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STATE PLAN FOR PUBLIC HEALTH SERVICES

Fiscal Year 1968

(Section 314(d) Public Health Services Act
as Amended)

DEPARTMENT OF THE
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EXHIBITS

- 1 Forms and Attachments for Fund Accountability
- 2 Time Record Form
- 3 Organization Chart

I. REQUEST FOR APPROVAL

The Department of Health of the State of Arizona
(State agency)

Hereby agrees and assures that the attached State plan for public health services and budget describe its operations for which Federal participation is requested for the fiscal year ending June 30, 1968, and that these operations will be carried out in Accordance with Section 314(d) of the Public Health Service Act, as amended, the Regulations and Information and Policies issued pursuant to that Section, the provisions of this plan which include the following specific provisions:

1. The activities described in the plan and carried out with Federal participation will be administered, or supervised in their administration, by the undersigned State authority.
2. Federal funds paid under this allotment will be used to make a significant contribution toward providing and strengthening public health services in the political subdivisions of the State in order to improve the health of the people.
3. Federal funds paid under this allotment will be made available to other public or non-profit private agencies, institutions, and organizations in accordance with criteria which are designed to secure maximum participation of local, regional, or metropolitan agencies, and groups in the provision of such services.
4. Federal funds paid under this allotment will be used to supplement, and to the extent practical, to increase the level of funds that would otherwise be made available for the purposes for which Federal funds are provided and not to supplant such non-Federal funds; similar assurances will be required of other public or non-profit private agencies, institutions, and organizations to which Federal funds are made available for participation in the furnishing of health services under this plan, except that this requirement may be waived in accordance with the conditions and limitations set forth in Regulations 51.104(e) (1) issued pursuant to Section 314(d) of the Public Health Service Act, as amended.
5. Personnel standards on a merit basis will be established and maintained for persons employed by the State authority and by official local health and mental health departments, to provide or supervise the provision of public health services under the approved State plan.
6. The fee schedules and other bases for payment of individuals, agencies, institutions, and organizations (not under a merit system) will be in accord with the usual and customary practices in the State.
7. The services supported under the State plan is in accordance with such plans as have been developed by the State Planning Agency designated pursuant to subsection 314(a) of the Public Health Service Act, as amended.

Regional Office Approval

Signature of Responsible Official

Commissioner

Approved by

Title

Date

Date

II. DESCRIPTION OF SPECIFIED STANDARDS, METHODS, POLICIES, AND PROCEDURES

A. Programs to be supported under the State Plan were selected on the basis of:

1. Statutory requirement.
2. Maximum effect on morbidity, disability, and mortality for the money to be expended.

The adequacy of the statistical basis for the second criterion listed above admittedly varies as between programs selected. A significant improvement in this area, both for future program selection and for evaluation, is expected to result from the work of the Health Evaluation Section of the Preventive Medical Services Division, described in Section III (Narrative) below.

B. Supervision of administration of health services provided by other agencies will be accomplished primarily through:

1. Contract execution
 - a. Fiscal audit
 - b. Program audit
2. Consultation

Money is subvented to other agencies by means of formal contract documents, which include attachments containing a complete program narrative and a budget. Expenditure reports are submitted regularly from these other agencies for fiscal audit, and informal program audit is made on site by out consultant staff on a continuing basis. Deviations from the written program are usually resolved by our consultant staff, but administrative supervision is definitely retained by us in that serious deviation from pre-set standards and activities is a legal basis for cancellation of the funding. In this, we are following much the same pattern as applies to us as recipients of Federal to State funding.

Exhibits 1-A through 1-E (attached) contain the forms and attachments used when funds are advanced to agencies. A slightly different form than Exhibit 1-B is used when funds are subvented on a reimbursement basis.

Exhibit 1-A is a route slip for internal use only to assure that proper departmental clearances are made.

Exhibit 1-B contains the standard terms and conditions under which the funds are subvented.

Exhibit 1-C is the civil rights attachment.

Exhibit 1-D is the program narrative attachment.

Exhibit 1-E is the program budget attachment.

C. With reference to the participation of other public or private non-profit agencies in the delivery of health services:

1. Our policy is to avoid fragmentation of services.
2. Our procedure is to channel funds through official local health departments.

Both the policy and the procedure are subject to possible future modification, but at this point in time they represent what we feel to be the only realistic approach to the effective use of funds.

As you may know, Arizona does not yet have a state-wide Comprehensive Planning Agency designated, nor does it have any areawide planning agencies in the sense of P.L. 89-749. It follows, of course, that there are no State or Area Advisory Councils and no State or Area Comprehensive Health Plans. We hope, of course, to develop all this as rapidly as possible. In the interim, we will rely on the official local health departments, which have, by their very nature, been most intimately aware of, and involved in, the full range of health concerns in their respective communities. They, in turn, will subvent monies to private non-profit agencies in ways best designed to overcome deficiencies in the broad range of health services. For example (although not reflected in the attached Budget Form because the amounts were not needed to reach the required total of federal and non-federal dollars), Maricopa County Health Department will subvent, out of funds received from us in fiscal year 1968, some \$5,500 to Memorial Hospital for a cancer detection clinic. Pima County Health Department will subvent some \$15,000 to the Arthritis Foundation for specialized work. And, although they are not equipped to handle the fiscal procedures, Yavapai County Health Department will be coordinating a direct-from-us contract with the Prescott Community Hospital concerned with rehabilitation of stroke patients.

In brief, in the absence of a fully developed comprehensive health plan which would prevent duplication or fragmentation, we feel that local health departments inevitably play the key role in the effective use of limited health funds. Participation in funding, therefore, will be made dependent on local health department discretion and judgment.

D. As indicated in item A. above, the measurement of health status of the general population is far from adequate. The identification of high risk sub groups within the general population, and the subsequent measurement of these sub groups' health status, is even further from having been accomplished. Pending the development of the work of the Health Evaluation Section's work, also mentioned in item A. above, we have to rely on professional judgment, mixed with such data as are available, to determine specific activities, which vary from program to program (as described in III - Narrative below). Indigency, of course, with its attendant environmental and health educational deficiencies, is a factor in most of our activity determinations.

- E. Support costs are not prorated and charged against specific programs. Rather, separate identification is made on the attached budget form for Administration, Laboratory, etc.
- F. We do not anticipate personnel working less than full time in their assigned program area, but, if such situations develop, we will use the time record form as approved by the Public Health Service for prior years (See sample attached as Exhibit 2).
- G. Qualifications required of health personnel are reflected in formal job descriptions, approved by Federal Merit System with review by the Public Health Service Regional Office, and administered autonomously from this department by the Arizona Merit System Board.
- H. No Public Health Service personnel in lieu of cash are anticipated in fiscal year 1968 for the Public Health Services Program.
- I. See Exhibit 3, attached.

III. NARRATIVE DESCRIPTION OF PROGRAMS IN THE STATE PLAN

150 DIRECTION

Direction consists of the immediate Office of the Commissioner, including the Deputy Commissioner for Local Health Services, which is accountable to a five-member Board of Health for the translation of policy into proper, effective and efficient action consistent with and responsive to State and Federal laws in the overall management of the Department.

The Deputy Commissioner serves as Deputy to the Commissioner of Health in all departmental affairs and acts as agent for the Commissioner of Health in the Commissioner's absence.

The Commissioner's basic legislated responsibilities are listed under ARS 35-136, 137. Several other specific responsibilities are determined by the State Board of Health.

151 Overall Direction

Today, public health administration is a complex, dynamic expanding enterprise. Technological advances and scientific achievements through research coupled with changing social philosophies and concepts tempered by the practicalities of political and economic considerations at all levels of government impose upon direction a whole host of problems, some of which may be clearly defined, but many of which will require definitive identification if there is to be proper and effective action toward raising and sustaining the highest possible level of personal, mental and environmental health of all the people. This is the administration environment in which overall direction of the State Department of Health must function. Detailed specifications in terms of problems, objectives, action plans and evaluation are reflected in the following pages of the two separate plan submissions, i.e., that for public health services and that for mental health services.

152 Local Health Services

- I. Development of Local Health Departments -- Under legal mandate and authorization of ARS 36-161 and ARS 36-183 authorizing development of local health departments, this office will be responsive to needs and mandates by developing local health departments under Article 3 and/or 4 of ARS Title 36.

A. Problem

Currently, Arizona has five Article 4-type local health departments with full-time medical health directors, three Article 4-type local health departments with part-time medical health directors, five Article 3-type local health departments with superintendents of public health and one county of over 12,700 people has no official health organization. All local health departments need additional staff.

B. Objectives

1. Long-term

The improvement of the health of the people of Arizona.

2. Interim

- a. The establishment of an Article 4-type local health department in every county in Arizona.
- b. The employment of adequate numbers and types of well-trained staff with full-time medical direction.
- c. The provision of public health services by the local health department for all cities and towns and the unincorporated area within the county.
- d. The establishment of a five-member board of health in each county by local ordinance.
- e. The establishment of a public health fund in each county which meets requirements of Article 4.

3. Short-term for Fiscal Year 1968

- a. Establish an Article 3-type local health department in Greenlee County.
- b. Develop an Article 4-type local health department in Yavapai County.
- c. Establish an Article 4-type local health department in Mohave County by local ordinance.
- d. Establish an Article 4-type local health department in Santa Cruz County by local ordinance.
- e. Set up a system of county public health budget and program plan submission.

4. Objective for State Health Department District Offices During Fiscal Year 1968

Strengthening Tucson and Flagstaff offices by adding additional personnel in Environmental Health.

C. Methods

1. Development of the Article 4-type local health department in Yavapai County will be done by this office consulting with the Yavapai County Board of Supervisors, their county medical society, their County Attorney, the present Superintendent of Public Health, and the Mayor and City Council of Prescott.

2. Establishment of an Article 3-type local health department in Greenlee County will be encouraged of the Greenlee County Board of Supervisors. This office will provide consultation, recommendations and contacts with the local medical society, County Attorney, County Comptroller and Board of Supervisors as indicated. Financial support and program consultation will be made available to the county.
3. Establishment of Article 4-type local health departments in Mohave and Santa Cruz Counties will be done by: developing a model ordinance for such action at the state level. Having same approved by the Attorney General's Office, Commissioner of Health and State Board of Health, then presenting the model ordinance to the respective boards of health and boards of supervisors and provide consultation and advice on passage of the ordinance with those groups and the County Attorney if needed.
4. Records and Reports
 - a. Nursing Activity Reports
 - b. Sanitation Reports
 - c. Yearly Budget
 - d. Quarterly Expenditure Reports
 - e. Quarterly Reimbursement Request for Home Care and for Institutional Care Tuberculosis

D. Evaluation

The accomplishment of each 1968 fiscal year goal by the end of 1968 fiscal year will be used as the criteria for complete success in each category. Partial success will be defined as partial accomplishment of the goals specified.

E. Collaborative and Cooperative Action

Appropriate cooperative action and support will be required as indicated from every division and section of the Arizona State Department of Health.

Cooperative support will also be requested from appropriate bodies of local government, officers of local governmental units, state medical association and local medical societies, Arizona Association of Local Health Officers, etc.

- II. Development of State-Local Relationships -- Under legislative mandate of ARS 36-105 and ARS 36-132, the State Board of Health is responsible for promulgation of state-wide health rules and regulations. Each local board of health is responsible for enforcing these rules and regulations. The State Board of Health cannot, however, limit the right of any local board of health or county board of supervisors to adopt such ordinances, rules and regulations as authorized by law within its jurisdiction, provided that such ordinances do not conflict with state law and are equal to or more restrictive than the provisions of the regulations of the State Board of Health.

A. Problem

Until fiscal year 1967 no official policy statement on state-local health department relationships had ever been formalized by the Arizona State Department of Health. No organization of local health officers existed in Arizona and routine state-county communications of a specific nature were somewhat sporadic and no smooth system of coordination at the state level existed in relationship to state staff making visits to the counties. The responsibilities and role of local health departments in mental health activities and comprehensive health planning has not been clarified adequately and local requests for clarification of other areas of responsibility at state and local level have been received, particularly in the area of environmental health.

B. Objectives

1. Ongoing and Long-term

- a. The establishment of a smooth and effective system of exchange of information between state and local health departments.
- b. The maintenance of effective and cordial working relationships between state and local departments of health.
- c. In cooperation with Division of Planning, develop a compilation of functions and programs which the State Department of Health must be legally involved in. Identify legal separation of those areas of state responsibility from those of local responsibility.

2. Short-term for 1968 Fiscal Year

- a. To have developed, a constitution and bylaws for effective operation of the Arizona Association of Local Health Officers.
- b. To explore desirability of incorporation of the above mentioned organization.
- c. To explore the desirability of establishing a health officer section in the Arizona Public Health Association.
- d. To develop a smooth and effective method of coordinating visits of State Department of Health personnel when visiting local communities.
- e. To develop a policy statement pertaining to State Department of Health relationships with other state agencies, with voluntary agencies and if necessary, modify the existing policy statement affecting State Department of Health relationships with local health departments

- f. Develop a routine communication schedule between this office and local health departments.
- g. Channels for proper written communication with counties will be clarified.

C. Methods

1. Constitution, bylaws and articles of incorporation will be studied in conjunction with the Arizona Association of Local Health Officers. Approval of such documents will be done by the Association.
2. The desirability of incorporation will be encouraged of this group by requesting the officers to make such a study and offering assistance from this office. If adequate study indicates a desirability, then incorporation will be encouraged; if such a study indicates this action is unnecessary, no incorporation will be encouraged.
3. Members of Arizona Public Health Association and Arizona Association of Local Health Officers will be invited to meet with this office in exploring reasons for or against such action. If indicated, encouragement to establish such a section will be given.
4. The complaints of counties of disjointed state staff visits will be studied and an improved method developed and presented to the Department's division directors for necessary revision and approval.
5. Relationships between the State Department of Health and other state departments and voluntary agencies will be studied in light of P.L. 89-749, Arizona Public Health Association policy statements and the current state-local relationship policy statement. Appropriate policy statements will be prepared for board consideration.
6. The reporting systems of the local departments to the State will be studied regarding: written reports, telephoned reports, routine letters of information, etc. Indicated improvements, if any, will be discussed with the division directors for approval and necessary action. This office will also develop a manual of communication procedures for intraoffice use.
7. Reminders on channels for proper written communication with counties will be distributed to division directors and incorporated into this office's procedure manual.

D. Evaluation

Successful accomplishment of short-term goals for fiscal year 1968 by July 1, 1968 will be used as the criteria of complete success in each category. Partial success will be defined as partial accomplishment of the goals specified.

E. Cooperation and Collaborative Action

1. In this activity it will be necessary to have cooperation from all division directors, all local health directors, superintendents of public health and chief sanitarians of counties organized under Article 3.
2. In development of policy statements, the Mental Health, Planning and Medical Services Divisions especially will need to be involved.

III. Development of Local Health Programs -- Under legal mandate of ARS 36-104-4 the State Board of Health must prescribe what are recognized public health activities as well as minimum standards of performance in connection with the activities of local health departments with which the State participates through grant-in-aid or other financial assistance.

A. Problem

1. The State Board of Health has never prescribed a list of recognized public health activities and related minimum standards of performance in connection with the activities of local health departments.
2. Several isolated standards are thought to exist in scattered form throughout the Department but have never been compiled and organized.
3. A study and compilation of State laws requiring certain program activities has never been made. Further, a differentiation of responsibility between State and local functions or a clarification of shared functions has not been done.
4. Program content differs in every local health department. Data input systems are weak, program manuals are virtually nonexistent and no overall plan is available for carrying out specific programs.
5. Program planning activities in several small rural health departments are weak or virtually nonexistent.

B. Objectives

1. Long-term
 - a. Develop, in cooperation with the Division of Preventive Medical Services, a data input system of adequate proportion to utilize computergraphics in connection with health problems.
 - b. Complete a compilation and study of Federal and State health laws and indicate the legal responsibility of State and local health departments in each case.

c. Develop a list of recognized public health activities and minimum standards pertaining to activities of local health departments.

2. Short-term to be completed during 1968 Fiscal Year

a. Compile and undertake a review of recognized public health programs and minimum standards affecting local health departments prescribed by other states.

b. Develop, in draft form, a list of programs being participated in by the State Department of Health which have significant impact on local health departments.

c. Develop, in draft form, a list of programs with appropriate narratives of each, being conducted at the local level.

d. With the assistance and consultation of all division directors complete and compile and initial review of all programs being conducted by all county health departments in Arizona.

e. Compile a complete annual report from all counties for 1966 calendar year and complete an initial review of the report in light of a proposed plan for 1967-1968 fiscal year.

f. Require a local health department program plan and budget from every county for the 1967-1968 fiscal year and complete review of each with each division director to determine areas of greatest need for consultation to the counties for the coming fiscal year.

C. Methods

1. 2-a. will be accomplished by sending an appropriate pretested questionnaire to the State person responsible for local health services, by compiling them into an easily accessible sequence and by perusing the information received.

2. 2-b. will be accomplished in cooperation with and consultation from the Division of Planning and Technical Support using information submitted by all division directors in program planning for the 1967-1968 fiscal year budget.

3. 2-c. will be accomplished in cooperation with every county health director in Arizona. Requests will be sent for each county to submit a program plan and budget for the 1967-1968 fiscal year. Part of each county plan will include a roster of local programs and an appropriate descriptive narrative of each.

4. 2-d. will be accomplished by routing the compilation of county budgets to each division and discussing same with each division director.
5. 2-e. will be compiled by the secretary in this office. Review of the reports and comparison with previous years will be done by the Deputy Commissioner. Consultation with counties will then follow and include appropriate discussion of activities as they compare with plans, etc.
6. See 3, 4 and 5 above.

D. Evaluation

The accomplishment of each 1968 fiscal year goal by the end of the 1968 fiscal year will be used as the criteria for complete success in each category. Partial success will be defined as partial accomplishment of the goals specified.

E. Cooperative and Collaborative Activities

Throughout this activity, a great deal of coordination and close cooperation will be necessary between this office, the Arizona Association of Local Health Officers, the State Commissioner of Health, the various division directors of the State Department of Health and individual local health officers. Frequent guidance from the State Board of Health and Commissioner of Health must be received in preparation of material required by law which is in the best interest of the public, and acceptable to those providing and coordinating the services.

IV. Development of Minimum Standards of Performance in Connection with the Activities of Local Health Departments --Under legal mandate of ARS 36-104-4 the State Board of Health must prescribe recognized public health activities and minimum standards of performance in connection with the activities of local health departments receiving financial assistance from the State.

A. Problem

1. The State Board of Health has never prescribed a comprehensive set of minimum standards of performance in connection with the activities of local health departments, nor is there a defined measuring or grading mechanism in use by which to determine if the minimum standards are being met even if such existed.
2. Three general sizes of county health departments are in existence in Arizona at the present time. Two different types also exist which are established under different laws. A single set of minimum standards would probably not be appropriate for all sizes and types because of the significant differences between them.

3. The three general sizes and two different types of county health departments in Arizona are:
 - a. Relatively sophisticated, large and capable departments organized under ARS 36-182, Article 4, which serve metropolitan populations (e.g., Pima and Maricopa).
 - b. Developing county health departments of intermediate capability which are also organized under ARS 36-182, Article 4 (e.g., Mohave, Pinal, Cochise, Santa Cruz, Yuma and Coconino).
 - c. Rural county health departments with very limited staff and resources which are organized under ARS 36-161, Article 3 (e.g., Gila, Graham, Greenlee, Apache, Navajo and Yavapai).

B. Objectives

1. Long-term
 - a. Develop standards for programs conducted in local health departments.
 - b. Upgrade all local health departments to at least the level of compliance with such minimum standards.
2. Short-term
 - a. Request support and obtain cooperation from: The Arizona Association of Local Health Officers, Arizona Public Health Association, Arizona Sanitariums' Association, Arizona State University College of Nursing and other related groups, in consulting with this Department in the development and future acceptance and support of said standards of performance.
 - b. Organize committees of appropriate State Department of Health and other public health personnel to collect references, peruse the literature and draft modern standards pertaining to local health activities for presentation to this office.

C. Methods

1. Discuss overall activity with division directors of the Department and receive their recommendations. Appropriate individuals and groups will be contacted by personal contact and letter from this office to request their assistance in this activity.
2. Appropriate ad hoc study committees will be established, their responsibility designated and request made of them to establish a time schedule for completion of their own committees' work. One or more State Department of Health staff will be assigned as liaison to the committees and to serve as secretary of the committees.

3. Staff work of the committees will be done through the State Department of Health representatives in cooperation with appropriate division staff.
4. When recommended standards are submitted, they will be forwarded to this office for further deliberation and if recommended for approval, will be forwarded to the Commissioner for Board of Health study and action. If further study is indicated, the ad hoc committees will be requested to further study and clarify any question which remains uncertain.

D. Evaluation

1. The criteria of success for this activity will be:
 - a. The participation of key groups in developing appropriate standards.
 - b. The development of appropriate standards during 1967-1968 fiscal year.

E. Cooperating Groups and Collaborating Agencies

The successful outcome of this activity depends heavily upon cooperation of at least the following groups (and preferably others):

Division Directors and staff - Arizona State Department of Health
Arizona Public Health Association
Arizona State College of Nursing
Arizona Association of Local Health Officers
Specific individuals from local health departments
Others

- V. Development of State-Local Health Department Funding Mechanisms -- Under legal mandate and authorization of ARS 36-187 B, the local health departments organized under ARS Title 36, Chapter 1, Article 4 (36-181 through 36-191) shall have a health department fund to which shall be credited any appropriated city, county, state or federal funds, or other grants or donations for local health purposes.

A. Problem

Arizona has eight local health departments with five-member boards of health and full or part-time medical directors. Minutes recording action by local boards of supervisors or local ordinances creating such local health departments are not on file with the State Department of Health. Thus documentation of the creation of local health departments under Article 4 is not on file with this department. Only two of the eight local health departments are known to have had a public health fund established. The status of the other six is questionable.

B. Objectives

1. Determine when each of the eight county health departments organized under ARS Title 36, Chapter 1, Article 4 was organized and receive documentation from authorized sources concerning such action.
2. Have county treasurer establish a public health fund in each county that has a local health department established under this law.

C. Methods

1. Ascertain by written inquiry to each county clerk the date of organization of local health department under Article 4 and request a copy of minutes of Board of Supervisors' action, or copy of ordinance if one was passed.
2. Collate responses to serve as index for future consultation.
3. In those counties where such a department was organized, determine the existence of a public health fund by sending a representative of the State Department of Health to confer with the county on the subject. Where no public health fund exists, assist with the establishment of such.

D. Evaluation

1. The ascertainment of organization dates of Local Health Departments (organized under Article 4) and receipt of minutes documenting same by September 30, 1967 will be considered as the criteria for complete success for this objective.
2. Establishment of local public health funds in one third of those counties which have an organized health department will be considered as criteria for success this fiscal year. This office will endeavor to have established these funds in all counties with organized health departments within three years.

E. Cooperating Groups

Success of this activity will depend upon the cooperation of the State Department of Health Division of Administration, local boards of supervisors, local boards of health, local health directors, and local clerks of the boards of supervisors in each county where an "Article 4-type" health department exists and in which no public health fund has yet been put into effect.

- VI. Development of Local Health Department Facilities -- Local boards of health have the opportunity to spearhead activities leading to provision of suitable offices, facilities and equipment for local health departments organized under ARS Title 36, Chapter 1, Article 4. All but three of the 14 counties in Arizona are eligible to receive

up to 51% of Federal funds providing the costs of construction and equipment through Hill-Harris funds. The same eleven counties have an "A priority" under Hill-Harris legislation. Several local health departments have auxiliary centers.

A. Problem

"A Public Health Center is a publicly owned facility, utilized by a local health unit for the provision of public health services, including related publicly owned facilities such as laboratories, clinics and administrative offices operated in connection with public health centers."

In Arizona, a local full-time public health service means a full-time service utilizing local, state, Federal and other funds, or any combination thereof, employing qualified personnel working under the direction and supervision of a qualified director appointed by the local health department and conducted in conformity with the rules, regulations and policies of the State Department of Health. If the population of the county is 100,000 or more, based on the last official U. S. Census, the director shall be a full-time M.D.

These local health units provide public health services through organized community effort providing services in six basic areas, and through several other programs. The six basic functions are:

1. Communicable Disease Control
2. Public Health Laboratory
3. Health Education
4. Environmental Sanitation
5. Vital Statistics
6. Maternal and Child Health

In analyzing Arizona's status concerning public health centers, at least four steps are involved:

1. What do we have?
2. What do we need?
3. Where do we need it?
4. Who will pay for it?

If we look at Arizona today in the light of these four basic questions, we can readily see what we have. We have seven existing Public Health Centers of which four are nonconforming as to physical structure.

The picture as related to Auxiliary Public Health Centers is more critical. Of 20 existing facilities, 19 are nonconforming as to physical structure.

If the facility endangers public safety because of the physical condition of the building or similar criteria as developed by the Public Health Service plant evaluation standards it is classed

as nonconforming. This is no reflection on the quality of service being delivered. It is a direct reflection on the 1) fire resistivity of each building, 2) fire and other safety factors of each building, and 3) design and structural factors affecting the function of the center.

Of the 27 Public Health Centers or Auxiliaries, 13 share quarters with some other organization. Three are in basements of courthouses, one located in the courthouse hall, three located on the second floor of old high schools, one in a community center building, three in city halls, two in old buildings adjacent to courthouses. Needless to say these facilities are nonconforming.

Nine of the 20 Auxiliaries are programmed for modernization. In light of proposal for state-wide plan, reevaluation is needed here. This means a total of ten will be conforming in the future. Of the seven Public Health Centers, four are programmed for modernization and then it is assumed all seven Public Health Centers will be conforming. Reevaluation is indicated. Seven new Public Health Centers are programmed for the future. From the inventory sheet we can also see that two new Public Health Centers are under actual construction in Coconino and Pima Counties.

Actually the Public Health Center in Coconino County has been substantially completed. The one in Pima County is about 20% complete.

Utilizing the 1967 State Plan we can see we need seven additional Public Health Centers and a redistribution of Auxiliaries. All of these facilities are currently programmed. Now it is a matter of time, money, and establishing priorities.

Apache, Gila, Graham, Mohave, Navajo, and Santa Cruz Counties are in need of Public Health Centers. If all seven of these health centers could be funded they would only serve some 9.8% of the total state population. Since all seven can't be funded at the same time some priority system will have to be established.

There were a total of 1,101 projects completed in the United States between 1947 and 1966. Of this total, only 100 were additions or alterations. The remaining 1,001 were new construction projects. Of this total of 1,001 new projects completed in the last 20 years Arizona had three Public Health Centers completed. This represents only .3% of total new projects. The 1,101 projects totaled \$209,680,000. Arizona's portion represented \$3,059,000 or 1.87% of the total.

There has been some talk of new Public Health Centers being promoted in Bisbee, Douglas, Yuma, and Holbrook. There is still talk and interest in developing new Public Health Centers in Douglas and Yuma but very little progress has been made beyond that stage. Holbrook is expected to submit their proposal for a new Public Health Center before the end of the year.

In view of P. L. 89-749 it would be most desirable to have a public health representative on the Advisory Council. Justification is cited from Part 23-2, B., 2, Public Health Service Health Grants Manual which reads, "Membership shall be drawn from each of the following categories: Representatives of public agencies concerned with the operation, construction, or utilization of hospitals or other facilities for diagnosis, prevention, or treatment of illness or disease, or for provision of rehabilitation services."

B. Objectives

1. Long-term

Develop adequate and appropriate facilities for each local health department in Arizona.

2. Short-term

- a. Increase the Advisory Survey and Construction Council membership by two people who represent public health centers; one of these to be a representative from Arizona Association of Local Health Officers, the other to be a public health consumer.
- b. Revise the state-wide plan for construction and modernization of local public health centers and include it as a separate section in the 1967-1968 state plan for hospital and facilities construction.
- c. Develop at least one construction project for a local health department during 1967-1968 fiscal year.

C. Methods

Request the State Commissioner of Health to:

1. Move favorably on the recommendation of the Advisory Survey and Construction Council that the council be increased by two members.
2. Request to Commissioner to refer the Council's recommendations to the Governor along with a recommended list of appropriate names from which the appointment could be made.
3. Set up a meeting with these two appointees, with Doctor Spendlove and appropriate Medical Services Division staff to orient them regarding their function and the past history of the council's activities, purposes and procedures.
4. In collaboration with the Arizona Association of Local Health Officers and the State Division of Medical Services, re-evaluate the State Plan for construction of public health centers -- especially in the areas of modernization.

5. Through written and telephone communication with County Boards of Health and County Boards of Supervisors, inform them of the availability of Hill-Harris funds and the procedure involved in obtaining these funds.
6. Encourage development of Navajo County construction of new health department facilities with Hill-Harris funds.

D. Evaluation

1. Criteria for success of B-2-a. above will be the appointment of two people on the council during the 1967-1968 fiscal year.
2. The criteria for success of B-2-b. above will be completion of revision of State Plan.
3. The criteria for success of B-2-c. above will be the filing with this department of at least first phase plans for construction of local health center in Navajo County.

E. Collaboration and Cooperative Activities

1. To accomplish B-2-a. above will require cooperation of the State Health Commissioner, State Advisory Survey and Construction Council, State Division of Medical Services, the Arizona Association of Local Health Officers and the Governor of the State.
2. The accomplishment of B-2-b. above depends upon close cooperation of the State Division of Medical Services and every local health department in the State.
3. The successful achievement of B-2-c. above depends upon the cooperation of Navajo County Board of Supervisors, Board of Health and Director, State Department of Health Division of Medical Services and its counterpart consultant in the Regional Office of the U. S. Public Health Service.

VII. Provision of Administrative and Program Coordination and Support to Counties -- Under mandate of ARS 36-104-4, 36-132-2, 6, 7, 8, 9, 10, 15, and others, the State Department of Health has the responsibility and authority to assist counties and coordinate many local health programs and activities.

A. Problem

Several attempts have been made to coordinate the activities of the various State Department of Health divisions in their correspondence and field visits to the counties. No single system or set of systems has been successful to date.

B. Objectives

1. Long-term

Develop an effective efficient and inexpensive coordinating system within the State Department of Health pertaining to all types of communication with local health departments.

2. Short-term

a. Develop and document appropriate lines of official communication with local health departments in regard to:

- 1) Use of telephone
- 2) Written correspondence
- 3) Personal field visits by state staff

b. Develop and document appropriate lines of official communication from counties with regard to the State Department of Health.

C. Methods

1. By discussion with state division directors and local health officers.
2. By consultation with telephone personnel and state building director.
3. By consultation with communication consultants and regional office consultants (as necessary).

D. Evaluation

Criteria for success will be the development of two effective systems of communication: one within the Department as pertains to local health departments; the other, between the state and local health departments.

E. Cooperating Groups and Agencies

All local health officers, all state division directors, key State Department of Health secretaries and various consultants will be involved in this activity.

153 Health Mobilization

I. Training Programs

A. Medical Self-Help

At present 40,000 individuals have completed Medical Self-Help Training. Expect to train 15,000 persons during fiscal year 1968.

Procedures -- The Medical Self-Help Training Course will be expanded from the present 50 schools participating to 75 schools participating for fiscal year 1968. Even with this anticipated increase in schools participating the total number of students trained will be reduced due to the fact that the larger high schools presently involved will be presenting the course mainly to freshman students rather than to the entire student body, as has occurred this past year.

It is anticipated that adult training will be more than doubled during fiscal year 1968 and should produce approximately 2,000 graduates. This will be accomplished through improved community organization. Also, efforts will be directed toward Medical Self-Help Training for industrial employees.

Financial Cost -- The program is 100% Federally financed by a fixed priced contract.

B. Community Hospital Disaster Drills

Approximately one-third of the hospitals in Arizona are presently holding one or more disaster drills per year. During fiscal year 1968 expect to maintain the present status.

Procedures -- By working in close cooperation with the Arizona Hospital Association and the State Medical Association and other agencies it is expected that the present level of cooperation and participation can be maintained.

Financial Cost -- No financial cost involved other than travel expenses.

C. Health Mobilization and Disaster Preparedness Symposiums

Expect to hold at least two symposiums at county or district level during the year.

Procedures -- This will be accomplished by working in close cooperation with the professional health disciplines in their respective districts or counties.

Financial Costs -- Costs other than travel expenses may be borne by State Civil Defense or the University of Arizona, Division of Continuing Education.

- II. Medical Stockpiling -- At present 18 Packaged Disaster Hospitals in the State, not necessarily affiliated with an ongoing facility. Expect to affiliate approximately 10 Packaged Disaster Hospitals and Hospital Reserve Disaster Inventory Units with ongoing facilities during 1968.

Procedures -- With the advice of State professional associations this will be accomplished by working directly with county health departments, county civil defense directors, and the respective health facility to which the unit will become affiliated.

Financial Cost -- One hundred percent Federally financed excluding travel expenses.

- III. Emergency Health Service Planning -- At present State Emergency Health Service Plan completed and one satisfactory County Plan completed. Expect to review and update State Plan and develop three County Emergency Plans during fiscal year 1968.

Procedures -- This will be accomplished by providing guidance and assistance to those counties involved. In particular, working with county health departments, local medical societies and local civil defense agencies.

Financial Costs -- No financial cost involved other than travel expenses.

154 Accident Prevention

Under mandate of ARS 36-132-1, the State Department of Health is to protect the health of the people of the State. One of the greatest modern menaces to life and limb is accidents. Accidents which can be prevented should be prevented.

A. Problem

At the present time the Arizona State Department of Health has no accident prevention staff, no accident prevention funds and hence no accident prevention program.

B. Objective

1. Long-term -- Develop an efficient program of accident prevention in the State Department of Health.
2. Short-term
 - a. Obtain a U. S. Public Health Service assignee for placement with the State Department of Health.
 - b. Explore grant funds from whatever appropriate sources to begin activities in health aspects of a state-wide accident prevention program.
 - c. Develop the beginnings of administrative procedures involved with the proposed highway safety standards and their effect on the State Department of Health.

- d. Organize an intra-departmental safety committee. (Tuberculosis Sanatorium has such a committee functioning).
- e. Begin the medical coordination activities of a state-wide study on passenger deaths and injuries occurring on Arizona's State highways.

C. Methods

- 1. Correspondence will be undertaken with U. S. Public Health Service for placement of a person in Arizona to explore currently operating accident prevention activities, determine available resources and conduct studies in order to compile appropriate county profiles.
- 2. When county profiles are developed, needs and resources documented and authority groups and individuals identified, a demonstration grant project will be written up in such a way as to request appropriate funds from appropriate sources to provide for demonstration of the effectiveness of a proposed program developed to meet demonstrated needs -- including, but not limited to State Department of Health participation in activities related to the proposed highway safety standards.
- 3. Discuss organization of safety committee with division directors and get approval of establishing same. Rotate membership on the committee and obtain staff services on the committee from those other than division directors.
- 4. Activities to accomplish B-2-e above can begin by starting a cooperative research effort with the following agencies or groups:
 - a. Cornell University) All have approved
 - b. Arizona Highway Patrol) participation in
 - c. Arizona Medical Association) this activity.
 - d. Arizona Hospital Association)

D. Evaluation

- 1. The criteria for complete success will be the satisfactory achievement of all goals specified.
- 2. The criteria for partial success will be the achievement of less than all goals specified within the 1967-1968 fiscal year.

155 Residency Program in Preventive Medicine -- Under the provisions of the Public Health Traineeship Program (Section 306, Public Health Service Act), traineeship grants are available for complete funding of three year residency programs leading to certification in Preventive Medicine. Such support will be provided to institutions or agencies offering approved residency programs through grants for support of specific individuals.

A. Problem

At the present time the Arizona State Department of Health has no approved residency program. Physicians assigned to the Department receive no formal residency credit although they receive significant training. Establishment of an approved training program would assure such credit.

B. Objective

1. To obtain approval for and institute a rotating three-year residency program to include one year of experience in a qualified county health department, one year in study at a school of Public Health leading to a Master of Public Health Degree, and a third year of assignment to a specific division of the State Department of Health.
2. To obtain approval of a five-year program to permit enrollment of successive trainees for the three-year residency.

C. Methods

1. Develop a program for approval by the Council on Medical Education and the American Board of Preventive Medicine.
2. Arrange for cooperation of qualified county health departments.
3. Arrange for admission to candidacy for the M.P.H. degree.
4. Select qualified candidates.
5. Apply for Residency grants for qualified candidates.

160 ADMINISTRATION

To provide an adequate and innovative administrative structure which will enable the Commissioner to translate Board of Health policy into proper, effective and efficient action.

161 Fiscal

A. Problems

1. To ensure that funds available to the Department are spent in conformity to the conditions under which they were granted to the Department. These conditions vary from State appropriation riders to Federal project and formula terms, guidelines, and standards. Expenditure record requirements vary from one funding source to the next in terms of scope and detail for audit, and all must fit within the framework of applicable, and not always harmonious State and Federal statutes.
2. To develop tools (contracts, agreements, disbursement procedures, pre-audit procedures, etc.) by means of which subvantees (local health departments) may more readily and flexibly obtain and expend subvented funds for approved purposes.
3. To ensure maximum return on money expended in areas under Fiscal Section control i.e., choice as to vendors of supplies and materials, etc.
4. To ensure an adequate level of General Services (negotiation of rental contracts, moving, telephone installations, duplicating services, etc.).
5. To provide staff support for development of fiscal year 1969 appropriations request in a Program Budget format.

B. Objectives

1. To achieve comprehension of, and competence in the execution of, Federal guidelines for the five kinds of funding sources under P.L. 89-749, the revised conditions of the Federal C.B. funds, and the specialized usage of State air and water pollution control funds.
2. To review and revise present formats for agreements and/or contracts under which primary and secondary subventions are made.
3. To develop standard written specifications on items representing at least 25% of our total expenditures for supplies and materials.
4. To establish a satellite mail supply and reproduction facility in the Goodrich Building having the capability of handling all General Services demands other than multilith printing.

5. To develop standard costing factors which can be applied to each element identified in the fiscal 1969 program budget request.

C. Methods

1. In-service training: distribution of Federal guidelines and regulations; divisional discussions; seminars; supervisory review and correction of work performed.
2. Discussions with subventees, legal counsel, departmental program heads, etc., leading to contract drafts to be reviewed and adopted.
3. Discussions with other purchasing agents, including the central purchasing office of the State, analyses of existing comparable written specifications, etc.
4. Identification and utilization of suitable space; recruitment, training, and assignment of a stock and mail clerk.
5. Analyses of actual Departmental experience records to date on average support costs per employee by category and function.

D. Evaluation

1. Absence of Federal and/or State audit exceptions.
Timely and accurate "status of funds" reports to Commissioner, division directors, etc.
2. Initiation, review, and approval of formal subvention contracts completed in less than 10 working days.
Absence of audit and/or program exceptions taken to expenditures made by subventees.
3. Twenty-five percent (or more) of category 200 and 300 expenditures made under written specifications.
4. Survey of units served to determine adequacy and quality of services provided by satellite station.
5. Production and validation of documentable standard cost factors in time to comply with 1969 budget submittal due date of September 1, 1968.

162 Personnel

A. Problems

1. Incompleteness of effective personnel regulations for both state and county health departments.

2. Incompleteness of an effective performance evaluation system at both state and county levels.
3. Lack of thoroughly systematic salary administration at state level, and inadequate salary structure at county levels.
4. Need to improve preparation and maintenance of job specifications.
5. Need to reduce the number of merit system exceptions taken against the state and county health departments.
6. Need to develop improved procedures for general personnel administration at state and county levels.

B. Objectives

1. To publish a document that conveys to all employees the basic merit system personnel regulations, the associated state level internal regulations and to ensure that county health departments either adopt state internal regulations or publish formally in a specified manner applicable local regulations.
2. To improve the existing performance evaluation system by inclusion of specific instructions to supervisors concerning methods for removal of unsatisfactory employees and by shortening from 90 to 30 days the time in which a supervisor may act constructively.
3. To develop a regular input of salary data from HEW, local and national sources for greater lead time purposes in studying and making recommendations as they pertain to cost of living index increases or significant changes in various disciplines.
4. To rewrite all job specifications in order to include current studies concerning titles, minimum qualifications, regional critique items and other corrections originating in the personnel office; to give increased emphasis to preparation of new job specifications by more detailed work analysis and other preliminaries such as job descriptions and extension of coordinative actions with merit system personnel analysts.
5. To establish direct activity and feedback between the merit system and the county health departments and the Tuberculosis Sanatorium on recruiting and certification matters while requiring state review of all personnel actions from the counties and the Tuberculosis Sanatorium as a check point for reducing potential exceptions; to visit and sample personnel records at counties and Tuberculosis Sanatorium in order to ascertain adequacy of record keeping on all subjects covered by merit system regulations.

6. To train administrative personnel at state and to provide training to local administrative personnel; to work with regional continuing education or state training officer in order to bring administrative training to state and county professionals for improvement of their administrative techniques and management of employees; to develop guides for county use in improving their development of compensation plans and to offer close liaison with merit system in solution of difficult personnel problems at county level.

C. Methods

1. Personnel Regulations

- a. In the light of experience to date, to revise and expand the Personnel Manuals for Board approval.
- b. Distribute copies of revised manual to counties for specific action. This requires state personnel office to make consultative and staff supervisory visits to all necessary locations.

2. Performance Evaluation System

- a. To conduct in-service training to ensure compliance with all pertinent instructions concerning content and rules pertaining to methods of marking, typing and processing time; to identify and correct inaction or failure to use system for elimination of unsatisfactory employees; to provide increased motivation for supervisor development of employee and self-development by employees.
- b. By on-site visits, to encourage the establishment of complete performance evaluation systems at each county health department and document staff supervisory visits for sampling and follow-up consultation.

3. Salary Administration

- a. Develop regular input of salary data and extensive, accurate salary survey data response as a service and make timely reports concerning any potential upgrading requirements for new budget preparation or execution of the appropriations.
- b. Documented staff supervisory visits should indicate action taken to promote or encourage local salary surveys in order to keep a current and continuous impetus at local levels to improve salary administration.

4. Job Specifications

- a. To establish a systematic schedule whereby each job description is reviewed at least once annually. For

fiscal 1968, this review will be performed with particular emphasis on academic minimum qualifications.

- b. Revised or new specifications should be supported by written record that all practical coordination has occurred prior to publication and installation.

5. Personnel Records

- a. At state level, there should be available a quick digest summary on the academic and experience qualifications of each employee and personnel actions that have occurred during employment including a running index of performance efficiency.
- b. There should be a record of staff supervisory visits to counties to sample and advise concerning the adequacy of personnel record keeping in the county.

6. General Personnel Administration

- a. Each new clerical employee should have a record showing the amount of training received prior to assuming actual duties in assigned office.
- b. County submittal of budget proposals should reflect continuing progress toward standardization of classification schedules and use of salary ranges with decreasing amount of errors in administration of reclassification, salary advancement and promotions.
- c. There should be a measurable tendency of county health departments to rely less and less on State for oral instructions or liaison with merit system concerning routine preparation and handling of personnel actions.

D. Evaluation

1. Personnel Regulations

- a. Revision of Personnel Manual completed through Board approval stage and officially established by October 1, 1967.
- b. All counties should be on record as officially adopting the revised Personnel Manual, with such exceptions as they choose to make, by June 30, 1968.

2. Performance Evaluation System

- a. Plotting of all performance evaluations made during the year should produce a curve within two standard deviations of a normal (bell curve) pattern.

- b. All counties should be able to document at least one formal performance evaluation made on each employee during the year.

3. Salary Administration

- a. Ability to document that salary recommendations are within 5% of prevailing competitive ratio, local or national.
- b. Since counties vary in economic circumstance and fiscal resources, it will be difficult to get the counties to do the kind of leg work that may be necessary and, necessarily by them. Ability to document that we have offered discussion, guidance and persuasion will probably be our only criteria here.

4. Administration of Job Specifications

- a. Ability to document review of each job description during the year.
- b. Ability to demonstrate that counties have been required to participate actively in preparation of specifications that are primarily applicable to them.

5. Administration of Personnel Records

Reduction of Merit System payroll audit exceptions below preceding year's level.

6. General Personnel Administration

Analysis and evaluation by Deputy Commissioner for local health services.

GENERAL NOTE

No distinction has been made in the material above between the Department and the Tuberculosis Sanatorium. It is assumed that, as a component of the Department, the Sanatorium is subject to Departmental fiscal and personnel procedures. While not necessarily identifiable by primary points of focus, a considerable investment in time and effort is planned for fiscal 1968 in the continuing attempt to help the Sanatorium administration apply Departmental policies.

170 PLANNING AND TECHNICAL SUPPORT

171 Planning

I. Departmental System for Program Planning and Budgeting

A. Problem

There exists within the Department deficiencies in all areas of program planning and budgeting. Program budgeting is a new and only partially understood concept.

B. Objectives

1. Identifiable and measureable improvements in overall program management.
2. Development of the Department's formal budget requests on a program basis.
3. Preparation of plans designed to obtain the block grant for health services under Section 314(d) of Public Law 89-749.

C. Methods

1. Cooperate with the Division of Administration to develop and refine guidelines for use of the Department in preparing work programs with realistic objectives subject to progress evaluation.
2. Assist Departmental personnel in documenting program plans in standard and comprehensive format.
3. Consolidate all Division programs to complete the Departmental budget for submission to the Legislature and for use in obtaining the block grant under Public Law 89-749.
4. Provide consultative assistance, on request, to county health departments and other public and non-profit organizations, throughout Arizona in development of program, budget and project requests to complete the State Comprehensive Health Plan.

D. Evaluation

This program is continuous and evolutionary and can be evaluated by progress toward a uniform, comprehensive and creditable plan for reaching definitive health objectives, program-oriented.

II. Organization for Comprehensive Health Planning

A. Problem

The impending implementation of Public Law 89-749 will require extensive organization, both internal and external to the Health Department, to provide an effective and integrated vehicle for state-wide comprehensive health planning. The exact nature, responsibilities and interrelationships within these organizational patterns must await final designation of a single State agency.

Deficiencies exist in such organization at all levels to respond to the newly-developing requirements of comprehensive health planning. A primary function of this Section during fiscal year 1968, and beyond, will be to assist and advise the Commissioner and the Board of Health in developing and implementing the Department's responsibilities in organizing for health planning.

B. Objectives

1. To establish, or to assist in the establishment of organizational groups for planning at State and community levels as required by Public Law 89-749.
2. To establish, or to assist in the establishment of such other organizational groups, not required by Public Law 89-749, as may be necessary to implement comprehensive health planning in Arizona.
3. To provide leadership and information necessary to assist these organizations in carrying out their missions.

C. Methods

1. Assist in the organization and orientation of the Governor's Health Advisory Council required by Section 314(a) (2) (B) of the Public Health Service Act as amended by Public Law 89-749. At least during the formative stages, a member of the Division staff may serve as Executive Secretary to the Council or may provide staff support to the Executive Secretary.
2. Assist in the formation and orientation of an Inter-Agency Committee for Coordination Planning consisting of representatives of all State and Federal agencies having legally vested responsibilities in the provision, supervision or financing of health services and health oriented programs in Arizona.
3. Assist in the formation, orientation and operation of an interdivisional permanent committee within the State Department of Health to advise and assist the Commissioner in developing and implementing the Department's responsibilities in health planning.

4. Assist and encourage county health officers to assume leadership in community health planning and action. By definition, comprehensive health planning must be community-based.
5. Creation of an information service to collect, analyze and digest data, directives and resource material from all available sources and to make this information available to all health planning organizations.
6. Develop departmental technical support proficiencies to supply consultative services to all health planning organizations in Arizona. Such services will include orientation to health planning, organizational assistance, instruction in basic planning techniques, assessment of problem areas, identification of resources, objectives and deficiencies and planning to overcome deficiencies, including the determination of priorities. In addition to individual expert consultation, formal and informal training courses will be developed as necessary.

D. Evaluation

The effectiveness and efficiency of organization and technical support activities will be measured by progress made during the year to obtain effective organization for informed health planning. The ultimate evaluation criterion will be the degree of excellence developed in the Arizona Comprehensive Health Plan.

172 Management Advisory Services

A. Problem

The scope and operation of the State Department of Health depends on the authority and responsibility granted or delegated to it by State law. The effective and efficient operation of the Department within its authorized sphere, in turn, depends to a large extent upon the adequacy, propriety, and clarity of the departmental rules and regulations. Similarly, the effective and efficient operation of the Department requires that managerial personnel within the Department and within the several local health departments have knowledge of and understanding of the statutes, regulations, policies, and procedures which affect their respective programs; it requires, also, the proper implementation of new or revised programs and the prompt identification and resolution of deficiencies or suspected deficiencies in the day to day operation of the Department.

The problem to which this program is directed is to identify and minimize or eliminate the legal and administrative deficiencies encountered or anticipated in the operation of the Department.

B. Objectives

The program objectives are as follows:

1. To assist personnel in the Department and in local (county) health departments to identify and resolve legal implications and administrative problems encountered or anticipated in the operation of the Department.
2. To draft, review or assist in the drafting or review of proposed legislation to be supported by the Department during the forthcoming legislative session.
3. To assist in preparing or reviewing contracts to which the Department is to be a party.
4. To effect liaison between the Department and the Office of the Attorney General and, when requested, to assist his office to resolve problems having public health implications.
5. To analyze, and where needed, to recommend changes and draft revisions of the rules and regulations of the Department.
6. To assist in the identification of grant resources available to carry out the activities of the Department and to assist in the preparation of grant applications.

C. Methods

This activity is conducted by oral and written response to requests for assistance and to observations of legal misconceptions of, or administrative deficiencies in, program operations. Analytical, investigative and research techniques are utilized as may be required to best resolve or accomplish the matter under consideration.

D. Evaluation

The progress of this program toward meeting its objectives will be evaluated on a short term basis by assessing the backlog of assignments in terms of the estimated hours or days for completion and in terms of the priority of the matters involved. On a long term basis the program can be evaluated by observing the measurable benefits to the Department and to the local health departments in terms of decreasing the legal and administrative deficiencies encountered in their operations.

173 Health Education and Information Services

The purpose of this activity is to gain better understanding, support, cooperation and responsible participation by the general public and a variety of special publics, in launching and carrying out public health programs.

A. Problem

The philosophy, value and need for public health programs and services are not adequately or uniformly well understood. This office will provide the supportive educational-informational services needed in the various programs.

B. Objectives

1. Plan, develop and implement educational-informational programs for specific Department projects and activities.
2. Plan, develop and publish Department publications.
3. Publish Arizona's Health, official bi-monthly publication of the Department.
4. Supervise the Department's film library.
5. Provide direct service to the press and other communication media.
6. Provide writing and editorial assistance to Department staff.
7. Develop exhibit materials.
8. Identify and meet unmet problems.

C. Methods

1. These activities--planning, developing and implementing educational-informational programs--will be carried out by assessing the scope and nature of the problem with the involved Department staff, reviewing the project's basic objective, and then mapping and carrying out a health education and informational support program tailored to accomplish the objective. This office will develop brochures, speeches, radio-TV spots, news releases and other materials designed to promote public understanding, support, cooperation and responsible involvement.
2. Department publications will be planned, written and published in cooperation with interested staff. Generally, each publication will be produced as one of a number of supportive actions to promote a new or existing specific program or activity.
3. The year 1967-68 begins the second year of publication for Arizona's Health. Improvements will be made by assessing the effectiveness of the first six issues. Future issues will be aimed at subject areas needing most attention. Present format will be evaluated to determine improvements if needed.

4. Supervision of the Department's film library will include the preparation and publication of an updated film catalogue. Existing films will be reviewed and, subject to fiscal limitations, additions will be made and obsolete films taken out of circulation.
5. Direct service to the press and other communications media is provided mainly through the production of news releases distributed to all media; and responding to follow-up queries and to requests for radio, television and press interviews with responsible Department officials. Priorities are based on the relative urgency and importance of the subject matter. The material is produced with the cooperation of the interested Department staff.
6. Writing and editorial assistance is given on request, and may include writing a complete speech for the Commissioner, assistance or editing of a speech for other professional staff; help in producing pamphlets or other materials.
7. Development of exhibit materials is carried out on request of Department staff. Sometimes it will be in response to an outside invitation to exhibit.
8. Identification and meeting of unmet problems is carried out by a review of specific programs and activities, assessment of public responses and reactions to various public health programs and activities, and other kinds of continuing surveillance.

D. Evaluation and Time Deadlines

Some activities and objectives will be judged on an annual basis. The amount of the total job done at year's end in the immunization project will provide a ready yardstick for measuring degree of success. In the case of comprehensive health planning, a year's time span may be less adequate, since the program is still in its embryo stage.

E. Collaborative and Cooperative Action

Since this is a "supportive" activity by nature, collaboration and cooperation with interested staff is an integral part of the approach. Such collaborative and cooperative action will also be established and strengthened with private and voluntary groups. This process has already begun through the use of the departmental magazine and other vehicles and techniques.

174 Training

A. Problem

Arizona has no organized statewide program to develop, establish and implement continuing education programs for professional public health workers at all jurisdictional levels, special training programs for lay leaders involved in comprehensive health planning and other programs that relate to identified training needs.

B. Objectives

To organize and staff a training section competent to develop training plans and to obtain training resources to meet identified training needs.

C. Methods

A comprehensive training program responsive to this need is being planned to include the following elements:

1. Consultative and advisory assistance to departmental program staff, county health officers, representatives of voluntary and health related agencies, heads of professional organizations, members of advisory councils and committees and others on request in the identification of training needs and in investigating and developing resources, programs, methods and approaches responsive to those needs.
2. Investigate, develop and obtain special resources necessary to support or otherwise make possible the implementation of training programs and projects. Resources include short-term training grants, courses of continuing education programs, individual trainee scholarships, special courses in university and junior college curricula and vocational training courses.
3. Plan and conduct for lay persons and organized community groups training courses that lead to effective involvement in the planning process.
4. Review, pre-evaluate and post-evaluate training programs, seminars, institutes, workshops, etc. to determine appropriateness of control and effectiveness of techniques.
5. Develop training materials, questionnaires, evaluation forms related to training activities.
6. Provide staff services to the formal Residency Program for Physicians to be conducted under the auspices and direction of the Deputy Commissioner.

D. Evaluation

The degree of success in the Department's efforts to establish and sustain a state-wide coordinated training program will involve assessment of many interrelated elements. Definitive identification of these elements including designs of appraisal methods and techniques will be incorporated into the planning of the training programs. These evaluation elements will be formed in several areas, such as, for example:

1. Identification of training needs in terms of adequacy and clarity of definitions as basis for determinations of responsive actions.
2. Resources development and utilization necessary to support planning and implementation of actions.
3. Training methods and techniques employed.
4. Quality and quantity improvements in health services.

180 VITAL STATISTICS

The Bureau of Vital Statistics (statutory title) is set up by law and assigned the duty of registering all births and deaths occurring in the State. It is also obligated to furnish certified copies of these documents to any eligible applicant upon request. In carrying out this task, the activities are divided into four sub-programs.

181 Administration

This includes supervision and monitoring of the overall mission toward the end that, (1) every birth and death is registered, (2) a complete and correct certificate is obtained for every event. This will involve preparation of regulations, devising new forms and procedures, training personnel, furnishing consultation, and possibly the preparation of statutory changes.

A. Problems

1. Provisions of the new State vital statistics legislation to be effective January 1, 1968, requires extensive revision of policies, methods, procedures, forms, and the establishment of a state-county partnership in registration activities.
2. Unsafe and inadequate space and facility for the housing of operations and records storage jeopardizes employees, exposes vital records to damage and possible loss, adds to the cost of operation, and is adverse to employee morale.

B. Objectives

1. To effect a smooth transition of operations from the present to the many new and different operational requirements of the State Statute which goes into effect January 1, 1968.
2. To obtain remedial action on the unsafe and inadequate housing of the vital statistics operations.

C. Methods

1. Operational transition to requirements of the new State Statute will involve:
 - a. Completion of revised rules and regulations with the assistance of the Division of Planning and Technical Support;
 - b. Designing, testing and installing new registration and operational forms and procedures;
 - c. Providing consultative services to County Health Department personnel, including preparation of written instructions, guidelines, etc.;

- d. Planning for and conducting on-the-job training of state and county personnel in new procedures;
 - e. Preparing and disseminating new guidelines to local registrars, hospitals, physicians, funeral directors, local officials, etc.; and
 - f. Maintaining close observation over all operations under the new rules and regulations, particularly documenting all situations which suggest necessity for changes in the statute or the rules and regulations, and preparing revisions where required and when needed.
2. Continue to effect accurate documentation of specific incidents, such as result from flooding of quarters due to heavy rains (this will happen), employee accidents, and specific conditions adverse to efficient production, which can be used to strengthen requests and justifications for remedial action on the problem of unsafe and inadequate housing and facility.

D. Evaluation

1. Evaluation of all methods employed to achieve smooth transition of operations to the requirements of the new State Statute on vital statistics is an inherent element in the methods themselves, with overall evaluation to be found in the degree to which the operational transition is accomplished without impairment of service, decrease in productivity and increase in costs.
2. The securing of safe and adequate housing and facility for the vital statistics operations will be the basis for evaluating achievement of this objective.

182 Registration

This sub-program requires a myriad of interrelated procedural activities. Advice, instructions, and guidance must be continuously furnished to hospitals, doctors, morticians, coroners, and the public on the proper completion of vital records.

A. Problem

The law requires that every single registration be complete and accurate, rules and regulations to implement the law specify this completeness and accuracy, and a myriad of procedures involving many people must be fully responsive to the specifics of the rules and regulations. There is a deficiency in the supervision and direction the Division is presently able to provide these operations.

B. Objective

To effect a demonstrable improvement in the supervision of the registration operations to the end that maximum completeness and accuracy of individual records is assured.

C. Methods

1. Incomplete records must be made complete, errors must be corrected when correctable, new certificates must be made to show changes of civil status, etc.
2. The newly authorized positions of Assistant Director of the Division with primary responsibility for registration operations will be filled.
3. New forms will be devised to simplify completion and still retain all essential information.
4. Improved response to requests for consultation from the field will be provided.
5. Will continue to furnish hospitals, doctors, morticians, coroners, the public, and others, with accurate answers to their specific questions or shortcomings.
6. Will establish effective working relationships with the Division of Preventive Health Services so that data from registrations are of maximum value to program operations and evaluation.

D. Evaluation

Evaluation of achievement of this objective will be found in the degree to which specific methods or techniques are effective in readily spotting deficiencies in records, in quickly identifying constructive procedural improvements, and in clear identifications of desirable or necessary changes in the state law or in rules and regulations.

183 Certification

Production of copies as a fee-paid public service demands a continuous, painstaking attention to detail. Last year over 150,000 copies were distributed -- about 1.2 copies every minute of every working day. A highly organized teamwork effort coupled with sound records management is indispensable. Experimentation has been under way for some time with "service-while-you-wait" in certain cases and has proven practical.

A. Problem

There is a recognizable need to effect improvements in service and to increase efficiency in production without impairment of accuracy and completeness of the individual certificate.

B. Objective

To achieve and maintain the highest possible level of public service in the issuance of certificates commensurate with the specified requirements for completeness and accuracy in those certificates.

C. Methods

1. Continue the experimental project initiated last year to test the efficacy and relative efficiency of issuing certificates on a "service-while-you-wait" basis.
2. Survey for reevaluation the current records management system for identifying possible areas of improvement and effect necessary or desirable changes in procedures as indicated.

D. Evaluation

The ultimate evaluation of the degree to which this objective is achieved will be based on measurable improvements in service, increased production at the same or lower cost, and simplification of issuing and record-keeping procedures.

184 Accounting

Statutes closely regulate the receiving and handling of public monies, which in this context means fiscal accountability for fees paid for copies of vital records. Also requires fiscal management responsive to the accounting standards promulgated by the State Auditor, Treasurer, and Post Auditor.

A. Problems

1. There is need to improve accounting forms and procedures and, at the same time, meet the accounting standards and requirements issued by the State Auditor, Treasurer, Post Auditor, and the State Department of Finance.
2. Some individual personal checks given in payment of fees are subsequently found to be uncollectable, which poses the question of continuing a policy which permits acceptance of personal checks. Good public relations essentially dictates the necessity of continuing the policy.

B. Objectives

1. Work will continue to realize an accounting scheme which gives all the checks and balances required by the agencies mentioned above but at the same time reduces clerical operations and other details to a minimum. Liaison will be maintained continuously with these agencies, and their consultation and guidance sought when innovations are tried out. Recommendation for an annual audit of books is proposed.

2. A system of monitoring checks is already in existence to weed out those likely to be returned for insufficient funds. All checks over \$5.00 must be initialed by director. Counter checks are refused. Checks on foreign banks are declined because of exchange problems. These procedures will be refined and modified to meet any changing circumstances.

C. Evaluation

Evaluation of the accounting sub-program will be measured by comparing satisfactory accomplishment of the assigned task against the standards cited, but with a minimum of personnel and the least complex system of operations.

A. Problems (supplemental data attached)

There is a need to be constantly alert to every opportunity to develop and improve public health nursing in all areas of the State. This includes:

1. The need to alleviate the problems of nursing shortages, particularly at the community level.
2. The need to elevate and maintain standards of performance for nursing services at all levels, including the development of methods for measuring performance in terms of standards and response to program requirements.
3. The provision of opportunities and methods for in-service and on-the-job training.
4. The need to provide instructional guidance to nurses in areas where local professional supervision is nonexistent.
5. The need to evaluate nursing in relation to quality, quantity and disposition of patient care.
6. The need to continuously collaborate with program administrators of the Department on meeting the nursing requirements of their ongoing and developing programs.
7. The need to implement an adequate statistical reporting system of nursing activities.

B. Objectives

1. Help alleviate nursing shortages at the community level on a selected and scheduled basis.
2. Develop and improve public health nursing services in all areas of the State through collaboration with local agency directors, public health nursing directors, supervisors and nurses responsible for nursing service at the local level.
3. Promote and conduct on-the-job orientation and in-service education for nursing staff.
4. Provide instruction, counselling and guidance to nurses in all areas of the State where local public health supervision is not provided.
5. On a selected county basis, explore methods for evaluation of quality, quantity and disposition of patient care.
6. Collaborate with program administrators and specialized nursing consultants to meet the nursing needs of various "special service" programs.

7. Implement an adequate statistical reporting system of nursing activities.

C. Methods

1. a. To work with the Deputy Commissioner for Local Health Services in:
 - 1). Defining numbers and qualifications for nursing staff in county health departments in order to have support of local boards of health and local boards of supervisors to budget for these nursing positions. Three counties already identified as having the greatest need and top priority are:
 - a). Pinal County - Supervising nurse as there are eight positions and no supervising nurse.
 - b). Yavapai County - Population 30,971 and only one nurse and one home health aide.
 - c). Greenlee County - with no public health nursing service.
 - b. Update data and assist in the construction of adequate compensation plans for nurses in all counties of the State.
 - c. Assist in recruiting qualified nurses and other professional persons in all counties.
2. a. Begin to assist each county without nursing supervisors in defining its health needs through analysis and evaluation of vital statistics, county pertinent data, and as may be indicated from health index surveys.
 - b. Assist in planning ways to best meet the nursing needs of the community, for example: immunization programs, cancer screening programs, home health services, etc.
 - c. Review existing programs in relation to stated needs.
 - d. Promote the development of a written plan for the nursing activities in each county delineating what they expect to accomplish for Fiscal Year 1968.
 - e. Assist in the development of standards of performance for nursing services related to this plan.
 - f. Help in development of written methods to carry out the plan for nursing services in counties without supervisors. For example: Division of a county into districts with a schedule for nursing visits to each district for the best utilization of time and travel and personnel.

- g. On a demonstration basis, assist in assessing patient and family needs and making nursing care plans to meet these needs.
 - h. Plan for the semi-annual meeting of the public health supervisors, consultants and directors which provides an opportunity for nurses to keep abreast of current trends in public health nursing with specific application to the needs of Arizona.
 - i. Provide technical and administrative consultation to local health departments in planning new programs and expansion of existing programs.
 - j. Promote development and utilization of a reference file on community resource material in each county.
 - k. Encourage nurses to identify opportunities for, and use of, volunteers in carrying out selected activities.
 - l. Survey local agencies who wish to become certified home health agencies and provide for periodic resurveys.
 - m. Participate actively with the professional organizations and individuals for evaluation and improvement of nursing resources in the State.
- 3. a. Continue quarterly in-service education programs for nurses in the northern counties.
 - b. Participate in in-service educational programs when requested; assist nurses in rural areas in planning, conducting, or arranging for in-service and on-the-job training within their agencies.
 - c. Continue to make professional and pertinent reference materials available, and assist nurses in selection of such materials.
 - d. Acquaint nurses with training opportunities, and promote attendance at selected programs, seminars or workshops.
 - e. Plan and conduct individual on-the-job training for newly employed nurses at the Department.
 - f. Plan and conduct group and individual orientation for newly employed nurses and other nurses who have not had orientation. This will be done at least twice in 1968.
- 4. a. Periodic visits on a planned basis to the counties to assist and guide the nurses in planning and selecting methods for implementing her nursing program.

- b. Complete revision of the Public Health Nursing Manual to assist the new nurse or the nurse working without direct public health nursing supervision.
 - c. Demonstrate and supervise a nursing visit, bag technique and other procedures as needed.
 - d. Assist local nurses in the methods and techniques of supervision of employees, both professional and ancillary.
5.
 - a. Encourage and assist at least two local nursing agencies to plan and conduct patient progress studies and/or other methods of assessing and evaluating nursing services.
 - b. Measure in at least three counties nursing services in relation to stated standards.
 6.
 - a. Consult with program administrators in defining and interpreting the nursing component of proposed or developing programs.
 7.
 - a. With Data Processing Unit, implement a new system of collecting reports of nursing activities by county and total for State.
 - b. To work toward inclusion of all community nursing activities in the State which will include Visiting Nurse Services and the Division of Indian Health, Public Health Nursing Services.

D. Evaluation

1.
 - a. Enumerate the number of new positions budgeted during Fiscal Year 1968.
 - b. Provide a chart comparison of compensation plans in the counties for July 1, 1967 and July 1, 1968.
 - c. List positions unfilled July 1, 1967, resignations, and number of vacancies filled during Fiscal Year 1968.
2.
 - a. Tabulate what has been done in the counties to meet this objective by summarizing the field trip reports made by the director of nursing and the nursing consultants.
3.
 - a. Report of in-service and orientation programs - content and number attending. Submit an evaluation to demonstrate how the participants used the knowledge gained to improve services.
4.
 - a. Study the number and spacing of visits by consultants and list what was accomplished toward this objective.

5. a. Report on patient progress studies and/or other methods of assessing and evaluating nursing services.
- b. Using, in at least three counties, the nursing services to measure the stated standards.
6. a. Tabulate the nursing activities and review nursing components in their programs.
7. a. Evaluate, from a developed questionnaire, the value of the new reporting system for all counties.
- b. Report on the progress made toward including the Visiting Nurse Services and the Division of Indian Health, Public Health Nursing Services, in inclusion of all community nursing activities in the State.

NUMBER OF NURSES NEEDED
IN PUBLIC HEALTH IN ARIZONA

COUNTY	TOTAL POP.	NON-INDIAN POP.*	NO. OF NURSES EMPLOYED JUNE 30, 1967 ⁺	NO. OF NURSES NEEDED ⁺⁺	ADDITIONAL NURSES NEEDED
Apache	31,840	7,689	1	1½	½
Cochise	67,403	67,254	9	13½	4½
Coconino	51,279	37,632	2	7½	5½
Gila	26,577	22,634	2	5½	3½
Graham	14,602	13,318	1	2½	1½
Greenlee	12,000	12,000	0	2	2
Mohave	14,000	13,246	1	2½	1½
Navajo	42,482	20,685	1	4	3
Pinal	72,901	66,718	8½	13½	5
Santa Cruz	11,577	11,577	2	2	0
Yavapai	30,971	30,041	1	6	5
Yuma	55,805	53,992	12	11	0
Maricopa	837,674	827,741	69	166	97
Pima	330,993	323,131	33	64½	31½
TOTAL	1,600,104	1,507,658	142½	302	160½

*Indian Population served by Public Health Service, Division of Indian Health.

School Nurses total 316 and serve 90% of the school population.

+Includes four counties with nursing supervision.

++Based on Ratio of one nurse per 5,000 population.

200 LABORATORY SERVICES AND SUPPORT

201 Laboratory Direction

I. Legislation

A. Problem

There is need for legislation that recognizes the need for and requires certification and licensure of clinical laboratories and their personnel.

B. Objectives

Complete preparation of draft legislation authorizing the Board of Health to establish rules and regulations to govern the certification and licensure of clinical laboratories and certain professional and technical personnel.

C. Methods

The Director and staff will collaborate with pathologists, physicians, laboratory societies and other interested or concerned groups in the development and drafting of acceptable legislation, and with the assistance of the Management Advisory Section of the Division of Planning and Technical Support clear final draft of the proposed legislation for submission to the Legislative Council for action in the next Legislative session.

D. Evaluation

Evaluation of the steps taken will depend on the outcome of Legislative action.

II. Laboratory Facilities

A. Problem

With the expansion and addition of new health programs in the State which require support services of the Laboratory, space and physical facilities of the Laboratory have become inadequate.

B. Objective

Complete detailed plans, specifications and costs and prepare specific recommendations for future expansion and improvement of the Laboratory's facilities.

C. Methods

Will obtain consultation from the National Communicable Disease Center's Laboratory Development Section to assist in the development of survey design and assessment techniques and will visit a few selected State health laboratories which have been

newly constructed or renovated in order to study their plans and approaches and to assess their experiences. On the basis of these actions and observations, the Laboratory will complete detailed plans for a scheduled expansion which will take into account, on a priority basis, the identification and costs of new or improved facilities adequate to meet the laboratory support activities required by such programs as radiological health, toxicology, air pollution, water quality, adulterated foods, caustic alkali and acids, meat products manufacture, etc.

D. Evaluation

Essentially, the planned expansion and improvement of the laboratory's facilities will be evaluated in terms of the demonstrated feasibility of the plan as will be shown through its implementation.

III. Staff Capability

A. Problem

There are deficiencies in the competence of State laboratory personnel in new technology and instrumentation which can be overcome by application of combinations of formal and in-service training methods and techniques.

B. Objective

Determine priorities of training and make selection of personnel categories within those priorities to be given training opportunities in new laboratory technology and instrumentation.

C. Methods

Develop and submit to the National Communicable Disease Center an application for a regional training grant which will support a specialist to assist in the development of a continuing education program which initially, in FY 1968 provides for a course in basic medical microbiology and for refresher courses (workshops and seminars) in laboratory methods for syphilis and parasitology.

D. Evaluation

The continuing education program will be evaluated through subjective assessment by trainees before and after participation in each course and through follow-up assessment of laboratory ability to implement new procedures and in identifiable improved efficiency of personnel that have had benefit of the training program.

IV. Up-grading Clinical Laboratories

A. Problem

Clinical laboratories throughout the State generally are deficient in capability, facility and technical competence in terms of ability to adequately respond to new and expanding demands for laboratory diagnosis.

B. Objective

Organize and establish a Laboratory Consultation and Evaluation Section within the State Laboratory to initiate consultative services leading to proficiency testing in parasitology and improvement of diagnostic methodology in medical microbiology in clinical laboratories.

C. Method

To send out unknown specimens at stated intervals to all laboratories requesting this service. Specimens included will be the common parasites encountered in Arizona and those bacteria most commonly found in medical practice. The methods will include on-site visitations to at least 50% of the laboratories requesting this service. Follow-up refresher courses are contemplated as indicated by the evaluation.

D. Evaluation

The evaluation of the results returned on the unknown specimens will indicate the directions in which the program should go with follow-up refresher courses.

V. Program Costs

A. Problem

The advent of formalized program planning and budgeting in the Department coupled with expansion of laboratory support services makes necessary the installation of systems which will provide accurate information on costs of support services to each of the several programs.

B. Objective

Install within the laboratory for all operations a fully effective and efficient system for the identification of costs of support services chargeable to each of the several programs.

C. Method

Will collaborate with the program divisions and the Division of Administration and Planning to develop and install a cost accounting system within the laboratory which will provide

accurate cost information. A classification of definitive support operations and procedures will be established; codes will be assigned; time studies will be conducted; and standard operating procedures for recording and reporting will be installed.

D. Evaluation

Evaluation of the laboratory's cost accounting system will be made primarily on the basis of its effectiveness in response to the specific requirements of the Department's program planning and budgeting system.

VI. Retrieval and Analysis of Laboratory Information

A. Problem

There is a need to develop a system for more rapid and accurate retrieval and analysis of information obtainable from laboratory procedures and operations.

B. Objectives

To develop a system, to include possible use of automated data processing equipment, which will permit obtaining timely information in useful form to meet not only the internal needs for evaluation of program efficiency but also to meet the information requirements of programs using the laboratory services.

C. Methods

1. With the aid of a systems analyst, develop and implement a pilot study to determine the efficiency of computerizing data obtained from the Tuberculosis Unit within the Laboratory.
2. Obtain information on and evaluate experience on data retrieval systems being used by similar operations in other States.
3. Develop, pre-test and finalize a program to provide a complete data retrieval system for inclusion in future plans and budget submissions.

D. Evaluation

The program will be evaluated by assessment of progress towards development of a data retrieval and analysis system which meets the present and future demands for information.

202 Chemistry

I. Air Pollution

A. Problem

With the establishment of an air pollution section in the Health Department there is a need to supply analytical chemical facilities to aid in the control of air pollution.

B. Objectives

Special equipment necessary for the laboratory support of the air pollution program will be purchased and installed. It will be necessary to train personnel since they will not be familiar with the methods to be used.

C. Methods

Working in close collaboration with the new chief of the air pollution program, we will purchase equipment. Staff will be trained at Public Health Service sponsored courses and instruments will be checked out, standardized and calibrated.

D. Evaluation

Essentially, the planned expansion of the laboratory facilities will be evaluated in the terms of its implementation. The training phase will be evaluated through subjective assessment of the courses and through follow-up assessment of the staff's ability to implement new procedures in support of the air pollution program.

II. Water Quality

A. Problem

With the adoption of the water quality standards for the State of Arizona it will be necessary to expand the work which has been done in support of this program.

B. Objectives

The establishment of a laboratory equipped and staffed to support the water quality program.

C. Methods

Working closely with the new chief of the Water Quality Section, we will supplement our presently owned equipment with special instruments necessary to support the program. If it is found necessary to train present staff and new personnel, we will send trainees to the National Center for Urban and Industrial Health.

We will continue to participate in programs for standardization of laboratory methods originating with the National Center for Urban and Industrial Health.

D. Evaluation

The program will be evaluated by assessment of the progress toward the development of a water quality chemistry section as measured by our ability to meet the present and future demands for information. The training program will be evaluated by the ability to implement the new procedures and the identifiable improvement of the efficiency of personnel.

III. Adulteration of Dairy Products

A. Problem

The intense competition in the marketing of dairy products has tempted some of the manufacturers to substitute vegetable fats for animal fats in order to gain a price edge. The problem will be to detect the adulteration of dairy products with vegetable fats.

B. Objectives

To reduce the contamination of animal fats with vegetable fats.

C. Method

The identification of the sterols present in ice cream using chromatographic techniques.

D. Evaluation

The program will be evaluated by assessment of the progress made in reducing the substitution of vegetable oils for animal fats in manufactured dairy products, principally ice cream.

IV. Pesticide Residues

A. Problem

Arizona has a peculiar situation in which people, pesticides and food are all mixed up. Analytical chemistry facilities must be expanded in order to monitor water, various food products, and soil as well as continuing the special dairy products study.

B. Objectives

Keep to a minimum the intake of pesticides into the human system.

Maintain surveillance on all products which have legal standards for contamination with pesticides.

C. Methods

Remodel the laboratory to conform to safety standards and install new equipment with multiple detector capabilities. Maintain close collaboration with the University of Arizona Community Pesticides Study.

D. Evaluation

The planned expansion and improvement of the laboratory facilities will be evaluated in terms of the implementation of the objectives. The effectiveness of the surveillance and monitoring programs will be measured by the reduction in the number of food products which are not in conformance with standards.

V. Clinical Chemistry

A. Problem

Recognizing the poor quality of laboratory work in clinical chemistry pointed out by nationwide studies, Arizona is embarking on a program to develop a clinical section in the State Laboratory. A proficiency testing program for clinical laboratories throughout the State can then be implemented.

B. Objectives

To raise the level of laboratory performance in clinical chemistry.

C. Methods

Since many states including Arizona do not have operating clinical chemistry section within the State Department of Health program, the National Communicable Disease Center has made available their laboratories as a reference center and they have prepared unknown specimens which can be used by the states in a proficiency testing program. Arizona will take advantage of both of these offers and use the facilities of the National Communicable Disease Center.

D. Evaluation

The program will be evaluated through objective assessment of the various clinical laboratories results to note identifiable improved efficiency and accuracy.

203 Microbiology

I. Deficiencies

A. Problem

In the past few years many new techniques have been developed in the analysis of food products for anaerobes and staphylococci. Refresher course training is necessary to upgrade present staff in these techniques.

B. Objectives

Train staff in the rapid handling of anaerobes and the serological identification of the staphylococcus enterotoxins.

C. Methods

In-service training and Public Health Service sponsored courses at the National Communicable Disease Center.

D. Evaluation

The in-service training program will be evaluated through subjective assessment of trainees before and after participation in each course and through follow-up assessment of their ability to implement new procedures.

II. Laboratory Safety

A. Problem

One of the most hazardous and infectious agents with which we work are the fungi. The control of the spores of these organisms is essential to the health and safety of the personnel.

B. Objectives

Eliminate the safety hazard in our mycology laboratory.

C. Methods

Install a safety hood in which the mycological examinations can be carried out.

D. Evaluation

The planned improvement of the mycology laboratory facilities will be evaluated in terms of the demonstrated feasibility of the plan as shown through its implementation.

I. Use of Laboratory Facilities

A. Problem

How, what and when to collect specimens for virological examination.

B. Objectives

Developing an intelligent use of the virological services.

C. Methods

Orientation of physicians and local health departments to the services available through presentation of seminars and published articles in Arizona medical journals.

D. Evaluation

Effectiveness of the program will be determined by the increased number of virus isolations and other confirming diagnostic aids to the physician.

II. Laboratory Safety

A. Problem

Inadequate quarters for the safe handling of suspected virus materials.

B. Objectives

Development of a long range plan for establishing a safe working environment for the virus laboratory personnel and the "isolation" of the virus unit from the rest of the laboratory.

C. Methods

Consult with National Communicable Disease Center Laboratory Development Section in the planning of laboratory design. On the basis of these recommendations the laboratory will complete detailed plans which will take into account on a priority basis the cost of new and improved facilities adequate to meet the virology program.

D. Evaluation

Essentially, the planned expansion and improvement of the laboratory's facilities will be evaluated in terms of the demonstrated feasibility of the plan as will be shown through its implementation.

I. Use of Laboratory Facilities

A. Problem

With the development of newer testing procedures in the diagnosis of syphilis there is a need to educate physicians, nurses and Health Department personnel in the procedures used.

B. Objectives

Reduce the cost of serological testing by limiting the unnecessary use of more expensive procedures.

C. Method

To use in-service training of Health Department personnel and education of physicians through the venereal disease investigators. Preparation and use of educational materials for distribution.

D. Evaluation

The effectiveness of the program will be determined by noting the reduction in the number of specimens requesting special studies when they are not indicated by the clinical diagnosis.

II. Evaluation of Procedures and Reagents

A. Problem

With the development of commercial reagents for the diagnosis of coccidioidomycosis, there is a need to evaluate the procedures as performed in various laboratories. Conflicting results have been brought to our attention and these in turn are lowering the confidence of the physicians in all laboratory work.

B. Objective

Set up a proficiency testing program which will include serological tests for coccidioidomycosis.

C. Method

Send unknown specimens to participating laboratories. Selected reference laboratories including National Communicable Disease Center, the Veterans Administration Hospital in San Fernando and the School of Public Health, University of California, Berkeley, will be used in a comprehensive study to compare results with those of the clinical laboratories and the State Department of Health, Division of Laboratories.

D. Evaluation

The effectiveness of the program will be measured by the agreement of the results obtained by the participating laboratories and the reference laboratories.

206 Tucson Branch Section*

Will provide the same services performed in the central laboratory with the exception of chemistry and virology. The area serviced will be the southern tier of counties plus Graham and Greenlee on the east.

207 Flagstaff Branch Section*

Will provide sanitary bacteriology for water and milk programs, screening tests for syphilis and limited bacteriological services of a screening nature. The area serviced will be the northern tier of counties along U.S. 66 and the Santa Fe Railroad.

* For administrative purposes only the Flagstaff and Tucson Branches are shown as separate sections.

210 ENVIRONMENTAL HEALTH

211 Sanitation

A. Problems

At the present time the Section is staffed with three sanitarians and a clerk. Although the need for additional staff has been presented many times, we have been unable to expand and staff the Section adequately to meet the need.

1. Almost 50% of the personnel in the fourteen local health departments are sanitarians. Their activities range to some degree over a minimum of twenty-eight different categories in Environmental Health. The Sanitation Section is responsible for providing technical assistance and consultation in at least twenty-five of these categories according to A.R.S. 36-132, B-2, 5 and 14, and Department assignments.
2. According to A.R.S. 36-132, B-15, the Department (and the Section by assignment) is also responsible for "conducting a continuing evaluation of State, local and district public health programs and must have the ability to study and appraise State health problems and make recommendations for their best solution".
3. One of the problems that exists is that a large percentage of the sanitarians have a limited education. About 90% fail to qualify for the minimum of a bachelor's degree. A number of them do not have the two years of formal education in an accredited school which was the minimum requirement for new employees a year ago. Less than ten out of eighty have received formal training in public health. Reliance on military training has been the mainstay of most health units in the State.
4. The Section has the responsibility for the enforcement of the State Pure Food laws and for collaborating with the Federal Food and Drug Administration in the enforcement of the Federal Food and Drug Laws.
5. The Section is responsible for the enforcement of the health and sanitation provisions appearing in the State dairy laws. Traditionally one of the Section sanitarians has been assigned to the milk program full time. However, this has not proved adequate and the Department has had to rely on local health units for routine inspection and control work.

6. The Section is responsible for licensing and inspecting approximately fifty-five children's camps scattered throughout the State. To date, the Section has not been able to carry out its inspection responsibilities and has had to rely on local approval. This has worked to a degree but there has been little opportunity to coordinate inspections and cause them to be made when camps are operating, or in some cases, not even when the camp is occupied by a caretaker.
7. Food service program evaluations made the past year in seven counties show that only two of the counties were able to achieve an acceptable rating in both the level of sanitation in their restaurants and conduct of their food sanitation program.

None of the departments surveyed this year or in any previous year since the latest P.H.S. rating survey method was developed have achieved an excellent rating in either category.

8. Several programs in other sections require the services of a sanitarian either in a direct inspection or consultative capacity. They are the Hospital, Nursing Home, Care for the Aged, Epidemiology, Migrant Health and Child Day Care (including certain types of schools), categories where a part of the Health Department's concern is in the area of sanitation. We should supply the technical services necessary from this Section in order to strengthen the concern for Environmental Health problems.
9. The authority for vector control activities is found in the laws on nuisance and in the Department's general responsibility for controlling communicable disease and the Department has the responsibility for providing technical guidance, consultation, etc. However, there is no specific authority for the State Department of Health to conduct a routine vector control program of a type which should be carried by the Sanitation Section in support of the local health units. Although the Department has epidemiologists to deal with outbreaks, there is no provision for the services of a technical expert who can focus on control methods, equipment and identification of vectors in support of the local health units and in cooperation with P.H.S. vector control teams.
10. Solid waste problems are a part of the Section's responsibilities. Open burning dumps exist in the majority of the counties in the State. A survey and planning program for the purpose of designing activities for the control of these dumps and other associated problems is needed.
11. The present Pure Food Law refers to a "standard of purity of food prescribed by the Secretary of Agriculture". This standard no longer exists because the pure food controls at

the Federal level were given to the Department of Health, Education, and Welfare a number of years ago. The standard referred to in the law should be the current standard used by the Federal Food and Drug Administration. It would be desirable to modernize the Pure Food Law by substituting a modern "Uniform Pure Food Law" which has been adopted by a number of states.

12. The past several years the Department and the State Board of Health have maintained an interest in the promotion of mattress and bedding legislation. Several proposals have failed for various reasons, and to date there is little control over the use of contaminated materials in such articles. It is the desire of the State Board of Health to continue to seek legislation which will permit the Department to control this problem.
13. Housing problems have long been recognized as being related to the health of the community. The Department has the general responsibility for maintaining an interest in all health problems. However, provision has not yet been made for the establishment of an activity which would clearly identify the extent of the housing problems related to health in this State and provide for the promotion of improvements.
14. The local departments are widely divided in capabilities and resources. One county does not have the services of a sanitarian at this time except for those services which this Section is able to extend to them. Five counties are staffed by a single sanitarian. Six counties have from two to five sanitarians. One county has a staff of nineteen sanitarians and the largest county is staffed with at least thirty-two sanitarians plus a number of public health engineers. The latter department has developed a Bureau of Environmental Health. The Sanitation Section of the State Department of Health must be sufficiently sophisticated and competent to be of assistance to the largest unit and at the same time be conversant with rural problems and direct services.

B. Objectives

The Sanitation Section will shift from a focus on milk and food service sanitation activities to the development of a program designed to evaluate all activities of the local health departments in environmental health, assess local and State sanitation problems and provide technical assistance and consultation to local health units.

We will also endeavor to maintain direct service programs and provide consultative and technical services as required to other Divisions within the Department. It should be emphasized that this effort must be in accordance with Department policy and budgetary limits for this fiscal year.

C. Methods

The Section will begin by making total program inventories in local health departments. It is expected that we will concentrate on the county health units which are not well equipped, without neglecting to become knowledgeable about the problems in the larger areas.

State sanitarians will work closely with environmental health personnel in each local health department on the inventory of activities and all that is required to proceed in each activity. They will then proceed with an evaluation of sanitation problems and suggestions for reorganization of effort, where necessary.

The State Sanitation Section will make an effort to provide guidance in sanitation program management for local health units for the purpose of strengthening those units. Guidance will be provided by means of formal short courses presented by experts of the P.H.S. when possible, the conduct of seminars for supervising and head sanitarians, and person-to-person sessions during routine activities. A routine training program in technical subjects will be delayed as far as this Section is concerned until a substantial need can be shown in a particular activity. The Section will then describe this need to the Department's training officer and assist in the development of appropriate training.

In summary this plan involves the State Department of Health Sanitation Section and fourteen local health department sanitation units. The effort will be carried to each local department a step at a time with considerable concentration on those who are most receptive and with considerable study of the unreceptive areas. The latter effort would be directed toward solving animosities harmful to the provision of complete environmental health services to the State of Arizona.

Throughout this process State sanitarians will be watchful for public information situations and will encourage and assist local health units in the preparation of the information for local news media.

D. Evaluation

The Section has an activity reporting system which will show the direction of previous efforts. This fiscal year's activity summary should show a change in direction.

Current local health department sanitation programs must be inventoried because this has not been done. Progress in this phase will be shown by a simple count of the material gathered. Later, the progress can be reported in terms of expansion of the Section's capabilities, the extension of local and State environmental health services to activities or areas where they do not now exist, and in terms of reducing environmental health problems which we expect to find and describe.

212 Water Supply

A. Problem

The Water Supply Section of the Division of Environmental Health is concerned with the quality of the public water supplies in the State of Arizona.

B. Objectives

The objective of this program is the prevention of the transmission of waterborne diseases and the availability of a palatable and esthetically acceptable water supply.

C. Methods

This Section is responsible for the review and approval of plans and specifications for public water supplies and swimming pools. Presently this Section reviews and approves plans for approximately 300 subdivisions and 30 new water companies each year. Plans and specifications for about 95 public and semipublic swimming pools, 90 water company additions and water line extensions, 17 schools, 25 trailer parks and 25 miscellaneous projects are also reviewed by this Section.

This Section is required by law to inspect new water supply systems during construction and upon completion of construction. This responsibility is only partially fulfilled due to staff limitations.

In accordance with Arizona's statutes, each well and every public water supply must be surveyed and certificated annually and reinspected as often as necessary when deficiencies are found. Each surface water source must be surveyed and inspected at least two times a year. Presently there are 562 recorded public water supplies with approximately 1,200 operating wells. There are 20 surface water sources. Again, staff limitations prohibit the fulfillment of this responsibility. Approximately one-third of this responsibility will be fulfilled.

There are approximately 2,136 semipublic swimming pools and 85 public pools in Arizona and the number of new installations is increasing rapidly. This Section does not attempt to inspect and survey these facilities with the present staff limitations. However, it is hoped that consultation and training can be provided to the personnel of local health departments in order that they may at least partially conduct this program at the local level.

The personnel of local health departments and plant operators collect and submit bacteriological samples to the State Department of Health Laboratory. The results of these samples are evaluated and interpreted by the staff of the Water Supply Section.

Inspections and recommendations are made immediately upon evidence that the water supply does not meet the requirements of the U.S. Public Health Service Drinking Water Standards for bacteriological quality.

D. Evaluation

The tabulation and evaluation of the results of the bacteriological sampling program permit an assessment of the quality of water available in our public water supplies. The results in the past year indicate significant improvement in the bacteriological quality of our water supplies due to an intensified inspection program. Written reports and recommendations are prepared and submitted to the responsible party following each inspection. These reports become a part of the permanent file of the Department and permit an evaluation at any time of the history of deficiencies and improvements in that particular water supply.

213 Radiological Health Section

A. Problems

1. Excessive exposure to patients during X-raying in the healing arts can cause genetic damage for future generations. Scattered radiation received by medical and dental personnel may exceed established safe limits and cause both a health hazard and legal problems.
2. Uncontrolled use of radioactive materials in industry, educational, institutions and medical facilities can cause bodily damage of a long-term nature (e.g. the radium dial painters in New Jersey in the 1920's), as well as contamination of buildings and offices.
3. Nuclear weapons testing in the atmosphere is continuing (France and Communist China) and may be resumed at any time by violators of the test ban treaty. Levels of fall-out as well as other radioactivity in the human environment may rise to dangerous proportions.

B. Objectives

1. All X-ray equipment and techniques used in the healing arts in Arizona should be such as to give the patients the absolute minimum of radiation exposure while still getting good diagnostic results.
2. Uncontrolled use of radioactivity must be prevented, by issuing a license for the legal possession of these materials. The license must be enforced by on-site inspections.
3. Continuous monitoring of levels of radiation in man's environment should be conducted, with emphasis on air, public water supplies, food, and milk.

C. Methods

1. The Radiological Health Technician in the Radiological Health Section, will devote almost 100% of his time to the making of X-ray safety surveys. Registration of X-ray machines in the healing arts is now mandatory, under the aegis of the Arizona Atomic Energy Commission. These registrations will be used to schedule office surveys, at a rate of 4 to 6 per day.
2. Licensing of possessors of radioactive materials is now a state function, having been assumed by Arizona from the U. S. Atomic Energy Commission on May 15, 1967. By formal agreement, the Arizona Atomic Energy Commission will issue the licenses and personnel of the Radiological Health Section will conduct the field inspections. A Health Physicist III will devote most of his time to these compliance inspections (some 80 licenses at present), at a rate of one to four per day.
3. Personnel of the Section will continue to operate an air sampler on the roof of the Goodrich Building, 24 hours per day, 7 days a week. From the sample, a determination is made daily of the level of fallout in Phoenix. Water samples are radioassayed for gross beta and gamma by the Division of Laboratories.

D. Evaluation

1. Each X-ray machine is evaluated for compliance with the requirements set forth in "Regulations for the Control of ionizing Radiation", formally adopted by the Arizona Atomic Energy Commission.
2. Each person, (institution, industrial plant, hospital, etc.) holding an AAEC license, is visited and inspected to determine his compliance with the requirements also contained in the AAEC Regulations. At the same time, our health physicist will answer any questions or help resolve any problems which may have arisen since the last inspection, in the areas of public health and safety.
3. Levels of radioactivity in the environment are assessed against results from other parts of the country. In consultation with the National Center for Radiological Health, Public Health Service, the Section is prepared to initiate or help initiate (as the situation may warrant) any actions necessary to protect people from fallout.

214 Air Pollution Control

A. Problem

The air over the State of Arizona is polluted to the extent that legislation has been enacted to protect the health and welfare of its inhabitants.

B. Objectives

1. The hiring and in-service training of core staff members to provide effort necessary to accomplishment of other objectives.
2. Procurement of Federal matching funds for the development of a state-wide air pollution control program.
3. Establishment of the objectives necessary to permit the design of a state-wide air pollution program.
4. The development of a coordinated program for the testing and control of vehicular emissions.
5. The development of information as required for public consumption and for internal uses.
6. Work toward the development of air quality and/or emission standards as control measures or guidelines.
7. Work toward the development of regulations to implement enforcement.

C. Methods

1. Utilization will be made of all available resources for the hiring of technical personnel who will receive training under the U.S. Public Health Service's Air Pollution Training Program or under other training programs which become available.
2. Federal money will be sought under provisions of the Clean Air Act as amended for program operation and other appropriate activities utilizing Public Health Service consultation available in the preparation and review of project applications.
3. A review will be made of the existing knowledge of air pollution problems in the State to better characterize the overall problem and estimates will be made of the amounts of selected pollutants being thrown into the atmosphere according to geographical area and source type.
4. The counsel of the State Highway Department and the State Highway Patrol will be sought in developing a coordinated effort for the testing and control of vehicular emissions as provided for by law, utilizing standards as may be adopted by the State Board of Health, excepting manufacturers' specifications set by Federal law.
5. The Chief of the State Air Pollution Control Program will work with official agencies as indicated above and with staff members within the state or as otherwise needed. All of the residents of Arizona are ultimately likely to be affected by

this effort which is to initiate a program designed to provide clean air as intended by the passage of air pollution control laws. The public will be informed of progress by conventional methods.

6. Information will be compiled through contact with official agencies or other sources as required on air quality criteria and standards and also on regulatory provisions nationwide to determine the best thinking available on the subject. Based on the guidelines and upon the study of economic significance, land use and other factors, develop regulatory proposals for review and action of the Arizona State Board of Health or other appropriate bodies.

An inventory will be made of the various resources available for participation in or contribution to air pollution control in Arizona. Federal, State, and local effort will be delineated as to type and amount available.

D. Evaluation

Progress toward objectives will be indicated by tangible information in printed form, by the existence of standards or regulations, by the existence of personnel, by the documentary evidence of Federal funds, and by the existence of vehicular exhaust or other control programs.

The health status of the people will be determined in a subsequent phase of the program extending into the future. The effectiveness or efficiency of operations of the development phase of an air pollution control program can only be evaluated in terms of specific objective accomplishment.

215 Waste Water

The objective of the Waste Water Section is to prevent the pollution of the surface and underground waters of Arizona. This activity is partially funded by program grants from the U.S. Department of the Interior. A water pollution control plan must be submitted to that Department in order to receive a program grant. This plan and budget request are submitted on form FWPCA-112.

220 MEDICAL SERVICES AND FACILITIES

221 Chronic Illness and Aging

A. Problem

Arizona has a disproportionate problem in the field of chronic illness and aging. The state's climate attracts the retirement age group and those already suffering from chronic respiratory disease and arthritis. This state has grown rapidly with a population increase of more than 300,000 between 1960 and 1965, half of this growth was due to in-migration.

In 1966 almost one-third of all state deaths were due to heart disease, cancer and stroke ranked second and third and Arizona regrettably led the nation in chronic respiratory disease deaths, the latter being the sixth most common cause of death within the state. Hardening of the arteries was eighth in the mortality list and diabetes ninth.

Death rates, of course, only tell a part of the story. Projected social security payments to the disabled with heart disease, stroke, cancer, chronic respiratory diseases, diabetes and arthritis in Arizona are estimated at about \$209,000 for 1967. Hospitalization costs for only one month covering the previously mentioned diseases are estimated at over \$2,000,000 for the more than 5,500 patients hospitalized with these selected chronic diseases in Arizona in March, 1967.

Maintaining and upgrading the quality of care is also a constant problem with the continuing improvement in knowledge and techniques. An example of a disease that creates a major problem, not in terms of the number of persons afflicted, but in the cost of care, is chronic renal disease. Means of reducing the cost or finding additional sources of funds are vital to the artificial kidney center at Good Samaritan Hospital.

Specific, immediate problem areas which fit into the overall goal of improving health services for the chronically ill and aged are (1) the need for identifying specific problem areas related to disease incidence, morbidity, geographical distribution including availability of services and health manpower as well as the need for specific training programs, (2) the need for the establishment of realistic and meaningful criteria for program evaluation.

B. Objectives

The long range goal of the program is to achieve decreased mortality and morbidity from chronic illness with coincident prolongation of useful life span by improved earlier case finding, higher quality care, better rehabilitation methods and to make these services generally available. Specific, more immediate objectives are as follows:

1. To identify specific problem areas more clearly, establish priorities for program development and generate constant criteria for the determination of program cost and effectiveness.
2. To coordinate, improve and broaden existing programs of demonstrated value in the areas of prevention, early case finding, rehabilitation, training, applied research and specific treatment in certain problem areas (i.e., coronary care units, hemodialysis), as well as to promote, initiate and assist in the development of new pilot or demonstration projects in accordance with priorities.
3. To improve the quality of care relating to the chronically ill and aged in hospitals, extended care facilities, nursing homes and related institutions in the area of restorative nursing care, rehabilitative services, nutrition, medical records and home health services.

C. Methods

1. (as relates to objective 1)

Extant data from vital statistics, local surveys, community service organizations, the health referral program and commercial sources will be collected, compiled, assessed and analyzed. In conjunction with the Health Evaluation Section of the Division of Preventable Diseases, surveys will be conducted in Mohave County and other areas of the State which will include information on the prevalence and history of chronic disease, nature and degree of disability, availability and adequacy of services, method of payment for care, etc.

In the establishment of priorities, the magnitude of the problem and the potential for positive action will be realistically evaluated in relation to available facilities, manpower, community resources and effectiveness per unit of cost. In assessing the various programs every attempt will be made to keep reporting forms as terse as possible and yet sufficiently detailed to provide meaningful and comparable information.

2. (as relates to objective 2)

The section has commitments, intentions and plans in various stages to: expand the secondary rheumatic fever prevention program, begin work on primary rheumatic fever prevention, expand home rehabilitation services in the larger counties, initiate stroke rehabilitation projects in Yuma and Prescott, continue support of cancer screening services in Maricopa County, assist in cancer program development in Cochise and Mohave Counties, continue support of the Tucson Arthritis program and initiate a diabetes screening program.

The section will continue to consult and work actively with voluntary health agencies, including the Easter Seal Society, Tuberculosis and Health Association, Cancer Society, Heart Association and others, local health departments, hospitals, nursing homes and related facilities in the development of special projects for demonstration, early case finding, rehabilitation, treatment of special disease problems (i.e., acute coronary care, hemodialysis) training and research. Continuing effort in cooperation with the Nursing Division will be devoted to the expansion and improvement of home health services. Community interest has recently developed in instituting a multiphasic screening program for early casefinding of cancer, hypertension, heart diseases, diabetes, glaucoma and possibly other chronic conditions.

The section will offer all possible technical support and advice in the development of such a plan, including the possible development of a special project application under PL 89-749, 314 (e).

3. (as relates to objective 3)

Direct consultation will be offered to hospitals, extended care facilities and nursing homes for meeting the standards or removing deficiencies for licensing, and certification for Medicare eligibility. Consultation is available in the disciplines of nutrition, physical therapy, medical records and nursing, in cooperation with the Division of Nursing. Assistance will be provided in the establishment of in-service training programs. Workshops and seminars will be promoted and developed in cooperation with appropriate professional societies and voluntary health agencies. Support for the Cardiac and Chest Disease Symposia will be continued. Work is progressing on plans for a training session for physicians, nurses, therapists and social workers in chronic respiratory disease with emphasis on preventive pulmonary hygiene. A rehabilitation seminar is also developing. Professional meetings in nutrition will be continued.

D. Evaluation

1. (as relates to objective 1)

The type and quality of data collected will be assessed. The area and population surveyed will be enumerated and the information compared with that collected in other districts and states. The resulting priorities will be subjected to review and confirmation. Evaluation instruments will be regularly tested for acceptance and usefulness.

2. (as relates to objective 2)

This goal will be evaluated in terms of number of projects started, number of patients served, units of service provided, degree of success or failure with individual cases, amount of expansion of existing programs, relative quality and cost effectiveness.

3. (as relates to objective 3)

Degree of attainment of this objective will be determined by the numbers of: consultative visits to target facilities, deficiencies removed, training programs established, seminars and workshops initiated or assisted and participants. The trainees evaluation of the sessions will also be incorporated in the overall evaluation.

222 Survey and Planning

A. Problem

The State Department of Health, as the sole state agency, has the responsibility of making an annual inventory of existing hospitals and related facilities, surveying the need for construction and modernization of these facilities and developing a program for the coordinated creation of additional facilities necessary to meet population and technological changes.

B. Objectives

Fundamental to the program is the objective of progressive patient care. In order to meet this goal the following are sub-objectives: elimination of duplication of facilities and equipment; location of facilities relative to population concentrations and transportation routes; medical and health manpower availability; economy of operation and maintenance; economy of construction cost; efficiency of design and functional relationships; placement of facilities of appropriate design, size and function to meet current service demands yet expandable to accommodate changes in demand caused by population changes and/or technological developments.

C. Methods

Annual plant evaluation studies are completed for each existing structure. Population changes, by service area, are measured along with economic changes which, in turn, are compared to existing utilization rates of existing facilities. These factors are used to calculate a schedule of relative priorities for construction, modernization or abandonment of facilities. The annual State Plan includes hospitals and related facilities, mental health and mental retardation facilities.

D. Evaluation

Evaluation is a constant process depending on daily and monthly reviews of proposed construction which, in turn, is measured against recommendations developed by the several voluntary Health Facilities Planning Councils within the state.

223 Construction

A. Problem

Provide architectural and engineering consultation and carry out inspection procedures during construction. Assist in the establishment, development and enforcement of construction standards in light of advancing knowledge which will promote safe and adequate accommodations for both patients and personnel.

B. Objectives

Maintain effective control over construction standards by developing for adoption, promulgation, repeal or amending of reasonable rules and regulations relating to sanitation, lighting, ventilation, fire protection, structural soundness, and building safety. Administer such regulations in conjunction with applications for construction and building plans review and approval procedures.

C. Methods

Architectural integrity, fire and sanitation clearance status, annual plant evaluation reports and structural changes or modifications are all cleared prior to the issuance of a license to operate. Since Title XVIII requires licensing as a priority over certification these same construction standards apply to the certification process.

D. Evaluation

Annual evaluation of physical facilities and the construction or modernization plan review provides for a baseline upon which improvement effectiveness can be judged. The annual tabulation of conforming vs. nonconforming facilities is used in determining needs.

224 Certification

A. Problem

By agreement, the Social Security Administration and the Arizona State Department of Health carry out the three basic program elements of Title XVIII: Certification, Consultation and Coordination, by coordinating licensing activities within Title XVIII quality improvement efforts.

B. Objective

Additional to standards improvement the initial objective was to assure adequate numbers of beds and related inpatient facilities to meet the admission load increases at the program's outset. This phase of the certification program has now been replaced by a concentrated effort to remove, within practical reasonableness, all factors which constitute a health or safety hazard, while at the same time lessening the length of stay and reducing costs.

C. Methods

The established periods for re-survey, by type of facility, augment the improvement activities of the licensing program. Cross reference is made to these files and consultation follow-up for deficiency removal efforts parallel the licensing program. Stated deficiencies receive the same referral to the appropriate discipline within the department. Problem areas common to a number of facilities are discussed with the association representing a particular category of facilities in order to design and conduct workshops pertaining to the problem area and indicated solutions to the problem.

D. Evaluation

Similar to the licensing program, deficiencies and their rate of reduction are tabulated on an annual basis for effectiveness determination.

225 Licensing

A. Problem

Basics include the adaptation of advancing knowledge to the promotion of safe and adequate accommodations for those individuals receiving care and treatment in hospitals, nursing homes, sheltered care homes, maternity homes and for those children cared for in child day care centers.

B. Objectives

Objectives are directed towards the development, establishment and enforcement of standards for the care, treatment, health, safety, welfare and comfort of individuals and for the general hygiene, maintenance and operation of facilities subject to licensure. Essential to this effort is a continuing activity of consultation provided by the Hospital Advisory Council relating to the adoption of rules and regulations governing construction, operation and maintenance of facilities numbering: 70 hospitals, 37 extended care facilities, 51 nursing homes, 24 sheltered care homes, 5 maternity homes, 9 home health agencies, 52 independent laboratories and 343 child day care centers.

C. Methods

Each facility is surveyed annually by members of the Medical Facilities field representative staff for purpose of license renewal. During the year each facility is re-visited at least once each 90 days for the purpose of follow-up consultation and compliance with recommendations made at time of licensing. This includes review of fire clearance and environmental sanitation reports submitted by local authorities. Various disciplines within the total State Department of Health are assigned specific consultation responsibilities for specific problems found at the time of survey or follow-up.

D. Evaluation

Master files are maintained, each containing a field evaluation report, summaries of deficiencies, copies of letters of recommendations. The annual reduction of deficiencies, by type and number, are used as the basis for measuring achievement of the above referenced objectives. This same data is reviewed by the county health authority in order that the State Department of Health's progress is adequately stated in terms of local situations.

226 Migrant Health

This program will be carried out in accordance with PHS Project Grant MG 111 C.

A. Problems

Irrigation has turned large desert plains in southern and mid-Arizona into highly productive agricultural areas. An estimated 21,000 seasonal farm workers are engaged during shorter or longer periods of the year in planting, harvesting and attending the many different crops produced, processed, and sold in Arizona or exported to other states in the U.S.A. or foreign countries.

The health needs and problems of these many farm workers and their dependents, totalling about 70,000 persons, are manifold, serious and urgent.

The necessity of following the crop forces most of the farm workers to migrate away from their home base to seek work in other counties or states at some times of the year. In spite of the absolute need for migrant farm workers in our agricultural production the migrant families are often not welcome in the communities into which they migrate and are usually not eligible for the community health and social services available for the permanent residents of the area. Housing is often substandard or not available, wages are generally low, and work at times scarce; distances to needed health services long and transportation difficult to obtain.

The educational level is low and many migrant families of Mexican descent are further handicapped in their education by language barriers.

Poverty, low education combined with poor environmental sanitation all tend to increase health problems related to communicable diseases, infantile diarrhea, venereal diseases, tuberculosis, malnutrition and other health hazards.

Several local communities in the State have realized the migrant problems and have initiated local programs to meet the needs of the migrants before the inception of this statewide program.

The State program faces specific problems.

There is need for more accurate assessment and evaluation of the migrant health problems in the State; there is need for coordination, support and improvement of existing health services and for expanding extant services or initiate new services in certain areas of the state in order to reach the total migrant population.

B. Objectives

1. To assess and evaluate migrant health needs as it relates to number of migrant families, specific health problems facing the migrant population, methods of providing efficient services at the most reasonable cost, efficient methods of motivating and reaching the migrant population.
2. To coordinate locally-conducted migrant health program, enhance and improve services.
3. To stimulate community awareness of migrant health problems, support and assist in the development of expansion of services and initiation of new services as needed.

C. Methods

1. (as relates to objective 1)

The program staff will continue to collect, compile and analyze available statistics from all sources: farm employment bureaus, migrant opportunity, migrant health project reports, etc. Emphasis will be placed on developing improved, uniform reporting systems adaptable for computerization in order to obtain more accurate information on activities, problem areas and cost efficiency.

2. (as relates to objective 2)

The staff will visit and get acquainted with local projects and services and offer professional consultation in the areas of program development, sanitation, nursing, nutrition and

health education. Coordination will be enhanced through state-wide meetings and conferences of project directors and personnel. Specifically, plans include the development of a workshop for "planning for health services" in the rural agricultural areas of the state with participants from project personnel from all project areas, professional, governmental, and voluntary health personnel, physicians, nurses, and related professions, boards of health, farmers, county supervisors, migrant opportunity programs, etc.

3. (as relates to objective 3)

Close cooperation and working relationship will be kept with all governmental and voluntary health agencies and personnel to determine need for additional health services. Direct consultation and assistance in development or expansion of services will be offered to boards of health, boards of supervisors, health agencies, or other interested civic groups. Program objectives, methods, and progress will be discussed, explained, published or presented to interested civic groups whenever opportunity affords it.

D. Evaluation

Evaluation will constantly be carried out to assess the degree of success with which each specific objective has been met and to find improved methods or approaches in reaching these goals.

1. (as relates to objective 1)

Evaluation of this objective will be determined by the quantity and quality of gathered information and by the success or failures in acceptance and efficiency of reporting systems.

2. (as relates to objective 2)

This objective will be evaluated through measuring quantity of direct services to migrants by the different projects, and by the degree to which uniform, qualitatively acceptable services will be made available by all projects.

3. (as relates to objective 3)

Evaluation of this objective will be made by determining the degree of needed services available in all geographical areas of the state, for all migrants and their dependents, at the right time, and by the utilization of these services by the migrants and their families.

This program will be conducted under contract with PHS No. PH 108-65-83 through December 1967. Continuation of the program after January 1, 1968, will depend upon successful application for a project grant under PL 89-749, 314 (e).

A. Problem

During fiscal year 1966-1967 a total of 5,700 armed forces draftees were examined at the Armed Forces Examining Station in Arizona. A total of 1,343 young men were rejected because of physical or mental handicaps.

There is need for evaluation of the causes for this large percentage of rejectees, for counseling and referral of those that need treatment, rehabilitation, or other health services and for assessment and evaluation of community resources to assist in preventing or correcting the disqualifying defects found.

B. Objectives

1. To assess and evaluate causes and defects found in Armed Forces rejectees.
2. To counsel and refer rejectees to appropriate health services as indicated by their condition.
3. To assess and evaluate community resources, enhance and stimulate community awareness of the problems of the young rejectees, with the ultimate goal of developing community health services for prevention, health education, treatment and rehabilitation of defects found in this age group.

C. Methods

In cooperation with the A.F.E.S. personnel all rejectees will on a voluntary basis be referred to interview and counselling by full-time experienced counselors. This first interview will take place right at the A.F.E. station upon completion of the medical examination. The cause of rejection will be explained to the rejectees and possible need for treatment, diagnostic studies or other health services individually discussed with each person. If no care is indicated, the case will be closed immediately. Those in need of care will be referred to their private physician or other health resources such as Vocational Rehabilitation, voluntary health agencies, Indian Health Service, County Hospital, etc. With the permission of the rejectee, copies of medical records and reports will be forwarded to the attending physician or other health institution. Follow-up will be carried out by the counselor who first interviewed the rejectee. This follow-up may be done by letter, telephone, and when needed, by personal contact in order to exhaust all possibilities for successful referral and treatment of the rejectee.

Program personnel will cooperate with attending physicians, voluntary health agencies, and other health institutions, discuss problem and progress, and assist in finding and using all available appropriate resources. Program objectives, methods, and progress will be discussed with and explained to interested health organizations, community leaders, and civic groups whenever opportunity affords it.

Statistical data on all activities, defects, referrals, etc. will be compiled and analyzed.

D. Evaluation

Evaluation will constantly be carried out to measure degree of success in reaching each particular objective.

1. (as relates to objective 1)

Statistical data on each rejectee, causes of rejection, defects found, etc. will be compiled, analyzed, and regularly reported.

2. (as relates to objective 2)

Number of rejectees will be compared with number of persons interviewed, number of no-care indicated, number of referrals, and number of referred persons successfully treated, cured, or improved.

3. (as relates to objective 3)

Community resources will be constantly evaluated and gaps in services pinpointed. Specific attention will be given to cases for whom needed services were not obtainable.

Special reports on such cases will be compiled, analyzed, and forwarded to appropriate sources.

230 PREVENTIVE MEDICAL SERVICES

231 Tuberculosis Control

(Background information and objectives are detailed in Application for Health Services Project Grant entitled Tuberculosis Services in Arizona for the period August 1, 1967 through June 30, 1968.)

A. Problem

Tuberculosis is a persistent public health problem in Arizona. Rates of newly diagnosed cases have been consistently higher than the national average. In 1965, a rate of 36.4 per 100,000 population ranked Arizona seventh highest of the 50 states; Arizona was eleventh highest in 1966 with a rate of 30.2. Arizona does not have a state-wide coordinated program for control of tuberculosis.

B. Objectives

The following specific objectives will be pursued:

1. A complete assessment will be made of the tuberculosis problem in Arizona. By consolidating and interpreting data on tuberculosis available from all sources, tenable bases will be developed for planning a state-wide program.
2. Services will be expanded to provide adequate attention to all known cases of tuberculosis. This will be accomplished by providing 17 additional tuberculosis clinics and improving procedures for distribution of prophylactic drugs. Systems will be developed for recording and retrieving data from clinics, nurses visits, and reports from physicians and laboratories to enable instigation of epidemiological study of contacts within two weeks of detecting new cases.
3. Tuberculin testing programs will be developed and initiated to test 95 percent of all first grade school children.
4. Studies on the epidemiology of atypical mycobacteria will be initiated to determine distribution and association of illness with about 500 isolations made during the previous three years.

C. Methods

The following procedures will be followed to achieve these objectives:

1. Data from state agencies, local health departments, Division of Indian Health, and accounts of antecedent work performed by official and volunteer agencies in Arizona will be accumulated and analyzed. Additional data needed, as revealed

by these analyses, will be assembled in collaboration with appropriate health jurisdictions. When adequate information is available, narrative accounts with supporting statistical information will be prepared to provide an accurate description of tuberculosis in Arizona, the effect of remedial work done, and indication of needs for future work. This material will be used as a basis for developing and evaluating control efforts. A state plan for control of tuberculosis will be developed cooperatively with all agencies concerned.

2. Existing state control program will be expanded to include areas of the State not currently serviced. In the counties without specific programs for control of tuberculosis, work will be undertaken to insure that accurate information is available on the current status of tuberculosis and that services are adequate in these locations. Tuberculosis project nurses will be assigned to these counties to develop uniform record systems, insure current receipt of information, and to aid in developing control programs in accordance with established standards and guidelines.
3. In collaboration with local health and school officials a program will be planned for annual tuberculin test of school children with emphasis on school enterers. Assistance will be provided by furnishing needed materials; assigning a team trained in organizing programs and in performing mass tests; and by developing a uniform record system for recording, compiling, and reporting data to insure adequate attention to reactors and follow-up of their families.
4. Epidemiological studies will be made of cases of illness associated with atypical mycobacteria for which data are complete. Progressive studies will be made of newly detected infections of atypical mycobacteria and will be made of specific populations when accumulative data suggests a concentration of organisms or illness associated with atypical mycobacteria.

D. Evaluation

Progress toward objectives will be assessed as follows:

1. By objective evaluation of the adequacy of the state plan for control of tuberculosis.
2. By determining the number of counties provided services, the proportion of known cases examined on recommended schedules, and the proportion of persons for whom prophylaxis was recommended who are receiving drugs.
3. By determining the percentage of eligible school children given tuberculin tests, the percentage of reactors, and the percent for whom subsequent epidemiological studies were made.

4. By objective evaluation of information accumulated on the epidemiological and etiological significance of atypical mycobacteria.

232 Venereal Disease Control

(Background information and objectives are detailed in Application for Health Services Project Grant entitled Arizona State-wide Program to Eradicate Syphilis and Control Spread of Venereal Disease for the period July 1, 1967 through June 30, 1968.)

A. Problem

Venereal diseases increased in Arizona during 1967. The reported incidence of syphilis in infectious and potentially infectious stages rose about 29 percent. The 417 cases reported were 93 more than during 1966. Incidence of gonorrhea also was greater for the same period. Increase of 515 cases over the 3,501 cases reported in the previous year is a rise of about 15 percent. The non-white population, which is approximately 10 percent of the total, contributed 50.3 percent of the infectious cases of syphilis. About 60 percent of these were from the Indian population.

B. Objectives

Two general objectives were adopted in efforts to reverse this trend in occurrence of venereal disease in Arizona.

1. To conduct epidemiological studies of every reported case of early syphilis as soon as possible after receipt of reports.
2. To secure prophylactic treatment for all named contacts regardless of clinical and serological indication of infection.

C. Methods

1. Assistance will be provided to local health departments, physicians, hospitals, public institutions, the Division of Indian Health, and military installations in developing programs for detecting cases by epidemiological study. Field personnel will be assigned as needed, within limits of available staff. Informational and educational materials will be supplied to educators and the general public.
2. Physician responsible for treatment of syphilis will be supplied with appropriate information on the rationale for treating all known contacts of cases regardless of laboratory or clinical indications.

D. Evaluation

The effectiveness of these efforts will be determined as follows:

1. By comparing trends in rates of venereal disease during successive years and by determining the proportion of reported cases on which epidemiological strides are made and the interval between receipt of the report and investigation.
2. By comparing the proportion of known contacts treated in successive years.

233 Acute Communicable Disease

A. Problem

Control of some acute communicable diseases has advanced to the stage where two prominent interrelated problems are delineated. The need remains for maintaining competent personnel and other resources to cope with residual infections when they occur sporadically or epidemically. Of increasing significance as declines occur in prevalence of diseases preventable by immunization is the necessity for maintaining high levels of artificial immunity among populations at risk.

B. Objective

Achieving the following objectives should further accelerate the decline of preventable infection.

1. Conduct epidemiological investigations where infections occur at unusual prevalence or where infections persist to elucidate reason for continued occurrence of preventable disease.
2. Develop procedure for maintaining adequate surveillance of communicable disease of low prevalence or exotic disease that may be introduced.
3. Continue to obtain reports of morbidity from physicians and to develop more sensitive measurements that will provide effective guides for developing and evaluating programs.
4. Continue programs throughout the State to raise levels of immunity against measles, diphtheria, whooping cough, tetanus, poliomyelitis, and smallpox among population at greatest risk of infection.

C. Methods

These objectives will be pursued as follows:

1. Sporadic cases of exotic disease such as plague and small-pox will be investigated as reported to determine mode of introduction or transmission. Disease of low incidence will be studied similarly to improve control procedures.
2. Epidemiological evaluation will be made of factors related to occurrence of specific infectious diseases, e.g., encephalitis, and procedure developed for maintaining measurements of elements in the parasite system that may be harbingers of occurrence, e.g., density of mosquitoes or extent of virus activity in sentinel birds.
3. The system for collecting data by reports from physicians will be examined critically to devise and evaluate alternative procedures such as reports by telephone or sampling selected groups of population.
4. Levels of immunity will be measured in representative communities throughout the State and programs undertaken to promote immunization where needed.

D. Evaluation

The effectiveness of these methods will be appraised as follows:

1. By determining the proportion of reported exotic diseases or diseases of low frequency that are investigated and the instances in which improvements are made in control practices.
2. By determining the number of diseases for which regiments of surveillance are devised and the efficiency of these procedures as indicators of impending occurrence of disease.
3. By noting the improvement in participation of physician reporting communicable disease and changes in trends or magnitude of cases reported.
4. By determining the geographic coverage achieved in surveys, by measuring the proportion of persons at risk who receive immunization, and by observing increases in levels of immunization.

234 Dental Health

A. Problem

Evaluation of the extent of preventable dental disease in Arizona is just under way. Tenable indications of the problem may be inferred from the preliminary data available and from national experience. By the age of 2 years, 50 percent of children have decayed teeth, and at 15 years of age they have an average of 11 decayed, missing, or filled teeth. Selective Service recruits have an average of three missing and seven decayed teeth.

There are now about 253 thousand preschool children in Arizona. Population projections anticipate an increase of 50 percent, or 126 thousand children, by 1985. The number of children under age 19 will increase from 690 thousand to about 947 thousand by that date.

Children 6 to 11 years old develop an average of one new cavity per year, and one and one-half cavities per year from 12 to 15 years of age. In areas with adequate fluoride in domestic water, the incidence of caries is about 60 percent less. Only about 8.6 percent of the population in Arizona use water with optimum fluoride content, thus placing this State 46th in rank of states with adequate fluoridation.

The principal needs related to dental health in Arizona are assessment of the extent of deficiencies in dental hygiene, fluoridation of communal water supplies, and promoting instruction of school children in dental health.

B. Objectives

The following objectives are designed to meet these needs:

1. Appraise the dental health status of Arizona citizens.
2. Promote fluoridation of community water supplies in Arizona.
3. Promote use of anti-cariogenic agents.
4. Determine the amount of dental health education given in Arizona elementary schools.
5. Develop a school dental health guide for teachers in collaboration with the State Department of Public Instruction and the State Dental Association.

C. Methods

These objectives will be pursued by:

1. Conducting dental surveys in communities known to have high or low fluoride levels in domestic water supplies to obtain local evidence on correlation between fluoride content and dental caries.
2. Determining fluoride levels of the 138 communal water systems in Arizona and ascertain feasibility of adjusting fluoride content to optimum levels. Make data available to local communities, assist them in obtaining local support, and aid in developing and implementing programs.
3. Encouraging, through school health programs, the use of topical applications of fluoride or other anti-cariogenic

agents by dentists in private practice where fluoridation of communal water supplies is not feasible or where it must be postponed.

4. Reviewing the health curricula of elementary schools to determine if dental health is covered adequately.
5. Completing review of materials used in other states to determine if existing material is adequate or if a guide should be prepared especially for use in Arizona. Material for information and instructions will be selected or prepared and used on a trial basis.

D. Evaluation

The effectiveness of these procedures will be determined as follows:

1. By determining the number of communities, schools, and children examined in surveys and the extent to which material is made available to local health departments and professional societies.
2. By determining progress made in accumulating data on the 138 communities and in providing data to responsible local officials also by the number of communities that undertake programs for adjustment of fluoride. The local efficiency of the technique will be evaluated by dental surveys before and after initiation of the program.
3. By examining samples of school children to determine incidence of caries before and after promotional program. Data will be obtained from dental referral cards used in elementary schools.
4. Same procedure used in 3. Also by evaluating response to dental referral cards. The removal of candy and soft drink machines from schools will be noted.
5. By noting changes in use of P.T.A. study course, teachers' in-service training course, prospective teachers training courses, community and school educational programs, educational films, slides, and other educational material on dental health.

235 Health Evaluation

A. Problem

Definitive, quantitative data on distribution and magnitude of problems are deficient for most areas of public health operations. Such information obviously is needed for assessing the relative significance of public health problem, for establishing priorities

for programs in terms of predictable accomplishments with available resources, and for evaluating the effectiveness of remedial or preventive efforts. Programs have been devised to begin accumulating the objective, quantitative data needed for these purposes.

B. Objectives

The following objectives were defined to instigate systematic collection of information:

1. To develop profiles on health and disease in Arizona, data will be collected to identify and measure factors conducive to health and problems adverse to health.
2. To provide an objective basis for planning public health programs, data will be obtained on the cost of preventable diseases and of other remedial health problems to the State and to specific local communities.
3. Procedures will be developed for maintaining current surveillance of diseases and public health problems.
4. Studies will be made to characterize systems employed in specific public health activities.
5. Studies will be made to improve procedures for automatic data processing.

C. Methods

The following efforts will be made to accomplish these objectives:

1. Available data on occurrence of disease will be assembled from records of morbidity and mortality in official repositories and from special studies. This information will be analyzed to determine rates of occurrence and geographic density of diseases and other health problems.
2. Available data will be collected on economic loss attributed to specific diseases and problems that presently are involved in preventive public health programs in Arizona.
3. From information obtained through morbidity and mortality reports, data will be displayed and maintained in readily available forms as tables and graphs showing annual, seasonal, monthly, and weekly trends of infectious diseases such as measles, influenza, seasonal gastroenteritis, diphtheria, tetanus, and other diseases pertinent to programs of the department. To maintain epidemic surveillance, epidemic thresholds will be determined for diseases of high incidence, e.g., influenza, and the data displayed as graphs showing trends and current prevalence.

4. Analysis will be made of record systems and sequences of activities used on selected public health programs. For example, a systems analyses will be made of the sequence of activities in detecting cases of tuberculosis, corroborating diagnoses, treating and subsequently following cases.
5. Critical evaluation will be made of present operations in automatic data processing, the availability of more effective equipment and procedures will be investigated, and the optimum system available with existing resources will be selected.

D. Evaluation

Progress in achieving these objectives will be determined as follows:

1. By determining progress made in delineating public health problems on the basis of geographic, racial, and age distribution.
2. By success in developing tenable cost of public health problem.
3. By the availability of accurate, current data on the occurrence of disease that can be used as a basis for planning and evaluating public health programs.
4. By the development of accurate description of steps in orderly sequence use on specific public health programs.
5. By improvement in procedures for data processing and wider use of mechanical systems in the department.

250 Maternal and Child Health

(This program is described in detail in the Maternal and Child Health Plan for Arizona dated June 1967.)

A. Problem

Health problems related to mothers and children usually are delineated by enumerating deficiencies in programs or services generally recognized as necessary. When objective data are not available to quantitate specific needs, selection of activities and determination of priorities must be based on the testimony of informed observers and professional judgment. On this basis, deficiencies of Arizona's program are recognized in prenatal and postnatal services for the medically indigent, in clinical services for well children, in medical and hospital care for pregnant women and for infants and children of low income families, in program of school health, in family planning, in hearing and visual conservation, and in the number of properly trained public health workers.

B. Objectives

Pursuit of the following objectives should aid in meeting some of these deficiencies.

1. Assist local health departments in operation of programs in maternal health.
2. Develop and assist counties in operating local programs for family planning through county health departments.
3. Delineate factors associated with perinatal mortality.
4. Demonstrate procedures for transport and intensive care of premature infants.
5. Appraise the status of school health.
6. Promote immunizations and physical examinations for school-age children.
7. Evaluate hearing of preschool and school-age children.
8. Provide training for personnel in health department.

C. Methods

The following procedures will be followed in pursuit of these objectives:

1. Financial assistance will be provided for direct service to maternity patients, especially high-risk groups with previous adverse outcome of pregnancy, poor socioeconomic status, low health and nutrition, or concurrent medical problems. Cancer screening (Papanicolaou smears) will be supported in counties where the service is not available.
2. Assistance and financial aid will be provided in organizing services, procuring materials and supplies, and securing and paying for professional services.
3. Efforts will be continued to collect, analyze, and evaluate data on perinatal deaths to delineate contributing factors.
4. A specially trained neonatologist will advise and instruct staffs of county health departments and county medical facilities in techniques for transporting and providing intensive care for premature infants of low birthweight.
5. Comprehensive surveys will be made of the existing school health program in selected counties. The resulting data will be compiled and analyzed to determine problem or deficiencies, and recommendations will be made for improvement.

6. Support of local health departments, county school superintendents, and State school administrators will be solicited in promoting a proposed program for physical examination and immunization of school children, and counties, districts, and schools will be assisted in developing plans for carrying out this program.
7. Audiometrists will be provided to counties for evaluating hearing of school children.
8. Short term seminars and workshops will be arranged and costs of travel, per diem, and tuition will be paid when needed training cannot be provided locally.

D. Evaluation

The efficiency of these efforts will be appraised as follows:

1. By determining the number of persons who avail themselves of services, by comparing mortality rates before and after programs are developed, and by observing the number of remediable or preventable conditions detected.
2. By determining the number of new programs developed and the number of persons served by them.
3. By demonstrating correlation between preventable or correctable factors and occurrence of perinatal deaths.
4. By determining the number of facilities and personnel that acquire adequate information on the transport and care of premature infants, by comparing rates of deaths of premature infants before and after initiation of the program, and by determining the number of infants admitted to the program.
5. By determining the number of schools, districts, and counties when surveys are made of programs or needs evaluated, by objective evaluation of improvements in programs, and by the number of schools that adopt programs where none formerly existed.
6. By determining the number of schools that adopt physical examination and immunization programs, by observing increase in levels of immunization among school children.
7. By determining geographic coverage achieved in testing hearing of school children, by determining proportion of school children tested, by determining number of defects detected and number of children referred for treatment.
8. By evaluating number of courses and other training activities conducted and the number of persons trained in relation to predetermined needs for training.

IV. BUDGET

Name of Agency ARIZONA STATE DEPARTMENT OF HEALTH 1624 West Adams Street Phoenix, Arizona 85007	State: ARIZONA
	Fiscal Year: 1968

STATE PLAN BUDGET MENTAL HEALTH
 BUDGET REVISION NO. _____ PUBLIC HEALTH

Federal Share Percent 56.85 Federal Allotment \$ 421,561.80
 State and Local Funds Required for Grant of Full Allotment \$ 319,971.71
 TOTAL \$ 741,533.51

Budget Item Number	Health Programs (Follow same sequence as In Plan Narrative)	Estimated Current FY Expenditures	Anticipated Cost FY <u>1968</u>
100	Public Health Nursing	34,578.00	96,060.00
200	Laboratories	274,041.93	335,260.00
210	Environmental Health	119,924.22	163,481.50
220	Medical Services	179,992.50	96,020.00
230	Preventive Medical Services	103,154.76	281,537.00

Budget Item Number	Health Programs (Follow same sequence as in Plan Narrative)	Estimated Current FY Expenditures	Anticipated Cost, FY 1977

STATE:

STATE PLAN BUDGET HEALTH SERVICES
CONTINUED

BUDGET ITEM NO. (1)	HEALTH PROGRAMS (FOLLOW SAME SEQUENCE AS IN PLAN NARRATIVE) (2)	ESTIMATED CURRENT FY EXPENDITURES (3)	BUDGETED FOR FY 1968 (4)
TOTAL EXPENDITURES FOR PUBLIC HEALTH SERVICES UNDER SECTION 314(D)		\$ 711,001.41	\$ 672,866.50

SOURCE OF FUNDS FOR PARTICIPATION UNDER SECTION 314(D)			
STATE PUBLIC FUNDS		\$ 405,553.00	\$ 550,001.20
LOCAL PUBLIC FUNDS		\$	\$
PRIVATE NON-FEDERAL FUNDS		\$	\$
TOTAL NON-FEDERAL FUNDS		\$ 405,553.00	\$
FEDERAL GRANT FUNDS BUDGETED UNDER SECTION 314(D) (FEDERAL GRANT FUNDS UNBUDGETED \$)			\$ 421,561.00
TOTAL (SAME AS TOTAL EXPENDITURES ABOVE FOR COLUMN (4) OF STATE PLAN BUDGET)			\$ 672,866.50

SIGNATURE OF RESPONSIBLE OFFICIAL

Commissioner
(TITLE)

July 23, 1967
(DATE)

REGIONAL OFFICE APPROVAL:

(APPROVED BY)

July
(DATE)

MEMO ENTRY ONLY
ALL OTHER FUNDS BUDGETED

NON-FEDERAL	\$ 4,225,445.00	\$ 3,922,151.00
OTHER FEDERAL	1,672,220.00	1,612,750.00
TOTAL	\$ 5,897,673.00	\$ 5,534,901.00

*Includes federal funds of \$226,137.00
in projects mentioned on Page 1.

V. ADDITIONAL INFORMATION

Public Health Service instructions read, in part:

"If a State agency elects to submit additional information to assist the Public Health Service in better understanding their plan, this could be accomplished as follows:

Prepare an overall State Plan which will permit the development of the total State health program without fragmentation, but within the body of that document identify by numerical sequence and list in the same order on the budget the costs for those activities in which Federal funds will participate."

The Department, of course, wants the Public Health Service to be fully informed of its plans, as well as its problems, because the Service represents a resource in terms of competencies and counsel far in excess of the value of grant funds. We have chosen the method cited above i.e., in the III - Narrative Section, we submitted material covering our entire operation.

Please note that the cardinal numbers are in multiples of ten (150, 160, 170, etc.). These represent generic program areas. Sub-programs or specialized activities are reflected in the addition of single integers (151, 152, 153, etc.). For example, the generic environmental health program is identified as 210. The sub-program of Sanitation is 211, of Water Supply 212, and of Radiological Health 213.

From among the generic programs, we have chosen the following for which to identify costs on the IV - Budget form:

- 190 Public Health Nursing
- 200 Laboratory Services and Support
- 210 Environmental Health
- 220 Medical Services
- 230 Preventive Medical Services

All numbered items in III - "Narrative" other than those listed immediately above should be regarded as informational only.

Arizona State Department of Health

DOCUMENT APPROVAL ROUTE SLIP

NOTE: Operating Sections will send all carbon copies directly to the Management Advisory Section.

The attached _____
(Full title of contract or document)

with _____
(Name of contractor or party to agreement)

originating in the _____ (Section)
 (Division)

shall be reviewed and approved by the following and routed to each of the following offices:

FINAL
COPY
DISTRIBU-
TION*

	OFFICE	ROUTE TO:**	INITIAL	DATE
	1. Operating Section			
x	2. Director of Division			
	a. Inter-div. Approval			
	b. Inter-div. Approval			
	c. Inter-div. Approval			
x	3. Fiscal			
	4. Management Advisory Section			
x	5. Dir., Plan. & Technical Support			
	6. Commissioner			
	7. Mgt. Advisory Section (for transmittal)			
	8. Attorney General			
	9. Mgt. Advisory Section (for transmittal)			
x	10. Contractor (for signature)			
	11. Mgt. Advisory Section (for clearance)			
	12. Deputy Commissioner			
	13. Commissioner (for signature)			
	14. Mgt. Advisory Section (for final distribution)			

* Distribution of signed copies will be made to offices designated by an X.

** To be filled in by the Operating Section.

3. To retain all records pertaining to this project until permitted to dispose of them by the Department.
 4. To permit the State and/or Federal Auditors to audit any and all records for this project as often as they deem necessary.
- B. The Department agrees to advance allotment of funds to the Contractor on a monthly basis, if funds are then available. It is agreed by Contractor that said allotment funds shall be expended solely in compliance with the terms of this Contract and any amendments thereto approved by the Department.
1. The date of advance of the first allotment shall be on or about _____ or as soon thereafter as funds become available. An advancement shall be of such an amount that it will only run through the then month of the fiscal year ending on the 30th of June next following. Thereafter each allotment of funds shall be made, as provided herein, for the remaining months of the fiscal year.
- C. The Department reserves the right to determine whether expenditures made under this Contract by the Contractor were made in accordance herewith. In all such instances, however, the decision of the State Auditor regarding the propriety of any such expenditures shall be final and binding on all parties.
- D. The Contractor agrees to reimburse the Department for all allotment funds determined by either the Department or the State Auditor to have been expended by the Contractor in violation of the terms of this Contract.
- E. Any unexpended allotment funds remaining in the possession of the Contractor shall be immediately refunded to the Department upon the termination of this Contract. In any event, all unexpended allotment funds in the possession of the Contractor on 30th of June of each year shall lapse back to and be refunded to the Department by July 15. The Department may waive the latter requirement with regard to annual lapses of allotment

funds and consider any unexpended allotment funds on 30th of June of each year as a part of the ensuing year's first quarter allotment.

F. The title to any and all non-expendable property acquired through the expenditure of funds under this Contract shall remain in the Department. Acquisition of such property will be reported at the end of each quarter. Records of such purchases must be kept, and will be subject to audit. When this Contract is terminated, the disposition of all such property shall be determined by the Department.

G. This Contract shall terminate on _____ 19 ____; however, either party hereto may terminate this Contract at any earlier time by giving 30 days written notice to the other party.

H. Non-discrimination in Employment.

1. Executive Order 11246, 9/24/65, Form HEW-386, is made a part of this Contract by reference and attachment. (Attachment #1)

By: _____
Title: _____
Date: _____

STATE DEPARTMENT OF HEALTH

By: _____
Title: _____
Date: _____

(Rev. 6/67)

3C - 6/67

EQUAL EMPLOYMENT OPPORTUNITY

(Attachment #1)

(Section 202, Executive Order 11246, September 24, 1965, 30FR 11269)

"During the performance of this contract, the contractor agrees as follows:

"(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

"(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies involved as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

"(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interest of the United States."

Arizona State Department of Health
Fiscal Contract No. _____
Attachment No. _____

PROGRAM NARRATIVE

(Name of) Program

(This attachment consists of one or more pages, as needed, to describe the problem to be alleviated, the objectives of the program, the methods and procedures to be utilized in carrying out the program, the staffing requirements, the program activities and the means of evaluation.)

Arizona State Department of Health
Fiscal Contract No. _____
Attachment No. _____

PROGRAM BUDGET

(Name of) Program

Grant funds will be expended to provide
personnel and support as needed (salaries,
OASI, retirement, professional fees, travel,
supplies, equipment, etc.)

\$ xxxxxx

ARIZONA STATE DEPARTMENT OF HEALTH

