

ANNUAL REPORT

ARIZONA STATE DEPARTMENT OF HEALTH

1940 - 1941

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HARRY M. MCORE

Secretary of State

By

Paul Harvey
Assistant Secretary

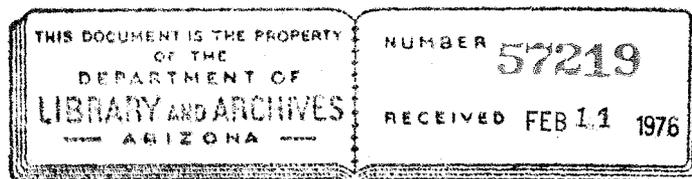
HEALTH, 1941

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ANNUAL REPORT

A R I Z O N A S T A T E D E P A R T M E N T O F H E A L T H

1940--1941



ARIZONA STATE BOARD OF HEALTH

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ARIZONA STATE DEPARTMENT OF HEALTH

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George Marx, Director, Division of Sanitation
Florence Olsen, Vital Statistician

COUNTY HEALTH UNIT DIRECTORS

O. B. Moon, Cochise County Health Unit
H. L. McMartin, Maricopa County Health Unit
L. H. Howard, Health District No. 1 - Pima and Santa Cruz Counties
R. M. Matts, Yuma County Health Unit

Central Administration

Report of Superintendent

New State Law

Outline of Organization

Organization Chart

Financial Report 1940-1941

Financial Summary 1935-1941

REPORT OF SUPERINTENDENT

Progress has been made in the state of health of the people in Arizona, but in certain diseases the public health worker possesses no specific methods of treatment by which the diseases may be controlled. Diseases for which the public health worker has specific means of control show a decrease in incidence and demonstrates the value of immunization against certain diseases. There has been a definite decrease in maternal and infant death rates in the State during the past year. Much is being accomplished through organized work in the control and treatment of venereal diseases, especially syphilis.

There has been a steady increase in the amount of work required of the various divisions of the State department and local health units, due not only to an increasing population, but to an ever increasing demand by the people for health services as a better understanding of their value becomes known.

National Defense has increased the work of the department very materially, especially in the divisions of vital statistics, laboratories, sanitary engineering and venereal disease control.

Public health has a long way to go in Arizona before its real value to the people of the State is realized and its benefits taken advantage of. There are many unsolved problems in the field of health in Arizona. The lack of adequate funds prevents the starting of many public health projects at the present time that would be of definite value to a large proportion of our population. There is urgent need of improvement in sanitation in many areas of the State. Extension of public health work into all counties of the State where such services are not available is desirable and expansion of organized health units that are now rendering valuable service in a few counties.

There exists a pressing need for a greater amount of office space for the Department. Crowding not only interferes with efficiency but is detrimental to the health of the employees.

CHAPTER 105

HOUSE BILL NO. 1

AN ACT

Relating to public health; creating the state department of health and defining its powers and duties; amending section 68-405; and repealing sections 68-101, 68-102, 68-103, 68-104, 68-105, 68-106 and 50-902, Arizona Code of 1939, and declaring an emergency.

Be it enacted by the Legislature of the State of Arizona:

Section 1. Definitions. In this Act, unless the context otherwise requires:

"department" means state department of health;

"board" means state board of health;

"superintendent" means superintendent of public health.

Sec. 2. State department of health. The state department of health shall consist of the state board of health, the superintendent of public health, and the several divisions of the department. The department shall succeed to and is hereby vested with the duties, powers, purposes, responsibilities, and jurisdiction heretofore by law vested in and imposed upon the state board of health, the superintendent of public health, the state registrar of vital statistics, the supervisor of public health nursing, the state laboratory, the director of the state laboratory, the board of regents of the University of Arizona relating to the state laboratory and the director thereof.

Sec. 3. Divisions. (a) The department shall include the following divisions, together with such other divisions and bureaus as the superintendent, with the approval of the board, may establish: 1. division of local health administration; 2. division of maternal and child health; 3. division of vital statistics; 4. division of sanitary engineering; 5. state laboratory; and, 6. division of public health nursing.

(b) The superintendent shall prescribe the powers and duties of the several divisions, and shall appoint the directors thereof, subject to the approval of the board.

Sec. 4. Duties of superintendent. The superintendent shall be the executive officer of the department and the state registrar of vital statistics, in which capacity he shall act as director of the division of vital statistics, but shall receive no compensation for his services as registrar. The superintendent of health shall perform all executive duties now required by law of the state board of health, and such other duties as are incident to his position as chief executive officer. He shall administer the laws relating to health and sanitation and the regulations of the state department of health. He shall prepare sanitary and public health regulations for consideration by the board and shall submit to said board recommendations for new legislation. He shall perform such other

duties as may be prescribed by law or by the board. He shall have power to authorize any officer or employec of the department to act in his stead. He may sit at meetings of the board, but shall have no vote.

Sec. 5. Duties of board. The board shall advise the superintendent in the performance of his duties, and formulate general policies affecting the public health. It may hold hearings and subpoena witnesses and documents. Any member shall have power to administer oaths in connection with the duties of the board. The board shall have no administrative or executive functions other than those set forth in this Act.

Sec. 6. Rules and regulations. (a) The board shall have power to adopt, promulgate, repeal, and amend rules and regulations consistent with law to: 1. define and control communicable diseases; 2. prevent and control public health nuisances; 3. regulate sanitation and sanitary practices in the interests of public health; 4. cooperate with local boards of health and health officers; 5. protect and promote the public health and prevent disability and mortality; 6. isolate any person affected with and prevent the spread of any contagious or infectious disease; 7. govern the transportation of dead bodies; 8. establish quarantine; and, 9. carry out the purposes of this Act.

(b) A copy of the rules and regulations of the board shall be filed with the secretary of state. The rules and regulations shall be published not more than ten days after adoption in a newspaper of general circulation in the state, and shall be issued in pamphlet form for distribution to local health officers and to interested citizens.

Sec. 7. Personnel. The board shall adopt, and the superintendent shall enforce, rules and regulations providing for the merit system of employment of all officers and employees of the department.

Sec. 8. Annual report. Not later than August 20 of each year the superintendent shall submit to the governor a report setting forth: 1. the condition of public health in the state; 2. the activities of the department during the preceding fiscal year; 3. the work done in each county; 4. the character and extent of all diseases reported; 5. the expenditures of the department and of each county board of health; and 6. such recommendations as he may deem advisable for protection of the public health.

Sec. 9. Superintendent. (a) The superintendent of public health shall be appointed by the board. The term of the first superintendent appointed under this act shall expire March 1, 1946. Thereafter the term of the superintendent shall be five years. He may be removed only for cause, on written charges and after a public hearing thereon by the board. Appointment to fill a vacancy resulting otherwise than from expiration of term shall be for the unexpired portion of the term only.

(b) The superintendent shall be a reputable physician having the degree of doctor of medicine from a reputable medical school recognized by the Council on Medical Education and Hospitals of the American Medical Association. He shall have had not less than five years' experience in full time administration of public health or, in lieu of five years' experience, three years' experience in

full time public health administration and a degree from an accredited school of public health. He shall be licensed to practice in Arizona.

(c) The superintendent shall devote his full time to the duties of the office, and shall not engage in the private practice of medicine in any other occupation. He shall receive a salary, to be fixed by the board within the limits of funds available therefor, of not less than four thousand eight hundred dollars per annum.

Sec. 10. Sec. 68-405, Arizona Code of 1939 (Sec. 2705, Revised Code of 1928), is amended to read:

68-405. State laboratory. (a) The state laboratory shall be under the supervision of a director, and shall be located in rooms set aside by the University of Arizona and in such other places as the board may determine. The superintendent of public health shall appoint the director, who shall be a skilled pharmaceutical chemist or bacteriologist and analyst of foods, water supplies, and drugs.

(b) The state laboratory shall examine and analyze such foods, water supplies, drugs, and other specimens as the superintendent may direct. The director shall perform the duties prescribed in this article and by the superintendent, and shall cooperate generally with the department. The certificate by the director of analysis of an examination shall be prima facie evidence of the facts therein stated.

Sec. 11. State board of health. (a) The state board of health shall consist of five members, who shall be appointed by the governor, with the advice and consent of the Senate. One member shall be appointed for a term ending February 1, 1942, and one each for terms ending one, two, three, and four years thereafter and the governor shall be ex-officio member of the board without voting privilege. Upon the expiration of any of said terms a successor shall be appointed for a full term of five years. Appointment to fill a vacancy resulting otherwise than from expiration of term shall be for the unexpired portion of the term only.

(b) Two members of the board shall be licensed practitioners of medicine and surgery, who have been engaged in the practice of medicine in the state. Three members shall be persons selected for their interest in public health.

(c) Members of the board shall receive no compensation for their services as such, but shall be reimbursed for necessary expenses incurred in the performance of their duties, in the amount provided by law.

Sec. 12. Meetings and organization. The board shall hold regular quarterly meetings, and such special meetings as may be called by the chairman, the superintendent, or any three members. Three members shall constitute a quorum. The board shall elect from its membership a chairman and a vice-chairman and a secretary.

Sec. 13. Financial provisions. (a) The public health fund shall consist of appropriations and of all receipts from any other source for the use of the department. The state treasurer shall receive and disburse moneys donated to or provided for the department by any person, town, city, benevolent organization, or other agency for public health work, and moneys so received shall be deposited in the public health fund. The salaries and expenses of the department shall be paid from said fund. Disbursements therefrom shall be made upon claims signed by the superintendent, in the manner provided by law for payment of other claims against the state.

(b) Moneys received from the United States, or any agency thereof, for public health purposes, shall be kept in a separate account in the public health fund. Any unexpended and unencumbered balance of federal funds remaining in the public health fund at the end of a fiscal year shall not revert to the general fund.

Sec. 14. Penalty. Any person violating any provision of this Act, or any rules or regulation adopted pursuant to this Act, shall be guilty of a misdemeanor, and upon conviction shall be fined not less than twenty-five nor more than two hundred dollars, or imprisoned in the county jail not more than thirty days, or both.

Sec. 15. Repeal. Sections 68-101, 68-102, 68-103, 68-104, 68-105, 68-106, and 50-902, Arizona Code of 1939 (Sections 2678, 2679, Revised Code of 1928; Section 1, chapter 103, laws of 1935; section 2680, Revised Code of Arizona, 1928; section 1, chapter 38, laws of 1931; section 2681, Revised Code of 1928 and section 2, chapter 82, laws of 1931), are hereby repealed. This section does not negative an implied repeal of any statute which conflicts with this Act.

STATE DEPARTMENT OF HEALTH

ORGANIZATION

A. State Board of Health

1. Organization

- a. Five members
- b. Terms - five years, staggered
- c. Appointed by the governor with advice and consent of the senate
Two members must be licensed practitioners of medicine and surgery, and three others selected for their interest in public health
- e. Compensation - necessary expenses incurred in the performance of their duties, in the amount provided by law.

2. Duties

- a. Appoint the superintendent of public health
- b. Advise the superintendent in the performance of his duties
- c. Formulate general policies affecting public health
- d. Adopt, promulgate, repeal, and amend rules and regulations to:
 - (1) Define and control communicable disease
 - (2) Prevent and control public health nuisances
 - (3) Regulate sanitation and sanitary practices in the interests of public health
 - (4) Cooperate with local boards of health and health officers
 - (5) Protect and promote the public health and prevent disability and mortality
 - (6) Isolate any person affected with, and prevent the spread of any contagious or infectious disease
 - (7) Govern the transportation of dead bodies
 - (8) Establish quarantine
 - (9) Carry out the purposes of the state law
- e. Adopt rules and regulations for the merit system of employment of all officers and employees of the department
- f. Have meetings each quarter, or oftener when called.

B. Superintendent of Public Health

1. Appointed by the State Board of Health

2. Term of office is five years, unless removed for cause

3. Duties

- a. Prescribe the powers and duties of the several divisions
- b. Appoint the directors of divisions subject to the approval of the Board
- c. Act as the executive officer of the department

- d. Act as state registrar
- e. Carry out all provisions of the law
- f. Make an annual report to the governor not later than August 20th on:
 - (1) The condition of public health in the state
 - (2) The activities of the departments during the preceding fiscal year.
 - (3) The work done in each county
 - (4) The character and extent of all diseases reported
 - (5) The expenditures of the department and of each county board of health
 - (6) Make recommendations which he may deem advisable for the protection of the public health

4. Qualifications

- a. Reputable physician having the degree of doctor of medicine from a medical school recognized by the Council on Medical Education and Hospitals of the American Medical Association
- b. Five years' experience in full-time administration of public health or three years' experience in full-time public health administration, and a degree from an accredited school of public health
- c. A license to practice in Arizona
- d. Salary to be fixed by the Board, within the limit of funds available therefor, of not less than \$4800 a year

C. Divisions

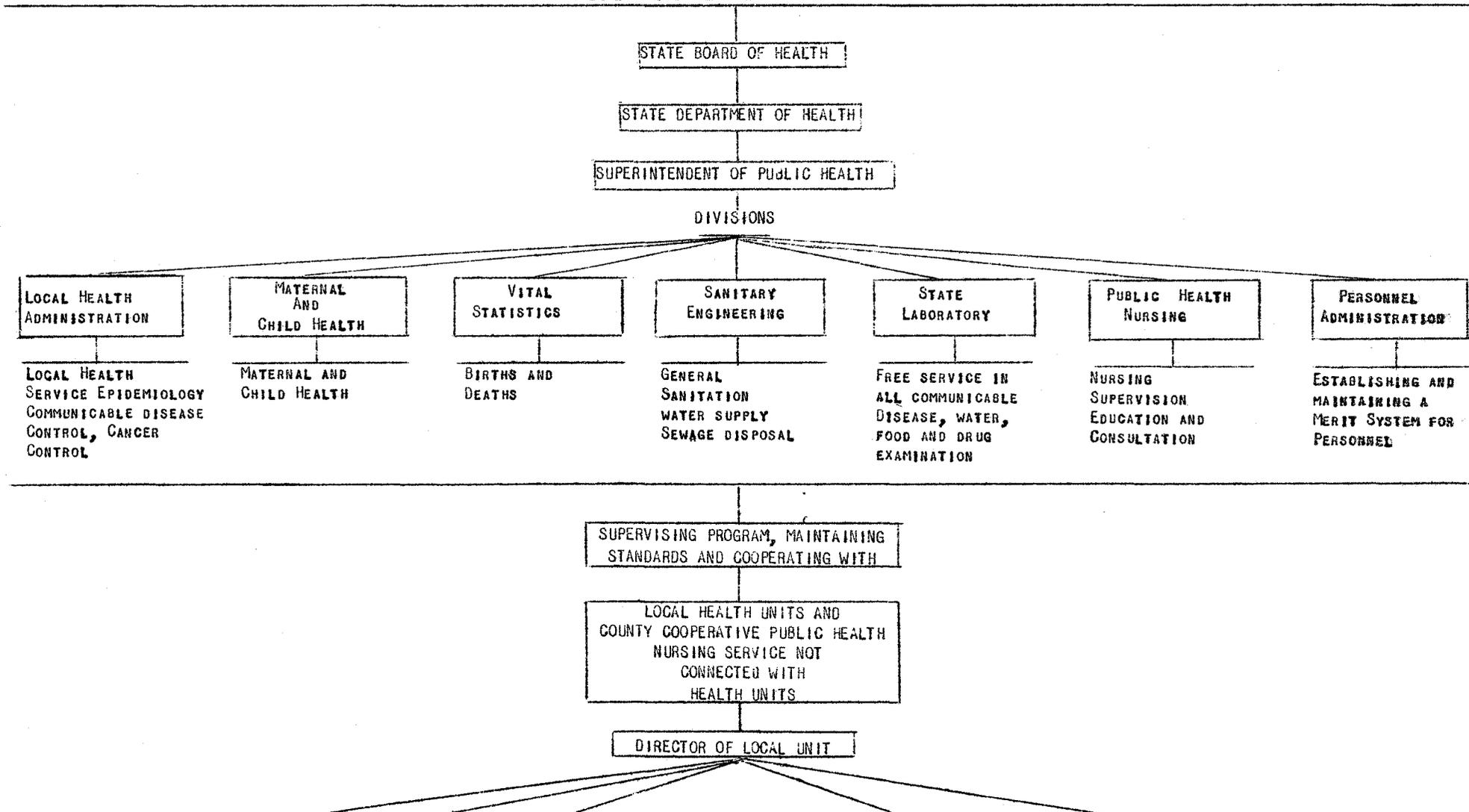
1. Division of Local Health Administration

- a. Supervision of local full-time health services to promote uniform administration over the state
 - (1) Full-time health services in Cochise, Coconino, Maricopa, Pima, and Santa Cruz, and Yuma Counties
 - (2) Full-time nursing services in Navajo and Apache counties
- b. Development of services in unorganized areas
 - (1) Six counties, containing 22% of the state's population are without full-time health services. Units are established as rapidly as local groups are able to cooperate in full-time health work on a matching basis
 - (2) Development of health services in cooperation with agencies not established under the State Department of Health
 - (a) Red Cross
 - (b) Schools
 - (c) Service clubs
 - (d) Civic organizations, etc.

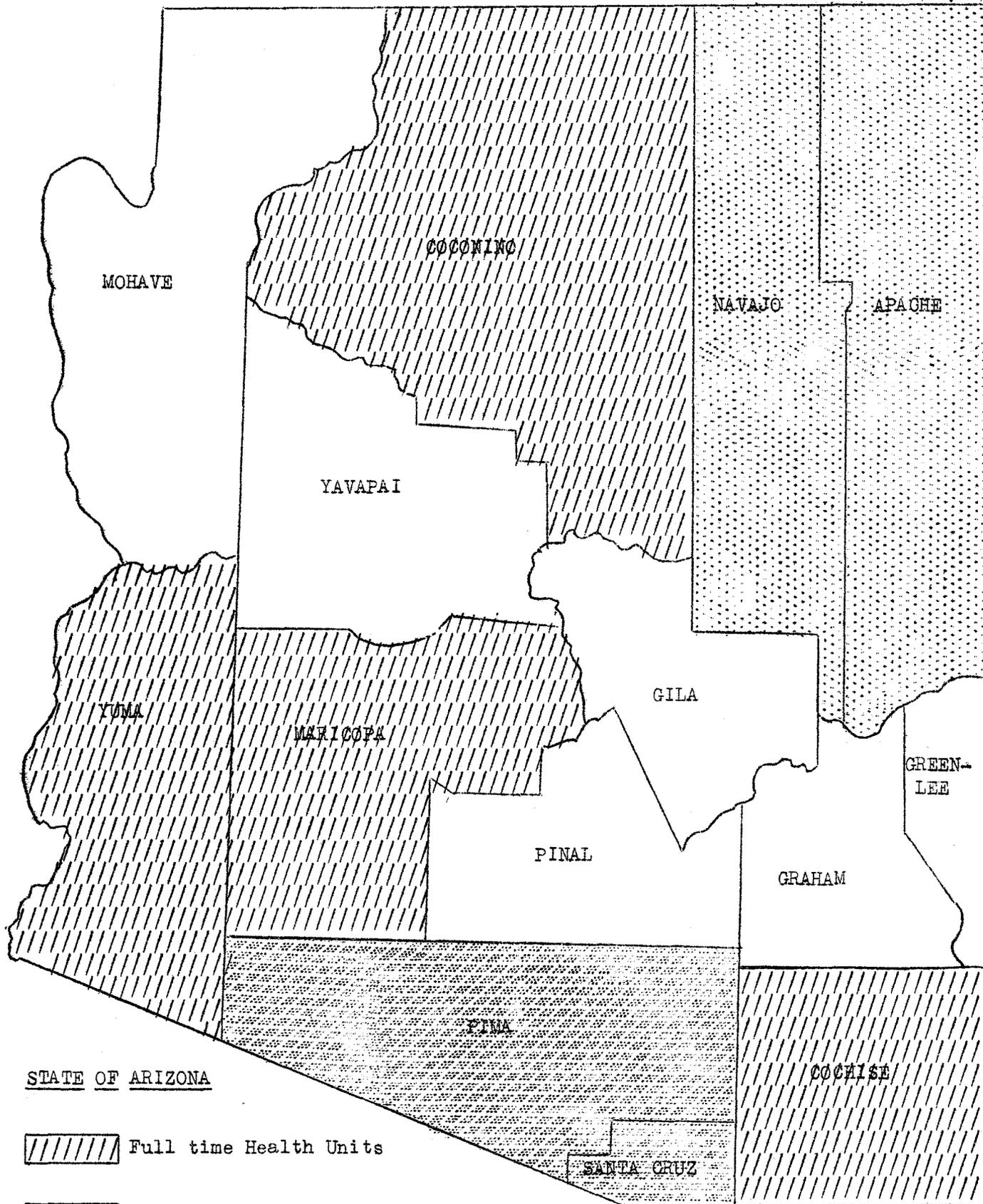
- c. Communicable disease control
 - (1) Collection of statistics
 - (2) Aid in epidemics
 - (3) Supervision and cooperation in immunization programs
 - (4) Particular attention to special health problems of Arizona
 - (a) Tuberculosis control - X-ray and skin testing
 - i. Healthmobile
 - ii. Local health unit programs
 - (b) Venereal disease control
 - i. Clinics established and maintained at population centers
 - (i) Six full-time clinics in the state
 - (ii) Average patient load of 1500
 - ii. Free drugs to physicians for the treatment of venereal disease cases
 - (i) Over 100 physicians participating in program
 - (ii) All counties represented
 - (iii) Average monthly patient load - 500
 - d. Cooperation and coordination of health education program
 - (1) Distribution of literature, films, and press releases
 - (2) Radio talks and lectures
 - (3) Classes in health programs in schools
2. Division of Maternal and Child Health
- a. Development and direction of maternal and child health services
 - (1) Medical
 - (2) Nursing
 - (3) Dental
 - b. Special attention to infant and maternal mortality
 - (1) Well baby clinics
 - (2) Maternal clinics
 - (3) Maternity hospitals in areas not otherwise served
 - (4) Home delivery medical-nursing services
3. Division of Vital Statistics
- a. Recording births and deaths in the state
 - (1) Collection
 - (a) State is divided into 115 local districts and a registrar appointed in each. The local registrar collects and sends to the state the records of births and deaths for his district. Payment is made by the county board of supervisors at fifty cents (50¢) for each certificate.
 - (2) Preservation
 - (a) Records checked for duplication or errors
 - (b) Card indexed by name
 - (c) Certificates are segregated each month by date and county and put into permanent binders.

- b. Issuing copies of records
 - (1) Certified copies as requested for legal matters
 - (2) Notifications of births to parents
 - (3) Transcripts of records as requested by Federal bureaus
 - c. Statistical studies
 - (1) Births
 - (2) Deaths
 - (3) Special studies
4. Division of Sanitary Engineering
- a. Development and direction of sanitation projects
 - b. Supervision and inspection of water supplies
 - c. Supervision and inspection of sewage disposal plants
 - d. Community sanitation
 - e. Supervision of local sanitation services
5. Division of State Laboratories
- a. Examination and analysis
 - (1) Foods
 - (2) Water
 - (3) Supplies
 - (4) Drugs
 - (5) Other specimens as directed
 - b. General cooperation in the development of the health program
6. Division of Public Health Nursing
- a. Assist in the supervision and development of nursing services
7. Division of Merit System Personnel Administration
- a. Select and maintain qualified personnel

FISCAL YEAR 1941-1942
 PUBLIC HEALTH ORGANIZATION IN ARIZONA
 IN COOPERATION WITH
 UNITED STATES PUBLIC HEALTH SERVICE
 AND
 FEDERAL CHILDREN'S BUREAU



SANITATION - NURSING - MATERNAL AND CHILD HEALTH - CLERICAL AND STATISTICAL - COMMUNICABLE DISEASE



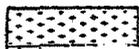
STATE OF ARIZONA



Full time Health Units



District Health Units



Public Health Nurses only

SUMMARY OF EXPENDITURES

FOR THE FISCAL YEAR ENDED JUNE 30, 1941

BUDGET Number	ITEM Description	EXPENDITURES						
		1	2	3	4	5	6	
		Total	State	Local	U. S. P. H. S.		CHILDRENS	OTHER
				Title VI	V.D.	BUREAU	FUNDS	
1	Central Adminis	30,070.42	16,310.53		5,520.28	8,239.61		
2	Local Health Admin	14,848.32			12,464.57	2,383.75		
3	Division of Mater- nal & Child Health	25,238.12					25,238.12	
4	Nursing Personnel	6,979.59			3,539.78		3,439.81	
5	Tuberculosis Control	8,683.85	7,973.04					710.81
6	Sanitary Engineer- ing	16,689.56	7,316.50	749.96	7,625.10			1,000.00
7	Health Education	3,680.29	2,872.08		381.30		426.90	
8	State Laboratory	17,680.39	10,840.39		4,770.00	1,470.00	600.00	
9	Merit System Person- nel Administration	929.12			686.62		242.50	
11	Training	8,401.48			2,555.53		5,845.95	
12	Apache County	7,056.22		1,554.76			5,501.46	
13	Cochise County	28,133.98	1,599.84	13,513.61	5,049.72	295.95	7,674.86	
14	Coconino County	17,753.53	1,799.76	6,680.00	5,846.51	1,250.00	2,177.26	
15	Maricopa County	56,166.22	2,315.52	26,136.19	10,839.70	5,941.67	10,933.14	
16	Navajo County	15,139.84		4,292.66			10,847.18	
17	District 1	66,081.87	1,200.00	32,903.64	12,415.17	5,922.19	13,640.16	
18	Yuma County	19,641.63	1,050.00	9,058.03	7,128.00	200.00	2,165.20	40.40
		343,174.42	53,277.66	94,888.85	78,820.28	25,703.88	88,732.54	1,751.21

EXPENDITURES BY THE ARIZONA STATE BOARD OF HEALTH AND
COOPERATING AGENCIES FOR 1935 to 1941 INCL.

<u>BEFORE SOCIAL SECURITY ACT</u>	TOTAL	STATE	LOCAL	FEDERAL	OTHER AGENCIES
<u>1935</u>					
Appropriation	\$ 88,114.72	\$33,500	\$38,546.88	\$ 16,067.84	
Per Capita Rate	.18	.07	.08	.08	
Per Cent of Total Appropriation	100%	38%	43.7%	18.3%	
.....					
<u>After Passage of Social Security Act</u>					
<u>1936</u>					
Appropriation	\$165,028.52	\$35,005	\$58,638.00	\$ 71,385.52	
Per Capita Rate	.35	.07	.13		
Per Cent of Total Appropriation	100%	21.1%	35.5%		
<u>1937</u>					
Appropriation	\$214,105.89	\$36,365	\$65,838.00	\$111,902.89	
Per Capita Rate	.44	.07	.14	.23	
Per Cent of Total Appropriation	100%	16.9%	30.8%	52.3%	
<u>1938</u>					
Appropriation	\$241,160.65	\$37,875	\$85,131.00	\$118,154.65	
Per Capita Rate	.49	.08	.17	.24	
Per Cent of Total Appropriation	100%	15.7%	35.3%	49%	
<u>1939</u>					
Appropriation	\$251,652.36	\$37,625.	\$91,278.30	\$122,749.06	
Per Capita Rate	.51	.08	.18	.25	
Per Cent of Total Appropriation	100%	14.9%	36.2%	48.9%	
<u>1940</u>					
Appropriation	\$268,253.79	\$45,800	\$89,384.45	\$133,069.34	
Per Capita Rate	.53	.09	.18	.26	
Per Cent of Total Appropriation	100%	17%	33%	50%	
<u>1941</u>					\$t. Laboratory
Appropriation	\$364,338.26	\$45,400	\$96,688.00	\$207,969.45	\$14,280.81
Per Capita Rate	.72	.09	.19	.41	.03
Per Cent of Total Appropriation	100%	12%	27%	57%	.04%

Annual Reports of State Divisions

Vital Statistics

Health Education

Laboratories

Sanitation

Maternal and Child Health

Local Health Administration

Tuberculosis Control

PUBLIC HEALTH NEWS

Arizona

PHOENIX, ARIZONA

JUNE, 1941

VOL. 34—NO. 3

1940 REPORT OF VITAL STATISTICS

The present Arizona State Board of Health presents this report of Vital Statistics for 1940 as its last report. According to the provisions of the law passed by the recent legislature, a new five-member board and full-time superintendent of health will be welcomed into the department on June 16, 1941.

During the year 1940, 11,593 certificates of birth and 5,772 certificates of death were filed with the Arizona State Board of Health. In addition to these, approximately 5,000 affidavits of birth were filed for those persons born in Arizona who had no birth certificates on file. 18,214 certified copies of birth and death certificates and affidavits of birth were issued compared with 7,171 issued in 1939.

The 1940 statistical report has been compiled from data obtained from the original certificates of birth and death filed in the office of the Arizona State Board of Health. The completeness and accuracy of the report depends upon the completeness of the reporting of births and deaths and the accuracy of the information on the birth and death certificates.

Since 1940 was a census year, a summary of births, deaths and deaths from certain causes for the years 1931-1940 is given in Table I with rates calculated on the new midyear population estimates for those years. These estimates have been made from the 1930 and 1940 census figures and, therefore, the rates are somewhat changed from rates given previously for these years. No race or age specific rates are given as the Bureau of the Census has not at this time released the final figures on race and age groups. The number of births and deaths in each case on this summary has been taken from the Bureau of the Census publications except for the year 1940.

Causes of death in Tables II-IV in all cases were

classified according to the International List of Causes of Death and were assigned by the rules of the Manual of Joint Causes of Death. Since both the International List and Manual of Joint Causes were revised in 1939 and sent out by the Bureau of the Census in 1940, the 1940 classification of deaths is not comparable with the 1939 one in all cases.

Both births and deaths have been tabulated by place of occurrence and not by place of residence since the data on the latter were incomplete until after the new standard forms of certificates were adopted. This was not until after many 1940 certificates were filed. However, the number of out of state residents who died in Arizona is given in Table II.

Table VIII shows the births classified according to the occupation of the father. The occupations were grouped into ten groups based on Alba N. Edward's "A Social-Economic Grouping of Gainful Workers of the U. S." and coded by the instructions given in the Index of Occupations published by the Bureau of the Census. This is the first time that such a classification has been made for births in Arizona.

In Table IX measles, mumps, influenza and pneumonia show the greatest differences in number of cases reported compared with the number of cases in 1939.

This 1940 report shows a slight decrease in death rate and increase in birth rate. Tuberculosis, diseases of the heart and pneumonia continue as the principal causes of death.

ARIZONA PUBLIC HEALTH NEWS

Official Publication of the State Board of Health

SUCCESSOR TO THE ARIZONA STATE BOARD OF HEALTH BULLETIN

Entered at the Phoenix Post Office as Second Class Mail Matter

F. P. PERKINS, M. D., Superintendent

TABLE I.
VITAL STATISTICS DATA — ARIZONA 1931-1940

	Estimated Population		Number Births		Rate per 1000 Births		DEATHS FROM CERTAIN CAUSES— NUMBER AND RATE PER 100,000												Rate per 1000 Livebirths Infant/Mtrnl Deaths D'ths		
							Tuberculosis		Motor Vehicle Deaths		Cancer		Pneumonia		Syphilis		Diphtheria				Whooping Cough
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	
1931..	443,530	9,369	6,074	21.1	13.7	1,290	290.8	159	35.8	270	60.8	474	106.9	27	6.1	27	6.1	45	10.1	109.6	8.2
1932..	449,900	8,523	5,420	18.9	12.0	1,184	263.2	166	36.9	271	60.2	457	101.6	40	8.9	20	4.4	31	6.9	95.9	8.1
1933..	456,270	8,125	5,539	17.8	12.1	1,110	243.3	154	33.8	255	55.9	433	94.9	47	10.3	22	4.8	31	6.8	111.4	6.5
1934..	462,640	8,492	5,647	18.4	12.2	1,055	228.0	211	45.6	311	67.2	552	119.3	58	12.5	20	4.3	110	23.8	103.5	6.9
1935..	469,010	9,139	6,077	19.5	13.0	1,068	227.7	215	45.8	298	63.5	645	137.5	76	16.2	17	3.6	76	16.2	111.7	5.8
1936..	475,386	9,545	6,551	20.1	13.8	1,115	234.5	242	50.9	309	65.0	671	141.2	80	16.8	25	5.3	23	4.8	119.6	9.1
1937..	481,750	10,494	6,919	21.8	14.4	1,075	223.1	257	53.3	377	78.3	693	143.8	69	14.3	24	5.0	29	6.0	120.7	5.4
1938..	488,120	10,878	6,002	22.3	12.3	964	197.5	214	43.8	350	71.7	668	136.9	73	15.0	32	6.6	58	11.9	98.8	4.8
1939..	494,480	10,928	5,851	22.1	11.8	892	180.4	224	45.3	374	75.6	430	87.0	111	22.4	19	3.8	43	8.7	94.3	4.4
1940..	500,850	11,593	5,772	23.1	11.5	846	168.9	238	47.5	418	83.5	466	93.0	110	22.0	16	3.2	50	10.0	84.3	5.3

TABLE IV.
PRINCIPAL CAUSES OF INFANT MORTALITY—ARIZONA 1940
BY COUNTIES, SEX AND RACE GROUPS

CAUSE OF DEATH	Total	Rate per 1000 Live Births	COUNTY													SEX			RACE					Total White, Mexican & Other	Rate per 1000 Live Births, White, Mexican, Other	
			Apache	Cochise	Coconino	Gila	Graham	Greenlee	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma	Male	Female	Unknown	White	Mexican	Indian	Others			Unknown
			Total Principal Causes	835	72.0	72	36	27	27	28	12	320	5	47	121	54	10	30	46	459	376		305			359
Pneumonia—all forms	207	17.9	32	4	13	10	2	1	75	15	23	14	3	9	6	116	91		57	86	59	5	148	14.1		
Premature Birth	195	16.8	10	14	5	7	3	5	85	2	7	21	15	3	8	10	113	82		98	75	16	6	179	17.0	
Diarrhea and Enteritis	170	14.7	20	5	2	1	10	3	69	1	7	28	12	1	2	9	96	74		37	93	39	1	131	12.5	
Injury at Birth	49	4.2	1	1	2	2	1	2	11	4	5	3	1		6	10	29	20		26	15	7	1	42	4.0	
Congenital Malformations	48	4.1	2	2	2	3	3	23	1	3	9	1			2	22	26		36	7	4	1	44	4.2		
Influenza	44	3.8	2	2	3	5		18		4	6	3			3	23	21		14	28	2		42	4.0		
Other Diseases Peculiar to First Year of Life	43	3.7	6	2	2		3	1	13	1	5	4	1	1	3	18	25		20	15	8		35	3.3		
Whooping Cough	27	2.3	1	2	1	1		6		2	10	1			3	17	10		6	16	5		22	2.1		
Syphilis	26	2.2	2	2	2	1	1	9		1	3	1	1		1	11	15		2	14	5	5	21	2.0		
Congenital Debility	26	2.2	2	2	2			11		4	3	1			2	14	12		9	10	7		19	1.8		
All other Causes	142	12.2	14	5	2	4	3	1	43	3	11	26	20	1	4	5	96	65	1	33	52	55	1	86	8.2	
TOTAL	977	84.3	86	41	29	31	31	13	363	40	58	147	74	11	34	51	535	441	1	338	411	207	20	769	73.2	
Rate per 1000 Live Births			181.4	52.0	81.9	63.1	87.8	52.8	79.8	40.4	114.9	90.4	91.8	50.9	66.3	108.0	91.3	76.9		50.5	120.0	189.2	53.1			

TABLE V.
DEATHS FROM MOTOR VEHICLE ACCIDENTS—BY COUNTIES, MONTHS, SEX AND RACE GROUPS
YEAR 1940

COUNTY	Total	January	February	March	April	May	June	July	August	September	October	November	December	SEX		RACE			
														Male	Female	White	Mexican	Indian	Other
														APACHE	8	1			
COCHISE	13	1	1				2		3	1	1		3	6	2	5			
COCONINO	15			1			1			1	2		3	11	4	14		6	1
GILA	8	2			1		1			1		1	2	6	2	6			
GRAHAM	4			1			1							3	1	2			1
GREENLEE	7				3		1				1	1	2	4	3	2		1	
MARICOPA	78	15	4	4	4	10	7	1	8		7	8	9	58	20	68		8	
MOHAVE	6			1	2		1	1	1			1	1	6	5	5			1
NAVAJO	14	1	1		1		3	1	3			3	1	8	6	5		3	6
PIMA	34	3	3	5	3	2	3	2	3	3	3	2	4	21	13	25		4	5
PINAL	26	3	1	1	3	2	3	4	2	3	1	4	2	19	7	21		3	1
SANTA CRUZ	1	1												1	1	1			
YAVAPAI	11		1	1		1	2	2	2		1		1	7	4	9		2	
YUMA	13		2		1	3	2		2		1	1	2	8	5	12		1	
TOTAL	238	27	13	14	16	26	22	11	22	14	18	24	31	170	68	185		30	19

TABLE VI.
SUMMARY OF DEATHS FROM TUBERCULOSIS—ARIZONA 1940
BY COUNTIES, SEX, RACE AND AGE GROUPS

COUNTY	Total	Rate per 100,000	Pulmonary	Other Forms	SEX		RACE				AGE AT TIME OF DEATH										
					Male	Female	White	Mexican	Indian	Other	1 Year	1-4 Years	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 and up		
					APACHE	74	304.9	67	7	35	39	2		72				3	12	9	19
COCHISE	24	69.4	24		18	6	11	12						2	1	2	2	6	5	1	5
COCONINO	10	52.0	7	3	6	4	3		7					2	2	2	3	2	2	1	
GILA	20	87.7	19	1	15	5	8	7	5					1	1	3	2	2	5	4	3
GRAHAM	9	73.1	8	1	5	4	4	4	1			1			4	4			1		3
GREENLEE	5	57.2	4		4	1	3	2											2	1	2
MARICOPA	312	166.8	295	17	204	108	199	77	18	18		1	8	9	52	65	64	59	32	22	22
MOHAVE	5	57.9	4		3	2	3	2							2	2	2	2	3	1	3
NAVAJO	46	181.7	44	2	14	32	2	1	43					8	8	18	2	2	6	2	1
PIMA	225	305.8	216	9	149	76	161	23	33	8		1	8	4	23	38	51	57	33	10	10
PINAL	40	137.3	38	2	29	11	10	19	9	2				1	1	6	6	13	5	4	4
SANTA CRUZ	8	83.8	8		7	1	2	6						1	1	2	2	1	1	1	1
YAVAPAI	50	188.6	50		43	7	43	5	2	2				1	1	8	8	14	11	3	6
YUMA	18	93.2	17	1	12	6	7	5	2	1				4	4	4	1	3	9	3	3
TOTAL	846	168.9	801	45	544	302	458	164	194	30		6	33	35	136	151	155	168	95	67	67

TABLE VII.
SUMMARY OF BIRTHS — ARIZONA 1940

COUNTY	Total	SEX		RACE					SINGLE or PLURAL			ATTENDANT AT BIRTH			
		Male	Female	White	Mexican	Indian	Negro	Other	Single	Twin	Triplet	Physician in Hosp.	Physician not in Hosp.	Midwife	Other
APACHE	474	238	236	128	77	245	13	11	466	18		280	147	31	16
COCHISE	789	407	382	426	339		23	1	770	19		448	280	53	8
COCONINO	354	178	176	183	102	57	7	5	346	8		166	152	9	27
GILA	491	261	230	261	139	87	2	2	475	16		236	207	3	45
GRAHAM	353	183	170	232	98	21	1	1	347	6		84	250	5	14
GREENLEE	246	123	123	135	111				232	14		158	88		
MARICOPA	4549	2294	2255	3097	1092	146	132	82	4437	109	3	3361	923	202	63
MOHAVE	198	104	94	156	16	26			198			134	53	6	5
NAVAJO	505	244	261	232	92	178		3	501	4		272	96	18	119
PIMA	1627	840	787	758	673	153	36	7	1598	29		979	367	178	103
PINAL	806	386	420	428	214	146	11	7	782	24		433	313	41	19
SANTA CRUZ	216	104	112	98	113	1	1	3	210	6		37	132	42	5
YAVAPAI	513	258	255	310	191	8	2	2	505	8		258	242	13	5
YUMA	472	239	233	254	167	26	22	3	466	6		314	52	101	5
TOTAL	11593	5859	5734	6698	3424	1094	250	127	11323	267	3	7160	3302	689	442

TABLE VIII.
BIRTHS—ARIZONA 1940—BY COUNTIES AND OCCUPATIONS OF FATHER
OCCUPATIONAL GROUPS

	Total	0	1	2	3	4	5	6	7	8	X	
APACHE	474	19	157	18	33	45	33	13	98	8	50	0—Professional persons.
COCHISE	789	27	36	34	41	61	89	12	386	10	93	1—Farmers (owners and tenants).
COCONINO	354	21	34	24	26	29	51	17	116	9	27	
GILA	491	12	13	19	21	34	59	2	280	5	46	2—Proprietors, managers and officials.
GRAHAM	353	16	80	19	21	30	24	28	119	2	14	3—Clerks and kindred workers.
GREENLEE	246	9	8	9	9	36	33	4	126	3	9	4—Skilled workers.
MARICOPA	4549	205	443	297	487	404	508	680	1125	72	328	5—Semi-skilled workers.
MOHAVE	198	14	17	13	12	18	18	7	91	1	7	6—Farm laborers.
NAVAJO	505	24	115	18	30	64	55	7	145	6	41	7—Other laborers.
PIMA	1627	83	98	132	179	196	217	58	471	30	163	8—Servant classes.
PINAL	806	15	208	22	23	48	40	145	271	6	28	X—Unemployed, W.P.A. retired, unknown, disabled, others in non-gainful pursuits.
SANTA CRUZ	216	8	11	19	22	15	16	16	97	3	9	
YAVAPAI	513	23	35	24	35	37	54	11	222	5	67	
YUMA	472	18	33	28	29	31	41	110	151	6	25	
TOTAL	11593	494	1288	676	968	1048	1238	1110	3698	166	907	
Percentage Distribution of Occupational Groups...	100.0	4.3	11.1	5.8	8.4	9.0	10.7	9.6	31.9	1.4	7.8	

TABLE IX.
REPORTABLE DISEASE MORBIDITY AND MORTALITY SUMMARY—ARIZONA 1940
BY MONTHS

DISEASES	TOTAL		January		February		March		April		May		June		July		August		Sept.		October		Nov.		Dec.	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Anthrax	1																									
Chancroid	40				4		1		2		2		1		6		3		9		5		5		2	
Chickenpox	1,009		141		212		163		109		70		31		10		12		10		34		68		149	
Diphtheria	171	16	29	5	24		15	1	7	1	7		13	1	6		5		4	2	24		31	4	6	2
Dysentery	1,077	35	42	4	42		49	2	78		127	2	104	1	106	4	122	6	60	6	121	5	152	4	74	1
Encephalitis	10	6			1		1		3	2			1				1						1		1	
Erysipelas	2	4			1		1	2				1		1							1		1		1	
German Measles	90		2		11		10		14		8		11		11		4		2		4		12		1	
Gonorrhoea	1,908	5	143		160		157	1	156	1	189		131	1	147	2	214		128		175		177		131	
Influenza	10,902	139	1032	14	1492	18	895	13	450	10	332	9	150	2	97	3	87	3	104	3	390	4	680	11	5193	49
Impetigo	12														12											
Malaria	35				6		2		1		5		3		1		3		8		3		1		2	
Malta Fever (Undulant)	29		1		3		3		1		4		2		1		4		2		5		3			
Measles	2,218	24	31	1	81	4	364	4	400	6	441	3	242	4	140	1	44		42		93		137		203	1
Meningitis, Epidemic	18	6	2		5				1		2		2		1				1		2	2			3	1
Mumps	1,598	1	206		190		395	1	157		147		93		84		36		34		63		80		113	
Ophthalmia Neonatorum	11		1		3				2						1				1				2			
Pellagra	30	5	2	1			5	2			1	1			1		1		3		3		7		7	
Pneumonia	1,853	466	180	64	309	42	319	63	137	38	129	43	38	33	29	21	45	15	23	16	44	25	200	42	400	64
Poliomyelitis	15	1	1				2				1		3				1		2		3		1			
Scarlet Fever	304	2	47		51		42	1	27		41	1	13		10		5				15		28		18	
Septic Sore Throat	1	5			1						1		1		1								1		1	
Smallpox	21		6		4						1				1								8			
Syphilis	2,788	110	182	13	274	9	283	15	254	4	223	8	263	14	159	8	240	6	179	8	231	3	174	8	326	14
Trachoma	600		39		89		58		45		62		49		43		56		38		52		45		24	
Tuberculosis	1,247	846	99	74	140	92	137	80	135	76	129	79	102	70	66	66	93	68	77	63	122	53	67	56	80	69
Tularemia	6				1						1				1				1				2			
Typhoid Fever	67	7	10	3	4		3	1	4		4	2	6		16		4		5		3		3	1	5	
Typhus Fever	2										1										1					
Whooping Cough	1,148	50	80		170	5	136	10	151	8	224	7	133	4	48	4	57	2	27	3	36	2	33	2	53	3
TOTAL	27,213	1728	2276	179	3276	172	3041	196	2134	146	2154	159	1390	134	999	110	1039	101	767	102	1431	94	1915	130	6791	205

TABLE X.
REPORTABLE DISEASE MORBIDITY AND MORTALITY SUMMARY—ARIZONA 1940
BY COUNTIES

DISEASES	Total		Apache		Cochise		Coconino		Gila		Graham		Greenlee		Maricopa		Mohave		Navajo		Pima		Pinal		Santa Cruz		Yavapai		Yuma	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Anthrax	1				1																									
Chancroid	40		2		10		3				3		2		8				1		4		1		2		1		3	
Chickenpox	1009		131		70		64		8		4		23		203		46		79		131		15		30		177		28	
Diphtheria	171	16	49	3	28	1	4		1		12	1	1		45	5			4	1	3		18	4		4		3	1	
Dysentery	1,077	35	22	1	3	1			12	5	21	1	19	1	487	2	13	2	158	1	143	8	95	9	36	1	2	66	1	
Encephalitis	10	6			1									6	3					2	1					1				
Erysipelas	2	4		1	1									1						1		1				1			1	
German Measles	90		8		1				2		1		42		1						8		14		1		3		9	
Gonorrhoea	1,908	5	149		154	2	16		14		50	31	1	906	25		43		226	1	66	1	82		43		103			
Influenza	10,902	139	315		543	6	259		261	9	236	8	303	1	4696	53	236	4	547	10	881	24	749	9	431	1	177	4	1268	10
Impetigo	12																													
Malaria	35				6		2		1		9				7		1						2		7					
Malta Fever (Undulant)	29				2				6		1		15		1						3							1		
Measles	2,218	24	127		421	2	1		56	1	8		304	1	615	7	10		317		82	8	31	3	8		72		166	2
Meningitis, Epidemic	18	6	7	1	1									3	4		1				1		4			1			1	
Mumps	1,598	1	71		82		5		27		28		26		88	1	89		460		82		26		8		604		2	
Ophthalmia Neonatorum	11		6						1				2						2											
Pellagra	30	5			1				4		1		10	3					1		2	1	3	1	1	1		6		
Pneumonia	1,853	466	220	50	38	13	29	22	11	28	50	9	48	5	882	161	25	7	92	28	157	73	102	27	25	8	43	18	131	17
Poliomyelitis	15	1	1				1				6		1		6				1		2		1				1		3	
Scarlet Fever	304	2	5		11		30		6		15		7		93	2	23		7		45		28			29		5		
Septic Sore Throat	1	5			1								1		2								1							
Smallpox	21						1				14		1										3			2				
Syphilis	2,788	110	121	14	152	4	22	2	34	1	65	3	29	2	957	43	62		68	1	879	24	128	3	104	8	91	2	76	3
Trachoma	600		201		46		27		6		13		10	5	35		3		60		124		14		9		75		75	
Tuberculosis	1,247	846	210	74	5	24	32	10	8	20	13	9	10	5	175	312	11	5	137	46	481	225	17	40	7	8	118	50	23	18
Tularemia	6				1						3				3						5		5	1	2		2		2	
Typhoid Fever	67	7	7	1	2		3		1		2		1		38	3					5		5	1	2			2		1
Typhus Fever	2										1				1															
Whooping Cough	1,148	50	137	4	35	3	62	1	7	2	17		47		332	11	91		174	5	107	17	32	2	12		20		75	5
TOTAL	27,213	1728	1789	150	1567	58	581	35	481	66	545	32	855	16	9667	612	642	19	2150	93	3381	383	1354	100	765	26	1389	78	2047	60

Annual Report 1940-1941

DIVISION OF HEALTH EDUCATION

Arizona State Board of Health

College and Field Courses in Health Education for the Training of Teachers and Prospective Teachers.

1. During the year the health education program in Arizona has emphasized the training of teachers and prospective teachers for health education work in the schools of the state. Courses in health education were conducted by the director of health education at the Arizona State Teachers College in Tempe and the Arizona State Teachers College in Flagstaff. This phase of the educational program took approximately five months of work on the part of the director of health education. During that time, however, 242 teachers and prospective teachers received instruction in health education, personal and community hygiene, and environmental sanitation.
2. To augment these courses in health education at the Arizona Colleges, field courses have been devised to meet the needs of teachers already in the profession. Such field courses have been conducted by county medical societies under the supervision of the director of health education and in cooperation with the local boards of education, superintendents of schools, and local health departments. These courses have been proven successful in promoting interest in hygiene and health education, and serve as a basis for establishing school health programs. Materials for these courses have been prepared and provided by the division of health education. During the last year, approximately 380 teachers have received training in health education and hygiene by utilizing these training facilities.
3. In addition to the college and field courses in health education the director of health education prepared courses of study for secondary and elementary schools during the year 1940-1941. At the present time 10% of the Arizona elementary schools use courses of study prepared by the director of health education of the State Department.
4. Health Survey-- A health survey sponsored by the State Health Department, Department of Education, and the Arizona State Teachers College at Tempe conducted by the director of health education among the elementary schools of the state for the purpose of discovering the needs of these schools for physical education and recreation. The results of this survey will be used by the colleges of the state to augment the training of teachers of physical education and recreation.
5. Radio: During the fiscal year, radio health education programs were continued as a part of the state program. Broadcasts covering practically all phases of public health were given over the Arizona health network representing six independent and chain radio stations in every section of the State.
6. Lectures: From September 23, 1940 to July 1, 1941, the director of health education gave ninety-five lectures to audiences in the State of Arizona. The total attendance at these lectures numbered 8,025 persons--an average attendance of 84.55 persons per lecture.

7. Motion Pictures: During the fiscal year 1940-1941, motion pictures were utilized almost entirely in the program of visual health education. Sound films were used to augment practically all of the lectures given by the director of health education.

8. Over one hundred and fifty film showings were booked by the health film library. Most of these films were requested by the elementary and secondary schools of the state for the purpose of promoting health instruction in the schools.

9. An estimated 100,000 persons in Arizona were served by the health film library during the year through film showings in the communities of the state.

10. Throughout the year, requests were received from every county of the State for posters, pamphlets, and the loan of text books. During the twelve months of the fiscal year, approximately 8,152 pamphlets on maternal and child health, venereal disease control, tuberculosis control, etc., were distributed to schools, civic organizations, community groups, and professional agencies in Arizona.

11. Professional Cooperative Activities: The activities of the division of health education have always been designed to coincide and correlate with the activities of the Committee on Public Health Education of the Arizona Medical Association. In cooperation with the Committee, radio program, college and field courses in health education, and public health programs were supervised and conducted by the director of health education. No program was begun without the approval of the Committee. Thus, a well-balanced program of health education was developed to meet the needs of the department of health and the medical profession.

12. The director of health education in cooperation with the Maricopa Dental Society designed a plan of Dental Health Education for the county society. This plan has been adopted and is now being carried out by the Committee on Public Relations of the Dental Society.

13. Additional Activities: During the fiscal year of 1940-1941 the director of health education assumed the responsibility of cooperating with various agencies and Committees interested in state health work. From the 1st of September 1940 to March 15th 1941, the director of health education served in the capacity of State Health Supervisor for the National Youth Administration.

14. During the year the director of health education served on the Executive Boards of the Arizona Congress of Parents and Teachers, State Committee for Human Nutrition, State Committee for the Hard of Hearing, State Committee for Family Relations, National Educational Committee on Social Hygiene and the Board of Directors of the Maricopa County Chapter of the American Red Cross. The health education director served in the capacity of Secretary-Treasurer of the Arizona Section of Physical Education and Recreation of the Arizona Educational Association.

Report of the Director, Arizona State Laboratory,
for the year, 1940

Introduction

The Arizona State Laboratory was established by an act of the legislature in 1912, for the purpose of making such analyses as might be necessary in connection with the enforcement of the Arizona Pure Food Law, the examination of waters, and such additional examinations as might be authorized by the Board of Regents of the University of Arizona and the State Superintendent of Public Health, acting in joint session.

Early in 1913, due to many requests from physicians, the Laboratory was authorized to make examinations of sputum. This marked the entrance into the field of public health laboratory work. Since that time the scope of the Laboratory has been expanded until at present, practically any examination of public health importance can be made.

Within the last decade, as a result of increased interest and activity in the field of public health the number of examinations increased to the point where it seemed desirable to establish a Branch laboratory. This was established at Phoenix in 1931.

In October, 1939, the State Board of Health established a laboratory at Flagstaff, which was furnished quarters by the Coconino County Health Service. This laboratory was established for the purpose of furnishing laboratory facilities for the vast northern Arizona region. There had been a need for this service as shown by the constantly increasing number of specimens which are being submitted to that laboratory.

The laboratories have facilities for the performance of diagnostic tests for syphilis, agglutination tests for the diagnosis of disease, the culturing of practically all of the pathogenic bacteria, the examination of smears, the chemical and bacteriological examination of milk, water and food, and the laboratory diagnosis of rabies. Virulence tests, or other examinations which require the use of animals are made only by special arrangement. The Laboratory does not examine tissues or perform clinical chemical tests. A relatively small number of clinical examinations such as blood counts and urine analyses are made, but these are chiefly for the Venereal Disease Clinics, Health Units, or for the University Infirmary. These services are offered to the University in return for quarters, which are furnished to the laboratory at Tucson. The Laboratory does not prepare or distribute vaccines or serum.

Laboratory Examinations

Tables which are attached, show in detail the examinations which were performed during the year. The total number of examinations is 240,204. This does not include 28,411 examinations which were performed in connection with the Cooperative Bang Eradication Project.

The following table gives the principal types of examinations which were performed, and the percentage of the total which each represents:

<u>TEST</u>	<u>NUMBER</u>	<u>PER CENT OF TOTAL</u>
Serologic tests for syphilis	111,894	46.6
Other serologic tests	93,821	39.0
Total Serologic Tests	205,715	85.6
Urine Analysis	10,178	4.3
Water	7,375	3.0
Dairy Products	6,558	2.7
Smears	5,876	2.5
Cultures	1,650	0.7
Special Investigations	1,607	0.7
Other Examinations (Spinal fluid, dark field, hematology, animal heads etc.)	1,245	0.5
Total	240,204	100.0%

In the past few years, the number of examinations performed has greatly increased, as shown by the following table:

<u>Year</u>	<u>Number of Exami- Nations</u>	<u>Bang Irradication Project</u>	<u>Grand TOTAL</u>
1935	8,262	15,258	23,520
1936	15,988	32,425	48,413
1937	44,834	26,256	73,196
1938	108,831	21,286	132,059
1939	156,483	25,065	181,548
1940	240,204	28,411	268,615

The number of examinations in 1940, exclusive of those performed by the Bureau of Animal Industry is TWENTY NINE TIMES the number for 1935--an increase of 2900 per cent.

TOTAL TABULATION OF EXAMINATIONS MADE DURING THE YEAR, 1940.

		<u>Number of Examinations</u>
I	WATER	
	Plate Count	449
	Detection of coli-aerogenes group	6,890
	Chemical	36
II	MILKS	
	Plate Counts	2,289
	Butter Fat	1,822
	Solids not Fat	1,233
	Miscellaneous	190
	Special	1,024
III	SMEARS	
	Vincent's Organisms	404
	Tuberculosis	903
	Gonorrhoea	3,767
	Blood	16
	Diphtheria	104
	Other	682
IV	STOOL SPECIMENS	
	Bacteriological--enteric organisms	380
	Microscopic parasites	118
	Special	18
V	CULTURES	
	Diphtheria	1,067
	Meningitis	5
	Blood	33
	Other	156
	Streptococci	9
VI	SEROLOGICAL	
	Brucellosis	
	Animal--tube method	2,610
	Human --tube method	15,076
	Typhoid Dysentery	
	Typhoid H and O	30,034
	Paratyphoid A and B	30,153
	Syphilis	111,894
	Proteus OX-19	12,961
	Tularemia	2
	Special	2,979
VII	URINE ANALYSIS	
	Chemical	5,980
	Microscopic	4,141
	Special	57
VIII	FOODS	
	Bacteriological	2
	Chemical	10
IX	MISCELLANEOUS	
	Animal Heads--Rabies	86
	Blood Counts	630

TOTAL TABULATION OF EXAMINATIONS MADE DURING THE YEAR, 1940 (Cont'd)

	No. of Examinations
Coagulation Times	33
Spinal Fluids	35
Other	317
X SPECIAL INVESTIGATIONS	1,607
<hr/>	
TOTAL NO. OF EXAMINATIONS THIS YEAR	240,204

Continuous Projects

National Evaluation Study of the Efficiency of
the Performance of Laboratory Tests for the Dia-
gnosis of Syphilis

The Phoenix Laboratory participated in the National Evaluation Study: sponsored by the United States Public Health Service. The results obtained by the Phoenix Laboratory are given below, along with those obtained by the control laboratory (i.e., the author of the test):

<u>TEST</u>	<u>LABORATORY</u>	<u>SENSITIVITY</u>	<u>SPECIFICITY</u>
Kline Diagnostic	Control	75.7%	97.2%
	Arizona	74.7%	98.6%
Hinton	Control	79.7%	100.0%
	Arizona	74.2%	99.5%
Kahn Standard	Control	71.2%	100.0%
	Arizona	63.5%	100.0%

The results obtained by the Phoenix Laboratory compare well with those obtained by the control laboratories. With the exception of the Kline test, the results are well within the limits of sensitivity and specificity prescribed by the United States Public Health Service. In the case of the Kline test, difficulty, due to certain unsatisfactory lots of antigen, was encountered by practically all laboratories which entered the Kline test. It is understood that Dr. Kline has eliminated this difficulty and the Kline test will be entered in the 1941 study.

The Diagnosis of Enteric Infections

Isolation of the incitants of enteric infections are few, even in cultures for the release of known typhoid cases. When compared to the estimated percentage of typhoid cases who become convalescent or permanent carriers, the percentage for Arizona is extremely low.

In order to improve laboratory procedures, if possible, a comparative study of methods, preservatives and culture media has been made by the three laboratories. Results are as yet inconclusive but this project is being continued. The few typhoid cultures which have been isolated have been referred to Dr. Alfred S. Lazarus, University of Colorado Medical School for Bacteriophage typing.

The reports of prevalence of disease in Arizona show that many cases of dysentery are reported. It is not apparent from examination, how many of these may be amoebic or bacillary. Since many cases are not confirmed by laboratory examinations, there is a possibility that a part of these may be gastroenteritis or acute indigestion rather than bacillary dysentery. In order to obtain some information one cooperative project has been established.

A Study of the Bacterial Flora of Arizona Waters

The Tucson Laboratory has, over a period of time, attempted to identify organisms isolated from water supplies. Particular attention has been given to those organisms which ferment lactose. Due to the pressure of other examinations, little has been accomplished during the past year.

Incidence of Agglutinins

The Tucson Laboratory has published findings regarding the incidence of agglutinins for Typhoid, Paratyphoid, Brucella and Proteus OX-19. Similar studies are under way at Flagstaff and Phoenix in order to determine to what extent agglutinins might occur in persons residing in areas served by these laboratories.

NEW PROJECTS

Bacteriological Study of the Colorado River

In May, as a result of an earthquake which caused considerable damage to water supplies in California, the Health Officer at El Centro requested that the State Board of Health make an investigation at Yuma. Water is diverted from the Colorado River below Yuma through canals, which pass through Mexico and eventually become the water supply of several cities in southern California. The City of Yuma has discharged raw sewage into the Colorado River for years, but the earthquake damaged treatment plants to such an extent that the California health officials feared an epidemic of water borne diseases. At the request of the California authorities, the City of Yuma chlorinated all sewage discharged into the river. A survey was made and the data obtained, although not sufficient to warrant any definite conclusions, indicated that the bacterial content of the Colorado River at Yuma is much greater below the point of discharge of sewage than above. Chlorination of sewage before discharge reduces the numbers of those organisms to some extent. Apparently, however, self purification proceeds rapidly. This confirms a similar study made several years ago by Miss Jane Rider. In the meantime, Boulder Dam has been constructed, and the amount of silt carried by the Colorado River at Yuma has been reduced. It is hoped that at some future date, Miss Rider's investigation may be repeated in order to determine what effect, if any, the removal of silt may have upon the bacterial flora of the Colorado River water.

National Defense Program

With the passage of the Selective Service Act, the Laboratory was requested to cooperate with the United States Public Health Service, the Selective Service System and the Arizona State Board of Health by providing laboratory services. At the time of registration, all registrants in Pima and Maricopa counties were requested to report to their physician or to their health department for a blood test. Due to the limitation of equipment and personnel, it was impossible to extend this survey to other counties, but a significant number of registrants in other counties did voluntarily consult their physicians and blood specimens were submitted. The results of the tests were reported to the State Board of Health, who notified the registrants either that their tests had been negative, or to consult their physician or health officer regarding another test. As a result of this program, a significant number of cases of syphilis have been discovered among registrants and their families, and a large percentage are already receiving anti-syphilitic treatment.

A blood test is a part of the physical examination of every registrant, and the laboratories have placed their facilities at the disposal of the Selective Service System. An adequate supply of specimen outfits were sent to every local board.

The following table gives the results of serologic tests for the diagnosis of syphilis which have been made upon registrants who voluntarily submitted to blood tests and those men who were examined by Medical Examining Boards. Numbers refer to men, and not to specimens. Recheck specimens were not included.

	Negative		Doubtful		Positive		Total
	No.	%	No.	%	No.	%	
Registrants	5108	92.0	81	1.5	368	6.5	5557
Selectees	1809	90.4	63	3.1	130	6.5	2002
Total	6917	91.6	144	1.9	498	6.5	7559

At present, Fort Huachuca is the only Army Post in Arizona. The post is being expanded, and the facilities of the Tucson laboratory have been placed at the disposal of the Post Commander. A large number of samples of water and milk, as well as blood specimens have been submitted.

National Youth Administration

This administration has recently inaugurated a health program which includes a complete physical examination of all persons employed on N.Y.A. projects. The three laboratories are cooperating in this program by providing necessary laboratory facilities. Blood and urine examinations are performed routinely, and other tests are made when indicated.

State Evaluation Study of Laboratory Tests for Syphilis

In cooperation with the State Board of Health, an evaluation study was sponsored. Every laboratory in Arizona was invited to participate, and the following laboratories accepted.

Pathological Laboratory, Phoenix
St. Joseph's Hospital, Phoenix
Copper Queen Hospital, Bisbee

(Cont'd):

State Welfare Sanitarium, Tempe
The Thomas Laboratories, Yuma
U. S. Veterans' Hospital, Tucson
Drs. Holbrook and Hill, Tucson
Laboratory of Dr. N. C. Bledsoe, Tucson
Thomas-Davis Clinic, Tucson
Wyatt Clinic, Tucson
Arizona State Laboratory, Tucson
Phoenix Branch, State Laboratory, Phoenix
State Board of Health Laboratory, Flagstaff

Blood specimens were secured through cooperation of the Maricopa County Health Unit, Phoenix. The following technics were entered in this survey: Hinton, Kahn, Kline, Leiboff, Mazzini, Kolmer-Wassermann and U.S. Veterans Administration Wassermann. In general the results obtained by various technics in the several laboratories showed excellent agreement, except for the fact that in a few laboratories, complement fixation tests were low in sensitivity. The results indicated that the laboratories that participated are performing serologic tests for the diagnosis of syphilis in a satisfactory manner. Several laboratories had sensitivity ratings of 90% or more, with specificity ratings of 100%.

Gonococcus Cultures

With the installation of Gonorrhoea Clinics at Phoenix and Tucson and the use of sulfanilamide and similar compounds in the treatment of this disease, the demand for cultural studies, in addition to conventional microscopic examinations became necessary. Consequently the number of gonococcal cultures has increased. Primary cultures are secured through the use of ascitic fluid swabs described by Greene and Breazale, Journal of Laboratory and Clinical Medicine, Vol. 23, p. 1211, 1938. After incubation, and the examination of stained preparations from the swabs, they are used to inoculate secondary media. The oxidase test is applied and suspicious colonies are transferred to the usual carbohydrate media for the biochemical identification of the gonococcus. The results of this study confirm the findings of other investigators, that the cultural method is a valuable aid in the diagnosis of gonococcal infections.

Cooperation with State and Federal Agencies

It has been the policy to assist and cooperate to the fullest extent with other departments, State and Federal. Services have been made available to the following departments: Arizona State Teachers' College, Tempe, Arizona State Teachers College, Flagstaff, University of Arizona, State Dairy Commission, State Veterinarian, State Prison,

State Hospital, Industrial School, Arizona School for Deaf and Blind, Board of Pharmacy, State Highway Patrol, U. S. Indian Service, U. S. Bureau of Animal Industry, Health Departments, Law Enforcement Agencies.

Any physician in Arizona may submit specimens for the diagnosis or control of communicable disease. Examinations, not strictly of public health nature, may be made by a special arrangement for persons not able to pay for the services of a commercial laboratory.

Special Investigations

As time has permitted, attention has been given to various problems which have arisen. Several papers dealing with these problems have been published during the year, and others have been accepted for publication. A list follows:

- The Occurrence of Neurotropic Viruses in Wildlife - (Breazeale)
- Blood Groups of the Papago Indians (Brezeale, Green, Kantor)
- The Reaction of Animal Serum to Laboratory Test for the
Diagnosis of Syphilis (Greene, Breazeale, Harding)
- Transient Positive Laboratory Tests for Syphilis (Greene and Breazeale)
- Comparison of Methods for the Laboratory Diagnosis of
Syphilis (Greene and Breazeale)
- Normal Blood Counts of Mexican Children of Tucson (Breazeale & Greene)

Foods, Water and Dairy Products

Due to the increase in other types of work, less attention has of necessity been given to foods. The Laboratory has, however, actively cooperated with the U. S. Food and Drug Administration. As far as foods are concerned, Arizona is a consumer rather than a producer state. With the exception of vegetables, meats and dairy products, a large proportion of foods are imported. Consequently cases of adulteration and misbranding of foods which have been shipped in interstate commerce have been referred to the United States Food and Drug Administration.

Several complaints were received regarding spray residues on fruits and vegetables. Excessive amounts were not found in any case. Although certain lots of lettuce did contain arsenic, the amounts were within the permitted tolerance. Several lots of celery contained spray residues, but these were found to be those of Bordeaux mixture.

In cooperation with the Cochise County Health Service, a shipment of worm infested fish was destroyed. Samples of insect infested candy were also submitted. The matter was referred to the United States Food and Drug Administration, with the result that thousands of worm infested candy bars were seized and destroyed.

Considerable quantities of sea food are imported from Mexico. Although this is primarily a problem for Federal action, the United States Food and Drug Administration have not been able to have a full time sea food inspector at ports of entry. When inspectors have been on duty at Nogales, the Laboratory and the Sanitarian of the Santa Cruz County Health Service, have cooperated with the Food and Drug Administration. Several thousand pounds of decomposed fish and shrimp have been seized and destroyed.

The Quartermaster, Fort Huachuca, purchases large quantities of food. In some cases, foods have been rejected due to decomposition or failure to meet Army Standards. There is reason to believe that in some cases, foods rejected by the Army have been offered for sale within the state. In view of the expansion of Fort Huachuca, and the possibility that rejections might become more frequent, arrangements have been made whereby any necessary action can be taken against rejected food.

A few outbreaks of food poisoning have been investigated. In most cases, epidemiological investigations and laboratory findings have been inconclusive. In one outbreak, involving several prisoners, evidence indicated that macaroni was the food responsible for the outbreak. A strain of staphylococcus was isolated from the macaroni which was considered as being the causative organism.

During the year, 7,375 examinations of water have been made. A small part of these were submitted from private supplies. The majority came from public supplies. Samples have been submitted from every municipal supply in Arizona. The water supplies of public carriers--railroads, bus lines and air lines--have been examined, and the results have been used by the State Sanitary Engineer for the certification of these supplies for use by interstate carriers.

There were 6,558 examinations of dairy products. A part of the samples were submitted by the State Dairy Commission; others were submitted by the various health units. In Addition to the usual examinations, the phosphotase test was employed. Several cases of improper pasteurization were discovered. In some instances, this was due to inadequate heating or holding time; in others equipment was at fault. There have been several cases in which addition of water to milk has been suspected. Although the percentage of solids not fat was below the legal standard, with a single exception, added water was not detected.

AVAILABLE PUBLICATIONS OF THE ARIZONA STATE LABORATORY

1940

Incidence of Spirochaetes and Fusiform Bacilli in Throat and Gum Smears, Southwestern Medicine, Jan. E.L. Breazeale & Robert Greene.

Incidence of Agglutinins for Typhoid, Paratyphoid and Brucella Abortus, Southwestern Medicine, April, E. L. Breazeale and Robert A. Greene

Ropiness in Tea Caused by Aerobacter Aerogenes in a Water Supply, American Journal of Public Health, Vol. 30, p. 680-682, 1940 Emma Judd, G. W. Marx, and Robert A. Greene.

A Quantitative Study of Syphilitic Serum, Journal of Laboratory and Clinical Medicine, Vol. 25, p. 972-974, Robert A. Greene, Edward L. Breazeale and Charles C. Croft.

Early Mild Infestation with the Parasite Trichinella Spiralis, Journal of the American Medical Association, Vol. 114, p. 2271-2275. Dr. J. E. Andes, Robert A. Greene and Edward L. Breazeale

Incidence of Agglutinins for Proteus OX-19, Southwestern Medicine, September, Edward L. Breazeale, Robert A. Greene and Harry B. Harding.

Food Poisoning Due to Aerobacter Cloacae, Southwestern Medicine, November, Robert A. Greene, Harry B. Harding, and Dr. Z. D. Noon.

Why the B. Coli Group? Bulletin of Arizona Sewage and Water Works Association, Vol. 3, October. Robert A. Greene.

The Arizona State Laboratory, Arizona Public Health News, January Robert A. Greene

The Functions of a Public Health Laboratory, Arizona Public Health News, January. Robert A. Greene.

Articles Accepted for Publication

A Comparison of the Hinton, Kahn, Kline and Mazzini Tests for Syphilis. Journal of Laboratory and Clinical Medicine.

A Quantitative Study of the Reaction of Heated and Unheated Cow Sera to the Hinton, Kline and Mazzini Tests. The American Journal of Syphilis, Gonorrhoea, and Venereal Diseases.

Articles Accepted for Publication (Cont'd)

The Absence of Heterophile Antibodies in Cow Sera and the Occurrence of Positive Kline Reactions. The American Journal of Syphilis, Gonorrhoea and Venereal Diseases.

Transient Positive Serologic Tests for Syphilis. Journal of Laboratory and Clinical Medicine.

Blood Groups of the Papago Indians. Journal of Immunology.

Normal Blood Counts of Mexican Children of Tucson, Arizona, Southwestern Medicine.

The Leiboff Test. Southwestern Medicine

The Incidence of Syphilis Among a Group of College Students. Southwestern Medicine.

DIVISION OF SANITATION

1940 - 1941

All municipal and community water supplies receive the supervision of the state department. Operators and interested individuals submit samples routinely to the state laboratories. Check samples are taken periodically by state and local health personnel. A copy of all water reports from the laboratory is submitted to the engineering division. At least one sanitary survey of every major water supply in the state is made once each year. Promotional effort toward improvements where needed is constantly an activity.

As a result during the past year, several major improvements were attained as follows: Flagstaff, complete chemical water treatment plant, capacity 1.33 million gallons per day; Williams, complete chemical water treatment plant, capacity 400,000 gallons per day; McNary, sanitary development of new springs; Lakeside, new pipeline to replace old insanitary earth canal; Navajo, new system entirely; St. Johns, additional chlorination facilities; Kingman, additional storage capacity; and Cottonwood, chlorination.

Rural water supplies are handled principally by local health personnel, assistance is furnished by the state by request.

The federal housing projects, through a cooperative agreement, must have the approval of the Public Health organization, either State or local for their water supply and sewage disposal before its acceptance by the F.H.A.

Besides a number of sewer extensions several towns are contemplating new sewer plants, chief of these are the cities of Mesa and Tucson. The State carries on the promotional work where needed and reviews plans of improvements to insure satisfactory work.

The Fifteenth Legislature of the State of Arizona, 1941 passed an act known as "The Sanitary District Act of 1941". It provides for the establishment of sanitary districts. This act will be of great benefit toward improvement of sewage disposal facilities in communities unincorporated.

In rural sewage disposal activities local health personnel are most active. The state has issued a bulletin for guidance in the construction of disposal systems for the rural home. The state sanitation personnel assist by request.

The Community Sanitation project has functioned well during the past year and it is with regret that we learn that it is to be discontinued.

Although the state department is interested in Housing control, it has been found impossible to engage actively in it as yet. Federal slum clearance projects have been completed in Phoenix and several other towns are contemplating similar improvements.

Local health personnel perform most of the promotional activity in relation to garbage collection and disposal, although the state assists by request.

Milk sanitation and control is not a major activity of the state department since a State Dairy Commissioner is provided for this activity. Local health personnel however are engaged in this work. The State department does make special investigations by request for instance at the State Teachers College, Flagstaff the milk supply was radically improved by such an investigation and recommendations.

Supervision of hotels, restaurants, lodging houses, etc. is not done, although there is a need for this type of activity. Lack of sufficient personnel and legislation discourages any such extended program. The state does act as consultant by request. Local health personnel carry on this activity satisfactorily in those counties having such service.

Stream pollution studies and activities are usually of a minor nature. They occur infrequently; the most recent study was made of Granite Creek, Prescott.

Swimming Pool work is limited to educational activities, reviewing of plans and consulting with local health personnel.

Surveys and recommendations for camp and recreational resort sanitation are made by request and some local health services have labor camps under control. In some instances requests for surveys are made without coaching.

Respectfully submitted

Geo. W. Marx, C. E.
Acting State Sanitary Engineer.

DIVISION OF MATERNAL AND CHILD HEALTH

During the past year the funds allotted to Arizona by the United States Children's Bureau under Title V of the Social Security Act have supported the following programs.

PUBLIC HEALTH NURSING SERVICE

Thirty-two nurses have been paid in whole or part from these funds during year 1940-1941.

These nurses assist in maternal, infant, and preschool children's clinics. They do follow-up work in the homes of the patients of above clinics. Nurse conferences are held for instructing prospective mothers in proper care during the prenatal period. Assistance is given to school nurses on general health problems and in the control of communicable diseases.

MATERNAL AND CHILD HEALTH CLINICS

In twenty two centers throughout the state, maternal clinics are held. In some of the densely populated districts, these clinics are held weekly or every two weeks, but most of the centers have clinics monthly. Both prenatal and postnatal care, including regular urinalyses, routine blood tests for syphilis, and hemoglobin determinations are given by obstetricians in Tucson and Phoenix and by general practitioners in the smaller cities. Twenty two physicians participate in this work. The bulk of the patients coming to these clinics are from the indigent and low income groups.

In forty-three centers throughout the state, infant and child welfare clinics are held regularly. Many of these clinics have grown so rapidly that they are now held weekly in order to accommodate the large case load. Infant clinics receive patients from birth to eighteen months of age. The food and behavior habits are supervised by pediatricians in Tucson and Phoenix and by general practitioners in the smaller towns. These doctors are paid a small hourly fee for attending clinics. Immunization for diphtheria and smallpox are given to all regularly registered babies before the end of the first year. Immunization for whooping cough is given in some centers and is rapidly gaining favor. Preschool clinics receive babies from eighteen months to six years of age. These children are checked regularly from every three to six months. Thirty physicians participate in the infant and child work.

During 1940-1941, three dentists have participated in the work of the maternal and child clinics. Their work has been mainly prophylactic.

POST-GRADUATE EDUCATION FOR PHYSICIANS AND NURSES

Eleven physicians participated in post graduate refresher courses in Pediatrics, of two weeks duration, given at the University of California medical school under the supervision of Dr. Amos Christie. Three Health Officers attended a five day refresher course in Pediatrics also given at the University of California. Nine nurses were aided in obtaining sufficient post graduate work to complete one year of academic public health training. One nurse attended a two weeks course in the care of the premature infant.

All of the above personnel were aided with a cash stipend, plus railroad fare.

THE DEMONSTRATION UNITS

A home delivery service was begun in December 1940 in Tucson. Three nurses rotate to cover the service. The patients are followed in prenatal clinics and again checked after delivery. The deliveries are done at home by the resident physicians from the two hospitals in Tucson. This service was well received and growing rapidly when it was terminated because the physicians were called to the army in May.

The nursing force and much of the equipment of three maternity homes, in Winslow, Snowflake, and St. Johns, were purchased by these funds. The patients pay as they are able, to help cover the current expenses. One hundred and sixty-seven patients were delivered in the three homes during 1940-1941. The medical care is given by the local practicing physicians.

ADVISORY COMMITTEE

Five physicians comprise the advisory council, which gives technical aid to the Director of M.C.H. Three meetings were held during the year. Three of the council members are making surveys on stillbirths, deaths where infants were delivered by midwives, and maternal deaths.

A lay advisory committee meets twice a year to offer suggestions and criticisms.

DIVISION OF LOCAL HEALTH ADMINISTRATION

Function

1. Supervision of local and full-time health services to promote uniform administration throughout the State. There are at present full-time health services in six counties: Cochise, Coconino, Maricopa, Pima and Santa Cruz, and Yuma. The Health service for Pima and Santa Cruz Counties comprise a health district, the only one in the State, and the service of both counties is under the supervision of the Pima County Health Service Director.

There are full-time health nursing services in Navajo and Apache counties. At present, 78% of the State's population is under full time health service. We are cooperating with agencies not under the cooperative health program, namely, the American Red Cross and the Public Schools. The Red Cross at various times sponsors a demonstration nursing service in the Counties. The purpose of this is to familiarize such local communities with a public health nursing service and to assist in creating a demand for the permanent establishment of such services.

2. Communicable Disease Control

- A. Collection of Statistics
- B. Assistance in epidemics
- C. Supervision and cooperation in immunization programs
- D. Particular attention to special health problems of Arizona, as

1. Tuberculosis control

This consists of the continuous tuberculin testing and X-ray programs in the public schools and teachers' colleges. The Field organization consists of an X-ray technician and a public health nurse who operate with the healthmobile, a mobile X-ray laboratory, and cooperate in local health unit programs

2. Venereal Disease Control

- a. Clinics

We have established six full-time clinics in population centers of the State with an average patient load of 1500. Seven clinics in outlying areas have also been recently established.

- b. Free drugs are supplied physicians for the treatment of venereal disease patients. There are more than 100 private physicians participating in this program, all counties in the state are represented and the average patient load is 500.
- c. Selective Service
In addition to the program outlined in venereal disease control this division has cooperated with the Selective Service in securing a blood test on every selectee who came up for examination before local boards in this state. In positive cases an effort is made for follow-up for the purpose of bringing such cases under treatment and securing their physical rehabilitation. A total of 7,890 such blood examinations have been made and 509 were positive, or approximately 7%.
- d. Mexican Border
Because the southern boundary of the State is also the international boundary line between the United States and the Republic of Mexico, communicable disease problems on either side of the border are equally a problem for both sides. In view of this, and because of the present military emergency, the Director of this division personally contacted the Health officers of Nogales, Naco and Agua Prieta and secured their cooperation in a case finding and treatment program. This is an assistance that is materially reducing the risk of infection and is building up a cordial relationship.

Note: Statistical reports from the operation of the Healthmobile and statistical and financial reports for all counties follow as a part of the report of the Division of the Local Health Administration.

Statistical and Financial Reports for Counties

A P A C H E C O U N T Y

Apache County has an area of 11,174 square miles and a population, according to the 1940 census, of 24,095. However, over 74% of the county area is federal land and a large proportion of the population lives on Indian Reservations as government wards.

During the past year, two public health nurses served the county; local funds being available for matching federal money. In addition during the year, a maternity hospital was established in cooperation with the State and County and Federal Children's Bureau. The personnel consists of: Senior Nurse, Junior Nurse, Attendant and a relief nurse.

Expenditures for full time health work in cooperation with state and Federal agencies were:

<u>TOTAL</u>	<u>LOCAL</u>	<u>CHILDREN'S BUREAU</u>
\$7,065.22	\$1,544.76	\$5,501.46

Additional expenditures for health work made by the county were:

Indigent Care

Physician's Fees	\$2,500.00
Hospitalization	640.00
Drugs	1,199.40
Hospital Rent	430.00
Vital Statistics	173.50

A P A C H E C O U N T Y

Population - U. S. Census:		1920	1930	1940					
		13,196	17,765	24,095					
VITAL STATISTICS									
		1925		1930		1935		1940	
		no.	rate	no.	rate	no.	rate	No.	Rate
BIRTHS									
no. and rate per 1000									
TOTAL		220	14.2	333	18.6	297	14.1	474	19.5
White		113		80		95		128	
Mexican		53		39		65		77	
Indian		27		208		118		245	
Other		26		6		19		24	
DEATHS									
All Causes									
No. and rate per 1000									
TOTAL		119	7.7	108	6.0	216	10.2	269	11.1
White		54		24		36		33	
Mexican		35		14		31		15	
Indian		56		69		146		215	
Other		14		1		3		6	
INFANT DEATHS									
No. and rate per 1000 live births									
TOTAL		26	118.2	25	75.1	69	232.2	86	181.4
White		8		1		8		5	
Mexican		13		21		13		8	
Indian		2		--		47		72	
Other		3		--		1		1	
COMMUNICABLE DISEASE CASES AND DEATHS									
		1925	1930	1935	1940				
TUBERCULOSIS	Cases	2	12	54	210				
	Deaths	22	18	32	74				
PNEUMONIA	Cases	20	7	72	220				
	Deaths	21	9	45	50				
DIPHThERIA	Cases	15	4	4	49				
	Deaths	-	-	1	3				
TYPHOID	Cases	7	6	4	7				
	Deaths	2	2	1	1				
GONORRHEA	Cases	-	4	40	149				
	Deaths	1	-	-	-				
SYPHILIS	Cases	-	7	21	121				
	Deaths	1	3	-	14				
MALTA FEVER	Cases	-	-	-	-				
	Deaths	-	-	-	-				

C O C H I S E C O U N T Y

Cochise County has an area of 6,256 square miles, less the 30% of which is Federal land. The 1940 U. S. Census gives the population as 34,627. There are almost no Indians in the County.

In cooperation with State and Federal agencies, Cochise County maintains a full time health unit with the following personnel: Director, Supervising nurse, 6 public health nurses, 2 sanitarians and a clerk.

Expenditures for the past fiscal year were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	U S P H S		CHILDREN'S
			<u>TITLE VI</u>	<u>V.D.</u>	BUREAU
\$28,133.98	\$1,599.84	\$13,513.61	\$5,049.72	\$295.94	\$7,647.86

COCHISE COUNTY

Population - U. S. Census:	1920	1930	1940
	46,465	40,998	34,627

VITAL STATISTICS

	1925		1930		1935		1940	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
BIRTHS								
NO AND rate per 1000								
TOTAL	1164	26.6	1071	26.2	625	16.6	789	22.8
White	462		522		291		426	
Mexican	622		492		280		339	
Indian	---		1		1		--	
Other	80		56		53		24	
DEATHS								
All Causes								
NO. and rate per 1000								
TOTAL	550	12.6	477	11.7	396	10.5	374	10.8
White	293		280		246		248	
Mexican	231		178		127		108	
Indian	2		--		6		1	
Other	24		19		17		17	
INFANTS DEATHS								
no. and rate per 1000 live births								
TOTAL	118	101.4	81	75.6	59	94.4	41	52.0
White	34		25		17		15	
Mexican	78		53		39		24	
Indian	1		--		1		1	
Other	5		3		2		1	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	3	6	47	5
	Deaths	45	26	27	24
PNEUMONIA	Cases	1	24	57	38
	Deaths	75	59	35	13
DIPHTHERIA	Cases	11	18	2	28
	Deaths	4	1	1	1
TYPHOID	Cases	62	12	5	2
	Deaths	9	2	-	-
GONORRHEA	Cases	24	17	112	154
	Deaths	-	-	-	2
SYPHILIS	Cases	4	7	41	152
	Deaths	7	2	6	4
MALTA FEVER	Cases	-	-	1	2
	Deaths	-	-	-	-

C O C O N I N O C O U N T Y

Coconino County with an area of 18,573 square miles is the largest county in Arizona and the second largest in the United States, and of this area, about 81% is Federal lands. The 1940 census gives the county a population of 18,770, or only a fraction over one person for each square mile.

Coconino county has a full time county health unit composed of a director, two public health nurses, a sanitarian, and a clerk. Until the present year the branch of the state laboratory which serves the northern part of the State, was set up in the Coconino County budget, adding the following personnel: bacteriologist, dishwasher, and during the last few months of the year a part time clerk.

Expenditures for full time health work for the fiscal year ended June 30, 1941, were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>US PHS TITLE VI</u>	<u>V.D.</u>	<u>CHILDREN'S BUREAU</u>
\$17,753.53	\$1,799.76	\$6,680.	\$5,846.51	\$1,250.	\$2,177.26

Additional County expenditures for health work were:

Physicians' salaries, fees, expense and travel	\$5,300.00
Hospitalization	8,002.19
Vital Statistics	26.00
School Nurses - salaries and expense	4,000.00

C O C O N I N O C O U N T Y

Population - U. S. Census:	1920	1930	1940
	9,982	14,064	18,770

VITAL STATISTICS

	1925		1930		1935		1940	
	no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS								
no. and rate per 1000								
TOTAL	376	31.3	358	25.2	303	18.1	354	18.4
White	215		140		138		183	
Mexican	120		133		108		102	
Indian	30		78		42		57	
Other	11		7		15		12	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	159	13.2	166	11.7	188	11.3	152	7.9
White	64		50		93		77	
Mexican	74		61		38		33	
Indian	12		52		50		37	
Others	9		3		7		5	
INFANTS DEATHS								
no. and rate per 1000 live births								
TOTAL	53	141.0	41	114.5	32	105.6	29	81.9
White	11		8		5		5	
Mexican	35		28		11		10	
Indian	4		5		15		13	
Others	3		-		1		1	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	1	2	15	32
	Deaths	6	15	14	10
PNEUMONIA	Cases	5	24	39	29
	Deaths	26	25	24	22
DIPHTHERIA	Cases	3	9	-	4
	Deaths	1	-	--	-
TYPHOID	Cases	6	10	--	3
	Deaths	3	1	--	-
GONORRHEA	Cases	5	1	17	16
	Deaths	-	-	-	--
SYPHILIS	Cases	-	-	7	22
	Deaths	3	-	3	2
MALTA FEVER	Cases	-	-	1	-
	Deaths	-	-	-	-

G I L A C O U N T Y

Gila County has an area of 4,750 square miles, only a little over 1% of which is state land. However, in this small state area is the greatest concentration of white and Mexican population as it includes large mining centers. The 1940 census gives the Gila County population as 23,867, and according to provisional summaries the Indian population probably does not greatly exceed 10%.

During the past year a full time district sanitarian was stationed in Gila County. Expenditures for this item were:

<u>TOTAL</u>	<u>LOCAL</u>	<u>USPHS TITLE VI</u>
\$2,362.50	\$1,050.00	\$1,312.50

Other health expenditures were:

Physicians' salaries, fees and expenses care of indigent sick	\$ 8,517.05
Hospitalization	21,500.00
Drugs	4,502.34
Rent, transportation & miscel expenses	3,233.51
Isolation Hospitals	2,320.00
County nurse, salary and travel	2,700.00
Inoculations-physicians' fees	723.00
Expenses and supplies	686.53
School nurses	4,000.00

G I L A C O U N T Y

Population - U. S. Census:		1920	1930	1940					
		25,678	31,016	23,867					
VITAL STATISTICS									
		1925		1930		1935		1940	
		no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS									
no. and rate per 1000									
TOTAL		1029	36.3	1024	33.2	522	19.1	491	20.6
White		384		393		199		261	
Mexican		560		523		204		139	
Indian		68		85		103		87	
Other		17		23		16		4	
DEATHS									
ALL CAUSES									
no. and rate per 1000									
TOTAL		463	16.3	422	13.7	259	9.5	222	9.3
White		170		179		125		134	
Mexican		216		183		68		38	
Indian		71		56		58		49	
Other		6		4		8		1	
INFANT DEATHS									
no. and rate per 1000 live births:									
TOTAL		120	116.6	88	85.9	38	72.8	31	63.1
White		27		21		6		8	
Mexican		79		56		18		11	
Indian		14		11		12		12	
Others		-		-		-		-	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	3	8	20	8
	Deaths	79	52	36	20
PNEUMONIA	Cases	-	6	40	11
	Deaths	60	34	28	28
DIPHTHERIA	Cases	4	49	7	1
	Deaths	1	7	-	-
TYPHOID	Cases	19	9	-	11
	deaths	4	2	-	-
GONORRHEA	Cases	3	-	17	14
	Deaths	-	-	-	-
SYPHILIS	Cases	2	-	36	34
	Deaths	2	7	3	1
MALTA FEVER	Cases	-	2	-	6
	Deaths	*	-	-	-

G R A H A M C O U N T Y

Graham County has an area of 4,610 square miles about 25% of which is state land.

The population in 1940 was 12,113 with few Indians and most of the population concentrated in agricultural districts through which runs a transcontinental highway. There is no full time health work in Graham county organized in cooperation with State and Federal agencies.

G R A H A M C O U N T Y

Population - U. S. Census:		1920		1930		1940			
		10,148		10,373		11,113			
VITAL STATISTICS									
		1925		1930		1935		1940	
		no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS									
NO. and rate									
per 1000									
TOTAL		304	29.6	346	33.2	372	32.7	353	28.7
White		202		256		223		232	
Mexican		69		86		122		98	
Indian		24		21		22		21	
Other		9		3		5		2	
DEATHS									
ALL CAUSES									
no. and rate									
per 1000									
TOTAL		111	10.8	128	12.3	134	11.8	123	10.0
WHITE		58		89		77		78	
Mexican		32		28		46		35	
Indian		19		10		11		9	
Other		2		1		-		1	
INFANTS DEATHS									
no. and rate per									
1000 live births									
TOTAL		28	92.1	28	80.9	37	99.5	31	87.8
White		10		14		10		13	
Mexican		12		10		20		17	
Indian		5		4		7		1	
Other		1		-		-		-	

C O M M U N I C A B L E D I S E A S E C A S E S A N D D E A T H S

		1925	1930	1935	1940
TUBERCULOSIS	Cases	-	-	1	13
	Deaths	11	10	9	9
PNEUMONIA	Cases	-	3	26	50
	Deaths	9	12	13	9
DIPHTHERIA	Cases	12	13	21	12
	Deaths	1	2	1	1
TYPHOID	Cases	1	7	8	-
	Deaths	-	2	-	1
GONORRHEA	Cases	-	-	36	50
	Deaths	-	-	-	-
SYPHILIS	Cases	-	-	36	65
	Deaths	-	-	-	3
MALTA FEVER	Cases	1	-	1	1
	Deaths	-	-	-	-

GREENLEE COUNTY

Greenlee County has an area of 1,874 square miles only about 10% of which is state land. It has a population, according to the 1940 census of 8,698 and is the second smallest county in the state. Since Federal lands are not Indian reservations, practically the entire population is white or Mexican and is concentrated in mining areas. Supervisory consultation services are given to an infant clinic in Morenci, but there is no full time organized work in the county under the direction of the State Department of Health.

County expenditures for health are:

Indigent care:

Physicians' fees	\$1,875.00
Hospitalization	5,260.00
Drugs	901.86
Indigent Relief	5,014.31

GREENLEE COUNTY

POPULATION - U. S. Census:		1920	1930	1940					
		15,362	9,886	8,698					
VITAL STATISTICS									
	1925		1930		1935		1940		
	no.	rate	no.	rate	no.	rate	no.	rate	
BIRTHS									
no. and rate per 1000									
TOTAL	262	20.8	316	32.1	121	13.0	246	28.2	
White	139		76		35		135		
Mexican	98		229		75		111		
Indian	--		---		--		--		
Other	25		11		11		--		
DEATHS									
ALL CAUSES									
no. and rate per 1000									
TOTAL	181	10.4	132	13.4	57	6.1	73	8.4	
White	56		28		23		34		
Mexican	73		103		32		39		
Indian	-		-		1		-		
Other	2		1		1		-		
INFANT DEATHS									
no. and rate per 1000 live births									
TOTAL	50	190.8	42	132.9	7	57.9	13	52.8	
White	15		4		-		2		
Mexican	34		38		7		11		
Indian	-		-		-		-		
Other	1		-		-		-		

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	-	-	10	10
	Deaths	19	15	5	5
PNEUMONIA	Cases	--	4	17	48
	Deaths	6	14	3	5
DIPHTHERIA	Cases	1	8	-	-
	Deaths	-	1	-	-
TYPHOID	Cases	1	10	3	2
	Deaths	1	1	-	--
GONORRHEA	Cases	-	--	13	31
	Deaths	-	--	--	1
SYPHILIS	Cases	-	--	4	29
	Deaths	2	--	2	2
MALTA FEVER	Cases	-	-	-	--
	Deaths	-	-	-	--

M A R I C O P A C O U N T Y

Maricopa County located in the central part of the state and containing the rich agricultural district of the Salt River Valley, has a population of 186,193, including the largest city of the State, Phoenix, which has a population of 65,414 within the incorporated limits and 121,828 within the metropolitan area. Over 39% of the total population of the state is in this one county. The area of the county is 8,231 square miles, about 49% Federal lands.

In cooperation with state and Federal agencies, a full time local health unit is maintained with the following personnel: Director, assistant director, supervising nurse, 15 public health nurses, three clinic nurses, three V. D. clinicians, 2 sanitarians, and 2 clerks.

Expenditures for the fiscal year ended June 30, 1941, for this unit were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>U S P H S</u> <u>TITLE VI</u>	<u>V. D.</u>	<u>CHILDREN'S</u> <u>BUREAU</u>
\$56,166.22	\$2,315.52	\$26,136.19	\$19,839.70	\$5,941.67	\$10,933.14

Additional expenditures within the county for health work were:

Indigent Care

Physicians' fees	\$29,467.50
Hospitalization	112,214.37
Drugs	31,108.87
School Nurses	26,000.00
Sanitary Inspectors	9,900.00
Vital Statistics	3,357.00
County Hospital	77,244.66

MARICOPA COUNTY

Population - U. S. Census:	1920	1930	1940
	89,576	150,970	186,193

VITAL STATISTICS

	1925		1930		1935		1940	
	No.	rate	No.	rate	No.	rate	No.	Rate
BIRTHS								
no. and rate per 1000								
TOTAL	2482	20.6	3314	21.8	3183	18.8	4549	24.3
White	1394		1973		2052		3097	
Mexican	860		1106		882		1092	
Indian	83		60		69		146	
Other	145		175		180		214	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	1804	15.0	2492	16.4	2190	12.9	2165	11.6
White	1098		1543		1402		1509	
Mexican	513		730		389		439	
Indian	103		83		79		85	
Other	90		136		120		132	
INFANT DEATHS								
no. and rate per 1000 live births								
TOTAL	319	128.5	433	130.7	356	111.8	363	79.8
White	78		157		134		168	
Mexican	205		238		199		158	
Indian	23		18		14		24	
Other	13		20		9		13	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	215	678	262	175
	Deaths	565	539	391	312
PNEUMONIA	Cases	-	148	266	882
	Deaths	137	269	249	161
DIPHTHERIA	Cases	38	93	58	45
	Deaths	5	20	6	5
TYPHOID	Cases	70	91	46	38
	Deaths	16	16	8	3
GONORRHEA	Cases	95	113	810	906
	Deaths	--	-	2	-
SYPHILIS	Cases	94	105	242	957
	Deaths	12	30	25	43
MALTA FEVER	Cases	1	6	5	15
	Deaths	-	-	-	-

M O H A V E C O U N T Y

Mohave County with an area of 13,260 square miles, approximately 42% Federal lands, has a population in 1940 of 8,591. This is the smallest total population of the state and has few Indians. The State Department of Health does not have any supervised cooperative work in this county, all health work being done locally except for requested consultative services from state officers.

County expenditures for health were:

Indigent Care:

Physicians' Fees	\$ 2,400.00
Hospitalization	20,000.00
Drugs	3,500.00
School Nurses	1,650.00
Sewer Inspector	1,200.00
Health Officers	600.00

MOHAVE COUNTY

Population - U. S. Census:		1920		1930		1940			
		5,259		5,572		8,591			
VITAL STATISTICS									
		1925		1930		1935		1940	
		no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS									
no. and rate per 1000									
TOTAL		83	15.3	91	16.1	106	14.8	198	22.9
White		55		58		77		156	
Mexican		23		14		15		16	
Indian		2		17		10		26	
Other		3		2		4		-	
DEATHS									
ALL CAUSES									
no. and rate per 1000									
TOTAL		50	9.2	73	12.9	115	16.1	81	9.4
White		41		56		83		67	
Mexican		7		3		8		6	
Indian		2		12		24		8	
Other		-		2		-		-	
INFANT DEATHS									
no. and rate per 1000 live births									
TOTAL		4	48.2	7	76.9	7	66.0	8	40.4
White		2		4		3		4	
Mexican		2		1		1		3	
Indian		-		2		3		1	
Other		-		-		-		-	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	1	-	15	11
	Deaths	12	12	17	5
PNEUMONIA	Cases	-	1	21	25
	Deaths	6	3	12	7
DIPHTHERIA	Cases	1	-	3	-
	Deaths	-	1	-	-
TYPHOID	Cases	1	-	1	-
	Deaths	1	1	-	-
GONORRHEA	Cases	-	-	40	25
	Deaths	-	-	-	-
SYPHILIS	Cases	-	-	19	62
	Deaths	-	-	3	-
MALTA FEVER	Cases	-	3	1	1
	Deaths	-	-	-	-

NAVAJO COUNTY

Navajo County has an area of 9,911 square miles, about 27% of which is state land. The population according to the 1940 census is 25,309 and according to provisional reports about 50% are Indians.

In cooperation with State and Federal agencies, Navajo county has two public health nurses and as a special demonstration, two maternity hospitals have been established at Snowflake and Winslow respectively. Each hospital has a senior nurse who is in charge, a junior nurse, an attendant, and part time relief nursing services.

Expenditures for these projects for the past fiscal year were:

<u>TOTAL</u>	<u>LOCAL</u>	<u>CHILDREN'S BUREAU</u>
\$15,139.84	\$4,292.66	\$10,847.18

In addition the county spent for health services:

Physicians' salaries and fees	\$ 6,597.50
Medical Aid Indigents	5,987.27
Quarantine	129 .55
Vital Statistics	398.00
Clinic rent and supplies	764.70

N A V A J O C O U N T Y

Population - U. S. Census:	1920	1930	1940
	16,077	21,202	25,309

VITAL STATISTICS

	1925		1930		1935		1940	
	no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS								
no. and rate per 1000								
TOTAL	404	21.7	463	21.7	507	21.8	505	20.0
White	191		210		197		232	
Mexican	56		62		66		92	
Indian	130		182		226		178	
Other	27		9		18		3	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	212	11.4	265	12.4	347	14.9	257	10.2
White	48		54		64		80	
Mexican	43		44		52		50	
Indian	117		164		230		127	
Other	4		3		1		-	
INFANT DEATHS								
no. and rate per 1000 live births								
TOTAL	82	203.0	72	155.5	79	155.8	58	114.9
White	11		11		6		13	
Mexican	16		14		21		21	
Indian	53		47		52		24	
Other	2		-		-		-	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	1	42	140	137
	Deaths	16	38	37	46
PNEUMONIA	Cases	--	23	121	92
	Deaths	17	24	31	28
DIPHTHERIA	Cases	7	1	25	4
	Deaths	3	-	3	1
TYPHOID	Cases	-	10	2	-
	Deaths	1	-	-	-
GONORRHEA	Cases	1	6	39	43
	Deaths	-	-	-	-
SYPHILLIS	Cases	-	1	9	68
	Deaths	-	-	-	1
MALTA FEVER	Cases	-	-	-	-
	Deaths	-	-	-	-

P I M A C O U N T Y

Pima County has an area of 9,241 square miles with about 41% Federal land. The 1940 U. S. census gives the county population as 72,838 including Tucson, the second largest city of the state which has a population of 36,818.

Pima County is a part of health district No. 1, which also includes Santa Cruz County. The Pima County division of the health district has a personnel consisting of: a director, assistant part time director, supervising nurse, ten public health nurses, a clinic nurse, two V.D. nurses, three sanitarians, two VD clinicians, two clerks, and a part time veterinarian and part time dentist

Expenditures for Health District No. 1 from State, Federal and cooperating local agencies for the fiscal year ended June 30, 1941, were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>TITLE VI</u>	<u>V. D.</u>	<u>CHILDREN'S BUREAU</u>
\$66,081.87	\$1,200	\$32,903.64	\$12,415.17	\$5,922.90	\$13,640.16

Of the local expenditure \$30,360.00 was expended by Pima County and the City of Tucson.

Other expenditures for health within the county were:

Indigent Care:

Physicians' and Dentists' Fees	\$ 7,800.00
Hospitalization	112,269.98
Drugs	3,869.47
Druggist, ambulances and other miscel expenses	28,393.17
School Nurses	12,872.00
Sanitation-dairy inspection	2,820.00 out
meat inspection	1,550.00 "

P I M A C O U N T Y

Population - U. S. Census:	1920	1930	1940
	34,680	55,676	72,838

VITAL STATISTICS

	1925		1930		1935		1940	
	no.	rate	No.	rate	no.	rate	no.	rate
BIRTHS								
no. and rate per 1000								
TOTAL	973	21.5	1199	21.4	1407	21.7	1627	22.1
White	380		471		567		758	
Mexican	472		611		566		673	
Indian	61		32		209		153	
Other	60		85		65		43	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	965	21.4	1009	18.0	1017	15.7	1035	14.1
White	530		622		626		614	
Mexican	319		283		211		224	
Indian	78		70		150		158	
Other	38		34		30		39	
INFANT DEATHS								
no. and rate per 1000 live births								
TOTAL	153	157.2	148	123.4	149	105.9	147	90.4
White	21		40		32		39	
Mexican	111		86		76		65	
Indian	18		22		40		42	
Other	3		-		1		1	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	106	353	502	481
	Deaths	413	367	313	225
PNEUMONIA	Cases	-	17	40	157
	Deaths	96	83	87	73
DIPHTHERIA	Cases	8	14	14	3
	Deaths	5	1	-	-
TYPHOID	Cases	76	10	11	5
	Deaths	5	6	2	-
GONORRHEA	Cases	5	27	138	226
	Deaths	-	-	1	1
SYPHILIS	Cases	9	25	88	879
	Deaths	1	5	20	24
MALTA FEVER	Cases	-	-	3	3
	Deaths	-	-	-	-

P I N A L C O U N T Y

Pinal County has an area of 5,378 square miles, about 52% Federal land. The population, according to the 1940 census is 28,841, between one-fifth and one-fourth Indian, and many transient agricultural workers.

There is no full time health work in Pinal county in cooperation with the State Department of Health.

County expenditures relating to health work are:

Medical Relief

Physicians	\$8,836.25
Medicine	5,527.33
Dentist	776.00
Other specialists, clinics, etc	512.30
Care in lieu of hospitalization	4,464.03
Ambulance	352.58
Quarantine Expense	50.65
Sanitary Examinations	380.00
Vital Statistics	632.50
Health officers-salaries	536.00
Health Nurse- salary	1,800.00
Supplies & Office	842.02
Travel	1,129.27
Hospitalization	28,596.90

P I N A L C O U N T Y

Population - U. S. Census:		1920	1930	1940	
		16,130	22,081	28,841	
VITAL STATISTICS					
		1925	1930	1935	1940
		no.	no.	no.	no.
		rate	rate	rate	rate
BIRTHS					
no. and rate per 1000					
TOTAL	418	21.9	455	445	806
White	115		160	148	428
Mexican	201		240	148	214
Indian	84		40	136	146
Others	18		15	13	18
DEATHS					
ALL CAUSES					
no. and rate per 1000					
TOTAL	360	18.8	297.	307	355
White	82		105	86	162
Mexican	161		170	89	113
Indian	111		16	128	67
Other	6		6	4	13
INFANT DEATHS					
no. and rate per 1000 live births					
TOTAL	98	234.4	80	66	74
White	8		17	11	29
Mexican	70		55	24	33
Indian	19		7	31	11
Other	1		1	-	1
COMMUNICABLE DISEASE CASES AND DEATHS					
		1925	1930	1935	1940
TUBERCULOSIS	Cases	1	3	24	17
	Deaths	50	48	36	40
PNEUMONIA	Cases	-	12	51	102
	Deaths	38	32	42	27
DIPHtheria	Cases	3	2	3	18
	Deaths	-	2	-	4
TYPHOID	Cases	7	4	4	5
	Deaths	1	1	-	1
GONORRHEA	Cases	3	-	41	66
	Deaths	-	-	-	1
SYPHILIS	Cases	1	-	13	128
	Deaths	1	-	6	3
MALTA FEVER	Cases	-	-	-	-
	Deaths	-	-	-	-

S A N T A C R U Z C O U N T Y

Santa Cruz County is the smallest county by area in the State and the third smallest by population. It has an area of 1,246 square miles, about 54% Federal lands. The 1940 population was 9,482, with practically no Indians and well over 60% Mexicans.

Santa Cruz county is a part of health district No. 1 and had as full time public health workers, for the past year, 2 public health nurses, one sanitarian, and 1 clerk.

Total expenditures for health district No. 1, were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>J S P H S</u> <u>TITLE VI</u>	<u>V. D.</u>	<u>CHILDREN'S</u> <u>BUREAU</u>
\$66,081.87	\$1,200	\$32,903.64	\$12,415.17	\$5,922.90	\$13,640.16 *

Local contributions from the county to the district were \$3,800.

Other county expenditures for health were:

Indigent care:

Physicians' Fees	\$4,800.00
Hospitalization	4,800
Drugs	400.00
School Nurses	2,072.92
City Health Officer	720.00
Vital Statistics	250.00

*Also shown on the Pima County Summary

SANTA CRUZ COUNTY

POPulation - U. S. Census:		1920		1930		1940			
		12,689		9,684		9,482			
VITAL STATISTICS									
BIRTHS		1925		1930		1935		1940	
no. and rate	per 1000	no.	rate	no.	rate	no.	rate	no.	rate
TOTAL		214	19.1	209	21.6	196	20.4	216	22.6
White		16		98		62		98	
Mexican		116		86		119		113	
Indian		-		-		-		1	
Other		37		25		15		4	
DEATHS									
ALL CAUSES									
no. and rate	per 1000								
TOTAL		114	10.2	114	11.8	145	15.1	82	8.6
White		41		51		75		38	
Mexican		60		53		61		41	
Indian		2		1		-		1	
Other		11		9		9		2	
INFANT DEATHS									
no. and rate per	1000 live births								
TOTAL		23	107.4	19		19	96.9	11	50.9
White		8		5		3		2	
Mexican		13		11		16		9	
Indian		-		-		-		-	
Other		2		3		-		-	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	--	4	120	7
	Deaths	6	9	42	8
PNEUMONIA	Cases	--	2	14	25
	Deaths	13	9	10	8
DIPHTHERIA	Cases	-	1	-	-
	Deaths	1	-	-	-
TYPHOID	Cases	1	1	2	2
	Deaths	-	-	-	-
GONORRHEA	Cases	13	13	98	82
	Deaths	-	-	-	-
SYPHILIS	Cases	2	6	35	104
	Deaths	1	2	2	8
MALTA FEVER	Cases	-	-	-	-
	Deaths	-	-	-	-

Y A V A P A I C O U N T Y

Yavapai County has an area of 8,091 square miles, about 60% of which is Federal land, largely National Forest. The population which is nearly all white or Mexican, was 26,511 in 1940. In the Cottonwood district supervisory consultation is given the prenatal well baby, and V. D. clinic, but no funds are allocated from state and Federal agencies for personnel.

The County expended for the past fiscal year the following:

Physicians' fees, salaries, dental fees and other expenses	\$ 9,804.84
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Indigent Care:

Hospitalization	36,699.43
Clinic Expenses	786.02
Ambulance and Mileage	357.29
School Nurses-salary and expense	1,872.15
Public Health Nurses	2,880.00

Y A V A P A I C O U N T Y

Population - U. S. Census	1920	1930	1940
	24,016	28,470	26,511

VITAL STATISTICS

	1925		1930		1935		1940	
	no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS								
no. and rate per 1000								
TOTAL	726	27.7	685	24.1	547	19.9	513	19.4
White	332		519		343		319	
Mexican	351		156		182		191	
Indian	6		-		8		8	
Other	37		10		14		4	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	431	16.4	449	15.8	390	14.2	340	12.8
White	276		342		313		280	
Mexican	121		95		63		42	
Indian	16		7		12		15	
Other	18		5		2		3	
INFANT DEATHS								
no. and rate per 1000 live births								
TOTAL	66	90.9	63	92.0	38	69.5	34	66.3
White	16		29		18		19	
Mexican	47		32		18		13	
Indian	3		2		2		2	
Others	-		-		-		-	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	558	735	259	118
	Deaths	122	110	59	50
PNEUMONIA	Cases	-	30	53	43
	Deaths	24	40	31	18
DIPHTHERIA	Cases	32	8	-	4
	Deaths	1	1	-	-
TYPHOID	Cases	6	5	2	-
	Deaths	1	2	1	-
GONORRHEA	Cases	6	12	82	43
	Deaths	-	-	-	-
SYPHILIS	Cases	1	23	21	91
	Deaths	2	-	1	2
MALTA FEVER	Cases	-	4	-	-
	Deaths	-	-	1	-

Y U M A C O U N T Y

Yuma County has an area of 9,985 square miles, about 55% of which is Federal land. According to the 1940 census the population is 19,326 with only a small percentage of Indians.

In cooperation with state and Federal agencies, Yuma county maintains a full time health unit with a personnel consisting of: a Director, 3 public health nurses, a clinic nurse, 2 sanitarians, and a clerk.

Expenditures for full time health work for the fiscal year ended June 30, 1941, were:

<u>TOTAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>U S P H S</u> <u>TITLE VI</u>	<u>V. D.</u>	<u>CHILDREN'S</u> <u>BUREAU</u>
\$19,641.63	\$1,050	\$9,098.43	\$7,128	\$200.00	\$2,165.20

Other county expenditures for health work were:

Indigent Care:

Physicians' Fees and expenses	\$ 5,318.94
Hospitalization	26,720.06
Drugs and supplies	873.17
Dentists Fees	63.00
Ambulance	372.38
Laboratory	900.00
Lanitation	143.00
School Nurses	1,395.00
Vital Statistics	358.00

Y U M A C O U N T Y

Population - U. S. Census:	1920	1930	1940
	14,904	17,816	19,326

VITAL STATISTICS

	1925		1930		1935		1940	
	no.	rate	no.	rate	no.	rate	no.	rate
BIRTHS								
no. and rate per 1000								
TOTAL	328	20.0	350	19.6	395	21.3	472	24.4
White	168		209		179		254	
Mexican	120		106		159		167	
Indian	12		17		22		26	
Others	28		18		35		25	
DEATHS								
ALL CAUSES								
no. and rate per 1000								
TOTAL	244	14.9	286	16.0	241	13.0	244	12.6
White	103		118		113		137	
Mexican	106		126		96		75	
Indian	22		30		17		15	
Other	13		12		15		17	
INFANT DEATHS								
no. and rate per 1000 live births								
TOTAL	54	164.6	58	165.7	48	121.5	51	108.0
White	15		11		12		16	
Mexican	35		41		28		28	
Indian	1		4		5		4	
Other	3		2		3		3	

COMMUNICABLE DISEASE CASES AND DEATHS

		1925	1930	1935	1940
TUBERCULOSIS	Cases	26	18	10	23
	Deaths	43	45	35	18
PNEUMONIA	Cases	-	29	32	131
	Deaths	28	40	23	17
DIPHTHERIA	Cases	2	49	16	3
	Deaths	-	2	5	1
TYPHOID	Cases	4	28	8	2
	Deaths	3	4	5	1
GONORRHEA	Cases	14	10	55	103
	Deaths	-	-	-	-
SYPHILIS	Cases	4	5	13	76
	Deaths	-	1	3	3
MALTA FEVER	Cases	-	-	-	1
	Deaths	-	-	-	-