, reckoned from the records of the monthly Bulletin of the State Department of Health for the Counties, omitting towns of 5,000 population and over, in order to get the purely rural districts.

*Dr. John T. Black, State Commissioner of Health.

tration of births which would be increased if the seriousness of the mid-wife question was recognized.

The visiting nurse associations do not report an abnormal increase in their work this year. That the over-crowding and the high cost of living has not induced acute illness needing the visiting nurse, does not mean that people's resistance is not being steadily reduced. It is against the insidious working of these conditions that the nurse can make headway by teaching the people in their homes how to live and what to eat.

†The high infant mortality rate in eight different localities was attributed by the health officers to the exceptionally high death rate among the Polish and Italian babies. This is very likely true. In a study of several sections in Hartford, Dr. Botsford, the health officer, found that the infant mortality rate for the congested Italian section was much higher than for the well-to-do American section of the city. For ten months of 1917, infant mortality rate for the Italians was 145 against 112 in 1916. He felt this was due to the fact that more Italian mothers had gone into industry this year with the direct consequence of neglect of their children, especially of the nursing babies.

‡Of Johnstown, Penn., it is written: "The fact is that the infant mortality rate is higher among the babies of the wage earning mothers than among others, being 188, as compared with a rate of 177.6 among the babies of the non-wage-earning mothers."

In studying the infant mortality rates of the forty-eight towns of 5,000 population and over, it was found that nineteen have an infant mortality rate that is 100 or under, while twenty-nine have a rate which is higher. Considering the healthful climate and the sturdy native stock of Connecticut, the rate should be the opposite. The causes and the differences are too many and too complicated to deal with here. *In Manchester, N. H., a study was made of the infant mortality and its causes among the foreign-born mothers. It was found that the highest rate was for babies born to French-Canadian mothers. This was 224.7. The next highest rate was that among the babies of Polish mothers, which was 189. This may easily account for the high infant mortality in some towns in the eastern part of Connecticut, where the same type of French-Canadian and Polish people live, as live in Manchester, N. H. At no time is the infant mortality rate in the Connecticut towns so high as in Manchester, but a rate of 129 for Killingly and of 146 for Plainfield might easily be accounted for in this way. This is the plainest proof of the need of infant welfare work that should be done in this section.

†The infant mortality rate used is the number of deaths of infants under one year of age per 1,000 living births.

‡Infant Mortality. Results of a Field Study in Johnstown, Pa., by Emma Duke, Federal Children's Bureau.

*Infant Mortality. Results of a Field Study in Manchester, N. H., by the Federal Children's Bureau.

I saw a striking example of the sort of care that a thrifty Polish mother can give her children. The house was a frame building in the tobacco country. The temperature outside was ten degrees below zero. I visited this family because they lived in a town where the infant mortality rate was high, and where the health officer had asserted that the high rate was due to the large number of Polish people who worked the tobacco fields in the summer and in the warehouses in the winter. The house was immaculately clean, the two babies, twins, fourteen months old, were playing on the floor. They had just two weeks before had the crisis in a severe attack of pneumonia. The stove made the room about the stove red hot, but the rest of the room was icy. The mother had dressed the children in perfectly clean clothes, and to keep them clean, she had tied the babies' skirts about their waists. From their waists to their knees they were perfectly naked and were sitting on the stone cold floor. The mother was ready and even eager to be told how to make the babies strong and well, although she was slow in understanding. The Polish people seem to be more difficult to make understand than any other nationality but when once their confidence is won a nurse can do almost anything for them.

The living conditions also may influence the infant mortality rate, especially such as one finds in the munition centers of Bridgeport and Waterbury, Ansonia and Hartford, where the past two years there has been a great influx of labor so that rents have soared to inconceivably large amounts.

One family in Waterbury was visited, which was typical of the suffering caused families by the abnormal conditions. The rent during the past year had been raised from \$16 to \$35. Mrs. R. had been able, with a husband who was worthless but who paid for his board and lodging, with two children who were working at Scovill's for good wages, and three who were at school, to keep her five room apartment warm and "stylish." With the raise to \$25 last summer, it was hard to make both ends meet, but with the winter raise to \$35, she was in despair as there was no place to which she could move. The only solution she could see was to send the children away and take in boarders. Another consequence of city over-crowding was seen in Ansonia, where the visiting nurse, in her search for a tuberculosis patient, found him sleeping in the same room with two other men, in a bed that was to serve two shifts of sleepers.

School Nursing.

*TABLE 3.

RATIO OF SCHOOL NURSES TO SCHOOL ENUMERATION ARRANGED BY TOWNS ACCORDING TO THEIR SIZE.

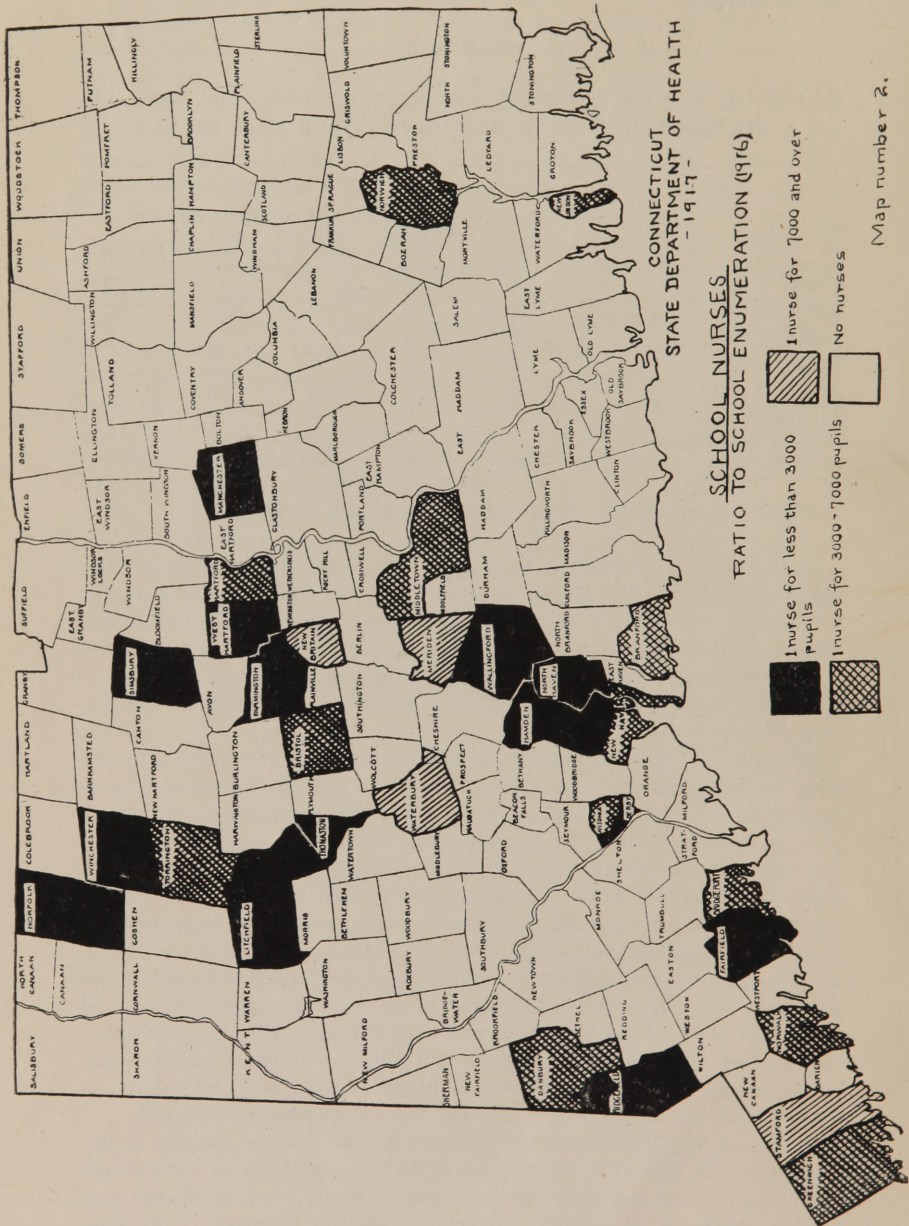
Population of towns	No. of towns	Number of towns with:			
		less than 3,000 children per nurse	3 to 7,000 children per nurse	7,000 and over per nurse	No nurse
Under 5,000	120	7	..	..	113
5,000-10,000	21	3	1	..	17
10,000-15,000	10	3	..	..	7
15,000-25,000	8	1	7	..	..
25,000-75,000	5	..	2	3	..
75,000-160,000	4	..	3	1	..
Total	168	14	13	4	137

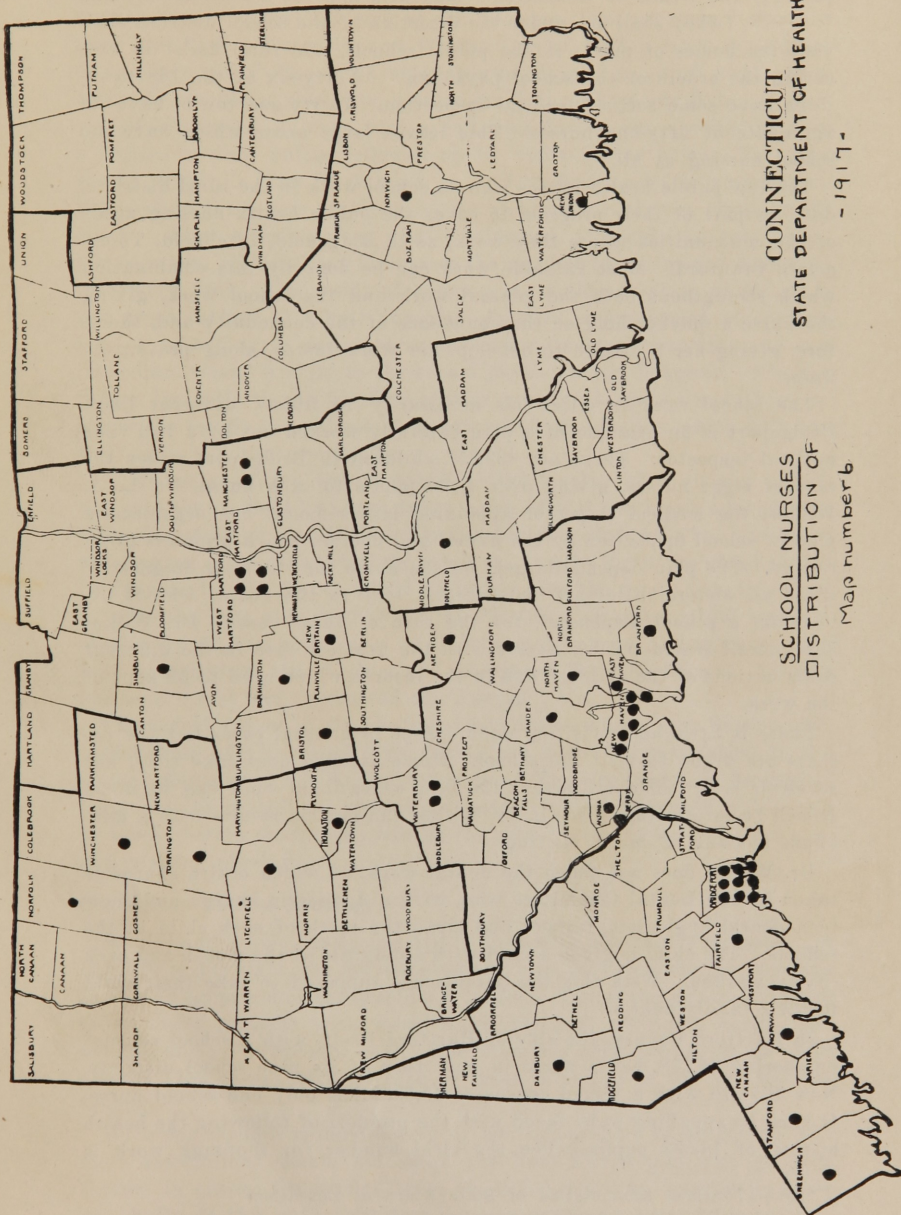
*From lists provided by State Board of Education, 1916-1917.

Map Number 2 shows the huge areas where no school nurses are employed, and where the school enumeration shows 94,110 children in the elementary schools; the thirteen towns where there are enough school nurses; thirteen where there are school nurses who can touch the most important points in their work, and the four towns where nursing is done, but where it is impossible for the nurses to more than scratch the surface, are shown.

The need of follow-up work is recognized by all. Adequate home visiting is impossible for over 1,000 pupils per nurse in the usual type of graded school. In the rural districts where transportation facilities are poor, even 800 children per nurse may be difficult to care for well. In the city districts where the congestion makes it possible to make more home visits, an able nurse who goes under a good medical inspector and has the co-operation of the teachers, can give good care to 3,000 children. If the percentage of children needing special attention is small, as is found in many well-to-do districts, and the distances to travel are not great, the nurse can have charge of as many as 7,000 children and still cover some of the important points at the same time demonstrating the need of more nurses. Complete and effective work at any time depends on the hospital and clinical facilities at command and on the co-operation of family physicians. These two points were not studied.

Comparatively little attention has been given to school nursing. A law was passed in 1915 that every town of 10,000 population or over should appoint a medical inspector for the schools. Every town of smaller population could, if it wished, appoint a medical inspector. Further,





CONNECTICUT
STATE DEPARTMENT OF HEALTH

SCHOOL NURSES
DISTRIBUTION OF
Map number 6

- 1917 -

(S. 308) the Board of Education "may also appoint a matron or nurse * * * (who) shall act under the direction of the school district, shall visit the homes of pupils in the public schools, and shall assist in executing the orders of the school physician." Forty-six of the 168 townships have some sort of medical inspection. Thirty-one towns have an aggregate of fifty-one nurses. This leaves large areas which have no school nursing at all.

The few public health nurses who do school work in the rural districts, do it as part of their program to cover the public health nursing needs of the communities where they work, as in Ridgefield, Litchfield, Thomaston, Branford. Most valuable work can be done by this combination which strengthens both the general work and the school work, giving the nurse a quicker hold on the confidence of the community and, therefore, giving her a chance to develop her work faster along preventive lines.

The school work in cities has necessarily to follow different lines. Bridgeport is an example of a plan carefully worked out by a full time medical inspector. There are *33,357 children in Bridgeport under the care of eight nurses, giving over 4,000 pupils to each nurse, Dr. L. A. Wilkes, the medical inspector appointed last summer, has organized a plan of school inspection by the nurses and doctors which promises great results. The plan depends largely on the nurse for "normal diagnosis" while all abnormalities are immediately sent to the doctor who is developing a school dispensary for the care of these cases. Dr. Wilkes has himself instructed his nurses with the greatest care in the different examinations of the children and in the records which need to be kept of the work.

There is little home visiting done except in unusual cases but the parents are urged to visit the school. Home visiting does take time, but surely it is by home visits that the best educational work can be done. It will be interesting to see if Dr. Wilkes can get his results with a minimum amount of home visiting.

Dr. Wilkes does not touch the dental work, of which entire charge is taken by the Dental Committee who, with a dentist in charge and fourteen dental hygienists, inspect and clean the teeth of each child in the schools. The child is given a card with a diagram of the mouth and each cavity marked. With this the parents are supposed to take their child to their family dentist.

In Hartford County, the city of Hartford itself, with a school census* numbering 26,178, has a nurse in only four of its nine school districts. New Britain with a school census of 13,593* has only one school nurse. It must be appalling to be faced with the problem of following the health history of 13,593 pupils, when the ideal number for thorough work is

*1916-17 School Enumeration of State Board of Education.

*Board of Education School Enumeration, 1916-17.

1,000 pupils. Nineteen out of the twenty-eight townships in Hartford County have no school nursing at all. Among these nineteen towns are some like Berlin, Plainville and Windsor Locks, with a large population of Italians and Poles whose standards of living are such that every means in our power should be used to teach them hygienic living.

Medical inspection, even with a full time doctor, can accomplish only a limited amount unless followed up by visits in the home. This was shown clearly in New York when in 1901, before school nursing began, the medical inspectors excluded 50,000 children for various physical ailments. After school nurses were established, although the total number of school children had increased, the number of exclusions decreased to 4,000 a year. The result of keeping the children safely at school is one great feature of school nursing. Another is prevention of epidemics. A school nurse early learns to note suspicious symptoms and can immediately send a child to the school physician for diagnosis. She can follow the child to the home in case of positive diagnosis and there instruct the family in methods of isolation and disinfection which will protect them and the community.

A serious condition was reported by the teacher of a district school. She said that a child had been taken home with throat trouble which was later diagnosed as diphtheria. The teacher was alarmed when she heard the diagnosis and asked that the other children in the little school should be examined. The health officer could not give the time at that moment to take the long ride into the rural district where the school was situated. Later, two more cases of diphtheria developed and he came. Too late, he examined the children and fumigated the school-house. Already one more child had contracted the disease.

The school nurses in Connecticut have duties which vary from simple chaperoning of the school girls during the doctor's examination to the normal diagnosis of the Bridgeport nurses. The work needs to be greatly increased, by additional specialized nurses in the congested cities, and by public health nurses who will do the school work as part of their general visiting nursing.

Contagious Disease Nursing.

Hardly any public health nursing is done with contagious diseases. In one city in the state, the nurse makes one visit in which she instructs the family in asepsis and disinfection. In New Haven the general visiting nurse visits patients with measles, chicken-pox, whooping cough, and mumps, and gives bed-side care. The work has been carried on for eight months (150 cases) with no case of gross infection as far as could be judged.

With our modern understanding of contagion there is no reason why more associations should not adopt the New Haven plan and go even further in caring for scarlet fever or diphtheria. An intelligent nurse can easily do this with no disastrous consequences.

Tuberculosis Nursing.

The tuberculosis problem in the state is well cared for when compared with other states. That sanatoria are provided with more beds per population than other states does not mean, however, that there is not a great deal of follow-up work which should be done. The patient, before he goes to the sanatorium and after he comes back, is sadly neglected in the greater part of the state.

There are in the state only fourteen nurses who are specializing in this form of public health work. Six of them are in New Haven alone where 269 new tuberculosis patients were cared for in 1917. Exposed to the positive cases there were 600 children under fifteen years of age who were cared for by the nurses.

In spite of good sanatoria that give good care there are many patients that refuse to stay. Take the case of Julia V. in New Haven, whose brother had died of tuberculosis. Julia's husband became a patient when already an advanced case of tuberculosis. He was sent to the sanatorium only to refuse to stay there. Shortly after his return he died, and in a month Julia's baby was born. Now Julia has tuberculosis and refuses to stay in the sanatorium. At home she is a constant menace to her two children. The public health nurse is a stern necessity in the care of this class of patient.

The general visiting nurse occasionally does some tuberculosis work when there is no specialized nurse in the field. Not half enough work is done. When one remembers the reports at the time of the draft, telling of numbers of men who were found to have the disease, one realizes that although much has been done, the disease is far from being stamped out. Every community should have a public health nurse whose duty should be to visit the family of each reported case. Whether she spends all her time at this particular work or does it as part of a general nursing program, the work should be done.

Tuberculosis Death Rate.

The tuberculosis death rate is low in Connecticut. In finding the crude tuberculosis death rate for the townships no town except the towns that had an abnormal rate on account of a sanatorium in the place had a rate as high as the 141.6 which is the average for the whole country. This should be a tremendous incentive to further work.

General Visiting Nursing.

The 136 nurses classed under general visiting nurses include the sixteen who are specializing in infant welfare and fourteen who are specializing in tuberculosis work. Of those doing general work, twenty-five are in the rural districts. It is in the rural communities that the visiting nurse can, with good results, include school nurs-

ing with her regular work of giving bedside care to the sick in their homes, and of preventive infant work. This is already done in some of the rural communities, as in Litchfield, Thomaston and Branford. The rural district nursing of necessity has different problems and develops along rather different lines from the work in the congested parts of the city. In several places the nurses are called upon to assist at operations. They also in several towns have built up a pay practice. One nurse, for example, had taken during December \$61.50. This is certainly providing a service that is needed. The great danger is that on account of pressure of work the patients who need to be sought out, the Poles, and Italians, among whom more preventive work should be done, may be neglected.

Hospital Social Service.

Less work is done in hospital social service work in Connecticut than in any other line. Two hospitals and two dispensaries in the whole of the state follow up their patients. These are the Hartford Hospital and Hartford Dispensary, the New Haven Hospital and the New Haven Dispensary. Bridgeport is planning a complete polyclinic which shall have nurses who will be in the dispensary and also will visit the patient in his home. Only by such a connecting link can the hospital or dispensary know that its work is complete. Take, for example, the case of Elizabeth C., ten years old, with heart disease. The doctor forbade her to go to school or to play with the children. He felt the admonition to stay at home would keep the child sufficiently inactive as she lived in a tenement on the first floor. The child did not improve. When the social service nurse called, she found that the child was going up and down stairs as much as she wanted, to friends on the third floor. Immediately the reasons were carefully explained, why Elizabeth should not go up and down stairs. The instructions were followed and Elizabeth's condition improved.

Life Insurance Service.

Nursing service, supplied by life insurance companies to their policy holders is reaching about one-fourth of the people of the state. Considerable of this service is through visiting nurse associations.

Industrial Nursing.

*TABLE 4.

RATIO OF INDUSTRIAL NURSES TO THE NUMBER OF EMPLOYEES ARRANGED BY TOWNS ACCORDING TO THEIR SIZE.

Population of towns	No. of towns	Less than 2,000 employees per nurse	2,000-5,000 employees per nurse	More than 5,000 employees per nurse	Towns less than 1,000 employees	Towns more than 1,000 employees
Under 5,000,	120	3	..	..	..	..
5,000-10,000,	21	2	3	..	5	112
10,000-15,000,	10	..	3	..	6	10
15,000-25,000,	8	3	1	2	4	3
25,000-75,000,	5	..	2	3	..	2
75,000-160,000,	4	1	3	..	..	..
Total,	168	9	12	5	15	127

*State Department of Factory Inspection.

Map number 3 shows in the black areas the industrial centers where there is one nurse for 2,000 employees.

There are ninety-nine nurses doing industrial nursing in the state, of whom eleven are not graduate nurses. The work of a nurse in a factory is altogether too responsible for an undergraduate.

It is difficult to say how many employees a nurse can care for, depending as it does upon the answers to these questions: First, how much first aid work does she need to do? Second, how much need is there for rest rooms, lunch-rooms, day nurseries, etc? Third, how much need is there for social service work in the homes of the employees? Fourth, how much do the employers recognize the needs of their men and how much do they feel responsible for their well-being?

Cheney Brothers, in South Manchester, with about 4,000 employees, employ three nurses, while Scovill's, with their 13,000 employees, also employ three nurses. In the first instance, a long established firm has developed a system of health care that is partly supported by the employee and partly by the employer. The family of the employee also benefits from the Cheney Brothers' Benefit Association. In the other case, a concern whose numbers are increasing with the great war orders, has established so far only a first aid hospital.

I was unable to visit more than eight of the plants which employ nurses, so the examples I cite refer only to those I visited although there are others which are doing interesting work.

In large plants, the first aid work is often very heavy, and is under the direction of a full time physician, as at Winchester's in New Haven, or the American Thread Company in Willimantic. The Remington

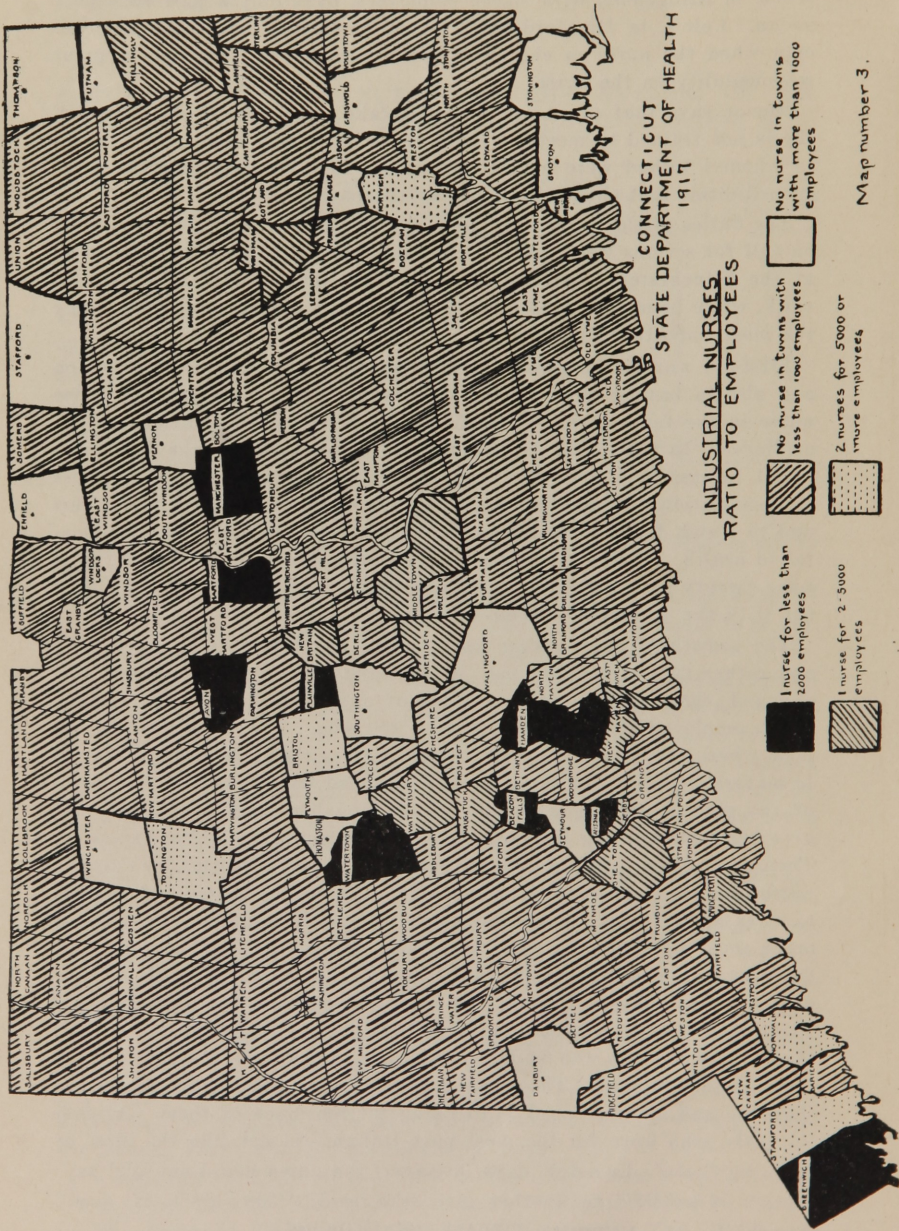
Arms, in Bridgeport, with 13,000 employees, have only a part time physician. Colt's, in Hartford, with 14,000 employees, only calls a physician when the nurse in charge thinks it necessary. This puts a great responsibility on the nurse.

Rumor says that often a nurse will take upon herself duties which she is not trained to meet. I could not confirm this rumor. All nurses to whom I talked were not at all anxious to take upon themselves responsibilities that should be taken by the physician.

The duties of the nurse vary from simple first-aid work, with a doctor on call for serious work, to elaborate hospitals with full time doctors as at the Winchester Repeating Arms Co., in New Haven. The first-aid work, while being the most obvious duty of the nurse, is far from being the most important duty.

First-aid work is invaluable in keeping down the chances of infection and also in having data for the "Workman's Compensation," but the nurse in the factory can do much more to better the conditions of the employee. In one of the large cotton mills, for instance, the nurse was asked to inspect the factory and generally to oversee the cleanliness and sanitation. In another instance, the nurse was asked to do this and to watch for any conditions in the factory that might be detrimental to health. It was after this that she was able to have the chairs of some twenty girls changed, so that instead of facing the windows they sat with the windows at their left.

The growth of the nursing work in one small factory is interesting and rather typical of what may be accomplished. When the nurse was engaged, there was no welfare work of any kind done in the factory which employed about 160 women and 250 men. The nurse went to the floor where the women worked. There were girls of from 16 years old to mature women. For three days she sat and waited, hoping that some of the girls would speak to her, recognizing her nurse's uniform, and give her some opening to assist them. For three days nothing happened. Then one of the girls fainted. When she revived, she confessed to the nurse that she came every morning without breakfast as she had to start to work at half past six and did not have time to light the stove fire in order to do any cooking. The nurse soon discovered that some fifty of the women were coming to work either with no breakfast at all or with only a cup of coffee. To meet this need she started a ten o'clock lunch. The girls were allowed ten minutes to get a cup of cocoa and some toast. Charge of five cents was made for the cocoa, and they could eat as much toast as they wished. The nurse would not give them coffee or tea, as they one and all were used to drinking far too much of them. At first the girls, who were for the most part Italian, did not like the idea of drinking cocoa. In a few days, however, the nurse heard one girl say: "Ain't it swell?" to another girl who said: "My ain't it swell, though?"



CONNECTICUT
STATE DEPARTMENT OF HEALTH
1917

INDUSTRIAL NURSES
RATIO TO EMPLOYEES

- No nurse in towns with more than 1000 employees
- 2 nurses for 5000 or more employees
- Nurse for less than 2000 employees
- Nurse for 2-5000 employees
- No nurse in towns with less than 1000 employees
- 2 nurses for 5000 or more employees

Map number 3.

This was the beginning of work which has extended during the past two years to include a lunch room where noon-day meals are served to both men and women in separate dining rooms. There is a rest-room with magazines, a victrola, and one or two couches. The first-aid room is small and seldom used as the machinery is well safeguarded. A day nursery was added when it was found that a number of married women were employed who had small children whom they left with neighbors while they were at work. The dangers of having married women seek a job where their children would be well cared for, was early recognized and a rule was made that a woman should have to work for at least a month before she could make use of the nursery.

The nurse has been able to counteract some of the effects of old-fashioned "charity." One Italian woman, thirty-five years old, was left a widow with six children, all under fourteen. She received nine dollars a week from the factory and part of the rent of her airless attic from the Associated Charities. Some groceries were given each week by the city authorities. The nurse found the woman worried, undernourished, but determined to keep her family from being scattered. She visited the woman's home and then called upon each of the relief agencies, ending up with procuring a raise in the woman's wages in the factory. Now the woman's family is clothed and well, and she herself is buxom and happy. To be sure, a widow's pension would have saved all this complicated machinery and would have gone farther and done better by paying the woman to stay at home and care for her children. However, the family is now intact and all have enough food and clothing.

Thirty-two of the ninety-nine nurses doing industrial nursing visit in the homes of the employees. The influence that a nurse can have is measured only by the ability of the nurse. Where the first-aid work is heavy, the nurse cannot leave the factory. Under such conditions she should have an assistant. In some factories the nurse visits the absentees. In others she visits also any other employees whom she can help either by nursing care or advice. The Winchester Repeating Arms Company has a system of home visiting that seems to work well. On the third day of absence, an employee is visited. If actual bedside care is needed the patient is referred to the New Haven Visiting Nurse Association which then takes care of the patient.

The only company that has an established plan for home care of sick employees is Cheney Brothers, in South Manchester. The Cheney Brothers Benefit Association is managed by a joint board of employees and employers. The company gives an initial physical examination to every applicant for employment. Each employee can, upon payment belong to the Benefit Association which provides nursing and medical care to each employee who belongs to the association and to any members of his family.

Lunch rooms and rest-rooms should surely be encouraged in factories. Day nurseries should be installed in any place only as a last resort. They make it altogether too easy for mothers to go to work. If, in spite of all that can be done, the mothers must work and a day nursery is started, it should be very carefully supervised. One day nursery that I was able to visit, was the gift of the company to those of its employees who wished to use it. The house had been supplied by the firm, and the order of Catholic nuns who lived several miles away undertook to run it. When I saw the nursery it was one of the coldest days this winter. The woman who had charge of the cleaning of the house, in return for the right to live in the house, was the only grown-up person to be seen. She was busy down stairs cleaning the stove, while upstairs four children from three to seven years of age were in charge of a child of thirteen. The place was bare of games, or any sort of amusement, and was frightfully cold although the stove down-stairs was making the lower floor comfortable. In contrast to this nursery was another in one of the mill towns in Plainfield. This nursery has been given by the mill for the care of its employees' children. There was a woman in charge who had been selected with great care, and the place was properly furnished and warm. A day nursery is for the protection of the children whose mothers have to go into industry. It is no protection to give them inadequate care under the cloak of philanthropy.

Summary.

There are 282 public health nurses in the state. The 136 general visiting nurses include sixteen who are engaged in infant welfare work, of whom two do pre-natal nursing, fourteen in tuberculosis work, and five in hospital social service work. Fifty-one are doing school work, four of them giving only part time. Ninety-nine are doing industrial nursing.

As map Number 1 indicated, only fourteen of the 168 townships have one nurse for less than 5,000 population. New Haven, which is in this class, and is better provided with public health nurses than any other of the large cities, does not feel that it has enough nurses to care for all the patients it should. Although they have six nurses who do nothing but the tuberculosis work, they report that the field is not thoroughly covered. The preventive work in the families of their tuberculosis patients cannot be cared for as it should be. There is need for more pre-natal and infant welfare work.

If this is so in New Haven, how much more could an increased number of public health nurses be used in the fifteen townships where there is one nurse to every five to ten thousand population. There are twelve towns that have one nurse who cares for more than ten thousand population. This leaves 127 towns with a total population of 317,526 which have no general visiting nursing at all.

The school nurses number fifty-one, of whom four in the rural communities do general visiting nursing in addition. Fourteen towns have one nurse for each 3,000 pupils, which is a minimum standard, while thirteen have from three to seven thousand children per nurse, a number which allows so little time per child that it is practically impossible ever to do thorough work even in well-to-do communities. Four towns have over seven thousand children per nurse, and 137, with a total school enumeration of 94,110 have no school nursing at all.

More Public Health Nurses Needed.

The State of Connecticut needs 171 more general visiting nurses and school nurses, and 64 more industrial nurses, which are shown in map Number 9, all making 235 more public health nurses. If we have a well organized group of public health nurses distributed throughout the state, when the Health Insurance Law passes there will be ready to hand a machinery for carrying out the nursing clause which is incorporated in the model law, giving nursing to all the employees and their families in addition to the medical care.

Reckoning that a general visiting nurse should be available for every ten thousand population, the map Number 7 was drawn. If a community of ten thousand begins with a nurse, undoubtedly it will need more nurses as the work develops. Map Number 7 shows the minimum number of nurses. On the same map are plotted the school nurses needed, reckoning that no school nurse should have charge of more than 3,000 children. The same map is used for both types of public health nursing because in the rural districts the two functions are carried on by the same nurse. In the country the specialized nurse has no place, if for no other reason than the difficulty of transportation. It is the family nurse who is ready to care for the pregnant mother, the baby, the tuberculosis patient, or the child with measles, who can do successful work in a rural district.

In placing the nurses, two other points were carefully considered. First and most important were the means, or often the lack of means, of transportation. Second, all other things being equal, an attempt was made to have several nurses from a common center rather than to have all the townships have individual nurses working alone. It is a rare type of woman who can do as good work alone in the field as she can do when she comes in daily contact with her co-workers. The arrows indicate the territory to be covered. The industrial nurses are not considered on this map.

In reckoning the number of industrial nurses needed, it was thought that towns with less than 1,000 employees did not need a nurse, as the visiting nurse in the community could be utilized. The above map shows the 64 industrial nurses needed and their distribution. It is a perfectly

feasible plan for small factories to combine and pay the salary of a nurse. This is already being done by the Manufacturers' Liability Insurance Company, whose nurses do first-aid work for about 150 factories in several cities. The same plan could be carried for a broader plan of work for the nurse which could cover the various branches of welfare work.

Nursing Sources.

How can all these nurses be provided? Only the best trained, registered, graduate nurse should be employed in the responsible work of public health nursing. Furthermore, she should have the specialized training in public health work with a well organized association or with one of the public health courses like those given to graduate nurses at Simmons College, or Teachers College, Columbia University. New Haven, Bridgeport, Hartford and Waterbury are giving public health nursing experience to a limited number of pupil nurses. The New Haven and Middletown Visiting Nurse Associations give a course to graduate nurses which enables a nurse in eight months to get a good idea of the problems which she must cope with in her district work. The practical field work is given under their staff of skilled nurses and is supplemented by lectures on social and public health subjects given by five of the leading Yale Medical School professors.

That the State of Connecticut is ready to develop public health nursing cannot be doubted. In the twenty-three townships visited, nine had definite groups who were interested. In three, the money had already been raised to support a nurse. Thirteen already had nurses. One of the thirteen was just starting a second welfare station. Only one town was apathetic. The opposition to public health nursing seemed to be the aftermath of an unqualified nurse who, although a graduate, had tried to do the work with no training in public health work and had ignominiously failed.

A public health nurse under the State Commissioner of Health would be of invaluable service in encouraging, directing and helping these communities who are so anxious to go ahead with public health nursing, but have so little knowledge in the subject. This expert advice could easily be given to them by a state Supervisor of Public Health Nursing.

Recommendations.

1. There shall be appointed a public health nurse who shall be directly responsible to the State Commissioner of Health. She shall be a graduate, registered nurse with experience in public health work.
2. Her duties shall be: (a) To encourage communities to organize for the support of public health nurses where such an organization has not before existed. (b) To advise with associations or individual nurses

already in the field as to the development of their work, especially in the line of child-welfare and tuberculosis work.

3. The first nurse as her work increases shall be given assistants, with the same qualifications for the work as she has, who shall, if the work justified it, be four in number, one for each of the sanitary districts. The first nurse shall supervise and direct the work of the assistants. X

4. It would be advisable for the State Department of Health to have moving pictures of public health nurses at work which could be used through the state in connection with lectures on public health nursing. Slides for stereopticon could be provided for use in those places where it might be impossible to use moving pictures.

5. It would be further advisable to have an Infant Welfare Exhibit owned by the state which could be sent about the state wherever it might be thought expedient to use such an exhibit. This method of publicity has been used successfully at county fairs, bazaars or similar meetings.

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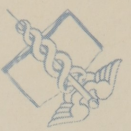
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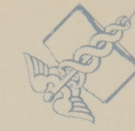
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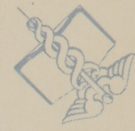
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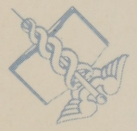
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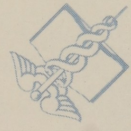
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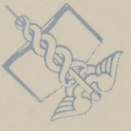
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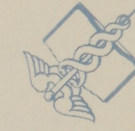
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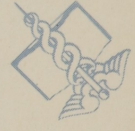
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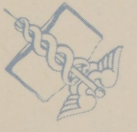
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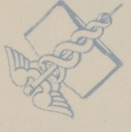
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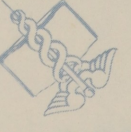
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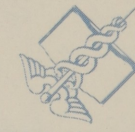
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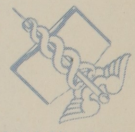
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