



Preliminary - Not for distribution

HEALTH SITUATION OF  
AGRICULTURAL MIGRANTS

Summaries of health data from a number of studies have been brought together in the following report. Most of the summaries are based on published material.

November 1954

## California

### Diarrheal Disease Study, 1950

#### 1. General background

Counties of San Joaquin Valley have shown consistently higher infant mortality rates from diarrhea and enteritis than the State as a whole. Migrant group has been particularly affected. Deaths from diarrheal disease were almost exclusively among children, chiefly between six months and two years of age.

Study was planned as a normal population survey to measure the prevalence of Shigella and Salmonella infection. Arrangements were made to utilize the personnel and facilities of various interested health agencies. Thus the application of results of the study would be facilitated since local personnel already had the motivation and the budget but lacked the facts for starting a local control program. Local, State and Federal health agencies shared responsibility for the investigation.

#### 2. Period covered

July-December 1950.

#### 3. Area covered

Farm labor camps, fringe areas of cities and towns, and housing projects in Fresno County.

#### 4. Population covered

Families selected for study were classified primarily according to nature, location, and ownership of their living quarters. They included the following groups, in each case with 80 to 90 percent cooperation from all resident families.

- (1) Families living in labor camps owned by growers or community organizations and located in or near farming districts. This housing ranged from clusters of shacks or tents with a minimum of sanitation to well-built, small homes with adequate sanitary and related facilities. Pure water was available in all, but the distribution system ranged from a few public faucets in the poor camps to complete bath and kitchen in the better camps.
- (2) Families living in town-fringe areas where housing was usually owned by occupants. Because of their low income it was crowded together and of poor construction. Sewer lines were lacking. City water was available to all through community faucets or in individual homes.

## California

- (3) Families living in housing projects. Housing was well built, as a rule, and usually had good plumbing in each unit.
- (4) In addition, low-income families bringing their children to the child health conferences operated by the County Health Department were studied for a short time.

## 5. Publications

Watt, James; Hollister, A. C., Jr.; Beck, M. D.; Hemphill, E. C. Diarrheal Diseases in Fresno County, California. Jour. Am. Pub. Health Assn. 43:728-741. June 1953.

Stein, W. F.; Beck, M. D.; Hollister, A. C., Jr.; Mortenson, Earl. The Organization and Operation of a Study of Diarrheal Disease in Fresno County. California Medicine Vol. 75. Aug. 1951.

Issler, Anne. Something for the Joads. The Survey LXXXVIII: 199-203. May 1952.

6. Summary of findings (No analyses were made of data on Salmonella. Salmonellosis was both relatively and absolutely a minor part of the problem.)

Survey cultures in four population groups with prevalence rates for the Genus *Shigella*, Fresno County, July-December 1950--

<u>Population group</u>	<u>Total cultures</u>	<u>Shigella</u>	
		<u>No. positive</u>	<u>Percent positive</u>
Camps	3,624	222	6.1
Towns (fringe areas)	2,574	100	3.9
Housing projects	278	1	0.4
Child health conferences	589	1	0.2
Total	7,065	324	4.6

Survey cultures taken in labor camps and town fringe areas and *Shigella* isolations in each month, Fresno County, Calif., 1950--

<u>Month</u>	<u>Camps</u>			<u>Town Fringe Areas</u>		
	<u>Total</u>	<u>Shigella positive</u>	<u>Per cent positive</u>	<u>Total</u>	<u>Shigella positive</u>	<u>Per cent positive</u>
July	199	15	7.5	273	16	5.9
Aug.	831	24	2.9	981	30	3.1
Sept.	464	14	3.0	425	19	4.5
Oct. <sup>1/</sup>	877	84	9.6	483	27	5.6
Nov.	780	57	7.3	217	1	0.5
Dec.	473	28	5.9	195	7	3.6

<sup>1/</sup> In October there is a large influx of workers.

## California

Age distribution of survey cultures, camps, and town fringe areas separately, and Shigella isolations, Fresno County, Calif., 1950--

Age Group Year	Camps			Town Fringe Areas		
	Total	Shigella positive	Per cent positive	Total	Shigella positive	Per cent positive
-1	532	19	3.6	291	6	2.1
1	455	40	8.8	291	7	2.4
2-4	1,408	86	6.1	934	46	4.9
5-9	1,130	72	6.4	991	40	4.0
10+	97	5	5.2	67	1	1.5

Shigella prevalence found in housing projects and labor camps compared according to availability of water supply and economic status--

Group		Economic status	Water supply	Cultures taken	No. positive for Shigella	Prevalence rate
Plumbing in each housing unit; generally good sani- tation	A	Moderate	In family home	278	1	0.4
	B	Low	In family home	376	8	2.1
Poor housing	C	Low	Out of home- more than 15 persons per faucet	2,182	116	5.3
Poor housing	D	Low	Out of home- less than 15 persons per faucet	1,051	97	9.2

"Probability" of a difference as great or greater being due to chance when comparing

A with B = 0.08 (exact probability)

B with C = 0.01

C with D = 0.0001

Diarrheal disease attack rates per 1,000 per annum by age groups in California camps and town fringe areas (July-December 1950) and in Texas untreated areas (March 1946-February 1948)--

Age Group	California			Texas		
	Observed Person Months Experience	Cases	Rate per 1,000 P. A.	Observed Person Months Experience	Cases	Rate per 1,000 P. A.
-1	1,275	86	809	4,384	222	608
1	1,206	81	806	4,028	263	784

# California

Age Group	California			Texas		
	Observed Person Months Experience	Cases	Rate per 1,000 P. A.	Observed Person Months Experience	Cases	Rate per 1,000 P. A.
2-4	3,264	100	368	10,888	224	247
5-9	4,481	75	201	13,612	68	60
10-14	3,659	35	115	11,036	30	33
15-34	9,056	94	125	31,696	81	31
35+	6,326	88	167	23,462	76	39
Unknown	355	2	—	230	2	—
Total	29,622	561	227	99,336	966	117

Quarterly attack rates for diarrheal disease; adjusted for age; camps and town fringe areas per 1,000 per annum--

Area	All Ages Combined		Less than 10 Years	
	July through September	October through December	July through September	October through December
Camps	67	526	107	913
Town Fringe Areas	303	214	559	455

## California

### X-Ray Survey, Imperial County, 1950

#### 1. General background

Imperial County, an important agricultural area, has long had high tuberculosis mortality rates. This has been particularly true among Spanish-speaking people. After an adequate number of tuberculosis beds were made available in the county, an active tuberculosis control program was undertaken by the local health department with the assistance of other State and local organizations.

#### 2. Period covered

1950.

#### 3. Area covered

Imperial County.

#### 4. Population covered

County-wide survey reached about 73 percent of the population 15 years of age or over--a total of 38,000 persons.

#### 5. Publication

Oechsli, Waldo R., Cohn, Harry, Kroeger, C. B. and Adames, Antonio A. Intensive X-ray Survey for Tuberculosis in a Rural County. California Medicine 75:344-344. Nov. 1951.

#### 6. Summary of findings

##### Confirmatory Films--Imperial County Survey

Number of Imperial County residents in survey	34,345 (exclusive of persons
Number of confirmatory (11x17 inch) films	527 X-rayed whose resi-
Number with X-ray impression of	dence was elsewhere
pulmonary tuberculosis:	than in Imperial Co.)
Minimal pulmonary tuberculosis	169
Moderately advanced	59
Far-advanced pulmonary tuberculosis	<u>28</u>
	256

Of the 256 cases, 68 were ultimately reported as cases of active pulmonary tuberculosis--only four of which had previously been known to the health department.

Of the 51 patients hospitalized in Imperial Valley Tuberculosis Sanatorium, 31 were of Spanish-American descent including 21 born in Mexico, 17 were native-born white, 2 were Filipino, and one a Negro. Nineteen were in some type of agricultural work.

## California

The report comments on problems in tuberculosis control resulting from the ease with which workers from Mexico can cross the border for employment by the day or for business purposes. A spot check of 2,556 miniature X-ray films was taken in Calexico, near the border. Approximately half of the subjects lived south of the border in Mexicali. Abnormalities consistent with pulmonary tuberculosis were noted in 4 percent of the films for this group compared with 2.4 percent for residents of Calexico.

## California

### Agricultural Labor in the San Joaquin Valley

#### 1. General background

Reports during the late 1940's of widespread privation among migratory workers in the San Joaquin Valley led to appointment by the Governor of a 15-person citizens' committee to make an objective study of employment, health, housing and education of farm migrants.

#### 2. Period covered

Data were obtained during 1950. In some cases these were for earlier years.

#### 3. Area covered

The seven San Joaquin Valley counties: Kern, Kings, Tulare, Fresno, Merced, Madera, and Stanislaus.

#### 4. Population covered

Migratory seasonal workers who "generally perform unskilled labor for relatively short periods of time for many different employers scattered over a wide geographic area. ....When accompanied by their families, all physically able members, including children, seek employment."

An estimated 20,000 out-of-state migrants were employed in the San Joaquin Valley in October 1949.

#### 5. Publications

Agricultural Labor in the San Joaquin Valley; Final Report and Recommendations. Sacramento: The Governor's Committee to Survey the Agricultural Labor Resources of the San Joaquin Valley. 1951. 405 pp.

#### 6. Summary of health findings

The report comments on the difficulty of determining the health status of seasonal agricultural workers. "Basic health indices from mortality data, maternal and infant mortality rates, tuberculosis mortality rate, and the general mortality rate cannot be determined for this occupational group because death certificates do not reflect the seasonal agricultural worker status. Nor are accurate population data available for the group as a whole."

Statistical data included in the report compare mortality rates for the State with those for counties with relatively high rates.

## California

Live births and infant mortality, California, San Joaquin Valley area and ten counties with highest infant mortality rates--1948 (By place of residence) (Rates are per 1,000 live births)

Area	Live births	Deaths under 1 year		Deaths under 1 month	
		Number	Rate	Number	Rate
California	239,518	6,858	28.6	5,002	20.9
San Joaquin Valley	29,524	1,086	36.8	636	24.5

10 counties with highest rates:

Imperial	1,941	109	56.2	57	29.4
Tulare	4,014	173	43.1	109	27.2
Kings	1,381	57	41.3	27	19.6
Kern	6,168	247	40.0	144	23.3
Merced	1,886	71	37.6	43	22.8
Riverside	3,957	148	37.4	87	22.0
Fresno	7,171	256	35.7	144	20.1
Venturo	2,731	94	34.4	66	24.2
Santa Cruz	1,265	43	34.0	34	26.9
Solano	3,191	108	33.8	87	27.3

Infant mortality from diarrhea and enteritis--California and selected counties of the San Joaquin Valley area, 1945-1948 (By place of residence)

Cause and area	Number of deaths				Rate per 1,000 live births			
	1945	1946	1947	1948	1945	1946	1947	1948
Total, all causes--								
California	5,978	6,676	7,204	6,858	32.8	30.7	29.5	28.6
San Joaquin Valley	709	817	908	947	41.2	38.3	36.2	38.2
Diarrhea and enteritis--								
California	427	391	499	411	2.3	1.8	2.0	1.7
San Joaquin Valley	101	102	147	152	5.9	4.6	5.9	6.1

Leading causes of infant mortality with rates per 1,000 live births, California and selected counties of the San Joaquin Valley area, 1948 (By place of residence)

	Calif.	Fresno	Kern	Kings	Madera	Merced	Stanislaus	Tulare
Total, all causes	28.6	35.7	40.0	41.3	45.3	37.6	31.3	43.1
Premature birth	10.3	9.3	11.0	10.9	10.3	11.7	11.4	14.4
Pneumonia (all forms) and influenza	2.8	4.7	5.2	10.9	4.1	2.1	3.8	6.2
Injury at birth	3.8	3.5	3.1	0.7	3.1	1.1	2.2	4.2
Diarrhea and enteritis	1.7	6.6	6.5	5.8	9.2	10.1	2.5	5.2
Congenital malformations	4.2	4.7	6.0	3.6	5.1	3.7	6.0	7.0
Other diseases peculiar to first yr. of life	2.8	1.8	4.2	1.4	5.1	5.3	2.8	1.7
All other causes	3.0	5.0	4.1	8.0	8.2	3.7	2.5	4.2

## California

The report comments that factors which contribute to higher mortality from diarrhea include:

1. Poor community sanitation
2. Poor home sanitation
3. Low nutritional and health status of young children (in turn influenced by health and nutritional status of mother, continuing health supervision of the child, and the ability of the family to provide necessary food and care)
4. Inadequate health resources and lack of maximum availability and use of medical resources

Morbidity reports showed 669 new cases of tuberculosis reported in 1949 in the 7 San Joaquin Valley counties--a rate of 72.2 per 100,000 population. The death rate was 30.0 per 100,000. These rates compare with a new case rate for the State of 83.8 and a death rate of 27.0 per 100,000.

## Colorado

### Migrant Farm Labor in Colorado, 1950

#### 1. General background

Study was made under auspices of National Child Labor Committee at request of Governor's Survey Committee on Migrant Labor. Purpose was to study conditions in the State and to make recommendations to the legislature.

#### 2. Period covered

Summer and fall of 1950.

#### 3. Area covered

Areas in Colorado where migrants worked during 1950 season.

#### 4. Population covered

262 families with 1,513 members.

Practically all were Spanish-Americans. They came from 11 States, nearly half from Texas.

Forty percent of those 16 and over spoke only Spanish. Nearly a third were illiterate.

Annual cash income per family averaged \$1,424.

Families averaged 5.7 members. Children 14 years and under made up 44 percent of total group.

#### 5. Publications

Thomas, Howard E. and Taylor, Florence. Migrant Farm Labor in Colorado. New York: National Child Labor Committee. 1951. 116 pp.

#### 6. Summary of findings

##### Housing--

Average sleeping room about 162 feet square was shared by 4.2 persons.

92 percent of families had no means of refrigeration.

13 percent of families had an obviously unsafe water supply; only one-third could be sure of a safe water supply.

Less than 1 in 4 of pit toilets would have passed elementary health inspection.

60 percent of families had no bathing facilities.

##### Health and medical care (data obtained chiefly from interviews with families)--

58 percent of persons covered by survey had no smallpox vaccination; from 80 to 90 percent had no diphtheria, whooping cough, or tetanus immunization.

Of babies born to migrants in last 5 years, one-third were born without a doctor in attendance and two-thirds were born outside a hospital. Infant mortality was nearly twice rate for State.

86 percent of those included in survey had not seen a doctor for past 12 months; 87 percent had not seen a dentist.

## Colorado

### Fort Lupton Health Project for Migratory Farm Workers, 1954

#### 1. General background

Migrant agricultural workers for sugar beet and other crops in Colorado are recruited from among Spanish-speaking people in Texas, New Mexico, and Arizona. Many come from the Rio Grande Valley.

In past years, evidence available from special surveys, local health departments, general practitioners, and other sources has indicated the probability that this group has higher rates of tuberculosis, venereal disease, and other ailments than the general population.

The Fort Lupton project was designed to demonstrate the possibility of providing health services to a large group of migrants through the cooperative effort of the Weld County Health Department, the Colorado State Health Department, and the Public Health Service.

The cooperation of the Great Western Sugar Company, the chief recruiting agency for the area, was essential to the project. A sociologist from the Colorado University Medical School acted as consultant.

Attendance by migrants at the clinic operated at Fort Lupton was entirely voluntary. About 1 in 3 of the approximately 9,000 migrants passing through the area came to the clinic.

#### 2. Period covered

Early April to September 1954.

#### 3. Area covered

The project centered at the clinic at the Fort Lupton reception center. A large proportion of the migrant farm workers who were later assigned to work on farms in eastern Colorado, Nebraska, Wyoming and Montana came to this center for their work assignments. (The center was operated by the Great Western Sugar Company during the first part of the season.)

Follow-up operations were continued in the areas to which workers were assigned.

#### 4. Population covered

Spanish-American migrants, recruited chiefly in Texas. Some were from Arizona and Mexico. A small proportion were Mexican Nationals brought in under contract from Mexico.

About 3,000 persons including workers and their dependents came to the clinic during the season. This represented about one-third of the total number passing through the center.

Colorado

5. Publications

A report of the project is now being prepared.

A film based on the center's operation is also in process of preparation.

Florida (See similar study for New York)

Migratory Farm Labor Study, 1952

1. General background

Florida is "home base" in terms of where seasonal work starts each year for many southern Negro migrants. Thousands come into the State each fall and start the long trek back northward each spring when the winter harvests are over.

2. Period covered

1952.

3. Area covered

Pahokee and Belle Glade areas in Palm Beach County.

4. Population covered

Southern Negroes living in camps and in their own homes. A total of 673 households and 1,866 individuals were included. Of the 1,866 individuals, 1,285 were workers.

5. Publication

In process of preparation by the Agricultural Research Service, U. S. Department of Agriculture.

6. Summary of health findings based on data obtained from respondents for working days lost from illness and related causes during the year preceding the date of the interview:

An average of 8 working days were lost per worker because of illness and related causes. (This is an understatement of the volume of illness among workers since it does not take account of illness during the slack season when no work is available.)

## Michigan

### Migratory Beet Workers in Michigan, 1939-41

#### 1. General background

Thousands of Spanish-Americans are recruited in Texas to work in Michigan sugar beets. During 1941, more than half came from the community of San Antonio. Others came from the so-called "winter-garden" area in south Texas. In 1939 they made up 56 percent of the total number of beet workers in the State with Michigan residents making up 39 percent.

#### 2. Period covered

Field interviewing was done in 1939, 1940 and 1941.

#### 3. Area covered

Michigan areas in which data were available from health units or sanatoria concerning health problems of beet workers.

#### 4. Population covered

Spanish-American beet workers examined for tuberculosis in Texas as part of the process of recruitment for work in Michigan. General information was obtained from local health units as well as from examination center records.

#### 5. Publications

Thaden, J. F. Migratory Beet Workers in Michigan. Spec. Bull. 319. East Lansing: Michigan State College. 1942. 47 pp.

(Other publications referred to in Dr. Thaden's report:  
Newitt, A. W. and Koppa, T. M. Tuberculosis in Mexican Agricultural Laborers. Paper read before the Epidemiology Section of the American Public Health Association, Detroit, Oct. 9, 1940.

Beet Growers Association Cooperates for Third Year in X-ray Examinations of Mexican Field Workers. Michigan Public Health 29: 46. Mar. 1941.

Gray, John. Diphtheria Outbreak in Large Migrant Labor Colony Brought Under Control by Swift Action. Michigan Public Health 29:173-175. Sept. 1941.)

#### 6. Summary of findings

Through arrangements between the Michigan Commissioner of Health and the Texas State Health Department, a health examination center was set up in San Antonio in April 1939. At the examination center, applicants for sugar beet work in Michigan were screened for tuberculosis with the following results:

Summary of findings (cont'd)

<u>Year</u>	<u>Number examined</u>	<u>Number rejected</u>
1939	4,271	101
1940	5,753	156
1941	7,597	201
1942	14,462	204

(Center was operated at Dallas  
in addition to the one at San Antonio)

Outbreaks of typhoid fever and diphtheria were reported by local health workers in several counties.

(Note: X-raying workers in Texas was declared unconstitutional by an attorney general's decision. Some Michigan counties have continued TB case-finding on an annual basis. One X-ray unit is reported to be owned jointly by five counties.)

## New Jersey

### Venereal Disease in Agricultural Migrants, 1953

#### 1. General background

An estimated 16,000 migrant agricultural workers enter New Jersey annually. Approximately 6,000 are southern Negroes who begin to appear in New Jersey in June. The peak is reached in August. Most have left the State by September.

The average age is approximately 30 years. Some travel with complete or partial family units and some travel singly.

A New Jersey law enacted in 1945 requires that any migrant worker who cannot provide satisfactory evidence of examination for venereal disease within 90 days before coming to the State must submit to an examination within 30 days after entry. Employers are required to notify the State Department of Health as to whether or not their workers have been examined.

During the 1953 crop season, 4 clinics in permanent locations and 1 mobile clinic were available for the examination and treatment of farm migrants. Ten clinic sessions were held each week during the peak period. They were scheduled from 7:30 until 10:30 in the evening. Clinics were staffed by physicians, nurses, technicians, venereal disease interviewer-investigators, and clerks. An attempt was made to visit each farmer employing migrants and tell him the exact time and place that a given crew was expected to attend the clinic.

#### 2. Period covered

July 17 through September 9, 1953.

#### 3. Area covered

Points in New Jersey located strategically for contacting large numbers of farm migrants from the South. Permanent clinics were at Orchard Center-Gelston Village, Freehold, and Prospect Plains. The mobile clinic moved from one centrally located place to another.

#### 4. Population covered

Thirty-four hundred of the approximate 6,000 southern Negroes working in New Jersey during the 1953 season.

#### 5. Publications

Shepard, Adele C. and Page, William J. Venereal Disease in Agricultural Migrants. Pub. Health Repts. 69:831-835. Sept. 1954.

## New Jersey

### 6. Summary of findings

Patients were examined according to policies set by the bureau of venereal disease control. All persons over 12 years of age were tested serologically for syphilis. Some compromise in examination and diagnosis was inevitable "due to the large numbers of patients processed during short clinic sessions and to the transient nature of the group."

Nearly 65 percent of the individuals tested were under 35 years with the greatest number in the 15-24 age group. Of the 3,401 persons surveyed, 19 cases of primary and secondary syphilis, 135 cases of early latent syphilis, and 198 cases of gonorrhea were found.

Of 3,170 blood tests on which complete data are available, 799, or 25.2 percent, were reactive for syphilis. Using the Mazzini test, 444, or 13.1 percent, were distinctly positive.

Follow-up was carried out within 36 hours after testing. Follow-up was by the same person who referred the migrant to the clinic for initial examination. Practically all persons who had positive tests for syphilis were returned for examination. Those who had left the State were referred to out-of-State health departments for investigation.

Of the 608 cases of venereal disease treated in all clinics, 356 were communicable or potentially so. Single-treatment schedules were recommended because of the unique follow-up problem introduced by the mobility of migrant labor.

The mobile clinic proved to be more effective than the permanent clinics in reaching the migrant group.

Migratory Farm Labor Study, 1952

1. General background

Operators of all labor camps housing 10 or more persons are required to register with the health department before each crop season opens. In 1948, registration records showed 429 worker camps open for an average of 85 days compared with 551 camps open for an average of 100 days in 1952. In 1953, the number of camps increased to 656, housing about 21,000 persons.

Migrant workers housed in camps of less than 10 persons probably numbered at least several thousands. These workers were not covered by the study.

Southern Negroes are the most numerous group among migrant workers from outside the State.

2. Period covered

The survey was made in three parts:

Early season - June 1952 - covering 15 camps

Midseason - August-September 1952 - covering approximately 40 camps

Late season - October 1952 (no information as to coverage obtained)

3. Area covered

Early season survey covered camps in 6 western New York counties: Erie, Orleans, Genesee, Wayne, Cayuga, and Steuben.

4. Population covered

Only camps housing Southern Negroes were included. A list of all Negro camps in the six counties with the number of persons in each camp was obtained. Camps to be surveyed were selected objectively from the total number listed. Fifteen camps with a total of 180 households and 359 workers were surveyed during June.

1 out of 4 households was interviewed in the large camps and all households were interviewed in the small camps.

The number of persons per household ranged from 1 to 12. About 1 household in 7 had 5 or more members. Single persons accounted for more than 1/5 of total and 2-person households for 2/5.

One-fourth of the 360 persons included were under 14. Two-thirds were between 18 and 44.

Florida was the State of origin of most of the workers in terms of where they had started to work during the 1952 season.

Earnings for all workers above age 9 and for both sexes averaged \$1,220 per worker for entire year preceding interview.

5. Publications

Motheral, Joe R., Thomas, Howard E. and Larson, Olaf F. Migratory Farm Workers in the Atlantic Coast Stream, Western New York, June 1953.  
Mimeo. Bull. 42. Ithaca: New York State Coll. of Agr. 30 pp.

This report covers only the early season study and is primarily concerned with its economic aspects. So far it is the only report published.

A later report will deal primarily with the health aspects of the entire study, including data from all three seasonal surveys. It will provide information about maternal and child health including the number of babies born, number of stillborn, number of infant deaths, prenatal care, and related data.

6. Summary of health findings from early season study based on data obtained from each respondent for working days lost from illness and related causes during the year preceding the date of the interview.

Illness and related causes were given as the reason for not working for an average of 15 days per worker during the past year. (Days of illness during the slack season where work was not available are not taken into account in this figure.)

Male workers from 25 to 34 years of age lost an average of 6 days per worker. Those past 45 lost an average of 20 days per worker.

Female workers from 20 to 24 lost 44 days per worker; those past 45 lost an average of 31 days.

(Note: Number of days lost by absences from illness or injury lasting one day or longer among employees of a group of plants in Tennessee during 1944-47, averaged 8 days per male worker and 13 days per female worker.)

## New York

### Data on tuberculosis case-finding among migrants from reports of Interdepartmental Committee on Farm and Food Processing Labor

#### 1. General background

Tuberculosis case-finding among migrants was first done through occasional examination of those with symptoms suggestive of tuberculosis. In 1945 mass x-ray surveys of everyone over 15 years of age were started in the farm labor camps.

#### 2. Period covered

1945-49 crop seasons.

#### 3. Area covered

Mass chest X-ray surveys were carried on chiefly in the counties with the greatest number of camps: Chenango, Madison, Herkimer, Oneida, Cortland and Wayne.

#### 4. Population covered

Workers in the surveyed camps were chiefly Southern Negroes or white people from Pennsylvania and West Virginia.

#### 5. Publications

Report of New York State Interdepartmental Committee on Farm and Food Processing Labor for 1949; New York's Harvest Labor, Report Covering the Five Year Period 1943-48.

#### 6. Summary of findings

##### Chest X-ray Surveys, 1945-49

<u>Year</u>	<u>Number of workers X-rayed</u>	<u>X-ray findings</u>				
		<u>Tuberculosis</u>			<u>Other lung</u>	<u>Heart</u>
		<u>Active</u>	<u>Inactive</u>	<u>Suspect</u>	<u>conditions</u>	
1945	2,688	12	9	10	72	7
1946	3,293	12	5	5	71	14
1947	2,709	9	3	12	30	8
1948	3,878	12	22	2	71	18
1949	4,291	15	6	12	-----71-----	

(According to 1949 report, the greatest prevalence of chest conditions was found among those 35 years or over. This group comprised only 36 percent of the camp population but had over 75% of the tuberculosis and 86% of the non-tuberculous chest abnormalities.)

## New York

The earlier report commented on the difficulty of follow-up since by the time the films were interpreted and the case investigation was begun the workers had moved, their contacts had scattered throughout the various camps, and it was impossible to locate them promptly. This situation improved with the cooperation of employers and crew leaders.)

## Ohio

### Preliminary Study of Health Problems of Migratory Farm Laborers, 1954

#### 1. General background

An estimated 7,000 to 12,000 migrants work in northwestern Ohio during the crop season. Health commissioners were being asked to deal with the health problems arising from this influx of workers but little factual information was available. This study was to determine "If and how the problems of study should be approached" in order to define the problems more precisely.

#### 2. Period covered

1954.

#### 3. Area covered

Five selected counties in northwestern Ohio.

#### 4. Population covered

Ohio migrants are chiefly American citizens of Mexican descent. Most come from Texas with some from other southern States.

Approximately 850 individuals of all ages were interviewed and various types of examinations were performed.

#### 5. Publications

A report is being prepared for publication in the near future.

## Texas

### The Wetback in the Lower Rio Grande Valley of Texas, 1949

#### 1. General background

The Southwest Council on the Education of Spanish-Speaking People has long pointed out the relationship between the presence of large numbers of illegal aliens -- "wetbacks" and the persistence of problems in health, education, employment, and discrimination against Spanish-speaking citizens. This study was to help meet the need for factual data about the situation.

#### 2. Period covered

1949.

#### 3. Area covered

The Lower Rio Grande Valley. Health data chiefly for Hidalgo County.

#### 4. Population covered

Comparisons were made between mortality rates for Spanish-speaking and non-Spanish-speaking residents of county.

#### 5. Publications

Saunders, Lyle and Leonard, Olen E. The Wetback in the Lower Rio Grande Valley of Texas, Inter-American Education Occasional Papers VII. 1951. Austin: Univ. of Texas. 1951. 92 pp.

#### 6. Summary of health findings

Total deaths by age at death for the non-Spanish-speaking and Spanish-speaking populations of Hidalgo County, 1949

Age group	Non-Spanish-speaking		Spanish-speaking	
	Total deaths	% of all deaths	Total deaths	% of all deaths
Birth to 1 wk.	16	7.1	185	13.4
1 wk. to 1 yr.	13	3.6	476	34.6
1-4 yrs.	3	0.8	158	11.5
5-14 yrs.	5	1.4	30	2.2
15-34 yrs.	18	4.9	146	10.5
35-64	106	29.0	218	15.8
65 and over	125	53.2	165	12.0
Totals	366	100.0	1,378	100.0

TexasNon-Spanish-speakingSpanish-speaking

Percentage of all deaths in each age group from specified cause

	Birth to 1 week	1 week to 1 yr.	1-4 years	5-14	15-34	35-64	65 and over	Birth to 1 week	1 week to 1 yr.	1-4 years	5-14	15-34	35-64	65 and over
Tuberculosis	-	-	33.3	-	-	-	-	-	-	-	13.3	21.9	17.0	4.9
Diarrhea <u>1/</u>	-	38.8	-	-	-	-	-	-	49.2	46.2	6.7	-	-	-
Cancer	-	-	-	-	-	11.3	11.3	-	-	-	-	3.4	11.5	10.9
Heart Disease <u>2/</u>	-	-	-	-	33.3	57.4	61.5	-	-	-	-	7.5	24.8	40.6
Pneumonia & influenza	-	15.4	-	-	-	-	4.6	8.4	21.2	15.7	10.0	-	3.2	10.3
Birth inj. & infections <u>3/</u>	100.0	7.7	-	-	-	-	-	64.9	3.4	-	-	-	-	-
Accidental death	-	7.7	33.3	60.0	33.3	6.6	3.1	-	-	7.0	30.0	35.6	18.8	-
Malnutrition	-	15.4	-	-	-	-	-	3.8	8.8	5.1	-	-	-	-
Total deaths in each age group	26	13	3	5	18	106	195	185	476	158	30	146	218	165

1/ Includes dysentery, enteritis, gastritis, duodenitis, colitis.2/ Includes vascular lesions affecting central nervous system, chronic heart disease, arteriosclerotic and degenerative heart diseases, hypertension with heart disease, other diseases of the heart, cerebral hemorrhage.3/ Includes congenital malformations, postnatal asphyxia, atelectasis, prematurity.

(Note: Author comments "that it must be admitted that the reporting of deaths, and especially of infant and child deaths, is by no means always based on accurate and detailed diagnosis..." but that "there is no reason to doubt that such reporting is sufficiently accurate to depict the general mortality pattern for an area.")

Texas

General observations on health conditions in the Rio Grande Valley:

In 1948, one-seventh of all the dysentery reported for the State was in Hidalgo and Cameron counties which together make up about one-thirtieth of the State's population.

The Valley has far more than its proportionate share of tuberculosis, diphtheria, malaria, meningitis, polio and typhoid.

Death rate among Spanish-speaking is between one and a half and two times than of the non-Spanish-speaking group.

Texas

Disease rates: 1952

Cases Reported per 100,000 Population

Disease	Entire State	11 border counties <u>1/</u>	Cameron and Hidalgo counties
Tuberculosis	56.9	120.8	137.4
Gonorrhea	267.2	349.5	473.4
Syphilis	89.4	185.1	272.1
Shigellosis (bacillary dysentery)	197.2	1,057.9	1,059.9
Amebiasis (amoebic cysentery)	6.5	37.8	74.3

1/ 11 border counties are: Brewster, Cameron, Dimmit, El Paso, Hidalgo, Hudspeth, Maverick, Starr, Terrell, Val Verde, Webb.

(Data appear in "What Price Wetbacks?" published by American G.I. Forum of Texas and Texas State Federation of Labor (AFL), Austin, Texas. Source given is Texas State Health Department.)

## Texas

### The Work and Welfare of Children of Agricultural Laborers in Hidalgo County, Texas, (1941)

#### 1. General background

Hidalgo County in the lower Rio Grande Valley is an important specialized farming area where large numbers of children were known to be employed in agriculture. Many of the families migrated to other parts of the State during the late summer and fall when field work in the Valley is at a minimum.

Most of the families interviewed were of Mexican descent although many of the children were born in the United States.

#### 2. Period covered

Winter vegetable harvesting season, January 15-March 28, 1941.

#### 3. Area covered

Certain blocks in five small towns and certain open country settlements in Hidalgo County, Texas. Areas were selected with the advice of various governmental and other agencies familiar with the county.

#### 4. Population covered

Households were included which had one or more children between the ages of 6 and 18 if either the "economic head of the family or any of the children of these ages had been engaged in agricultural labor for hire on at least 5 calendar days since December 1, 1940."

342 families with 998 children between 6 and 18 met criteria for inclusion in the survey.

#### 5. Publications

Warburton, Amber Arthun, Wood, Helen and Crane, Marian M. The Work and Welfare of Children of Agricultural Laborers in Hidalgo County, Texas. Washington: U. S. Children's Bureau, 1943. 74 pp.

Simons, Savilla Millis. A Study of Child Labor in Industrialized Agriculture in Hidalgo County, Texas. The Social Service Review XVI:414-435. Sept. 1942.

#### 6. Summary of findings (health findings only)

Housing: Generally overcrowded, crudely constructed, often with dirt floors. Drinking water often from irrigation ditch or other contaminated source. Typical toilet facilities were shallow privies, usually of ramshackle construction from tin, old lumber and cardboard.

## Texas

Physical examination and clinical findings:

83 children from 6 through 12 in 55 families were included in the health survey.

21 children had conditions classified as calling for immediate medical care. Several had more than one such condition.

<u>Condition</u>	<u>Number of children</u>
Skin infections or abscesses	6
Otitis media (acute or chronic)	6
Markedly impaired vision	6
Significant lung findings	5
Conjunctivitis	3
Temperature of 101.5 degrees or over	2
Positive Kahn test	1

(None appeared acutely ill. To superficial examination they appeared well. Yet each had one or more conditions that without suitable treatment would lead to serious infection or permanent handicap.)

27 additional children had other conditions for which medical care was considered to be indicated but not urgent. Such conditions included heart murmurs or significant heart findings (18 children); impacted cerumen, one or both ears (9 children); markedly enlarged tonsils (8); elevated temperature (4); urogenital abnormalities (4); poor nutrition (4); perforated eardrum (1); moderately defective vision (3); etc.

There were only 8 girls and 6 boys who did not need any type of medical care or observation but a total of 35 (about two-fifths of the total group) were in good physical condition except for minor findings.

31 children were in urgent need of dental care.

Among the 83 children surveyed, there were 166 illnesses during the preceding year with 27 cases attended by a physician. Illnesses included 102 cases of influenza; 10 of cold and/or tonsillitis; 9 contagious disease cases; 6, otitis media; 6, abdominal pain; 6, undiagnosed fever; 7, diarrhea; and 20, other conditions including malaria, convulsions and a variety of ill-defined complaints.

Among the 240 children, 25 had had diarrhea attacks during the year preceding the interview. Sixteen percent of all deaths in the county in 1939 were attributed to diarrhea or dysentery.

Well-baby clinics reached few of the 342 families included in the survey.

## Texas

In 278 of the families included in the general survey for whom information was obtained on this point, 1,927 children had been born alive. Twenty-three percent had died before reaching the age of 18. Diarrhea, tetanus, malnutrition, pneumonia, diphtheria, and insect bites were among the causes of deaths reported.

The report suggests "though it cannot be proved, that it was only the fittest of the children...who survived early childhood and, consequently, the children of school age were a selected group better able to withstand the health hazards to which they are exposed than a group of children would be who had been more carefully protected in their early years."

Round-up by State  
of some recent projects to define health needs  
or to extend health services to migrants

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California

A nonresident tuberculosis survey is getting underway

A VD testing project has been undertaken in the Imperial Valley.

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Fresno County's Rural Health and Education Committee has a program which includes well baby and prenatal clinics held in west-side camps under auspices of the health department; medical care clinics held under the auspices of the hospital with a welfare department representative present to determine eligibility of cases for financial assistance. No one is deprived of medical care because of residence requirements. Costs of indigent care are shared by growers, by the county, and temporarily by a Foundation.

Barracks have been converted by several growers into health centers with space for clinics, home demonstration agent, Red Cross home nursing teacher, and adult education workers. Some include general meeting places for movies and other recreation.

Florida

Eleven Florida counties assisted early in 1954 in compiling data on migratory labor camps as a means of indicating the general scope of the labor camp problem.

Illinois

An Illinois canners' group guarantees medical care for their migratory workers. Canners guarantee hospitals and physicians that their workers' bills will be paid. (Some employers expect repayment from workers.) The canners' group is reported to be investigating the possibility of group insurance for migrants they employ during the period while they are in Illinois.

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Hoopeston Migrant Council and Migrant Committee of Northwest Suburban Branch, AAUW, in Des Plaines sponsor services for migrants, including health care.

## Maryland

During the serological testing survey in June 1954 on the Eastern Shore of Maryland, about 6,000 migrants were examined. The positive rate for nonwhites was 18 percent and for whites, less than 1 percent.

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Wicomico County has a low cost maternity care plan which is available to migrants.

## Michigan

A nonresident tuberculosis study is in progress. The study includes agricultural migrants as part of the nonresident population.

A 2-month field survey was made in six Michigan counties during the summer of 1952 to observe living and working conditions as well as health conditions.

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A plan for providing health insurance was introduced on an experimental basis in one Michigan area during 1954.

## Pennsylvania

A trustee of Potter County Hospital reported that for several years the hospital had a large unpaid bill for care of migrants at the end of the season. Recently it was reported that some growers in the area have been pooling funds to help meet this end-of-the-season deficit.

## South Carolina

An Interdepartmental Committee on Migrants has been formed during 1954. Following a survey of labor camps by the State Board of Health, the committee set up a program for the improvement of living conditions. This year the screening of windows and provision for garbage disposal are being emphasized. Under an agreement with growers to build at least one cement block unit in each camp during the next year, the deteriorating living quarters of the migrant laborers will gradually be replaced.

## Texas

During the 5-year period 1949-53 in Hidalgo county, there were 8,590 cases of diarrhea and dysentery occurring in children during the first six years of life, 7,501 of these during the first month. Ninety-eight percent of the cases were in the Latin-American population. One out of five was so severe that hospitalization was required at a cost of \$27,000 a year to the county. In the same period 960 deaths occurred as a result of these diseases, 81 percent during the first year of life.

Five of the border counties provided 18 percent of the live births registered in 1953 and more than half of the diarrheal disease deaths reported in the State.

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A project for detecting and treating syphilis is underway in the Rio Grande Valley.

#### Wisconsin

Door County Medical Society and Wisconsin Anti-Tuberculosis Association in cooperation with other groups have prepared a pamphlet "Salud Amigos" for use with Puerto Rican cherry pickers in Door County. A Chilean nurse has been visiting families with health problems. A special grant for the Puerto Rican program was made available by the Milwaukee Service Club.

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In April 1953, 41 cannery workers were reported to have arrangements with local doctors to guarantee payment for services to workers and their families. Ten camps provided company nurses and 28 offered chest X-rays.

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During 1954, the Wisconsin State Medical Society prepared and distributed "A Guide for Bettering The Medical Care of Migrant Agricultural Workers" to operators of licensed industrial camps in the State.

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Some members of the Wisconsin Cannery Association have arranged for group insurance coverage of their workers.

## United States, 1938

### A Study of Medical Problems Associated with Transients

#### 1. General background

Defining "transient" as "any needy person in any community who is discriminated against in that community's program of material aid or medical care by the adoption of residence and technically related requirements," this study was initiated to determine "the availability of medical assistance and the transients' need for it." It also attempted to determine the influence of transients on community health.

At the time the study was made--in the late 1930's--interstate migration to find work was a major problem in the United States. Few migrated for health reasons only. Among those migrating for economic reasons were agricultural migrants.

#### 2. Period covered

Interviews were conducted during the spring of 1938.

#### 3. Area covered

20 cities and towns distributed over 15 States. The cities and towns were selected to include representative parts of the country with a high concentration of transients and with different types of transients.

#### 4. Population covered

A random sample was taken of all transient applicants for aid in the selected city or town at the time the study was made. A total of 1,893 transient families and 9,040 unattached transients were interviewed.

(Concurrently studies were in progress of agency practice in the 20 cities included, incidence of tuberculosis among migratory agricultural workers in Arizona, incidence of syphilis among transients, practices of hospitals in California, and hospital experience based on records of the Louisville, Ky., City Hospital.)

#### 5. Publications

Blankenship, Charles F. and Safier, Fred. A Study of Medical Problems Associated with Transients. Pub. Health Bull. 258. Washington: U. S. Govt. Print. Off. 1940. 132 pp.

#### 6. Summary of findings

The volume of disabling illness among transients was compared with that found among residents studied in 1932 (Health and Depression Studies).

# United States, 1938

Disabling illness rates (per 1,000 persons for a 3-month period) for interstate family transients and for residents, according to age of individual

<u>Age group</u>	<u>Transients</u>	<u>Residents</u>	<u>Number of persons observed</u>	
			<u>Transients</u>	<u>Residents</u>
Total (adjusted to age distribution of all family transients)	239	137	--	--
Total, crude	239	138	6,395	31,630
Under 5	299	185	913	2,486
5-9	258	196	802	3,641
10-14	195	115	738	3,716
15-19	185	87	643	3,306
20-24	216	88	640	2,538
25-34	217	121	1,153	4,646
35-44	240	132	814	4,678
45-54	286	141	462	3,515
55 and over	291	183	230	3,104
Number of disabling illnesses, all ages			1,525	4,358

Disabling illness rates (per 1,000 persons for a 30-month period) for interstate family transients and for residents classified as to economic status

	<u>Disabling illness rate</u>			
	<u>Transients</u>	<u>Residents</u>	<u>Comfortable</u>	<u>Moderate</u>
Total, adjusted to age distribution of all transients in family cases	239	126	128	154
Total, crude	239	119	128	152

Disabling illness rates for interstate family transients and for residents according to certain broad diagnosis groups (crude rates)

<u>Diagnosis group</u>	<u>Family</u>	
	<u>Transients</u>	<u>Residents</u>
Respiratory	83.7	62.9
Epidemic	41.4	17.7
Digestive	23.0	10.9
Degenerative, nervous, and rheumatic	14.5	24.6
Accidents	12.8	5.5
Puerperal	25.1	13.7
All other	51.2	9.2

## United States, 1938

### Days of hospital care:

Per 1,000 persons--

362 for family transients

575 for "poor" residents

Per 1,000 disabling illnesses--

1,515 for family transients

3,710 for "poor" residents

### Other study findings and conclusions:

"Many migrants have lost all rights to assistance in any State. Others are entitled to receive only 'emergency' assistance, and the majority have no governmental organization to which they can turn for aid. It should be emphasized, however, that the settlement law per se is not the cause but only the statutory method through which transients are made the object of discrimination. Discrimination is equally definite where no such statute exists."

\*\*\*

"One-ninth of all disabling illness experienced by members of transient families (but excluding families headed by persons eligible for Federal hospitalization) was hospitalized, less than a third received only the attention of a physician, and almost three-fifths did not come to medical attention. For similar illnesses residents received 3.2 percent more hospitalization, 21.4 percent more attention by physicians, and some type of care in 24.5 percent more of the illnesses reported."

\*\*\*

"Transients may be found living under all kinds of sanitary conditions. While some transients resemble, in their hygienic surroundings, residents of the same economic status, a greater proportion are forced to exist under almost every imaginable variety of insanitary condition..."

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"As a result of these conditions, a high incidence of typhoid fever and, particularly, of dysentery, occurs among transients, especially among the migratory agricultural workers. ..."

\*\*\*

"No thorough studies of the diets of transients have been made, but a partial one showed that on the basis of milk consumption the diets of transient children are very inadequate. ..."

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"...it was found in one study of the children of migratory agricultural workers that 27.9 percent of them had nutritional and dietary defects, not including dental caries and decalcification."

\*\*\*

"The effect of transients on community health is to increase the hazard of ill health to residents... ..it results chiefly from the fact that transients are not given equal consideration in community programs of sanitation, preventive medicine, and isolation of infectious cases of communicable disease."

## United States

### Migratory Workers' Health Services, 1938-47

#### 1. Background

Low income and mobility of migratory agricultural families made group prepayment plan enrollment infeasible. Residence requirements in localities and States where they worked made them ineligible for local relief and medical services. Individual States felt that the problem was not all theirs.

Recruitment of foreign workers for agricultural employment during the war period presented special problems. International agreements required that medical care be provided to foreign nationals.

#### 2. Period covered

Years 1938-1947. Original program for migratory agricultural families was initiated by Farm Security Administration in 1938. Program for importing workers from Mexico and elsewhere was started in 1943. General pattern developed under FSA expanded in 1943 under Office of Labor of War Food Administration with FSA personnel given concurrent responsibility for Office of Labor program or detailed to Office of Labor.

#### 3. Area covered

Entire United States was covered by six agricultural workers' health associations developed to provide health services to workers travelling in the major migratory streams.

#### 4. Population covered

Requirements for coverage--

- Early in program:
- (1) Employment in agriculture
  - (2) Low-income status
  - (3) Nonresidency and hence ineligibility for local welfare medical assistance

- Starting with 1943:
- (1) Agricultural workers, primarily seasonal, having a contractual relationship with War Food Administration or a State extension service and residing ~~either~~ in farm labor supply centers or private shelters
  - (2) Similar workers with no contractual relationship with WFA or a State extension service but living in farm labor supply centers or private shelters and placed by WFA or a State extension service

1944: Program extended to include workers who, without assistance of any Government agency, migrated into areas served by any farm labor supply center and to whom adequate health and medical services were not otherwise available.

## United States - AWHAs

Number of persons covered ("Foreign" includes transported foreign workers employed and available for employment; number of domestic workers was estimated.)

1943 (May-Dec.)	Foreign	40,000
	Domestic	57,000
	Total	97,000
1944	Foreign	57,000
	Domestic	45,000
	Total	102,000
1945	Foreign	50,000
	Domestic	27,000
	Total	77,000
1946	Foreign	46,000
	Domestic	28,000
	Total	74,000
1947 (Jan.-June)	Foreign	32,000
	Domestic	32,000
	Total	64,000

### 5. Publications (Only a few of those available are listed.)

Mott, Frederick D., Health Services for Migrant Farm Families . Am. Jour. of Pub. Health, vol. 35, no. 4, April 1945.

Mott, Frederick D. and Roemer, M. I., A Federal Program of Public Health and Medical Services for Migratory Farm Workers. Pub. Health Reports, 60:229-249, March 2, 1945.

Mott, Frederick D. and Roemer, Milton I., Rural Health and Medical Care. New York: McGraw-Hill Book Co., Inc., 1948, 608 pp., See pp. 422-431.

Rasmussen, Wayne D., A History of the Emergency Farm Labor Supply Program 1943-47. Agr. Mono. no. 13, Washington: U.S. Bur. Agr. Econ., Sept. 1951, 298 pp. See pp. 190-199.

United States - AWHAS

6. Summary of findings

Cases Receiving Physicians' Care, by Diagnosis, All Associations,  
July 1943 - June 1947

Type	Number of cases	Percent of cases
Infections and parasitic diseases	36,788	8
Neoplasms	1,820	<u>1/</u>
General diseases	3,171	1
Diseases		
Blood-forming organs	685	<u>1/</u>
Nervous system	6,740	1
Eye	14,512	3
Ear	7,120	1
Circulatory system	6,787	1
Respiratory system	98,180	21
Digestive system	50,587	10
Genito-urinary system	13,432	3
Childbirth and pregnancy	5,486	1
Skin	26,199	5
Bones	10,846	2
Congenital malformations	230	<u>1/</u>
Diseases peculiar to the first year of life	689	<u>1/</u>
Ill-defined diseases	36,781	8
Injuries and poisonings	<u>31,881</u>	<u>7</u>
Total illnesses	351,934	72
Examinations and prenatal care	81,823	17
Immunizations	<u>52,306</u>	<u>11</u>
Grand Total	486,063	100

1/ Less than 0.5 percent.

(The following additional data are from unpublished periodic reports of the agricultural workers' health associations compiled in the Labor Branch of War Food Administration:

During the four-year period July 1943 - June 1947, illnesses reported to the Health Services Division averaged 1,085.6 cases per year per 1,000 workers. This compares with an annual average for the United States of 844.5 cases of illness per 1,000 population (CCMC data for 1928-31).

Respiratory diseases

Persistent pharyngitis, influenza and other respiratory infections were found to be associated with the crowded, leaky, poorly-heated, and poorly-ventilated housing accommodations of many workers.

## United States - AWHAS

Workers were unaccustomed to the colder climates of northern United States and failed to provide themselves with proper clothing.

One serious outbreak of respiratory disease occurred at Manchester, Ga., where 15 percent of all camp residents were stricken with influenza in June 1945.

### Digestive diseases

Chiefly diarrhea and dysentery caused by lack of safe and adequate water supply in some quarters; lack of safe and adequate milk supply; poor refrigeration. Intestinal parasites were prevalent among foreign workers.

### Infectious diseases

Emphasis on preventive medicine led to lower incidence of most infectious diseases among farm workers than among the general population. However, West Indian workers were particularly susceptible to communicable diseases.

Two-thirds of all infectious diseases were venereal diseases, frequently contracted during leisure time because normal channels of recreation were not available to migrants.

### Injuries and other occupational health hazards

Accidental causes accounted for an estimated 6.5 percent of all cases of disability. Forty thousand man-days of work were reported to have been lost by foreign workers during 1946 as a result of permanent or temporary injuries from accidents. Seventy deaths were attributed to accidental causes.

Lead poisoning from use of spraying fluid was reported in the Northwest,

## United States

### Health Problems in Industrialized Agriculture

#### 1. General background

"Concentration of landownership, the introduction of mechanization, specialization of crops, and readily available transportation are all serving to bring about an industrial revolution on the farm."

\*\*\*  
"These developments have converted an important segment of our agricultural economy to large-scale specialized crop production. With many types of specialized crops, there are sharp peaks of labor requirements."

\*\*\*  
Industrial accidents, toxic exposures, and occupational dermatoses are among the hazards to which all farm workers are exposed, whether they be the unpaid workers belonging to the farm family, local workers, or temporary seasonal workers from outside the local area. The latter group also suffers from substandard living conditions in the places where they live temporarily.

#### 2. Publications

Axelrod, S. J. Health Problems in Industrialized Agriculture.  
Jour. Am. Pub. Health Assn. 39:1172-1175. Sept. 1949.

#### 3. Summary of findings

Accidents - In 1946, as in previous years, the largest number of occupational deaths--4,500--occurred in agriculture.

For 50,000 farm laborers supervised by the U. S. Department of Agriculture during 1945--

Farm machinery and handling of tools were the major source of farm accidents.

Mishandling of sugar beet topping knives, hoes, pitchforks, cane cutting knives, and other hand tools accounted for about a third of the work-connected injuries.

An estimated 9 percent of all cases of illnesses were due to accidental causes; 3.1 man-days per 1,000 man-days of employment were lost through injuries.

Toxic exposure - Some of the chemical fertilizers, pesticides, and substances used in food processing are exceedingly toxic.

Occupational dermatoses - Examples: "corn rash," hop pickers' dermatitis, a dermatitis due to the handling of citrus fruits, carrot handlers' dermatitis, and "muck sores" of the Florida Everglades.

Disabilities associated with substandard living conditions - Examples: Upper respiratory infections, digestive disturbances resulting in many instances from inadequate refrigeration and other poor food handling practices.

United States

Nonoccupation diseases - Lack of control measures in industrialized agriculture comparable to those in other industry contributes to higher rates of infectious disease among farm workers than among industrial workers.

### Children of school age

Health problems identified by chief State school officers as affecting school attendance of migrant children (Excerpted from Report of Regional Conferences on Education of Migrant Children, 1952. Published by U. S. Office of Education.)

1. Needs for medical inspections prior to entering school.
2. Financing medical services for migrant children.
3. Some of the children represent health problems. These conditions will have to be improved before children can be encouraged to attend school.
4. Migrant children are sometimes not clean and present a health threat to local children.
5. They bring disease into the State.....
6. Health conditions in migrant families create attitudes among natives of this State which discourage school attendance by migrant children.
7. Need for teacher education for migrant workers, physical and health facilities for children of migrant workers and health education for adults.
8. Lack of cooperative programs among agencies in providing school lunches and health services for migrant children. They need help on what and how to eat.
9. Explore the basic economic and social problems so that adequate standards of housing, health, nutrition, sanitation may be realized by the migrants.
10. A nutritional program related to health education, detection and treatment clinics for children of migrant workers.
11. VD, TB and dental clinics for parents as well as one designed for children to treat as well as detect need.

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"The Education of Migrant Children", a report by Shirley E. Greene published by the Department of Rural Education, NEA, 1954, referred to health problems in the four areas studied.

"School lunches were available in only one of the nine Negro schools in the 'Glades'. Two of the three Florida white schools have lunches, but the school with the largest percentage of migrant children does not. In Virginia, only two of the schools studied have lunch programs; in Texas, one; and in Illinois, two. In short, eight of 25 schools reporting have lunch programs."

.....  
"Sometimes it was some illness or disability of the child which kept him out of school.... In many cases, the parents gave their own illness as the reason that they were forced to this....migratory pattern of life and....to relay a good deal on the earnings of their children."

(Note: Study centers were the 'Glades' area, Palm Beach County, Florida; Northhampton County, Va.; Seguin Independent School District, Guadalupe County, Texas; Hoopeston-Milford-Rossville School Districts, Vermillion and Iroquois Counties, Ill.)

## Mexican Contract Workers

### Medical Examination Program under Division of Foreign Quarantine

#### 1. General background

For many years Mexican laborers have come into the United States for short periods to work on farms. Little attention was paid to their health until World War II. At that time medical examinations and vaccinations were started in connection with recruitment procedures.

The examination and vaccination procedure is carried out as part of a cooperative procedure involving the U. S. Employment Service, the Immigration and Naturalization Service, the Public Health Service and the National Government of Mexico.

Workers are recruited and given initial physical examinations by Mexican physicians at one of five migratory centers in Mexico. Vaccinations are given by Mexican nurses. Workers who are accepted are sent to one of five reception centers on the U.S.-Mexico border where they are again examined and go through other processing before employment in the United States. (Those who come from the Mexicali area go directly to the El Centro, California, reception center rather than going first to a migratory center in Mexico.)

The initial physical examinations in Mexico are paid for by the U. S. Department of Labor. The Mexican physicians work under the supervision of the U. S. Public Health Service.

In general, the clinical examinations conducted at the border reception centers are patterned after the traditional immigration medical examination.

During the current fiscal year, the staff of the five border reception centers has included the following persons:

5 physicians	3 clerks
5 nurses	3 laborers
5 technicians	2 administrative assistants
1 repairman	17 migrant labor inspectors (the
1 clerk-stenographer	inspectors may take on the duties
	of clerks, laborers, or technicians,
	as necessary)

#### 2. Publications

Gregg, Ralph. Medical Examination and Vaccination of Farm Laborers Recruited from Mexico. Pub. Health Repts. 65:807-809. June 23, 1950.

## Mexican Contract Workers

### 3. Summary of findings

#### Medical Examinations of Mexican Nationals Recruited for Farm Work in the United States

<u>Year</u>	<u>Where examined</u>	<u>Number of Examina- tions 1/</u>	<u>Number rejected</u>	<u>Number vaccinated</u>	<u>Disinfestations</u>
7-1-54 to	Mexico	182,606	2,316	181,017	17,073
10-31-54	United States	341,035	3,885	116,658	194,849
July 1953	Mexico	180,871	5,854	162,844	42,870
June 1954	United States	388,616	3,593	46,884	175,658
July 1952	Mexico	205,941	7,784	193,965	77,173
July 1953	United States	292,891	3,862	755	172,539
August 1951	Mexico	187,569	3,613	185,856	17,565
thru	United States	333,071	879	36	172,225
June 1952 ..					

1/ Initial screening is done by Mexican physicians at migratory centers in Mexico except for recruits from the Mexicali area who go direct to the El Centro, California, reception center for physical examination.

#### Causes for Rejection

<u>Causes</u>	<u>Mexico</u> Fiscal year--			<u>United States 1/</u> Fiscal year--		
	<u>1955</u>	<u>1954</u>	<u>1953</u>	<u>1955</u>	<u>1954</u>	<u>1953</u>
Mental	--	1	70	7	23	39
Tuberculosis-						
Pulmonary	41	21	85	2,861	2,709	2,437
Other	--	6	8	86	15	99
Total	41	27	93	2,947	2,724	2,536
Venereal disease	441	292	387	62	97	517
Other "loathsome of dangerous" diseases	102	102	200	132	91	6
Other conditions which are handi- capping for physical labor	1,732	5,432	7,033	737	658	764

1/ All tuberculosis x-ray screening is done at the border reception centers by Public Health Service personnel.