



P I N A L ♦ C O U N T Y
wide open opportunity

**Pinal County Public Health Services District
Annual Report FY 2009-2010**

The mission of the Public Health Services District is to provide disease prevention, health promotion and nutrition services to the residents of Pinal County so they can live healthy and productive lives.

Submitted October 21, 2010
By Thomas Schryer, Director



Introduction

FY2009/2010 was a significant year in the history of the Pinal County Public Health Services District. The continued cuts to public health funding from the State combined with a sluggish economy has resulted in continued pressure on the district's resources. Due to a disciplined approach in financial management, and a focus on core public health over the past three years the district has been able to maintain a strong financial status. This has enabled the County to respond to the need for public health services in the communities of Maricopa and San Tan Valley by building new clinics in these areas. Due to open in late 2011, these clinics will provide access to public health services for more than 100,000 Pinal County residents and is projected to increase our clients seen annually by more than 80%.

In the area of childhood immunizations we have cause for celebration. We have recently surpassed our goal of an 80% childhood immunization rate for children who are 2 years old. In July of 2007 our immunization rate was 43%, the Board of Supervisors at the time of creation of the district established a goal of 80% by 2010. We are happy to report that we have reached 82 %.

Public health preparedness has become a major strength of our district over the past 18 months. In August of 2008 the CDC determined that our county should be considered under the Cities Readiness Initiative. In October of 2008 we had a practice audit to determine our score for the anticipated CDC inspection in June 2009. The score was a disappointing 13 out of 100. Our staff worked tirelessly and by June of 2009 our score, as determined by the CDC was 82. In June of 2010 the CDC made another visit and determined our score to be 94, a level that most jurisdictions only reach after many years of work and millions of dollars.

These are only a few examples of the exceptional results your public health services district has earned in the past year of work. Going forward into FY2010/11 we are focused on the establishment of the two new clinics, broadening our immunization goal to include children between ages of 2 and 5 years old and gaining further efficiencies in our delivery of public health services.

We hope you enjoy reading this comprehensive report on our results for the year. Feel free to contact me directly should you have any questions or comments,

Respectfully,

Thomas Schryer, MBA
Director of Public Health

TABLE OF CONTENTS

STRATEGIC GOALS.....	4
BOARD MEMBERS AND SENIOR PERSONNEL	6
PUBLIC HEALTH SERVICES DISTRICT BUDGET	7
PINAL COUNTY SOCIOECONOMIC AND COMMUNITY HEALTH PROFILE	10
COMMUNICABLE DISEASE CONTROL	14
CLINICAL SERVICES PROGRAM.....	23
CLINIC OPERATIONS.....	31
PUBLIC HEALTH NUTRITION	34
PUBLIC HEALTH EDUCATION AND OUTREACH SERVICES	38
PUBLIC HEALTH SERVICES CENTRAL APPOINTMENT DESK	44
PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE (PHEPR).....	45
VITAL RECORDS	49

PINAL COUNTY PUBLIC HEALTH SERVICES DISTRICT

STRATEGIC GOALS

Strategic Goal 1: Improve Childhood Immunizations

Disease prevention is a vital component in Public Health. Immunizations prevent infectious diseases and save lives. Vaccination services have been responsible for the control of many infectious diseases that were once common in this country, including polio, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, and *Haemophilus influenzae* type b (Hib).

By 2012, the Pinal County childhood population will receive appropriate immunizations, thus, reducing the risk of childhood illness as evidenced by:

- 80% childhood immunization coverage rate achieved.

Strategic Goal 2: Public Health Accessibility

Public Health is not effective if the population cannot readily access services.

By 2010, the Pinal County population will experience better access to Public Health services as evidenced by:

- 70% of the Pinal County population will have a Public Health service within 10 miles of where they live.

Strategic Goal 3: Diabetes

Currently, \$750 million is spent on diabetic-related emergencies annually in Pinal County. While case management services is not within the scope of the Health District, providing educational outreach and establishing support groups will assist those at risk and those living with the disease.

By 2012, the hospitalization rate for participants in the diabetes support group will be reduced by 10%.

Strategic Goal 4: Methamphetamine Education

Methamphetamine use has become a growing problem among youth 25 years and younger, particularly within the western United States. Educational outreach increases awareness of the dangerous effects of this highly addictive drug.

By 2012, 80% of students in the fifth grade in Pinal County will have received methamphetamine prevention education.

Strategic Goal 5: Communicable Diseases

Communicable diseases are highly infectious and can be transmitted person to person. These diseases cause serious illness and potentially death. By identifying and treating

communicable disease cases in the county, the morbidity associated with infectious diseases can be reduced.

By 2010, reduce the threat of Tuberculosis and sexually transmitted diseases (Chlamydia, Gonorrhea, and Syphilis) as evidenced by:

- 90% of active Tuberculosis cases in the community complete treatment within one year
- 68% of Chlamydia cases treated
- 85% of Gonorrhea cases treated
- 90% of Syphilis cases treated

Strategic Goal 6: Cost of Services

A cost of service analysis is completed on a monthly basis to ensure optimum clinic utilization and responsible resource allocation.

By 2010, reduce cost per client visit by 15%.

**PINAL COUNTY
BOARD MEMBERS AND SENIOR PERSONNEL**

Board of Directors

Pete Rios
District 1, Chairman

Bryan Martyn
District 2

David Snider
District 3

County Manager

Terry Doolittle

Assistant County Manager for Health and Human Services

Lisa Garcia

Pinal County Public Health Services District Advisory Council

David Towle.....President, District 3 Representative
Rita Nader.....Vice President, District 3 Representative
Pete Rios.....Board of Supervisors Representative
Barbara BrownCity Council Representative
Douglas Parkin, MDPhysician at Large
Zola Hall.....District 1 Representative
Lawrence R. Ross, MD.....District 1 Representative
VacantDistrict 2 Representative
Dodie Freeman..... District 2 Representative

Public Health Services District Director

Thomas Schryer

Public Health Services District Medical Director

Dario Lizarraga, MD

Public Health Assistant Directors

Graham Briggs.....Communicable Disease Control
Kandi Harris.....Central Support and Accounting
Andrea Huerta.....Public Health Operations
Kore Redden.....Emergency Preparedness and Response
Rosanna Ringer.....Nutrition, Education and Outreach Services

PUBLIC HEALTH SERVICES DISTRICT BUDGET

Budget for July 1, 2009 - June 30, 2010		
A.	HEALTH EDUCATION	1,378,660
	Cardiovascular Disease Prevention	68,680
	Local Tobacco Education Project	334,980
	Public Health District Diabetes	68,645
	Public Health District Health Education	906,355
B.	NUTRITION SERVICES	1,744,824
	Nutrition Services	5,534
	Women, Infants, & Children	1,262,952
	Commodity Supplemental Food Program	37,358
	Breastfeeding Peer Counseling	159,970
	Farmer's Market Program	2,500
	Public Health District WIC	276,510
C.	MATERNAL & CHILD HEALTH	66,600
	Community Nursing Services	66,600
D.	CHRONIC DISEASE - CANCER	258,058
	Women's Cancer Control Project	192,958
	Public Health District Well Woman	65,100
E.	COMMUNICABLE DISEASE	2,961,182
	Tuberculosis Prevention & Control	37,109
	Sexually Transmitted Disease	10,017
	HIV Prevention & Control	23,714
	Immunization Services	79,065
	Immunization Donations	130,000
	Immunization Services – ARRA	0*
	Public Health District Immunization	826,259
	Preparedness & Response to Bio-Terrorism	436,778
	Cities Readiness Response Initiative	116,318
	Public Health District Infectious Disease	178,525
	Public Health District TB Management	72,534
	Public Health District STD/HIV Management	165,193
F.	FAMILY PLANNING SERVICES	769,027
	Family Planning Services	287,200
	Family Planning AHCCCS	31,477
	Family Planning Donations	6,400
	Family Planning Fees	9,000
	Folic Acid	11,000
	Public Health District Family Planning	423,950
G.	GENERAL LOCAL HEALTH DEPARTMENT ADMINISTRATION	1,508,303
	Public Health Human Resources	0*
	Public Health District Birth Certificates	54,680
	Public Health District Death Certificates	54,600
	Public Health District Fleet Maintenance	48,887
	Public Health District Budget/Finance/Purchasing	337,050
	Public Health District Executive Management	1,003,086
	Research and Development	16,000
H.	TRANSPORTATION SERVICES	180,000
	Local Transportation Assistance 2002	175,000
	Transportation Services	5,000
TOTAL		8,866,654

Source: AS400/JDEdwards Accounting System, Pinal County Public Health Services District

*Immunization Services – ARRA and Public Health Human Resources are listed as zero because these budgetary items were not a part of the original budget approved by the Board of Supervisors. These items were introduced later in the fiscal year.

Tax Revenues for the last 2 years:

Pinal County Public Health Services District		
Tax Revenue July 1, 2008 - June 30, 2009		
July	\$	272,666.83
August	\$	270,600.46
September	\$	266,454.77
October	\$	273,456.75
November	\$	223,220.55
December	\$	255,816.96
January	\$	199,993.62
February	\$	212,402.10
March	\$	214,067.16
April	\$	204,719.48
May	\$	223,480.04
June	\$	208,351.13
Total	\$	2,825,229.85

Projected Revenue FY 2008/2009
\$3.4 million

Actual Revenue
\$2.83 million

Pinal County Public Health Services District		
Tax Revenue July 1, 2009 - June 30, 2010		
July	\$	202,091.51
August	\$	210,992.53
September	\$	192,763.63
October	\$	199,127.48
November	\$	206,609.34
December	\$	207,458.72
January	\$	176,473.48
February	\$	199,275.90
March	\$	207,895.26
April	\$	190,892.16
May	\$	212,450.09
June	\$	198,046.81
Total	\$	2,404,076.91

Projected Revenue FY 2009/2010
\$3.12 million

Actual Revenue
\$2.40 million

Budget versus Expenditure Reports for the last 2 years:

Budget versus Expenditures for July 1, 2008 - June 30, 2009			
	Budget	Expenses	Difference
Personnel Services	5,775,841	\$ 4,630,954	\$ 1,144,887
Employee Related Expenses	1,676,945	\$ 1,359,214	\$ 317,731
Professional & Outside Services	134,260	\$ 131,790	\$ 2,470
Travel Expenses	175,448	\$ 83,712	\$ 91,736
Other Operating	1,103,250	\$ 744,327	\$ 358,923
Capital	126,093	\$ 154,387	\$ (28,294)
Indirect	530,648	\$ 512,764	\$ 17,884
Total	\$ 9,522,485	\$ 7,617,148	\$ 1,905,337

Budget versus Expenditures for July 1, 2009 - June 30, 2010			
	Budget	Expenses	Difference
Personnel Services	5,222,445	\$ 4,170,217	\$ 1,052,228
Employee Related Expenses	1,510,340	\$ 1,222,001	\$ 288,339
Professional & Outside Services	456,449	\$ 222,492	\$ 233,957
Travel Expenses	89,849	\$ 50,522	\$ 39,327
Other Operating	1,112,686	\$ 690,086	\$ 422,600
Capital	49,500	\$ 29,025	\$ 20,475
Indirect	425,385	\$ 368,589	\$ 56,796
Total	\$ 8,866,654	\$ 6,752,932	\$ 2,113,722

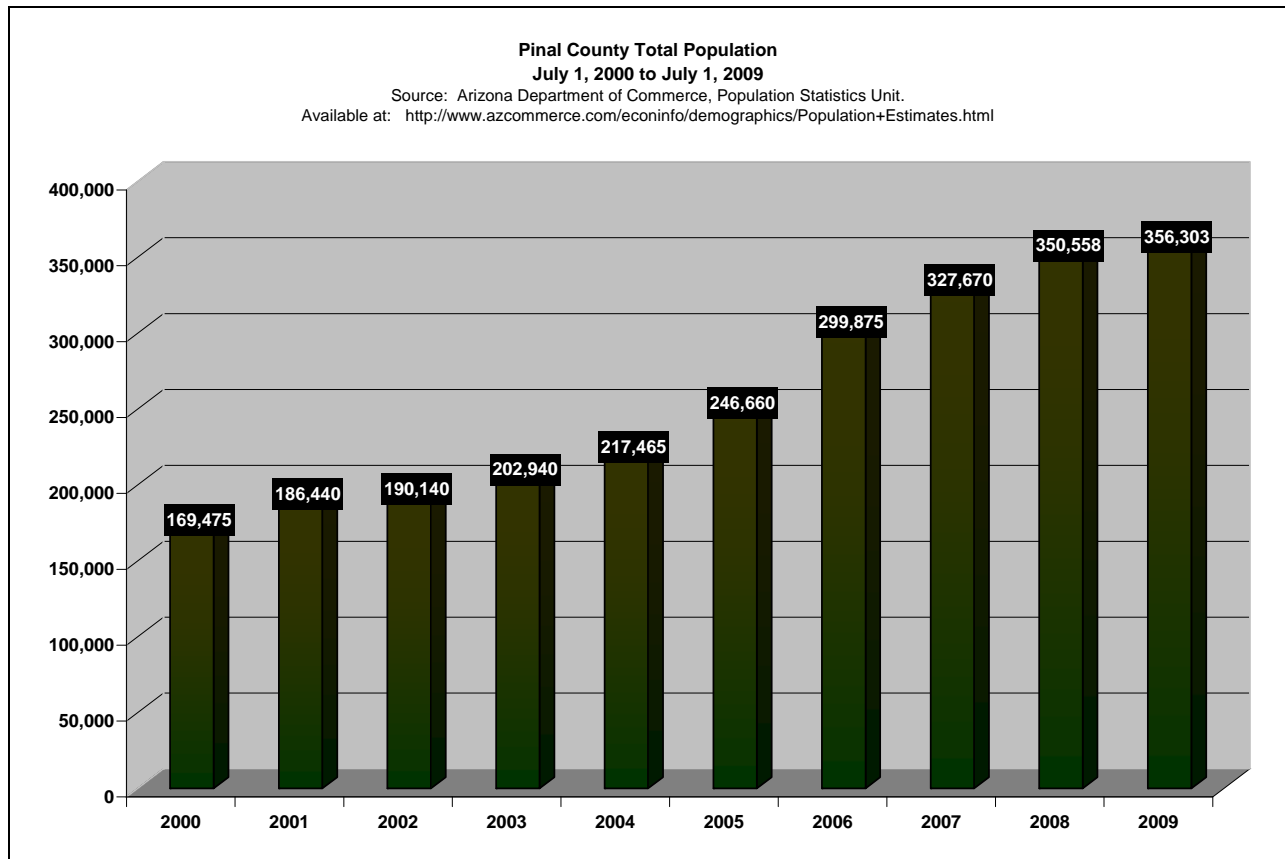
Source: AS400/JDEdwards Accounting System, Pinal County Public Health Services District

2010 PINAL COUNTY SOCIOECONOMIC AND COMMUNITY HEALTH PROFILE

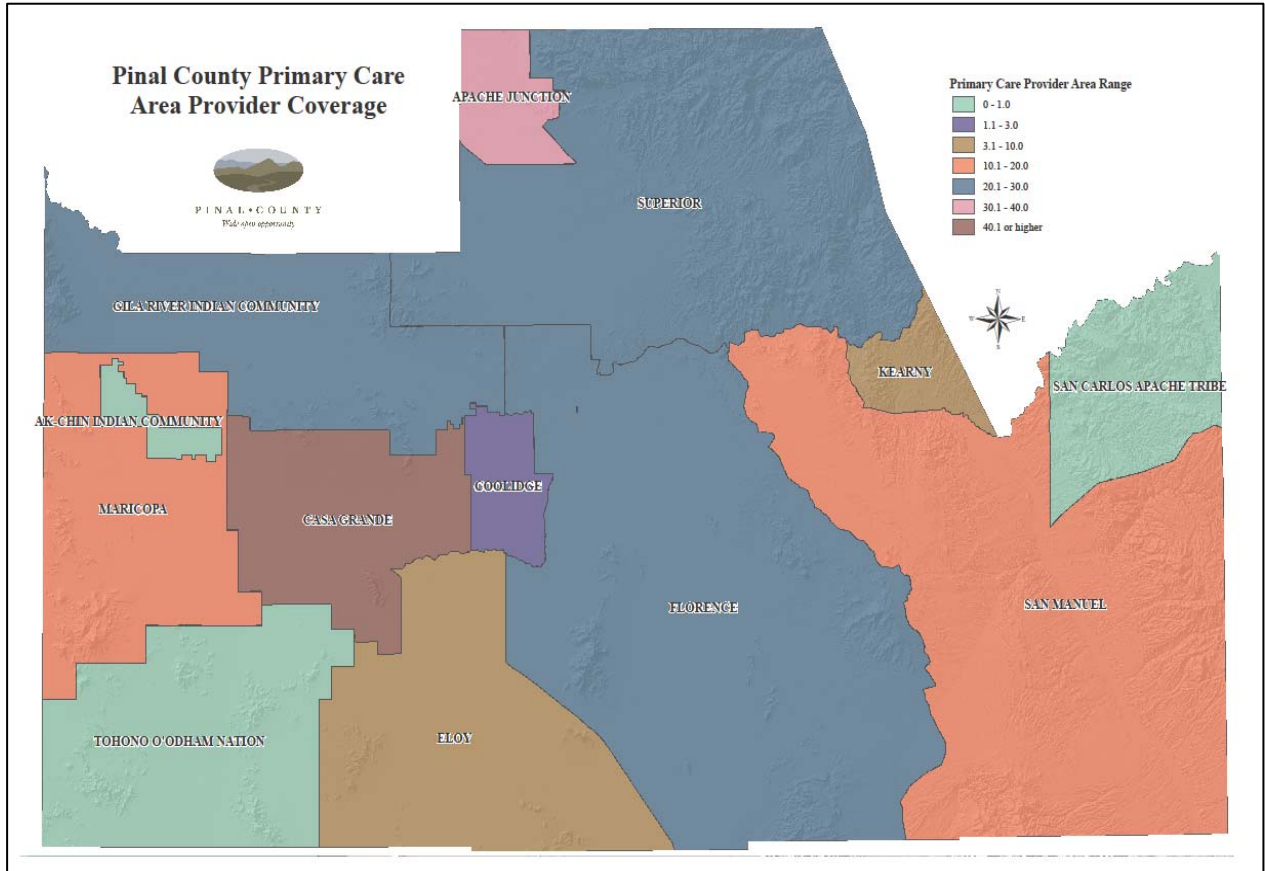
Pinal County has experienced an explosive population growth. The county ranks second in the country in population growth!

Resident Population Estimates for the 5 Fastest Growing U.S. Counties with 10,000 or More Population in 2009: April 1, 2000 to July 1, 2009 ^a					
Rank	Geographic Area	Population Estimates		Change, 2000 to 2009	
		July 1, 2009	April 1, 2000 Estimates Base	Number	Percent
1	Kendall County, IL	104,821	54,563	50,258	92.1
2	Pinal County, AZ	340,962	179,720	161,242	89.7
3	Rockwall County, TX	81,391	43,079	38,312	88.9
4	Flagler County, FL	91,622	49,832	41,790	83.9
5	Loudoun County, VA	301,171	169,599	131,572	77.6

^aPopulation estimates derived from U.S. Census 2000 Decennial Census



The lack of health care providers available in the county influences the health status of the community and places a greater demand on Public Health services.

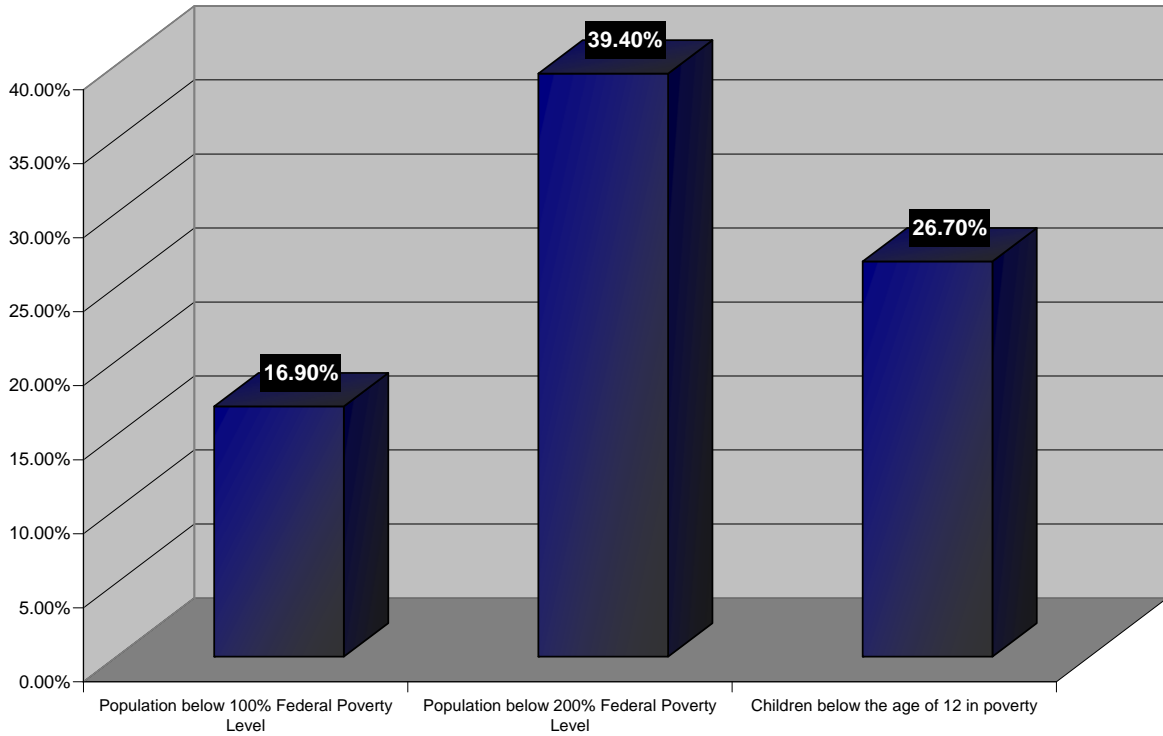


Source: Arizona Department of Health Services, Bureau of Health Systems Development, Arizona Primary Care Area Statistical Profiles, 2009. Available at: <http://www.azdhs.gov/hsd/profiles/profiles.htm>

The poverty levels in the county have impacted the demand for Public Health services. Higher poverty levels equate to an increase in those that are eligible for Public Health services.

Pinal County Population Demographics: Poverty Levels

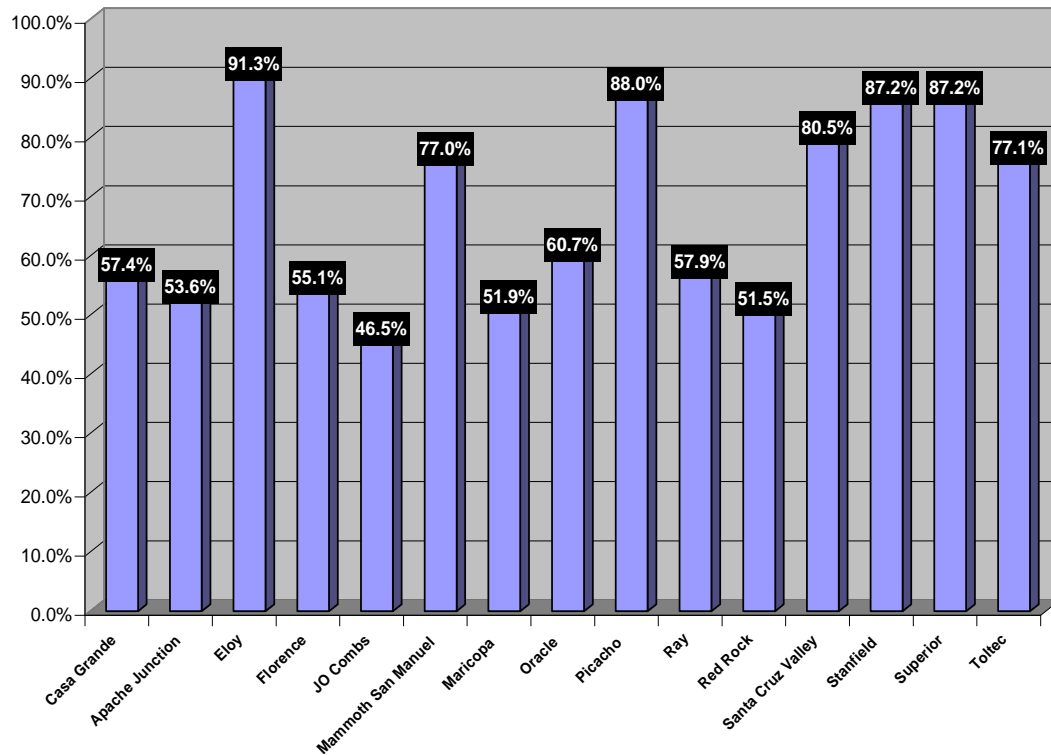
Source: Arizona Department of Health Services, Bureau of Health Systems Development 2009 Profile



School Districts are facing large percentages of free and reduced lunch programs:

Pinal County School Districts Free and Reduced Lunch Percentages

Source: Arizona Department of Education, Academic Achievement Division, Health & Nutrition Services, Child Nutrition Programs, March 2010 Report



With the continued population growth, the lack of healthcare providers, the increasing poverty levels, and the large percentage of children on free and reduced lunch programs, the Health District has had to strategize ways of meeting accessibility gaps, increasing services, and redirecting attention to newly developing issues that place an increasing demand on Public Health.

COMMUNICABLE DISEASE CONTROL

The Communicable Disease Control Section was created in July 2007, immediately following the approval of the Pinal County Public Health Services District. The duties of the program consist of:

- Identifying cases and contacts of diseases that represent a threat to the public's health;
- Ensuring treatment for those affected;
- Identifying and limiting risk factors for disease;
- Identifying and eliminating the source of outbreaks; and
- Providing education to county partners and the public concerning these diseases and their prevention.

The overall goal of the section is to limit or interrupt transmission using these methods to decrease the overall morbidity and mortality associated with communicable diseases in the county.

After the section's inception, emphasis was placed on increasing surveillance for cases and clusters of disease by increasing reporting by medical providers, schools, infection control programs, other county agencies, and the public. As reporting has increased, the section's ability to directly impact the health of the community has also increased. While surveillance continues to increase and the mechanisms for reporting remain in place, the focus of the section is now able to shift to directly impacting the public's health through intervention efforts including: case and outbreak investigations, unexplained death investigations, treatment of cases and contacts to interrupt transmission, identification of sources of infection, and education concerning infection prevention. The section is comprised of the General Infectious Disease, Tuberculosis, and Sexually Transmitted Disease Control Programs.

Major Accomplishments:

- The Communicable Disease Control Section recorded a total of 3,172 laboratory confirmed cases of reportable disease during the fiscal year.
- Twelve unexplained death investigations were conducted with collaboration between the Public Health Services District the Medical Examiner's Office
- The Public Health Services District, including the Communicable Disease Control Section responded to the second wave of transmission of pandemic influenza (A H1N1).

General Infectious Disease Control Program

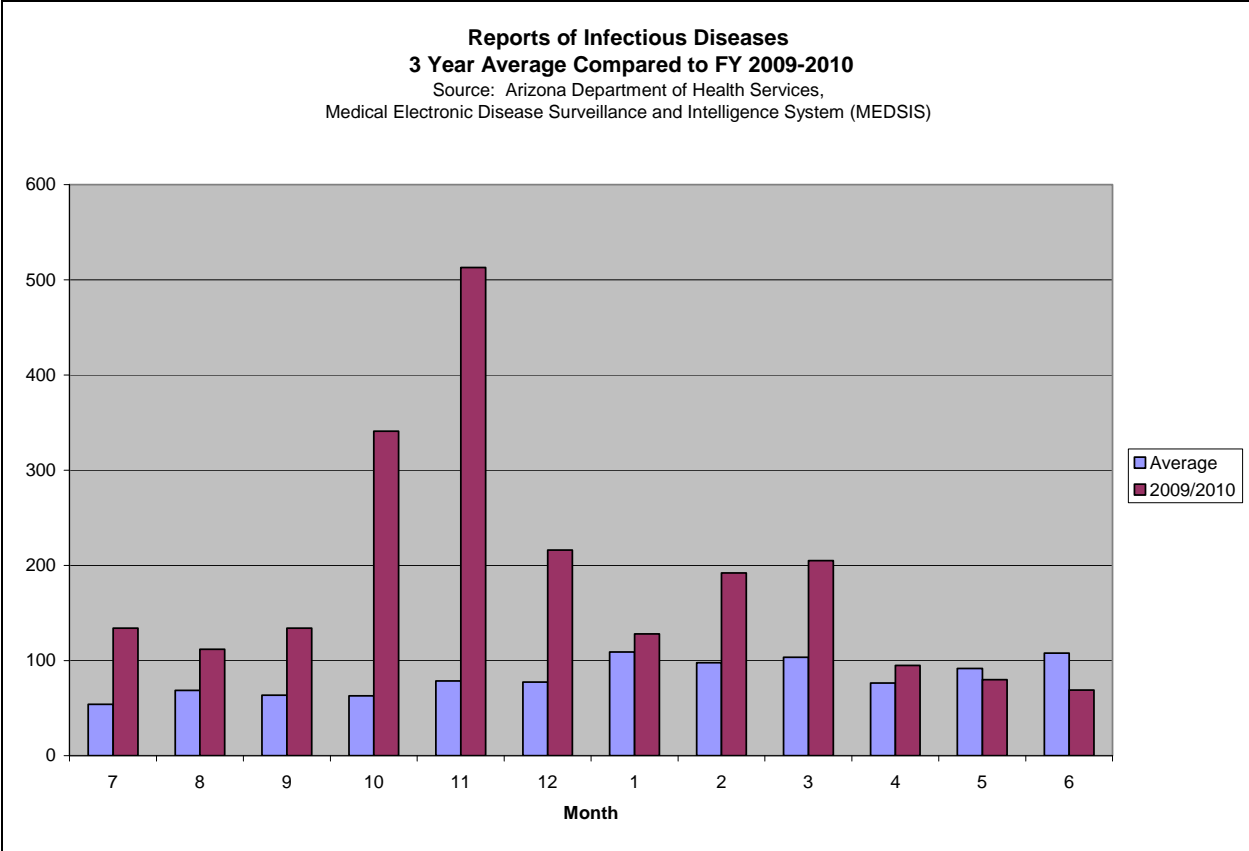
This program is responsible for the surveillance and response to approximately 85 diseases that medical providers are required by law to report to the local health department in Arizona. The program investigated 2,213 reports of infectious diseases including enteric, vector borne, environmental, antibiotic resistant, and airborne diseases. Contact investigations are initiated whenever a potentially infectious case of disease is identified. The investigation consists of identifying people that may have been exposed, providing education to those at risk, evaluating the contacts for disease, and recommending or providing therapy to prevent disease. Additionally, this program collects and analyzes data related to other reported cases of disease to better identify risk factors associated with each disease and identify potential outbreaks.

Highlights

- Contact investigations were conducted and prophylaxis provided for contacts to cases of hepatitis A and pertussis during this fiscal year.
- An environmental risk investigation and response was conducted in conjunction with the Arizona Department of Health Services and Tribal entities after the identification of the first two locally acquired cases of Rocky Mountain spotted fever in Pinal County, a potentially deadly disease transmitted through ticks.
- With increasing collaboration between the Public Health Services District and the Medical Examiner's Office, a protocol has been implemented to investigate unexplained deaths possibly caused by infectious disease or other threats to the public's health. Twelve unexplained death investigations were conducted to ensure no threat to the public and characterize deaths due to infectious disease.

Influenza

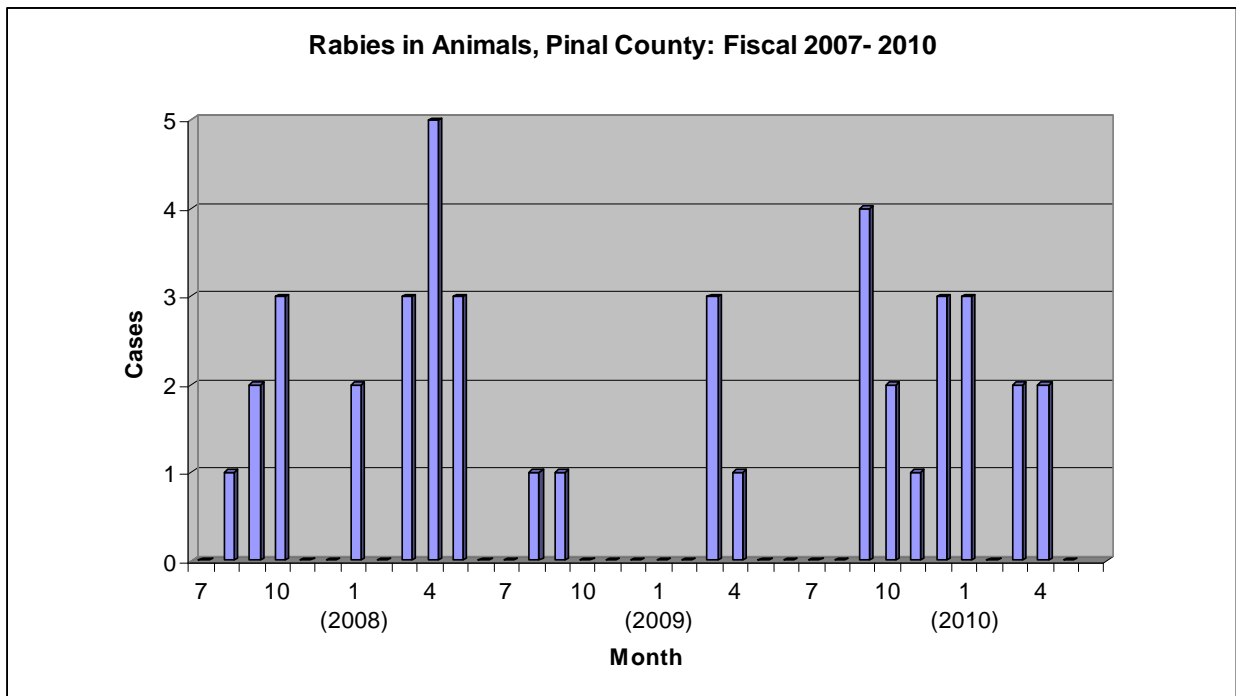
In November of this fiscal year, Pinal County recorded the peak of activity related to the second wave of influenza A(H1N1) transmission locally. The chart below compares the average number of total reports received by month in the Infectious Disease Control Program (does not include TB or STD) to the fiscal year of 2009-2010. The increased program activity and peak of influenza reporting are evident in the graph below.



Rabies

Rabies is a viral disease that all mammals are susceptible to. It is spread through the bite of infected animals and is fatal in humans once symptoms appear. However, with prompt medical care and prophylaxis the risk of acquiring disease after exposure is reduced to almost zero. Rabies is most common in wild animals such as bats, foxes, and skunks in Arizona. Due to vaccination efforts, rabies affects domestic animals only rarely in Arizona. Pets are protected from disease by rabies vaccination, but are susceptible if unvaccinated. The Infectious Disease Control Program works actively with the Pinal County Animal Care and Control Department and the Arizona Game and Fish Department to conduct rabies risk assessments after animal bites. The program is tasked with coordinating testing of animals that are available and determining risk of rabies in individuals that have been exposed whether the animal is available for testing or not. Once an assessment is made, rabies prophylaxis may be recommended and conducted through a private clinical provider or through county public health clinics. During this fiscal year identified cases of rabies occurred primarily in the south and eastern areas of the county during the winter months.

- Sixteen cases of rabies in animals were identified in skunks, bats, bobcats, and a coatimundi
- Three significant human exposures were identified and recommended for rabies prophylaxis



Source: Arizona Department of Health Services

Tuberculosis (TB) Control Program

Tuberculosis (TB) is a disease caused by bacteria that can be spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. If untreated, TB can be fatal. Both active disease and latent infections are tracked and treated in this program.



What is the difference between a latent infection and active disease?

Latent infection with TB is not contagious and causes no symptoms or illness. However, 10% of those with latent infection will progress to active disease at some point in life.

Active disease due to TB is contagious and will cause symptoms and disease that will lead to death without months of antibiotic treatment.

Treatment for TB consists of a combination of antibiotics and requires a minimum of 6 months and up to 24 months or longer to complete. Field visits are routinely conducted to confirm drug therapy is being completed. This is referred to as “directly observed therapy” (DOT). The Coordinator travels to clients’ residences on average 2-3 times per week throughout treatment.

Individuals acquire latent Tuberculosis infection by exposure to someone with active TB disease. It is essential to identify and treat latent TB cases to prevent them from potentially progressing to active disease and spreading it to others. Additionally, young children that acquire latent infection are more likely to progress to active TB more quickly and suffer more serious outcomes, including TB meningitis and death.

- 46 suspected cases of disease were evaluated in the county's monthly TB clinic
- Latent TB infection was diagnosed in 44 residents after evaluation

Active cases of disease represent a potential threat to the public while infectious, which makes prompt treatment a priority for this program. Contact investigations are also conducted around all potentially infectious cases. For the 2009-2010 fiscal year, 26 cases of active, infectious tuberculosis were identified in Pinal County, including three living in the community.

- One of the community cases completed "DOT" therapy in 12 months through the Health District. Two close contacts were identified; one acquired latent TB infection and is completing treatment through the health district
- The second community case moved into Pinal County after diagnosis then relocated to Maricopa County and completed treatment through Maricopa County Department of Public Health
- The third community case was diagnosed after death. This resulted in three contacts being identified; all were ruled out for latent TB infection.

The remaining 23 cases of active TB were located in various correctional facilities in Pinal County. Active cases diagnosed in correctional facilities pose a significant risk to others due to the close proximity and sustained contact. This is evidenced by the high number of latent TB infections identified after exposure to active cases.

- 263 contacts were identified during contact investigations
- 12 individuals exposed to one infectious correctional case tested positive for latent TB infection. Strong partnerships between the Health District and the correctional facility have resulted in successful and comprehensive TB management of both active and latent TB cases.
- The staff also conducted two health fairs in direct coordination with the Arizona Department of Corrections Inmate Health Services to educate inmates and staff.

Sexually Transmitted Diseases (STD) Control Program

For the 2009-2010 fiscal year, 1,056 laboratory confirmed cases of sexually transmitted diseases (STD) were identified including:

- 925 cases of Chlamydia (119 pregnant)
- 70 cases of gonorrhea (2 pregnant)
- 18 cases of syphilis (1 pregnant)
- 43 cases of newly diagnosed HIV/AIDS infection

Cases are identified through screening either by our Public Health clinics or healthcare providers throughout the county. The Program Coordinator is notified after test results have been confirmed positive for an STD. The Coordinator initiates a contact investigation within 24 hours of notification. Treatment is initiated immediately and services are predominantly provided by the Public Health Services District. A vital component to case management is identifying and treating individuals that had sexual contact with the case. Contacts are tested and, if needed, are given treatment through the Health District. The case investigation process is applied to any contacts that test positive.

Left untreated, syphilis can cause severe disease including blindness, cardiovascular disease, neurological disease, and eventually death. The most severe outcomes are associated with congenital syphilis and can include critical birth defects and potentially death. Because of this, syphilis is the highest priority STD for treatment. Therefore, the Program Coordinator prioritizes all pregnant cases for immediate follow up.

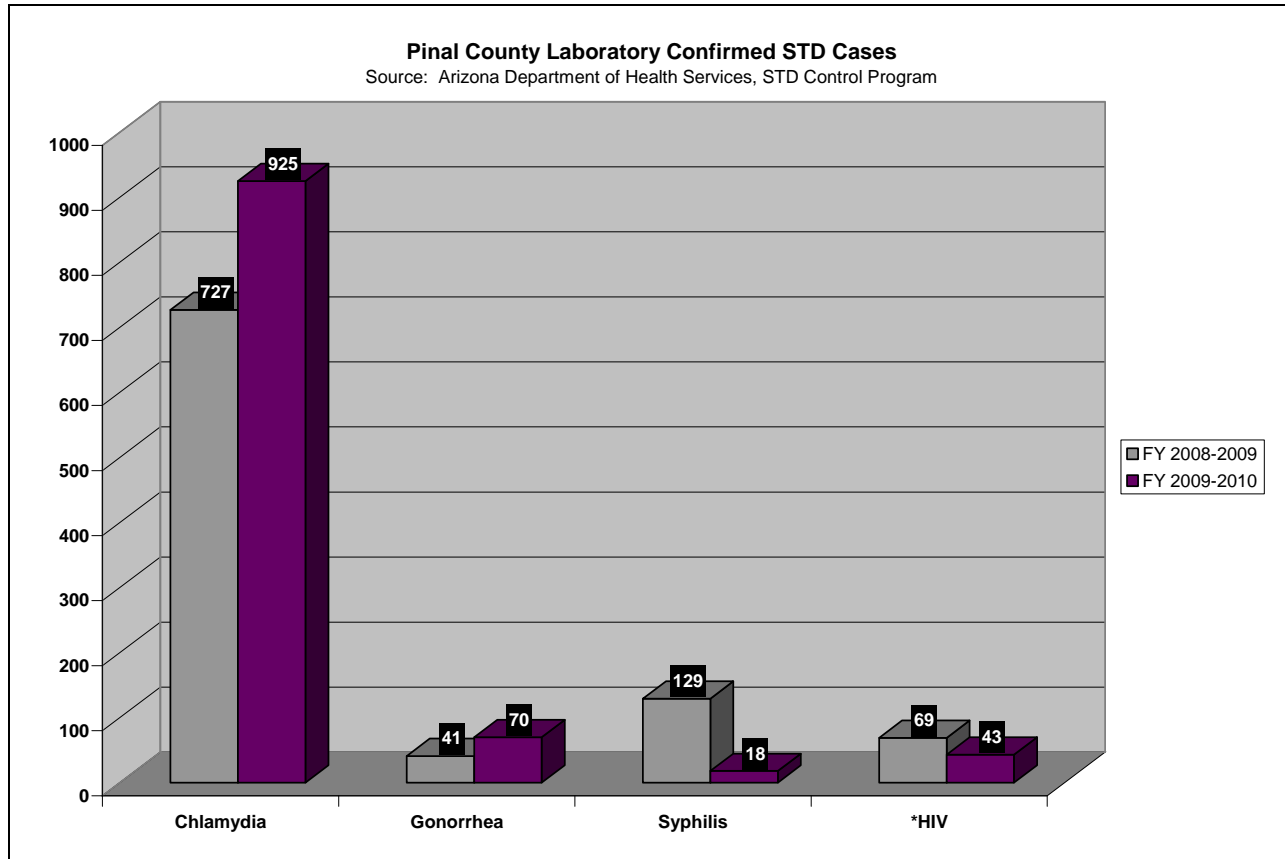
Several instances make case investigation difficult to complete. Often cases have moved or changed contact information. The economic downturn has forced many cases to relocate or lose phone service. However, the Program Coordinator travels throughout the county and conducts aggressive research to find all cases. This year, a pregnant syphilis case was difficult to locate. With the coordinator's exhaustive efforts, the case was found and treated immediately before the risk of fetal demise developed.

Additionally, 43 cases of newly diagnosed HIV/AIDS were identified. All community cases were given education, referred to specialists for HIV case management, and had a contact investigation conducted.

FY 2009-2010 STD Cases:

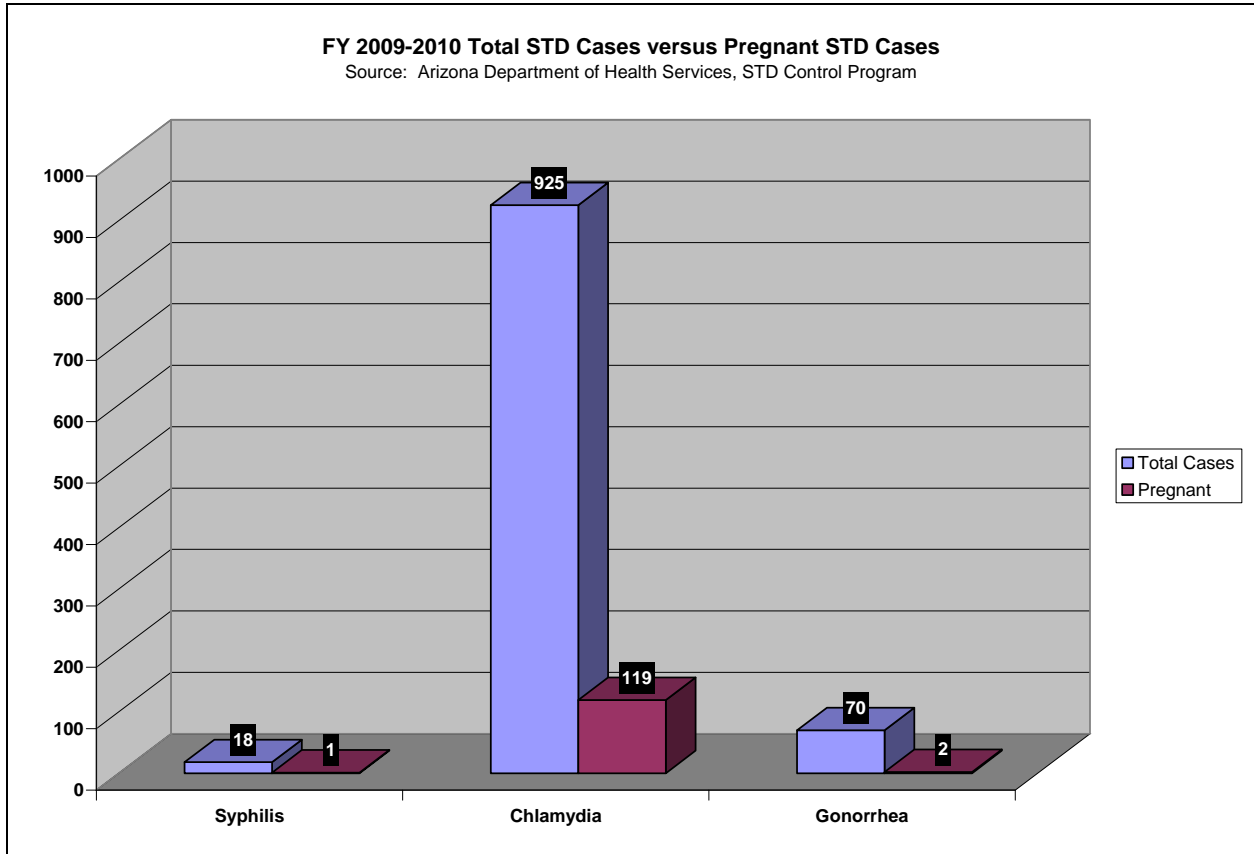
- 94.4% of all confirmed chlamydia cases were verified and treated.
- 50% of all confirmed gonorrhea cases were verified and treated
- 100% of all confirmed syphilis cases were verified and treated
- 92.6% of all confirmed STD contacts were verified and treated

The following graph illustrates the number of laboratory-confirmed STD cases over the last two years:



*Newly diagnosed HIV/AIDS infections

The following graph illustrates the number of **pregnant** cases in relation to the total amount of laboratory-confirmed STD cases in the county:



The following table details the case counts of all the diseases reported in Pinal County:

Enteric Diseases	
Amebiasis	1
Campylobacteriosis	18
Cryptosporidiosis	2
Enterohemorrhagic Escherichia Coli	6
Giardiasis	5
Hemolytic Uremic Syndrome	0
Salmonellosis	65
Shigellosis	22
Typhoid Fever	0
Yersiniosis	0
Invasive Diseases	
Aseptic Meningitis	18
Haemophilus Influenzae	2
Group A Streptococcus	12
Group B Streptococcus, infant <90 days	1
Meningococcal Disease	0
Methicillin-resistant Staphylococcus Aureus	45
Streptococcus pneumoniae	42
Vaccine Preventable Diseases	
Influenza (Lab Reportable)	774
Measles	0
Pertussis	11
Varicella	50
Vector-borne Diseases	
Hantavirus	0
Malaria	0
Rabies-Animals tested positive	16
Rocky Mountain Spotted Fever	2
Scabies	0
West Nile Virus	0
Viral Hepatides	
Hepatitis A	4
Hepatitis B	67
Hepatitis E	0
Other Reportable Diseases	
Coccidioidomycosis	572
Creutzfeldt-Jakob	0
Encephalitis, viral	0
Kawasaki syndrome	4
Legionellosis	0
RSV (Lab Reportable)	339
Unexplained Death	12
Sexually Transmitted Diseases	
Chlamydia	925
Gonorrhea	70
Syphilis	18
HIV (Newly Diagnosed)	43
Tuberculosis	
Active (Newly Diagnosed)	26
Total # of cases reported	3,172

CLINICAL SERVICES PROGRAM

The Clinical Services Program encompasses the following: Immunizations, Family Planning, and Well Woman Services. These services are provided to the residents of Pinal County so they can have access to immunizations, family planning, and breast and cervical cancer screenings.

Immunizations

In the last century, one of the greatest public health initiatives with the most significant impact has been immunizations. Immunizations have been used to help prevent and control the spread of vaccine preventable diseases such as polio, mumps, measles, hepatitis B, *Haemophilus influenzae* type b (Hib), rubella, pertussis, diphtheria, and tetanus. According to the Centers for Disease Control and Prevention (CDC), it is estimated that a little less than half a billion cases of vaccine-preventable disease and three billion premature deaths were prevented in the United States alone due to the administration of routine vaccinations.

Vaccination creates and maintains herd immunity against communicable diseases. Herd immunity can provide some protection to unvaccinated individuals. By increasing the vaccinated percentage of the population, there is less chance of spreading disease from person to person and a reduced risk of disease outbreaks. Therefore, if Public Health can increase the immunization rate, we can prevent disease and serious illness up to and including death. Indirectly this will also impact health care related costs.

Source: Centers for Disease Control and Prevention, *General Recommendations on Immunization. Recommendations of the Advisory Committee on Immunization Practices*. MMWR, 2006. 55(RR-15): p. 1-48.

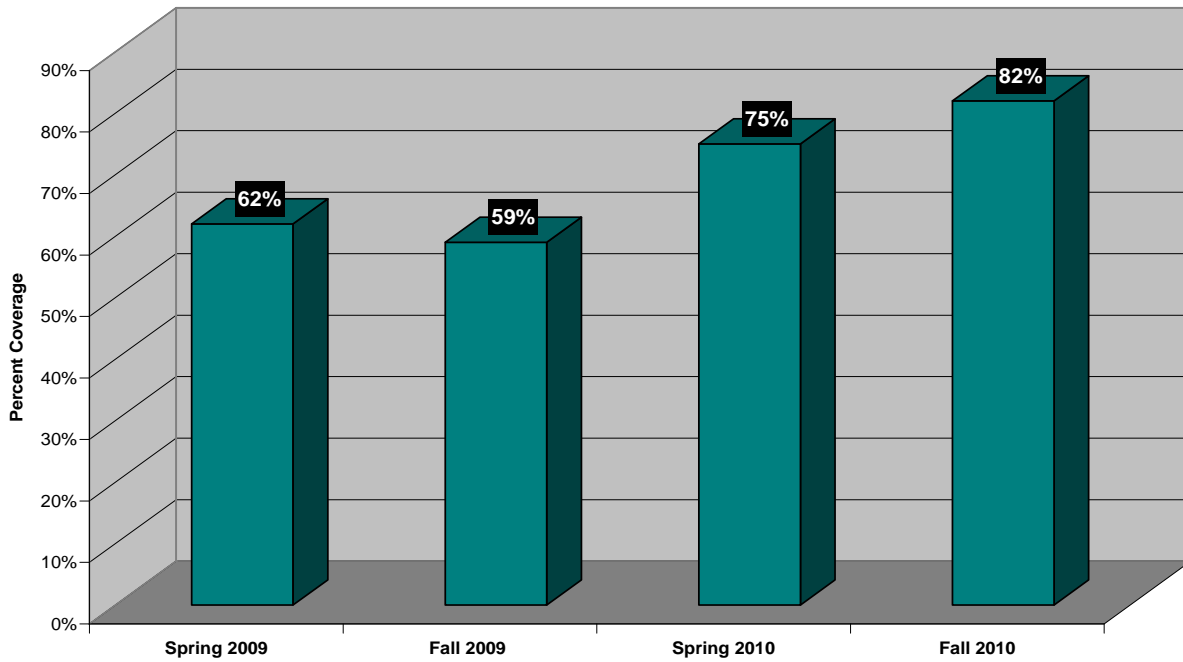
Major Accomplishments:

Immunization coverage levels for Pinal County have been improving over the last three years. The immunization rate has went from 43% to 82%.

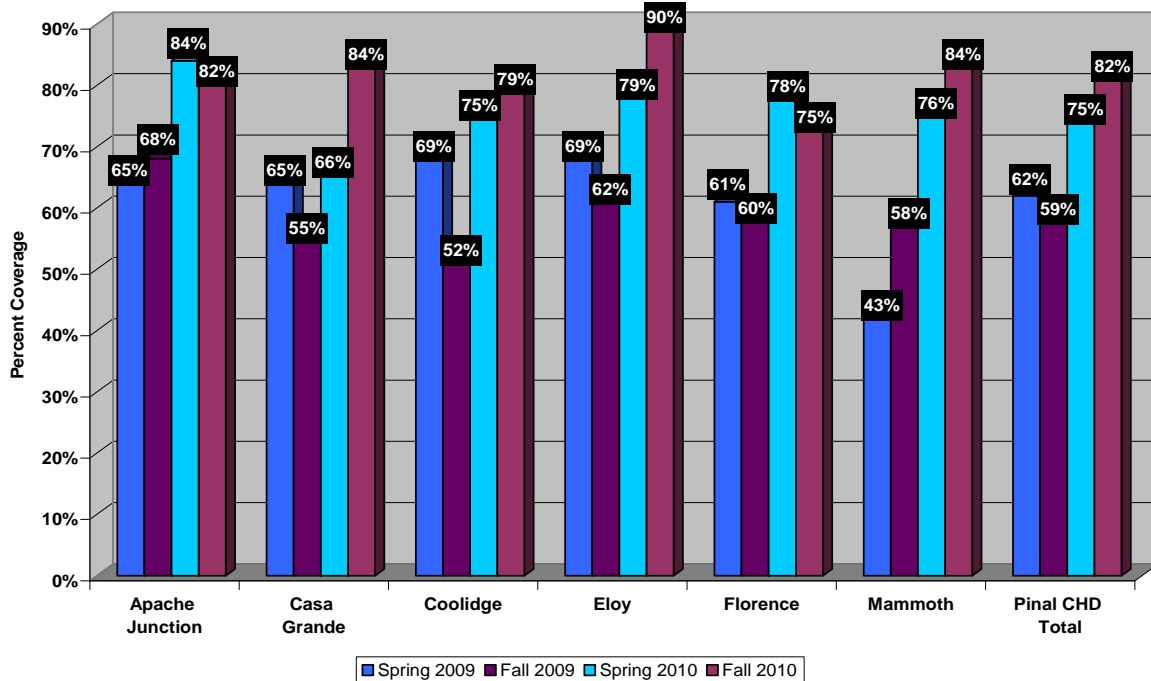
- By the Spring of 2010, our Apache Junction Clinic was the first individual clinic to reach and exceed the immunization goal by achieving an 84%.
- By the Fall of 2010, the Pinal County Public Health Services District reached its goal and has an immunization rate of **82%**!

The following charts illustrate the progression that lead to our successful immunization rate:

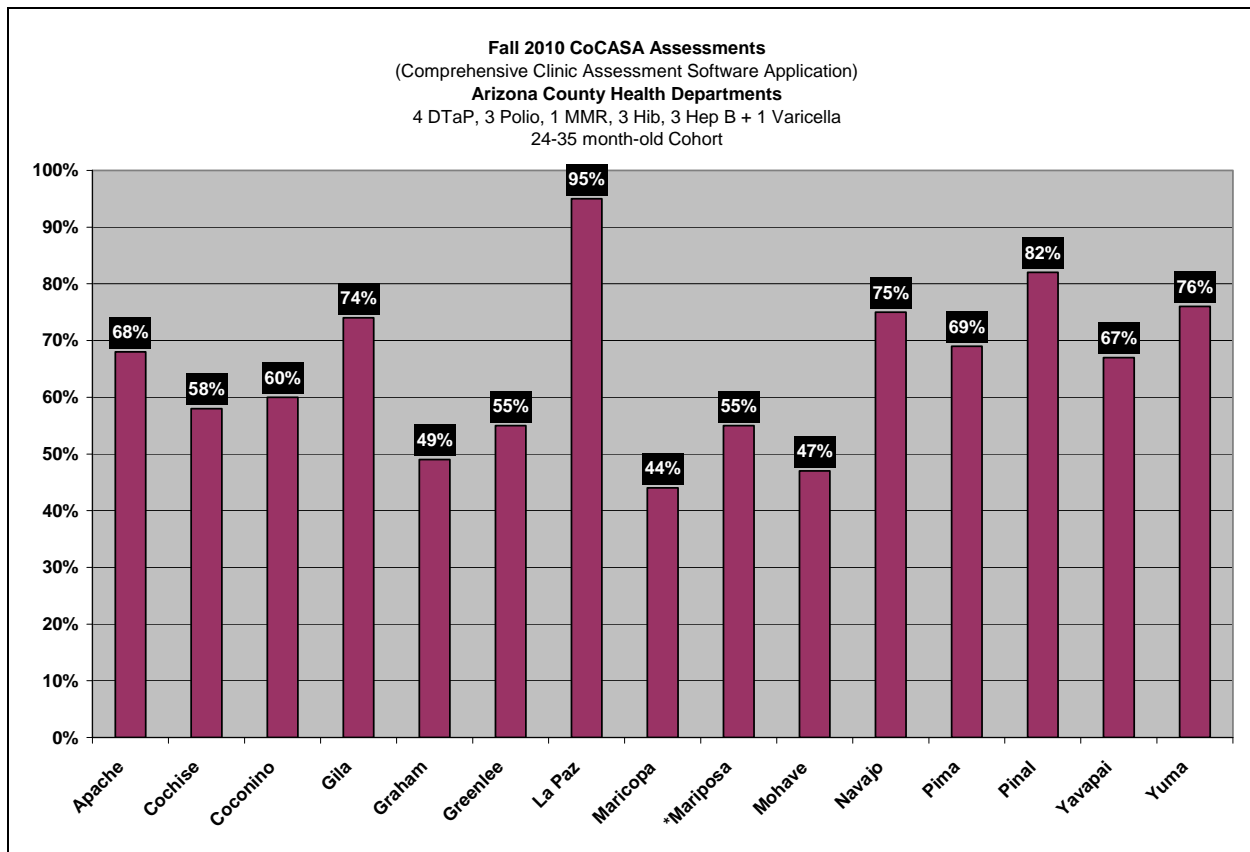
2009-2010 Pinal County Immunization Coverage Rates
for the 4:3:1:3:3:1 Schedule for 24 to 35 month old children by 24 months of age
 Source: Arizona Department of Health Services, Arizona Immunization Program Office, CoCASA Assessment



2009-2010 Pinal County Immunization Coverage Levels
4 DTap, 3 Polio, 1 MMR, 3 Hib, 3 Hep, 1 Varicella for 24-35 month old children by 24 months of age
 Source: Arizona Department of Health Services, Arizona Immunization Program Office, CoCASA Assessment



The following graph shows the statewide immunization rates. Pinal County ranks second in Arizona!



Source: Arizona Department of Health Services, Immunization Program Office, Assessment Unit.

*Mariposa: Mariposa Community Health Center, Santa Cruz County, Arizona

To add to the improvement of the immunization rate, beginning January 2010, the Pinal County Public Health Services District was awarded ARRA funds (American Recovery and Reinvestment Act of 2009) to be used for immunizations. The total amount of the award was \$70,797. This funding provided an increase in staffing in order to concentrate more on immunization services.

Along with the tremendous improvement of immunization coverage in children, Pinal County Public Health Clinics are seeing an increasing number of clients of all ages requesting immunizations. The Health District offers hepatitis B, influenza, measles, mumps, Rubella (German measles), tetanus, and diphtheria immunizations to adults over the age of 19. Regardless of age, a total of **33,541 doses** of vaccine were administered to clients in Pinal County. (Source: Pinal County Public Health Services District, Insight Patient Tracking System, EN24 Report).

Family Planning Services

Family Planning services assist women and men, including teenagers, in maintaining their reproductive health. Services are offered to clients who do not have insurance or whose insurance does not cover Family Planning. Services are confidential and fees are based on family income and the number of individuals living in the household. No one is refused service because of an inability to pay.

Funds for these services are provided by the Title X Family Planning Program (Public Law 91-572), which was enacted in 1970 as Title X of the Public Health Service Act. Title X is the only federal grant program dedicated solely to providing individuals with comprehensive family planning and related preventive health services. The Title X program is designed to provide access to contraceptive services, HIV testing, supplies and information to all who want and need them. By law, priority is given to persons from low-income families. (Source: United States Department of Health and Human Services)

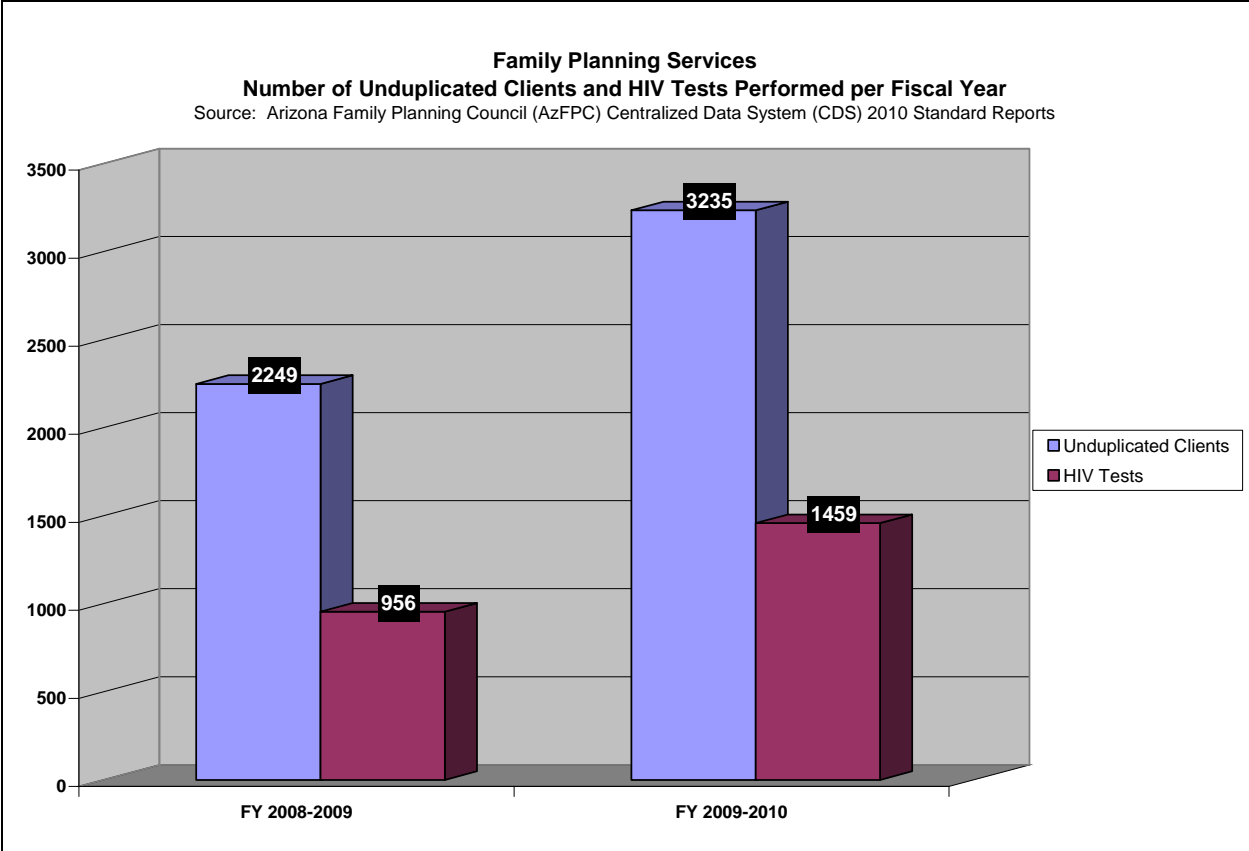
Title X funding is regulated by the Arizona Family Planning Council (AzFPC). The AzFPC controls the deliverables for this funding and audits both financial and service reports. The Pinal County Public Health Services District funds the nurse practitioner positions and licensure portion of the Family Planning services. Nurse practitioner services are essential to the Family Planning Program. Nurse practitioners perform examinations and perform prescription re-packaging and dispensing services.

Major Accomplishments:

- Public Health Clinic staff strives for excellence in customer service. Out of 606 surveys completed by clients receiving Family Planning services, 590 (**97.4%**) stated they were satisfied or very satisfied with the services they received. (Source: Managing for Results)
- The percent of Family Planning clients who experienced contraceptive failure remained less than 1% for the entire year.
- For 2009-2010, Family Planning services experienced a 43.8% increase in the number of duplicated clients served compared to 2008-2009; and a 52.6% increase in the number of HIV tests performed.
- An additional nurse practitioner was introduced into the Health District to meet the client demand for Family Planning services.

Last year, the contracted caseload and subsequent funding were increased in order to serve more clients. While there are no revisions to this year's contract, both the number of clients being served and the number of HIV tests being performed have increased.

The following illustration represents the amount of unduplicated clients that were seen and the number of HIV tests that were performed in the last two years:

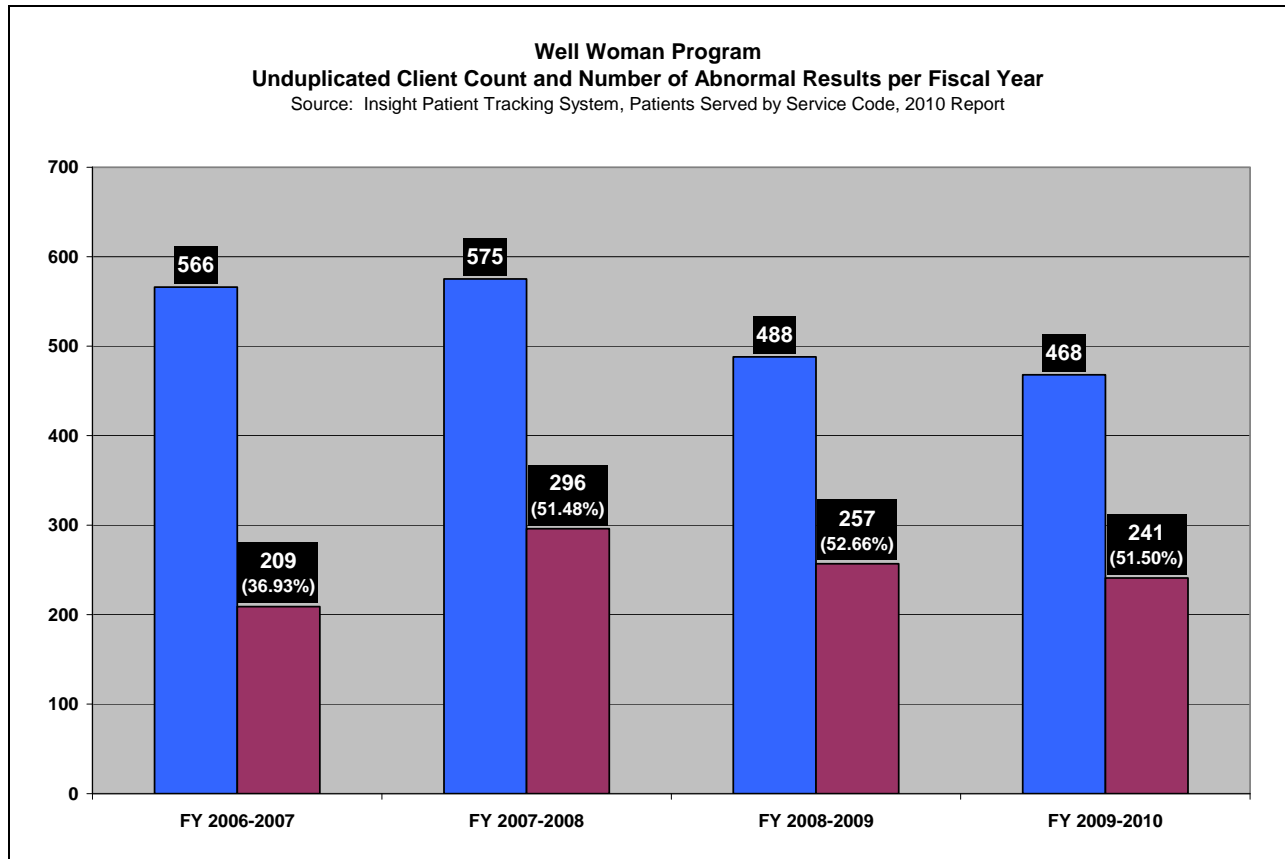


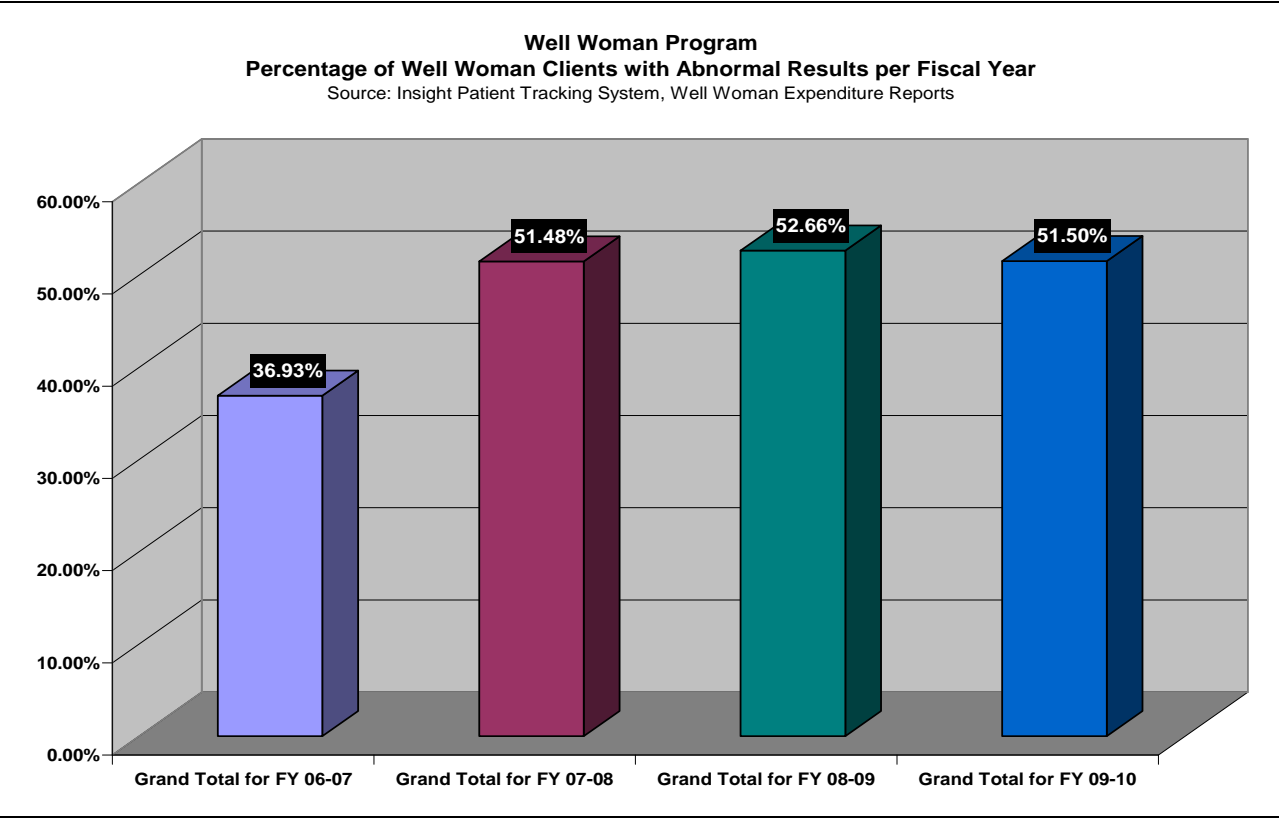
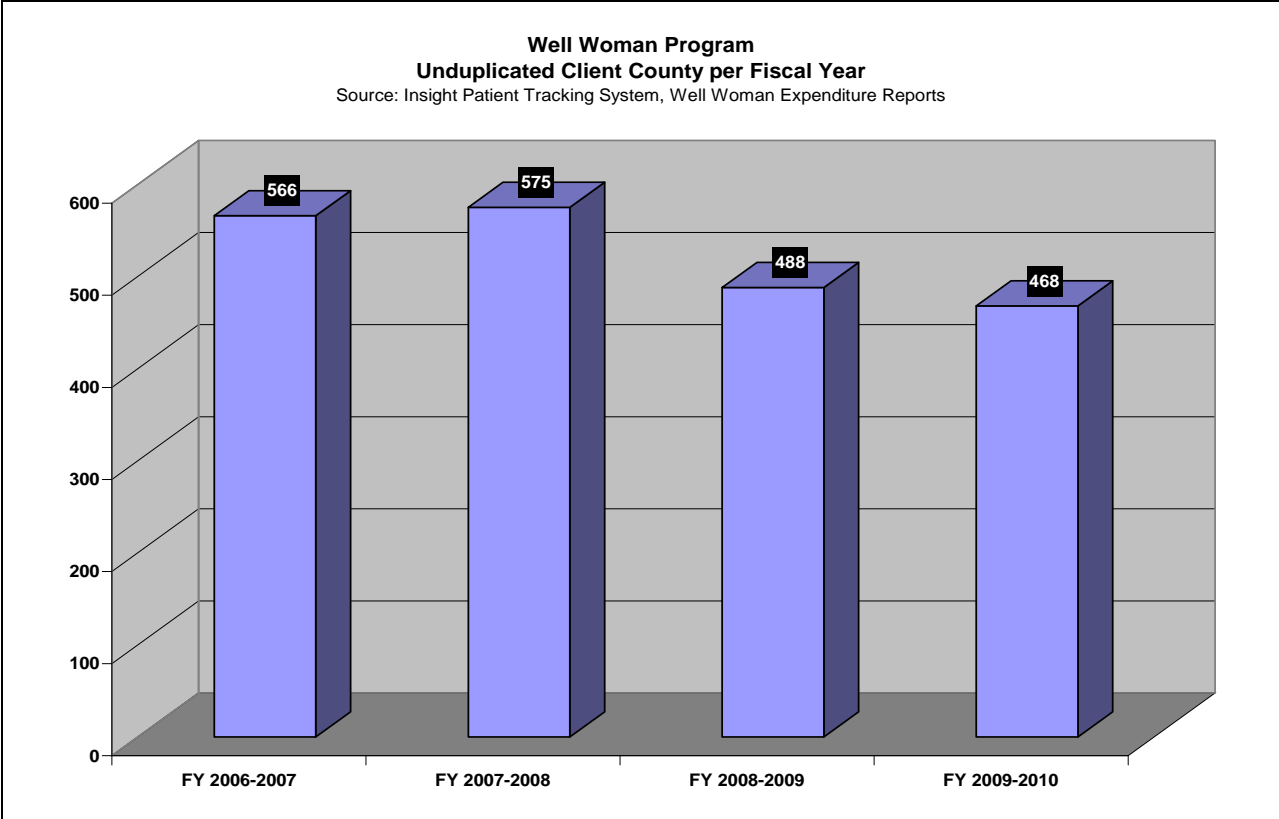
Well Woman Program

The Well Woman HealthCheck Program (WWHP) was established in 1993 as part of the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) administered by the Centers for Disease Control and Prevention (CDC). The Well Woman HealthCheck Program is a state-wide program that provides free cancer screening to women who qualify. In Pinal County, the WWHP funding comes from the Arizona Department of Health Services (ADHS), and grant funds are used to help low-income, uninsured, or underinsured communities, including migrant workers pay for services provided through this program. The Pinal County Public Health Services District offers a comprehensive breast health program through their Well Woman HealthCheck Program in eleven rural clinics throughout Pinal County. The program provides outreach, education, physical examinations, screening, diagnostic procedures, transportation services and patient navigation/guidance through the breast health system.

A very important grant deliverable in this program is the reporting of abnormal results within 60 days of the exam visit. This program focuses on early detection and prevention. Finding abnormal results and initiating referrals promptly helps to reduce

the risk of cancer or progressive spread of cancer. Out of the 468 clients seen in the Well Woman Program, 51.5% had abnormal results.





Major Accomplishments:

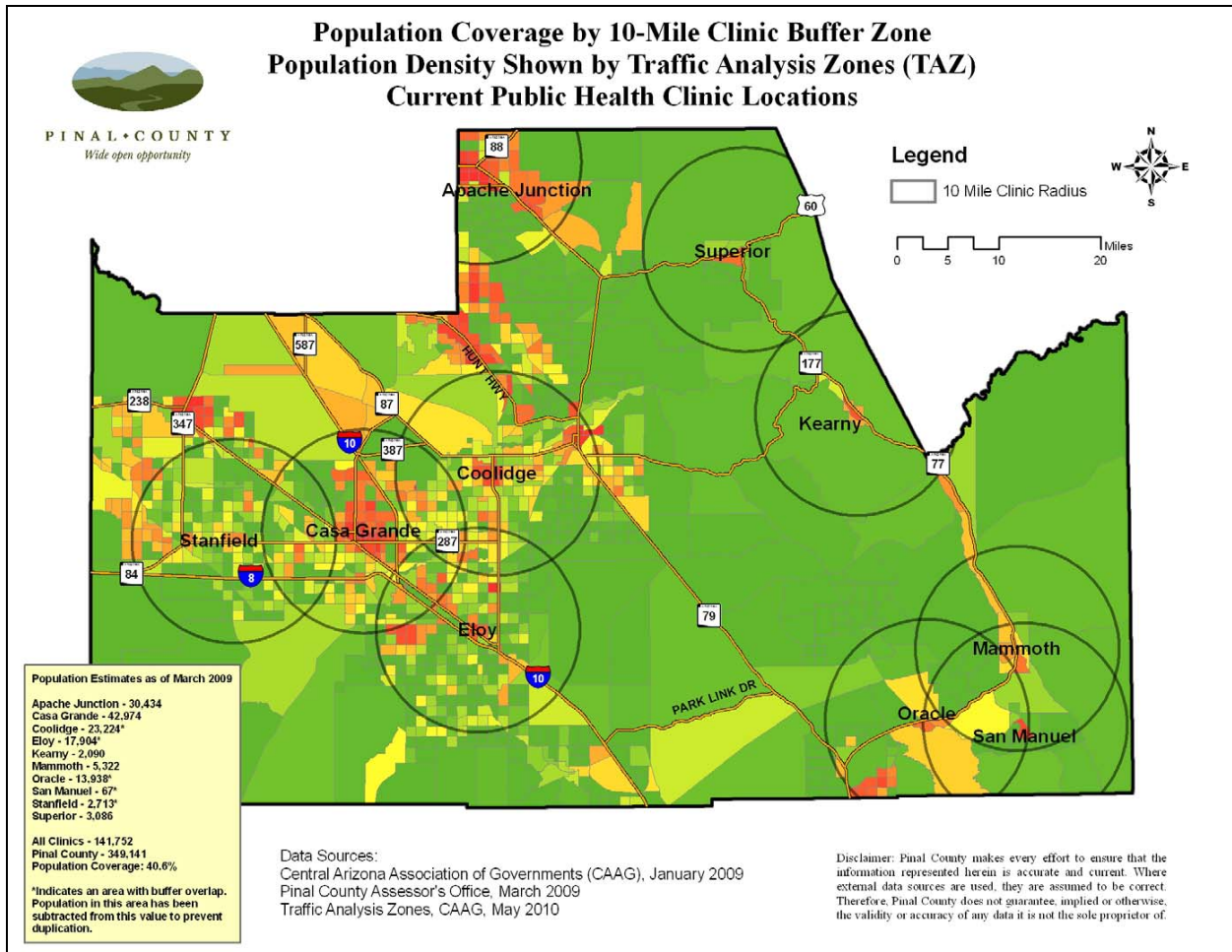
- 468 unduplicated female clients were seen in the Well Woman Program
- 93% of the clients with abnormal mammogram/clinical breast exam with completed work-up and final diagnosis recorded within 60 days of screening.
(Source: Managing for Results)

CLINIC OPERATIONS

Expansion of Public Health Services

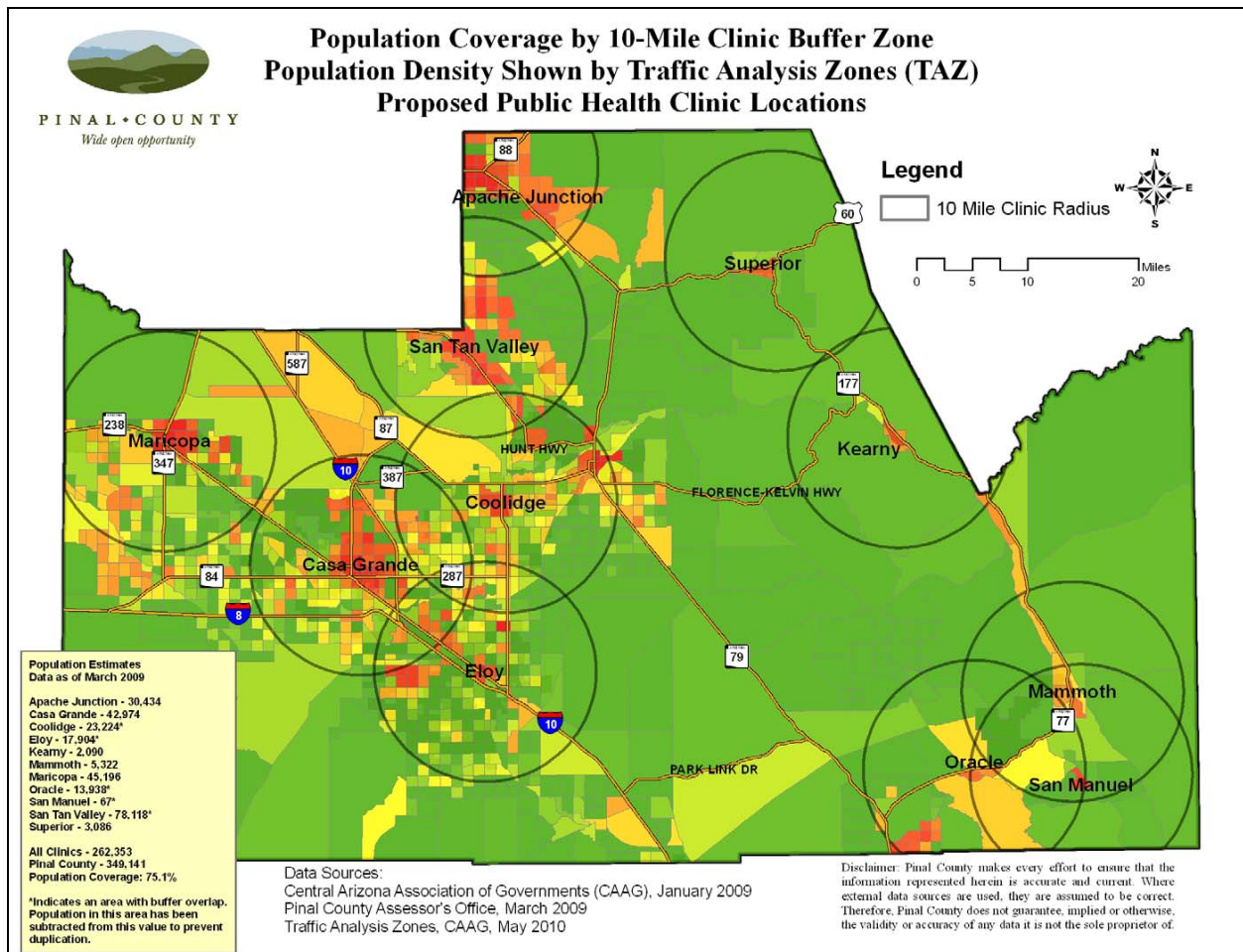
Accessibility to clinic services plays a vital role in successfully accomplishing public health initiatives. Currently, 60% of the residents of Pinal County do not have a public health clinic within 10 miles of where they live; and a large portion of this 60% live in San Tan Valley and Maricopa.

The following map represents the population coverage served by the Public Health Clinics.



After thorough analysis of both financial and service data, it was concluded that clinics should be placed in both of these areas.

The following map exemplifies the population coverage served by the Public Health Clinics if facilities are placed in Maricopa and San Tan Valley. All heavily populated areas are covered by Public Health services within a 10 mile radius.



As a result, the project was presented to the Board of Supervisors, and we are pleased to announce the Board approved the project for both clinics. Our conservative estimates show that the addition of these two clinics will increase the clients served by over 80%. This will result in a huge potential to increase the impact the Public Health Services District has on the health of the citizens by serving these areas. The goal is to have these clinics fully operational by the end of 2011.

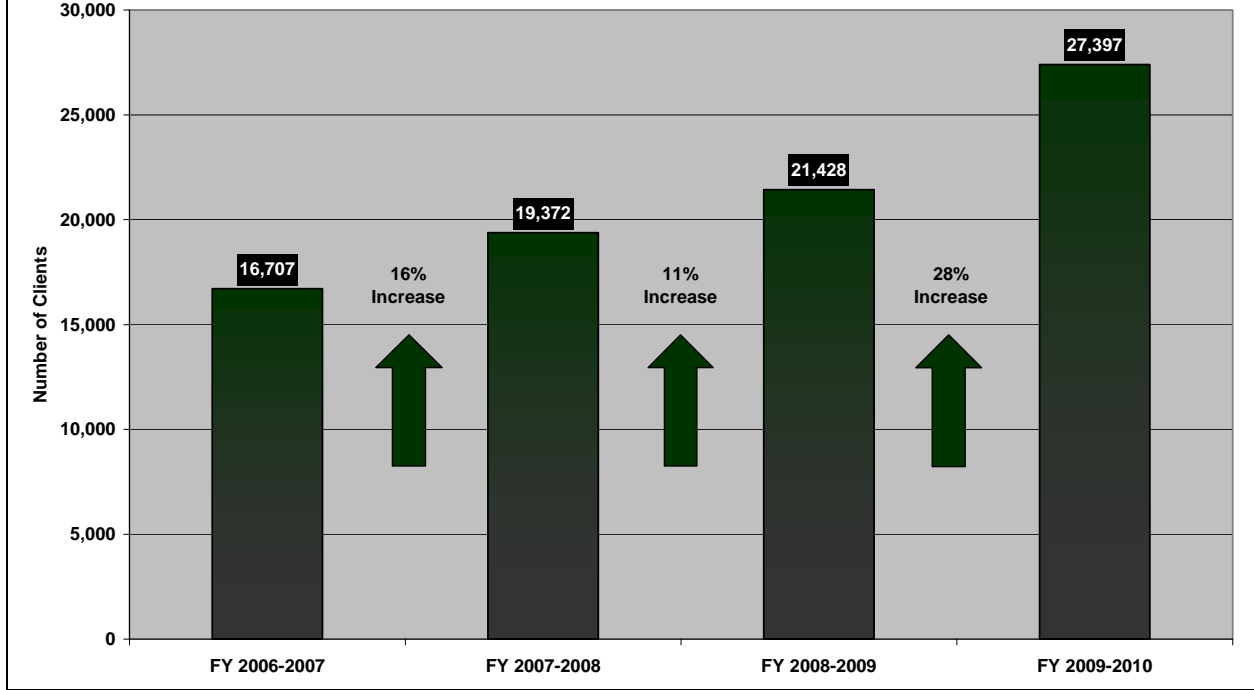
Clinic Utilization

While accessibility to clinic services is a key priority for the Pinal County Public Health Services District, efficient clinic operations must accompany this initiative. On a monthly basis, the Health District conducts an internal audit of the current resource allocation and clinic utilization among all its clinics. The analysis provides measures that allow for any necessary modifications in staff schedules, clinic schedules, and clinic locations in order to meet the key goal of optimum clinic utilization. Increased clinic utilization, efficient resource allocation, and reduced patient waiting times allows the clinics to see more clients and ultimately results in greater customer satisfaction.

As evidenced by the following chart, there has been a progressive increase in the amount of clients served by Community Health Nursing Services.

**Pinal County Public Health Services District
All Public Health Clinics
Community Health Nursing Services Clients Served
Percentage Change as of June 30, 2010**

Source: Pinal County Public Health Services District, Insight Patient Tracking System, EN01

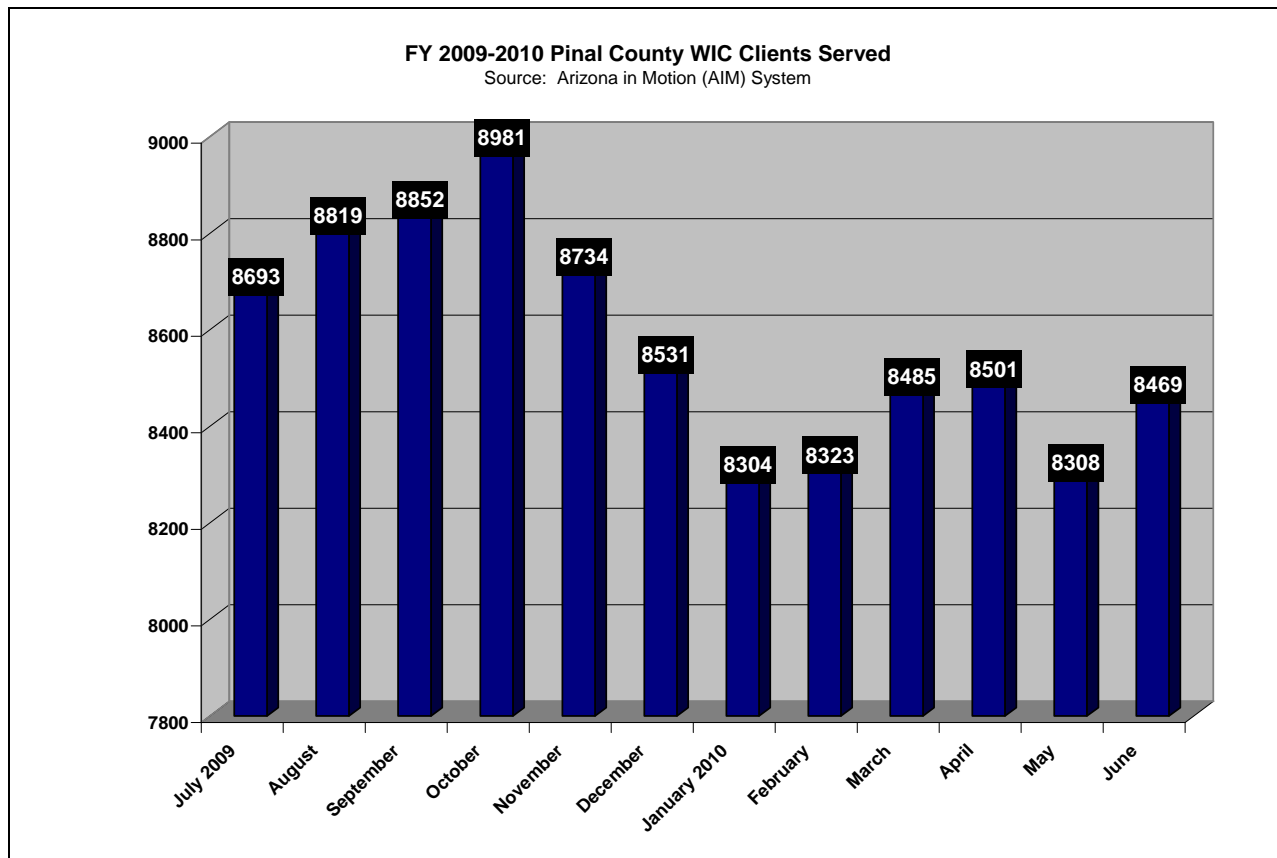


PUBLIC HEALTH NUTRITION

Women Infants and Children (WIC) Participation

WIC provides nutrition education and a monthly food package to low income pregnant, post-partum, and breastfeeding women; and infants and children under age 5 who have a nutrition risk.

The following chart illustrates the number of WIC clients served in fiscal year 2009-2010:

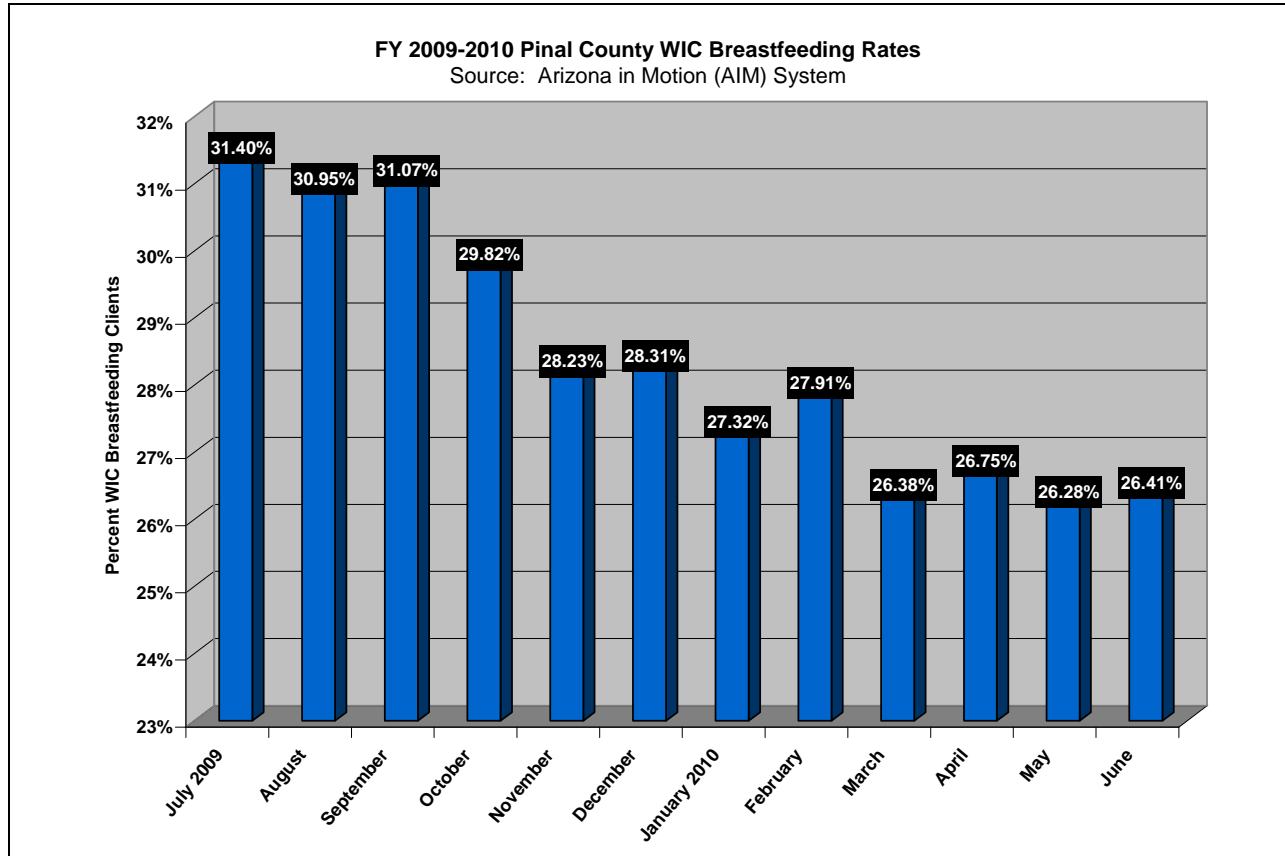


For the last six months, the percentage of clients that are eligible for WIC services has declined. The economic downturn has caused many of the eligible clients to leave the area. WIC staff continues to conduct aggressive outreach to newly eligible WIC clients in the county.

Breastfeeding peer counseling services is a vital component to WIC. Of the eligible WIC clients in the county, these clients also are eligible to receive breastfeeding counseling. This year, the Breastfeeding Coordinator passed the exam to become an International Board Certified Lactation Consultant. This allowed the county to become eligible for a Breastfeeding Peer Counseling grant which provides eligible county WIC

clients the ability to receive lactation consultation. The grant award was \$123,000. These funds have been used to increase staffing in order to meet client demand.

The following chart illustrates the WIC Breastfeeding rates for the 2009-2010 fiscal year:



While counseling services increased, the percentage of clients that traditionally breastfeed declined. Due to the economic downturn, many of the clients had to enter the workforce as their partners lost their jobs. Statistically, WIC clients typically work in low paying positions where employers may not have a breastfeeding support program in which clients are given the opportunity to pump breast milk. The Breastfeeding Peer Counselors continue to focus on outreach services to all eligible clients.

Community Supplemental Food Program (CSFP)

The Community Supplemental Food Program provides a monthly food box to low income pregnant, post-partum, and breastfeeding women; children under age 6; and elderly age 60 plus.



What is provided in a food box?

Food boxes contain 40 pounds of pre-packaged food including:

- Canned meat
- Canned fruit
- Powdered or canned milk
- Cheese
- Canned vegetables
- Canned juice
- Hot or cold cereal

Bonus items: beans, canned beef stew, or macaroni

Major Accomplishments:

- Farmer's Market: WIC staff distributed Farmer's Market Coupons (worth \$30) to 700 women and children, and 832 elderly clients so that they were able to purchase fresh fruits and vegetables.
- The Commodity Supplemental Food Program distributed 17,015 food boxes to eligible women, children, and senior citizens.
- Pinal County Public Health Services District served 103,000 WIC clients.
- 3,610 women received Breastfeeding Peer Counseling through the WIC Program.

Diabetes Education

Diabetes continues to afflict millions of Americans. While diabetic case management services are not within the scope of the Health District, outreach and educational services are.

The Diabetes Education began in October 2008. Diabetes Support Groups are being provided to Pinal County residents in Mammoth, Casa Grande, Maricopa, Florence, Apache Junction, and Eloy. Other nutrition presentations are provided upon request. The support groups provide monthly diabetes education along with tips, information, recipes, and discussion. The following table lists the monthly topics discussed in the support group meetings.

Curriculum for Diabetes Support Groups 2009-2010

Month	Support Group Topics
July 2009	Healthy Eating Conversation Map
August	Diabetes Complications
September	Side-by-Side: A Partner Approach to Diabetes Self-Care
October	Diabetes Medications and Sick Days
November	Surviving the Holidays with Diabetes
December	Hot Diabetes Topics in 2010
January 2010	Diabetic Foot Care
February	Diabetes and the Heart: Get Heart Smart
March	The Seven Wonders of Diabetes Management
April	Diabetic Eye and Kidney Health
May	Diabetes, Depression, and Stress
June	Healthy Eating and Diabetes

The project is staffed solely by the Program Coordinator. The Coordinator travels throughout the county to provide diabetes information at health fairs and for community presentations. Participants in health fairs and presentations are given a risk factor test for diabetes and referred to their primary care provider if needed.

Major Accomplishments:

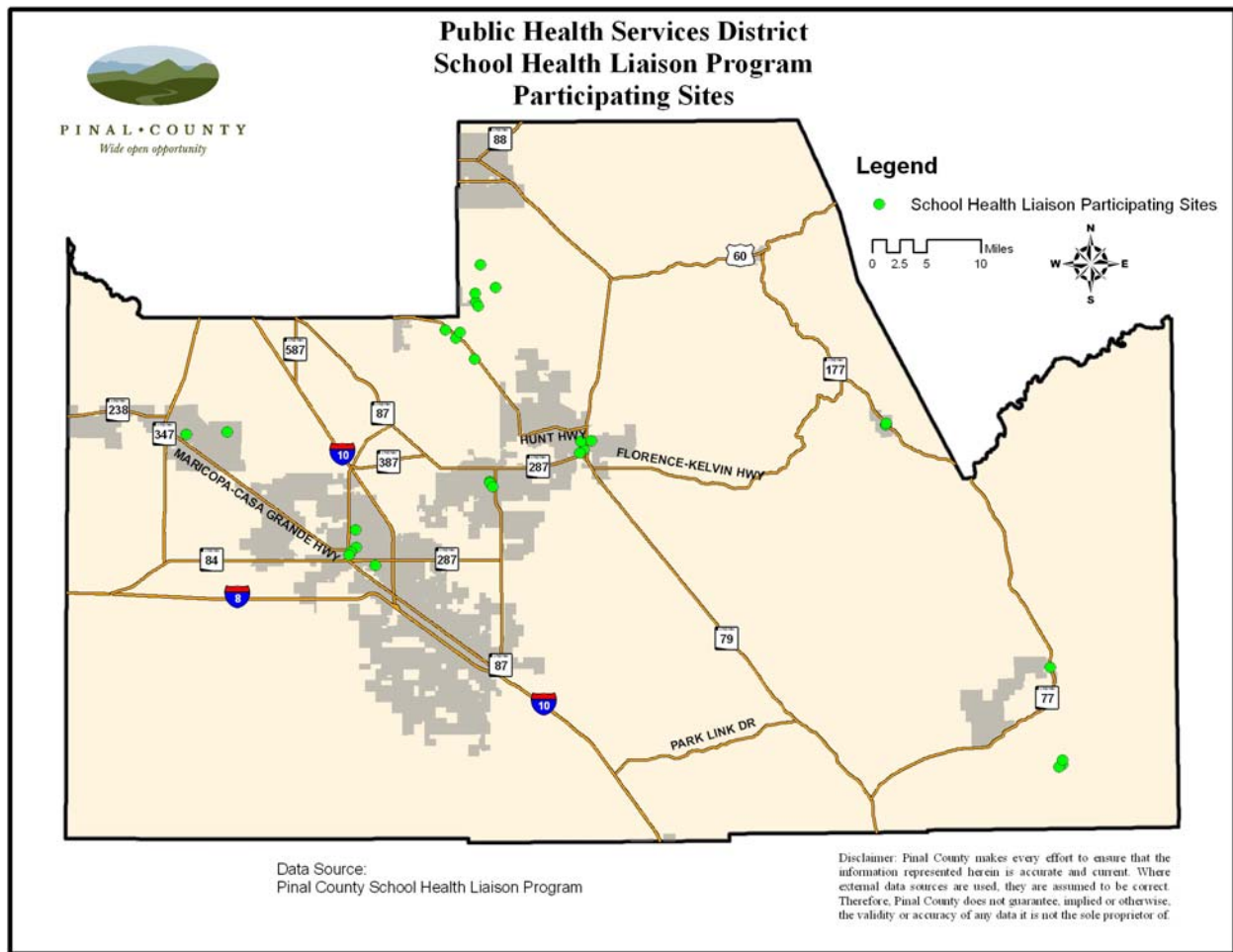
- Diabetes Support Groups were provided to residents in Maricopa, Florence, Casa Grande, Eloy, Mammoth, and Apache Junction.
 - The program served 667 people, a 62.3% increase from last year
 - Annual Diabetes Fair served 300+ people

PUBLIC HEALTH EDUCATION AND OUTREACH SERVICES

School Health Liaison Program

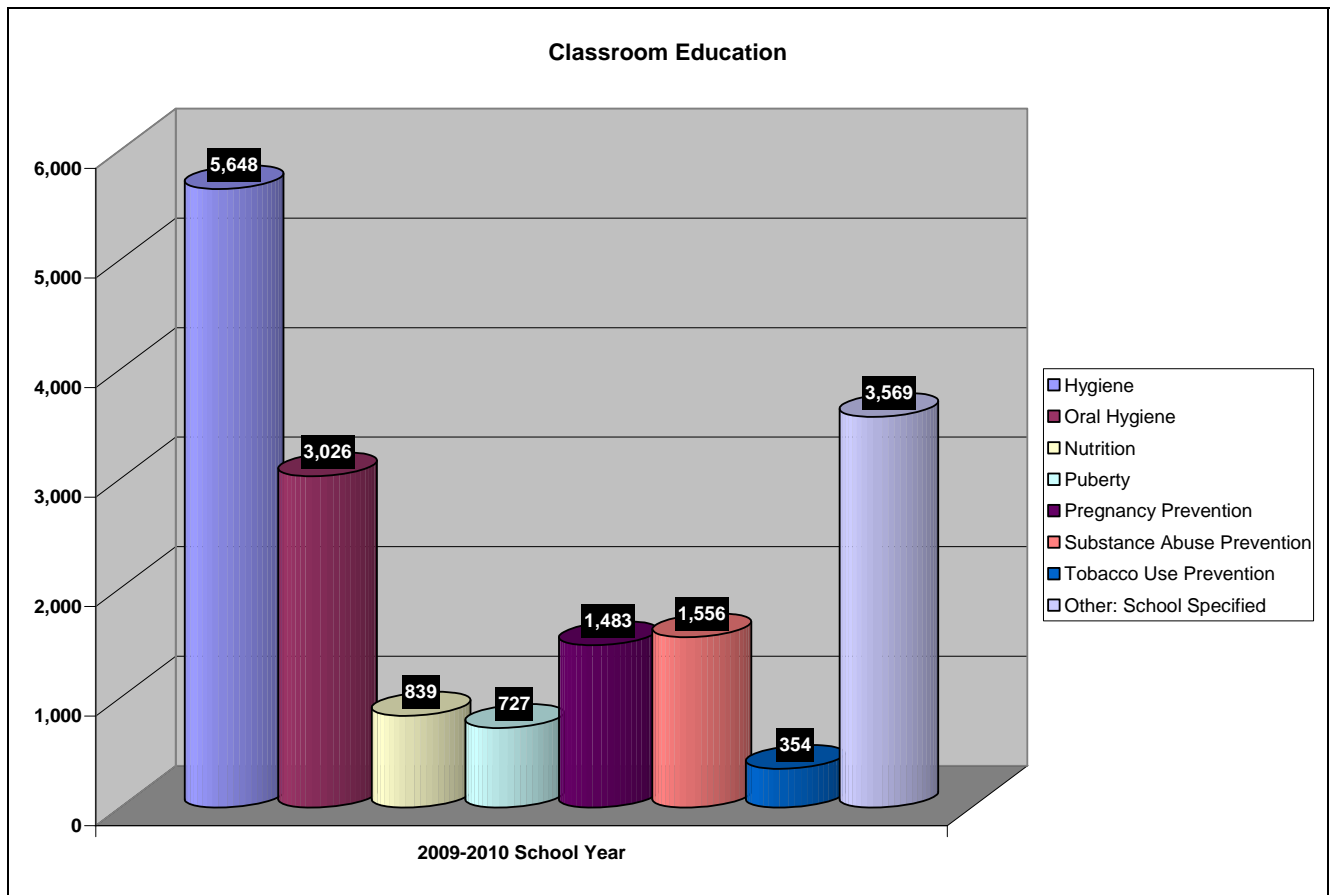
The School Health Liaison Program was created following the Pinal County Board of Supervisors' approval of the creation of a Public Health District. The program is funded by the Public Health District and the ADHS Bureau of Tobacco and Chronic Disease. The goals of the program are to:

- Improve the efficiency and span of Public Health services available to Pinal County residents, specifically school-aged children and their families;
- Help school districts maintain optimal health and safety conditions for students; and
- Provide a reliable “point person” for school administrators to obtain available services to meet their site’s public health needs.



A unique aspect of the School Health Liaison Program is that school staff determine health education priorities based upon the Public Health needs of their school. In addition to services that are offered universally, such as health articles for parent newsletters, links to Public Health programs, and information about communicable diseases, the Program tailors Public Health education to meet the needs of the school.

The following chart illustrates the types of health education provided by the School Health Liaison Program:



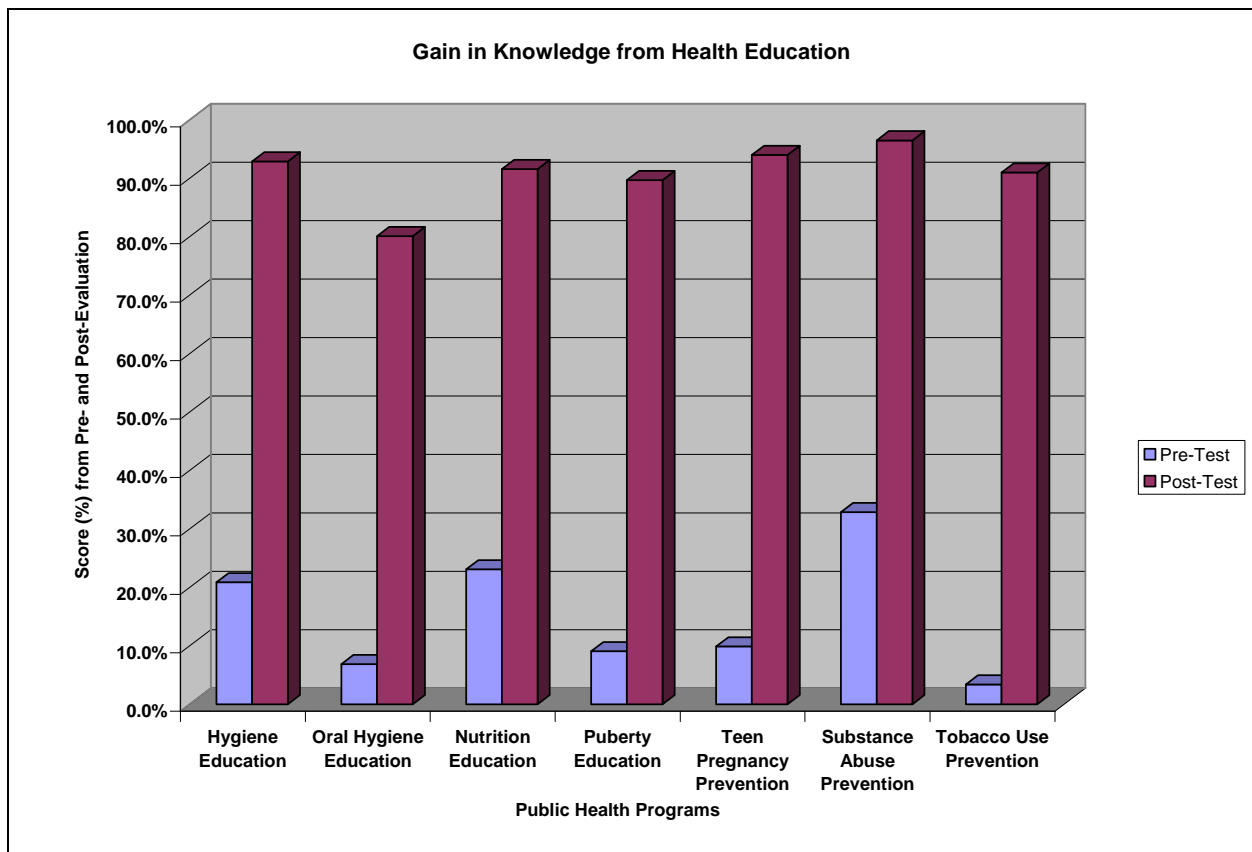
Participating Schools

- ❖ **Casa Grande Elementary School District:** Palo Verde Elementary, Saguaro Elementary, Villago Middle School, Cactus Middle School, and Casa Grande Middle School
- ❖ **Coolidge Unified School District:** West School Elementary School, Heartland Ranch Elementary School, Hohokam Middle School, Mountain Vista Middle School, and San Tan Heights Elementary School.
- ❖ **Florence Unified School District:** Florence K-8 School, Skyline (K-8), Florence High School, Walker Butte (K-8), and Magma Ranch (K-8)

- ❖ **JO Combs School District:** Ranch Elementary, Simonton Elementary, Ellsworth Elementary, Harmon Elementary, JO Combs Middle/High School
- ❖ **Juvenile Justice Center**
- ❖ **Mammoth/San Manuel Unified School District:** San Manuel Junior/Senior High, Mammoth Elementary/STEM, and First Avenue Elementary School.
- ❖ **Maricopa Unified School District:** Butterfield Elementary, Maricopa Wells Middle School, Saddleback Elementary, Desert Wind Middle School, and Maricopa High School
- ❖ **Ray Unified School District:** Ray Primary School and Ray Elementary

Major Accomplishments:

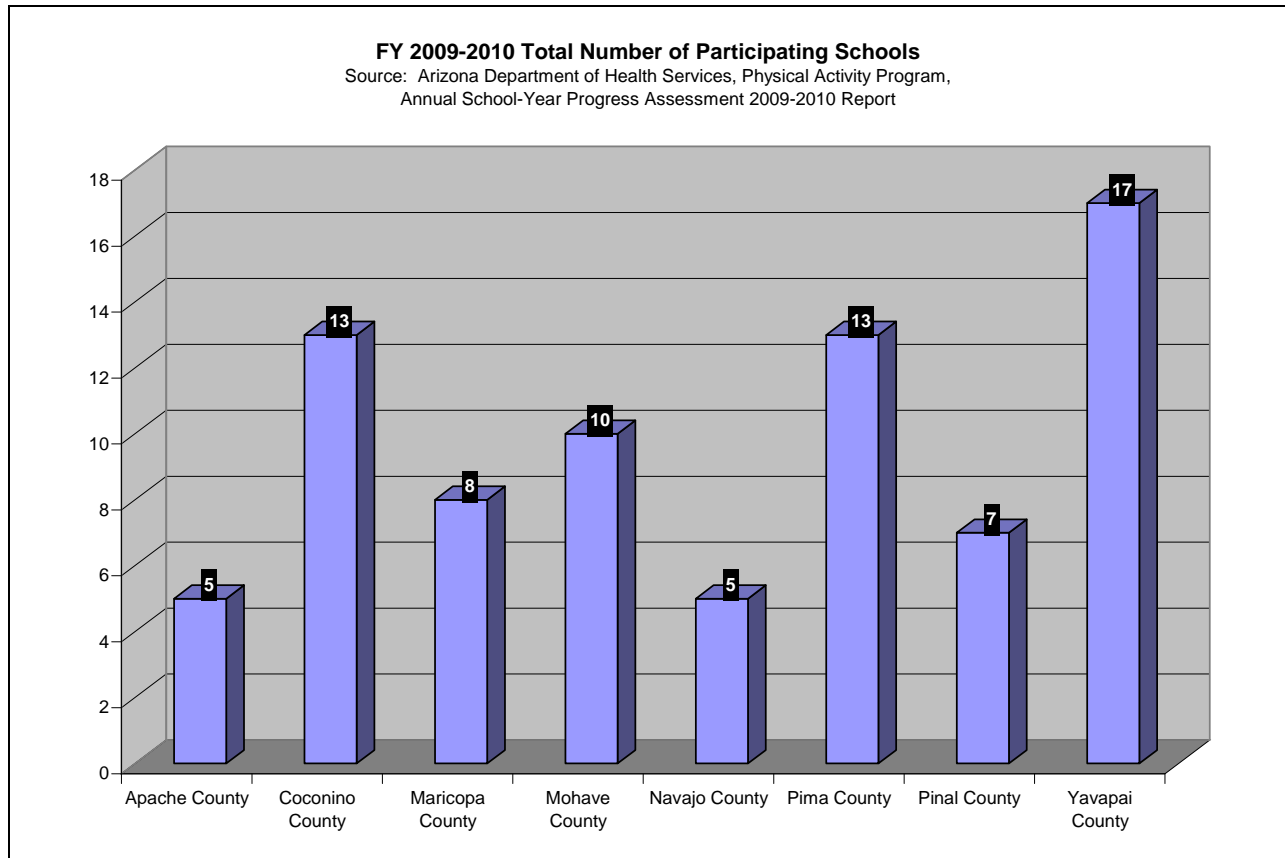
Evaluating the students' retention of knowledge from the health programs allows the School Health Liaisons to measure the effectiveness of the program content. The following graph illustrates the substantial gain in knowledge. One particular health program to monitor is Substance Abuse Prevention. This program assists the Public Health Services District in accomplishing one of the strategic goals: Methamphetamine Education.



Physical Activity Program

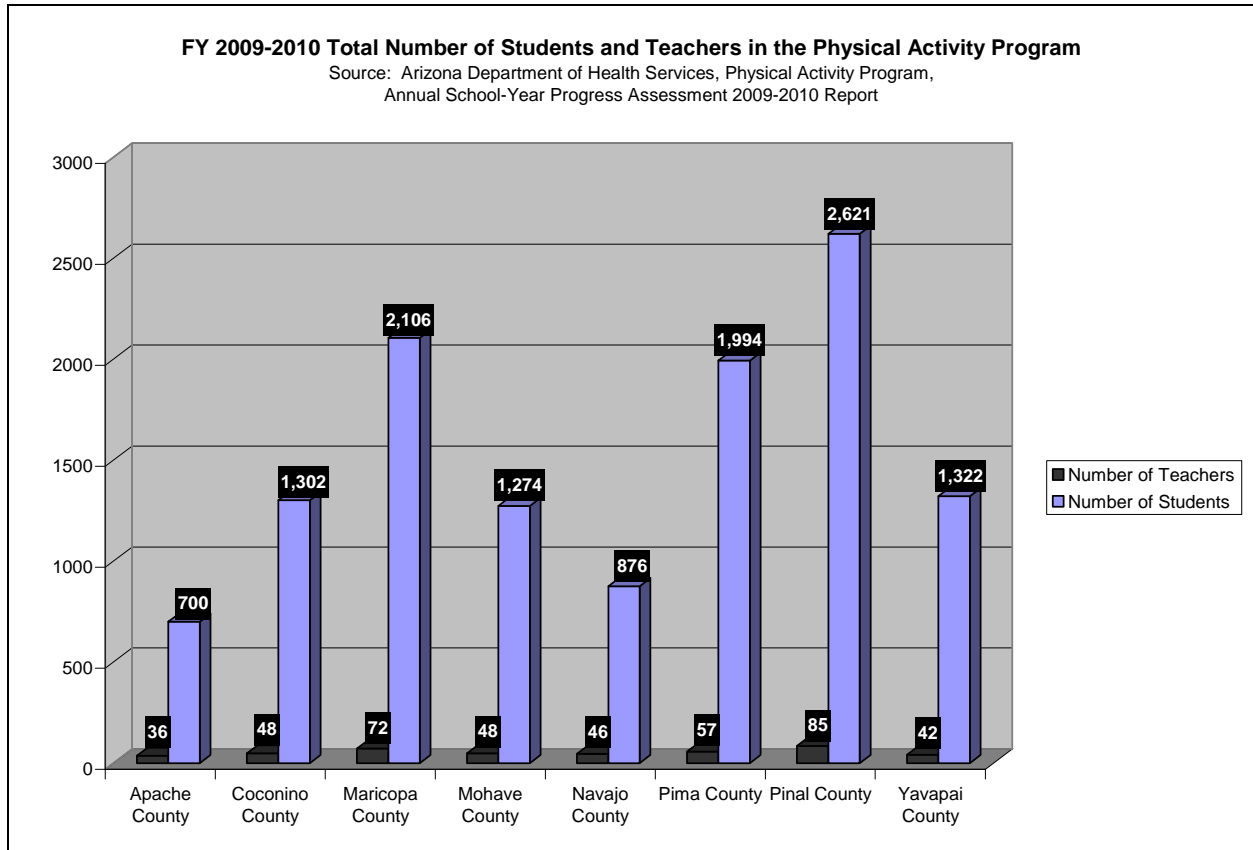
The Pinal County Physical Activity Program seeks to promote regular physical activity among youth to prevent chronic illnesses such as cardiovascular disease. Students in grades 4-8 are taught interactive lessons on the importance of having a healthy heart while being physically active for at least 60 minutes a day. The program model encourages teachers to incorporate non-competitive sports into daily classroom routines. One Program Coordinator is assigned to this program. Countless hours and dedication are spent to increase awareness and promote healthy, active lifestyles.

In comparison to larger urban areas with more population and more staffing assigned to the program, Pinal County has a large number of participating schools despite the limited staffing.



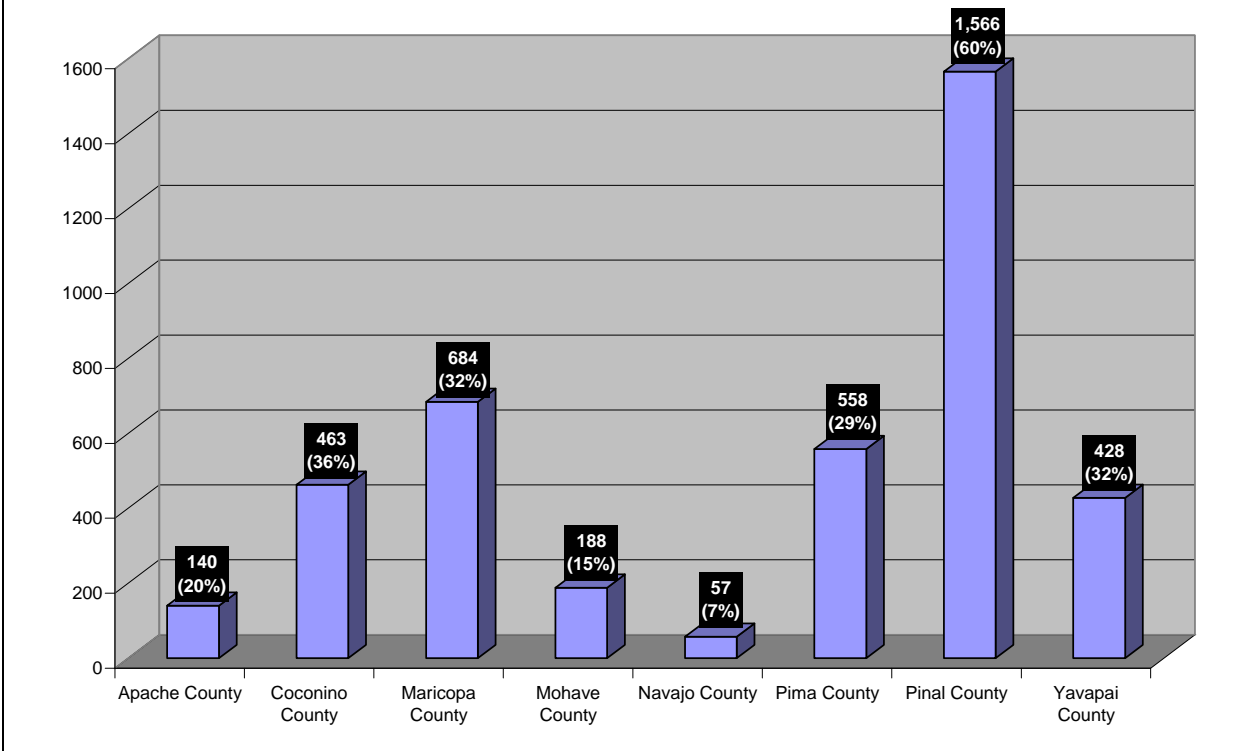
Major Accomplishments:

- Out of all of the counties in the entire state, Pinal County has the highest amount of students and the highest amount of teachers participating in the Physical Activity Program.



- Out of all the counties in the entire state, Pinal County has the highest number of students earning the Presidential Active Lifestyle Award. 60% of the students in the program earn the prestigious award.

FY 2009-2010 Number of Students Earning the Presidential Active Lifestyle Award
 Source: Arizona Department of Health Services, Physical Activity Program,
 Annual School-Year Progress Assessment 2009-2010



Additional physical activity program:

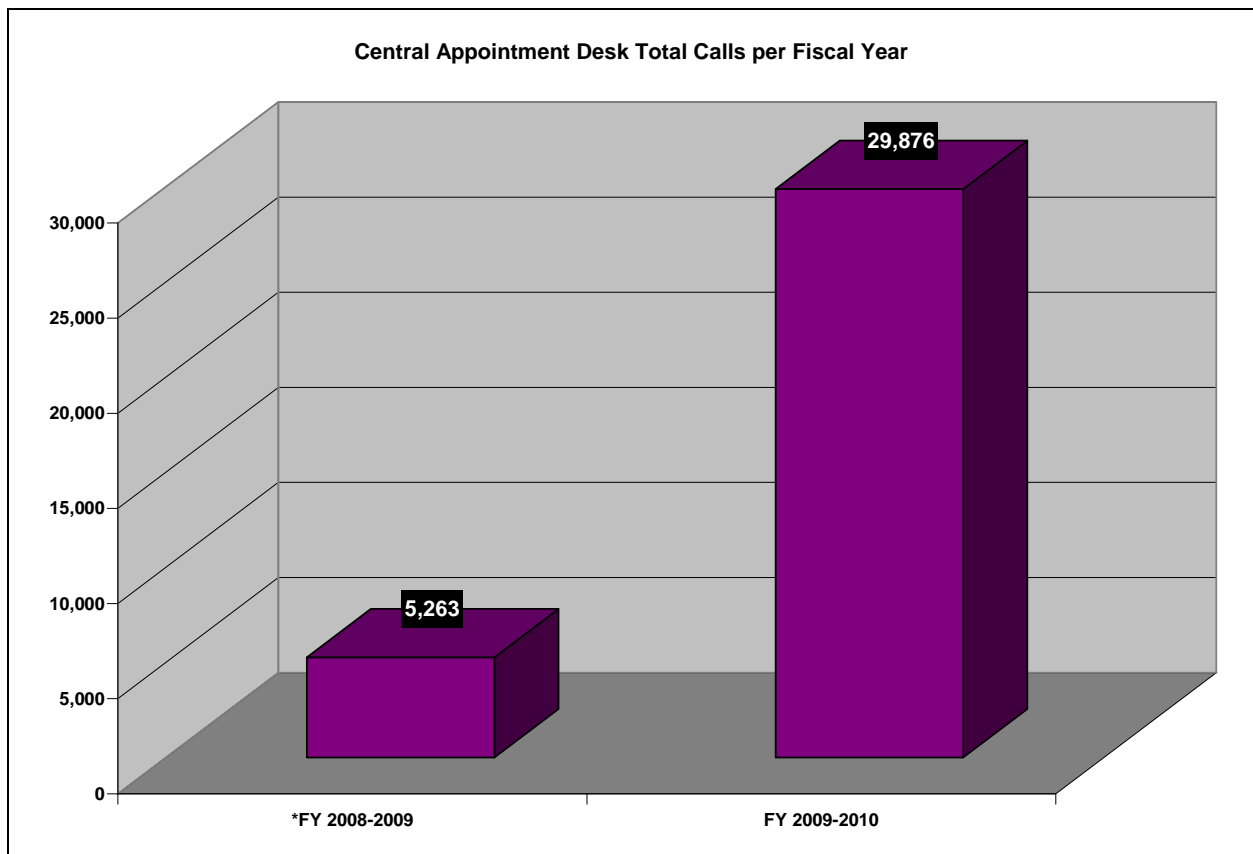
The Walk Everyday Live Longer Arizona, (WELL AZ) Program is a 5-week community based walking program targeted to high school students & adults. The overall goal of the program is to increase the physical activity levels of sedentary Pinal County residents.

- 125 Adults participated in the WELL Arizona Program, aimed at increasing physical activity among adults.

PUBLIC HEALTH SERVICES CENTRAL APPOINTMENT DESK

The main objective for the Central Appointment is to centralize phone calls and to provide appointment scheduling for the Public Health Mobile Unit and 9 Public Health clinics. The Central Appointment Desk provides scheduling for all WIC and Family Planning appointments. From July 2009 to June 2010, with 4 employees, the Central Appointment Desk received 29,876 calls. Despite the limited staff, on average, callers experienced a wait time of only 2 minutes.

For general information, or to schedule appointments for Woman Infants and Children (WIC), Well Woman Health Check, or Family Planning, please call the Central Appointment Desk toll free at 1-866-960-0633, Monday through Friday from 8:00am to 5:00pm. Immunizations for children up to 19 years are free of charge and are available without an appointment at any of the clinic locations.



*Call count began mid-fiscal year for 2008-2009.

PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE (PHEPR)

The Public Health Emergency Preparedness and Response (PHEPR) Section was created to prepare and respond to public health threats and emergencies from various sources, such as natural disasters, disease outbreaks, bioterrorism events and chemical terrorism events. Several focus areas include but are not limited to planning and readiness activities, disease surveillance and enhancement, risk communications, public information and training and education.

The PHEPR Program identifies and develops procedures to enhance disease surveillance and public health response to biological and chemical threats as well as natural disasters. In addition, program staff actively collaborates with state and federal agencies, emergency management, law enforcement, first responders, medical facilities and Tribal agencies in developing response plans, presenting training and educational programs and providing information to the public about biological and chemical agents and events which may impact the health of county residents.

The program encompasses two federal grants from the Centers for Disease Control and Prevention (CDC):

- Public Health Emergency Preparedness Grant (PHEP)
- Cities Readiness Initiative Grant (CRI)

Public Health Emergency Preparedness

Under the PHEP grant, the Emergency Preparedness and Response Section accomplishes several annual deliverables that focus on all-hazards preparedness planning. For the 2009-2010 grant year, all counties were required to submit the Project Public Health Ready to the National Association of County and City Health Officials (NACCHO). NACCHO represents local health departments. The Project Public Health Ready (PPHR) is a competency-based training and recognition program that assesses preparedness levels to respond to any public health emergency. It builds preparedness capacity and capability through a continuous quality improvement model. The PPHR criteria are the only known national standards for local public health preparedness and are updated annually to incorporate the most recent federal initiatives. Each of the three PPHR project goals—all-hazards preparedness planning, workforce capacity development, and demonstration of readiness through exercises or real events—has a comprehensive list of standards that must be met in order to achieve PPHR recognition.

The Emergency Preparedness and Response Section planning staff spent countless hours to compile very detailed, comprehensive planning documents that addressed all of the PPHR criteria. PPHR has been submitted to the NACCHO reviewers and the Health District should receive results by the end of 2010.

The CDC Cities Readiness Initiative (CRI) and Strategic National Stockpile (SNS)

Pinal County was recognized as a CRI/SNS applicable county in August (2008). Funding enabled the Health District to focus attentions on enhancing the preparedness levels in relation to mass prophylaxis.

The Cities Readiness Initiative (CRI) is a federally funded effort to prepare major US cities and metropolitan areas to effectively respond to a large scale bioterrorist event. CRI facilitates the transformation of federal, state, city, county, and civilian entities to become fluid in performing supply chain processes to move stockpiled antibiotics to end-user populations. It focuses on a 48-hour time frame to dispense antibiotics to all affected populations after initial exposure.

Major components required to complete mass prophylaxis:

- Established infrastructure
- Identifying all populations and demographics
- Obtaining prophylaxis and supplies needed
- Stockpiling all supplies
- Designating sites to conduct mass prophylaxis
 - **Points of Dispensing Sites (PODS)**

The Centers for Disease Control and Prevention (CDC) Cities Readiness Initiative (CRI)/Strategic National Stockpile (SNS) Local-Technical Assistance Review is a national score card for preparedness during SNS-related events. The CDC audits all components of the county's SNS preparedness plans. Out of 100 points possible, the county must receive a minimum score of 70 in order to continue receiving funding for preparedness planning. There are 72 cities (at least 1 in each state) that meet the criteria for this funding. There are two counties in Arizona that receive this funding (Maricopa and Pinal). At the state level, the CDC also audits the Arizona Department of Health Services preparedness plans and assigns a score to the state.

The following capabilities are audited during the Local Technical Assistance Review (L-TAR). Each capability carries a certain weight of the score as indicated by the percentage:

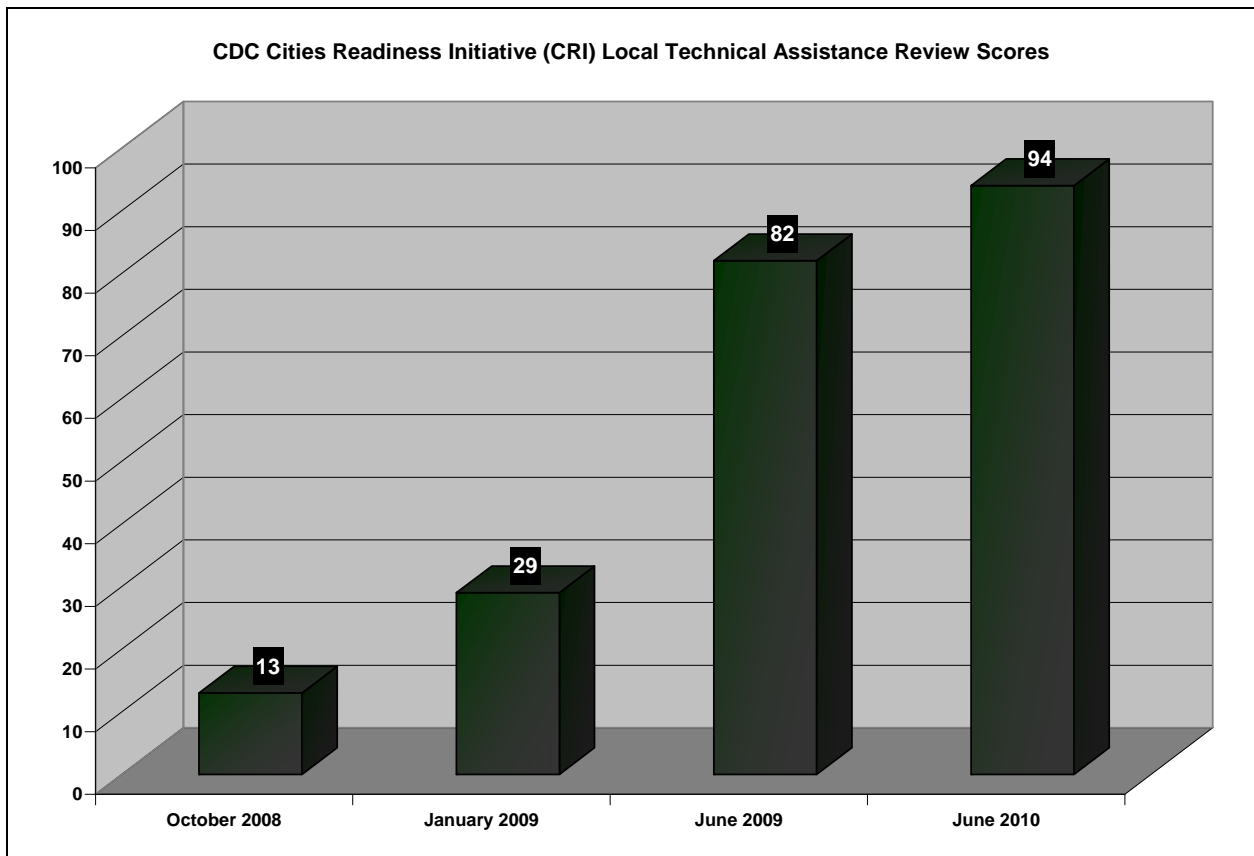
- Baseline Data
 - Provides data on local population, demographics, number of PODS, number of staff and volunteers.
 - GOAL: 100% of the population prophylaxed in 48 hours
- Developing a SNS Plan (3%)
- Management of SNS and Command/Control (10%)
- Requesting SNS (3%)
- Tactical Communication (3%)
- Public Information and Communication (7%)
- Security (10%)
- Regional/Local Distribution Site (14%)

- Controlling Inventory (3%)
- Distribution (10%)
- Dispensing Prophylaxis (24%)
- Treatment Center Coordination (3%)
- Training, Exercise, and Evaluation (10%)

Major Accomplishments:

The CDC performed the Local Technical Assistance Review in June 2010. The Health District is proud to report Pinal County received a score of **94 out of 100** possible points for the CDC site evaluation for strategic national stockpile capability. This is a 15% increase from last year’s score and a 600% increase from the initial audit.

The following chart illustrates the rapid progression of reaching such a high score:



2010 School-Based Immunization Clinics Mass Vaccination Exercise

Collaborative efforts between the Clinic Operations, the Emergency Preparedness and Response Division, and the School Health Liaison Program resulted in Pinal County Public Health Services District conducting twelve back-to-school immunization clinics during the months of July and August. Because there was funding available through residual H1N1 Planning funds and deliverables to be completed for the Centers for Disease Control and Prevention (CDC) Cities Readiness Initiative (CRI) Grant, these clinics were considered full-scale exercises. No health district funds were spent.

The Health District set out to complete the following objectives:

- Provide required childhood vaccinations for school-aged children in major school districts within Pinal County.
- Decrease demand in the existing Public Health clinic facilities and hopefully with the healthcare providers throughout the county.
- Increase accessibility of immunizations for the public.
- Increase preparedness levels and mass vaccination skills of the Public Health staff.
- Master clinic set up and efficient through-put design.
- Assess through-put of multi-vaccinations.
- Apply the Incident Command System to a real-life event.

The following schools throughout the county hosted the immunization clinics. The numbers represented the number of school-aged children that received back-to-school immunizations at each facility:

- Florence K-8: 66
- Walker Butte: 155
- Eloy: 0
- Desert Winds: 29
- Maricopa High: 28
- San Manuel: 8
- J.O. Combs: 68
- Kearny: 21
- Coolidge: 18
- Mesquite: 14
- Cottonwood: 11
- McCartney: 26

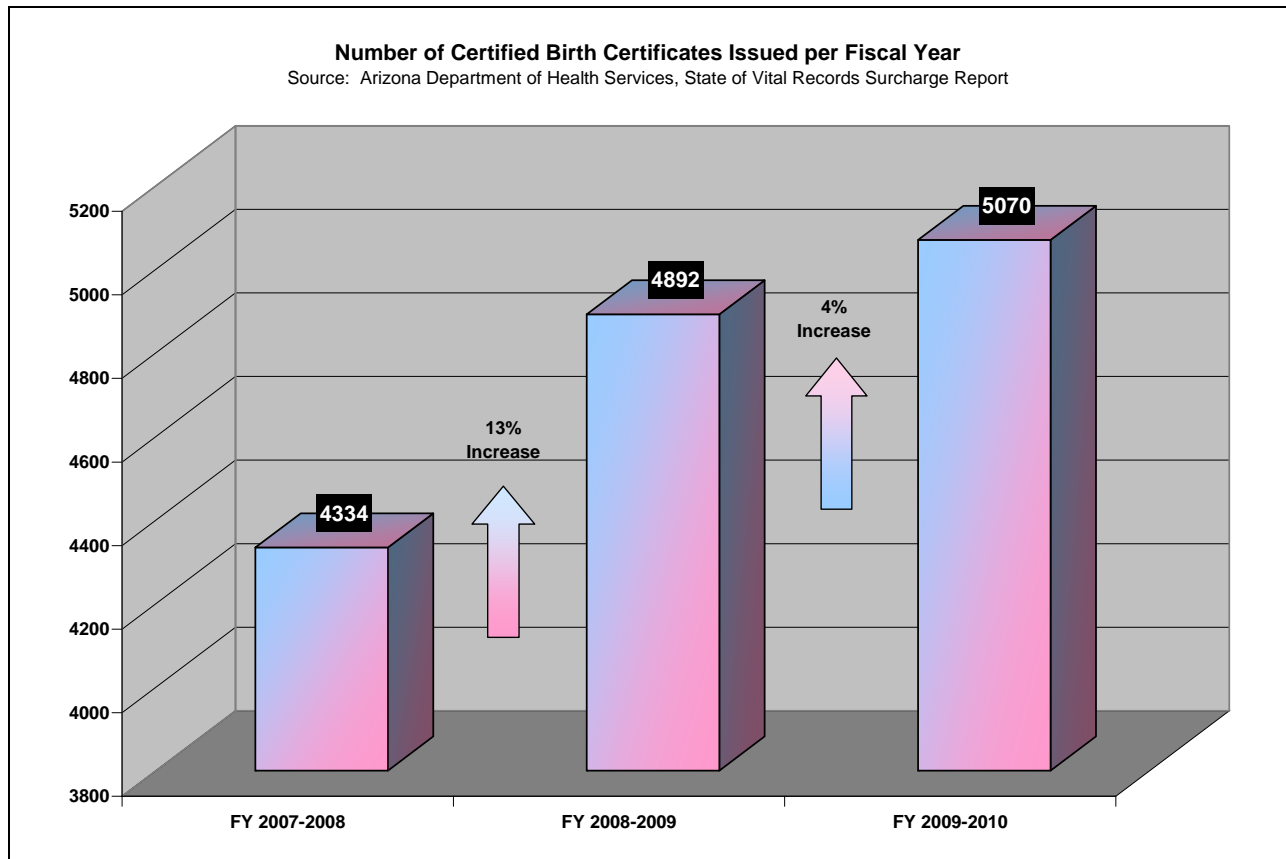
A grand total of 444 school-aged children received back-to-school immunizations. On average, each child received up to 3 vaccines. As a result, there were approximately 1,332 doses of vaccine administered.

VITAL RECORDS

Birth Certificates

The Public Health Services District Vital Records Department is responsible for issuing certified copies of birth certificates for anyone born in the state of Arizona after 1950. Other vital records services offered for birth certificates include record amendments, corrections, and official acknowledgment of paternity.

It is important to note the Vital Records Department is not responsible for tracking births in the county. The number of certified birth certificates does not reflect the number of actual births occurring in the county. The general public can obtain certified copies of birth certificates originating from other counties in Arizona via the Health District's Vital Records Department.

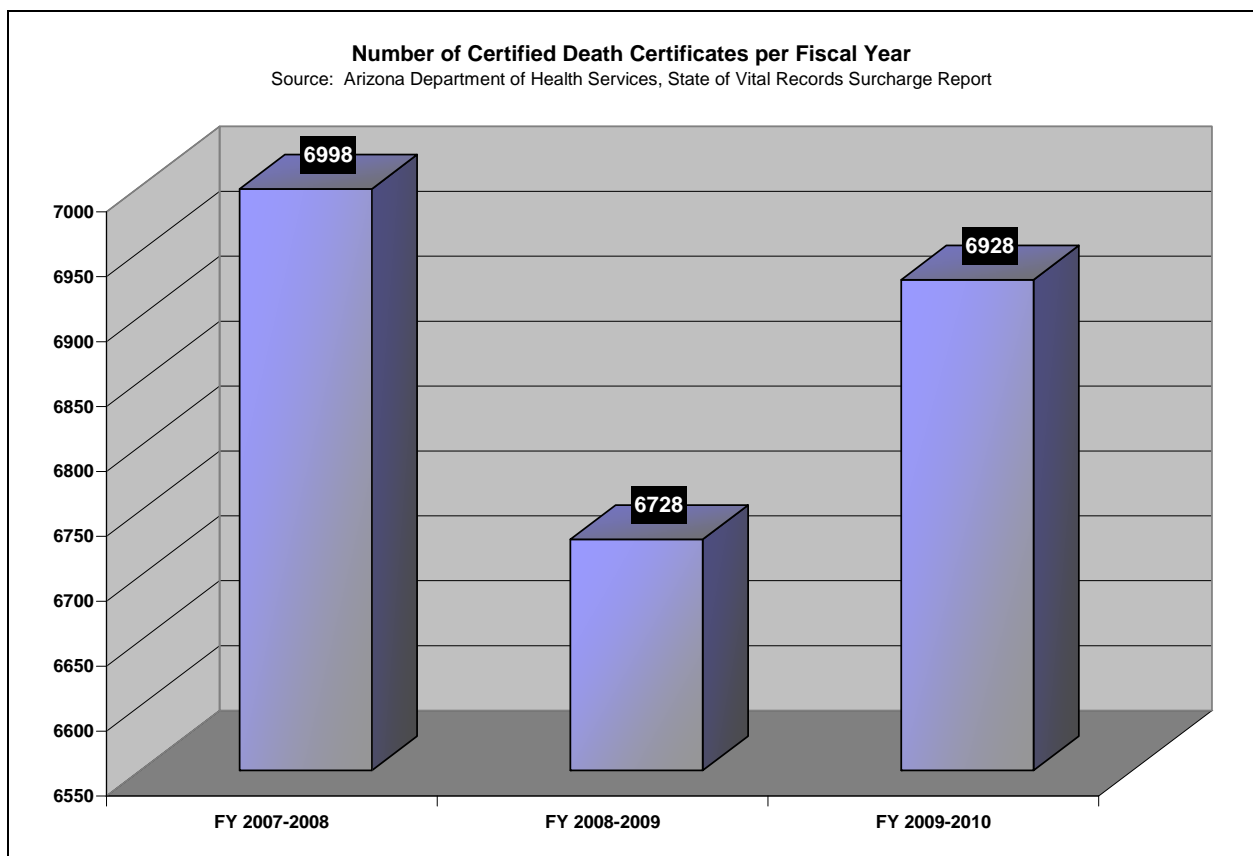


- Annual Totals
 - 5,070 certified birth certificates were issued in 2009-2010, which is a 4% increase from the previous year.

Death Certificates

The Public Health Services District Vital Records Department is responsible for maintaining and issuing certified copies of death certificates, including fetal death certificates and certificates of birth resulting in stillbirth events.

It is important to note the Vital Records Department is not responsible for tracking deaths in the county. The number of certified death certificates does not reflect the number of actual deaths occurring in the county. The general public can obtain certified copies of death certificates originating in any county in Arizona via the Health District's Vital Records Department.



- Annual Totals
 - 6,928 certified death certificates were issued in 2009-2010