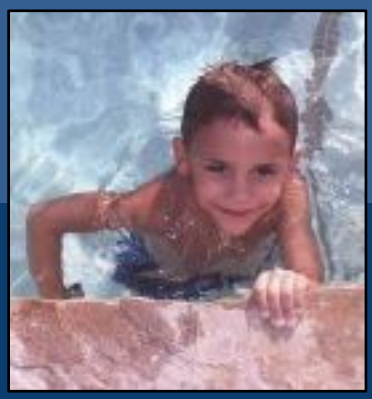
Imperial County Health Status Report 2008

A publication of the Imperial County Public Health Department



EXECUTIVE SUMMARY

The Imperial County Public Health Department is pleased to present the *Public Health Status Report 2008*.

Monitoring the community's health status is a core function of public health. Data collected at the county and state levels from birth and death records, hospital discharge documents, and disease reports are used to help assess our health status. Imperial County's health indicators are compared with California overall and, where possible, to standards set by the Healthy People 2010 initiative for improving our nation's health. The Healthy People 2010 national objectives focus on increasing quality and years of healthy life and decreasing health disparities.

The data presented will help us better understand the health trends that are of importance to our community. This report can be used by local organizations, elected officials, and health-care providers as a guide for program development and allocation of resources.

The first edition of the Imperial County Public Health Status Report was published in 2002 to provide a foundation and baseline for future reviews of important health trends and issues. This edition is expanded and provides greater detail on topics of particular interest for our community.

Many factors contribute to the overall health status of a community. Some of those factors can be improved through public health measures, while others cannot. Childhood vaccinations are one of most significant public health measures to date and have greatly reduced the number of cases of certain communicable diseases such as measles, mumps, and rubella. Other factors are more global in nature and cannot be addressed through public health measures alone. Many people have no health-care insurance which limits their ability to access care when needed. This results in higher rates of late or no prenatal care or hospitalizations for asthma. The percentage of children living in families at or below the poverty level is an indicator of global risk factors that could impact access to health care. In Imperial County, a higher percentage of children live at or below the poverty level than in most other counties in California.

The good news is that the percentage of Imperial County children in poverty has declined substantially from 29% in 1998-1999 to 18% in 2006. However, Imperial County remains higher than California overall (13%).

Health Successes

Imperial County's overall health status has improved in several areas since 2000, most notably in lower death rates for certain cancers, cerebrovascular disease, and coronary heart disease. The County continues to report improvements in several other key indicators including a lower death rate due to homicides.

Breastfeeding initiation improved significantly from about 75% of mothers on average in 1998-2000 who began breastfeeding during early postpartum to nearly 83% of mothers in 2004-2006. Improved vaccination rates have led to a reduction in cases of certain diseases such hepatitis A and B in recent years. Imperial County reported higher vaccination rates among Kindergartners compared to California as a whole

Opportunities for Health Improvements

Access to health care continues to be elusive for many Imperial County residents. Nearly one-quarter of pregnant women received either late or no prenatal care on average during 2004-2006, unchanged from six years earlier. Imperial County continues to report one of the highest teen birth rates of all counties in California. Certain communicable diseases and chronic illnesses impact our community more than elsewhere in the state. Imperial County continues to report the highest rates of tuberculosis in California. Hospitalization rates for asthma remain the highest in the state. Diabetes deaths are higher than statewide or nationally. Too many people continue to be hurt or killed in motor vehicle crashes or die from unintentional injuries. Obesity is a growing problem not only locally, but for California and nationwide.

Public Health in 2008 and Beyond

Major advances have been instituted in the Public Health Department since 2002 to keep pace with Imperial County's growing population and changing health trends.

The Public Health Department's organizational structure has been revamped to better handle the expanding health challenges of the 21st Century. New systems are in place to monitor illness reports and otherwise improve overall disease surveillance in Imperial County. Health-care providers can now report diseases to the health department electronically. The state-of-the-art reporting system is designed to alert epidemiology staff in the event of unusual disease reports or a surge in communicable disease cases. More programs are available to promote ways to improve health through better nutrition and increased physical activity, and to reduce risks for chronic diseases such as obesity, asthma, and diabetes.

Public Health Department staff are better trained and equipped to respond to emergencies that could impact the health and well-being of our community. Emergency preparedness training has included mass vaccination clinics to prepare for pandemic influenza and other major outbreaks or adverse health events. An electronic health alerting network is in place to relay advisories and other communications to Imperial County medical providers. Public Health staff is trained to rapidly disseminate up-to-date information to the media and hard-to-reach populations in the community in times of need.

Environmental health issues are at the forefront. Vector and animal control measures have greatly reduced our risks of contracting diseases such as rabies or West Nile virus. Major steps have been taken to tackle illegal dumping, improve food sanitation in restaurants and at community events, and ensure the safety of public swimming pools.

The Public Health Department is committed to continued collaboration with outside agencies and community organizations to improve the overall health status of our community. For more information about programs and services offered by the Public Health Department, visit our website at www.icphd.org

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RESUMEN EJECUTIVO

El Departamento de Salud Pública del Condado de Imperial se complace en presentar el *Informe de Salud Pública 2008*.

El monitoreo de la situación de la salud comunitaria es una de las funciones fundamentales en salud pública. Los datos recopilados a nivel local y estatal de certificados de nacimiento y defunciones, informes hospitalarios de altas de pacientes, así como los padecimientos y riesgos que están sujetos a notificación e investigación fueron utilizados para evaluar nuestro nivel de salud. Los indicadores de salud del Condado de Imperial fueron comparados con los de California en su totalidad y, en su medida, con los estándares señalados por la iniciativa *Healthy People 2010* la cual tiene como objetivo mejorar la salud nacional. Los objetivos nacionales de *Healthy People 2010* se enfocan en mejorar la calidad de vida así como en el número de años de vida saludable y disminuir las disparidades en la salud.

La información y datos presentados nos ayudaran a comprender de una mejor manera las tendencias que son importantes en nuestra comunidad. Este informe puede ser utilizado como una guía en el desarrollo de programas y en la asignación de recurso por organizaciones locales, funcionarios públicos y proveedores para del cuidado de la salud.

La primera edición del *Informe de Salud Pública* fue publicada en el año 2002 brindando una plataforma y base para futuras revisiones referente a tendencias y otros temas importantes de salud. Esta edición se ha expandido y provee información más detallada en los temas de particular interés para nuestra comunidad.

Existen muchos factores que contribuyen en la salud comunitaria en su totalidad. Algunos de estos factores pueden perfeccionarse mediante medidas en el área de la salud pública mientras que otros no. Hoy en día, las vacunas preventivas para niños representan una de las funciones más importante de la salud pública ya que han reducido significantemente el número de casos de ciertas enfermedades transmisibles como lo son el sarampión, paperas y rubeola. Por naturaleza, existen más factores globales que no pueden ser resueltos mediante medidas de salud pública

únicamente. Mucha gente no cuenta con seguro médico lo cual limita el acceso a los servicios de salud cuando sean necesarios. Como resultado, existen altas tasas de cuidado prenatal tardío o ausente, u hospitalizaciones por causa de asma. El porcentaje de niños viviendo con familias en o por debajo del nivel de pobreza es un indicador de factores de riesgo globales que pueden tener un impacto en el acceso a los servicios de salud. En comparación con la mayoría de otros condados de California, el Condado de Imperial tiene un porcentaje más alto de niños que viven en o por debajo del nivel de pobreza. La buena noticia es que el porcentaje de niños del Condado de Imperial que se encuentran viviendo en pobreza ha disminuido de manera importante de 29% en los años 1998-1999, a 18% en el 2006. Sin embargo, el Condado de Imperial aun se mantiene en un nivel más alto que el total presentado en el estado de California (13%).

Logros de la Salud

En general, el nivel de la salud poblacional del Condado de Imperial ha mejorado en diversas áreas a partir del año 2000. Este avance se ha reflejado notablemente en la disminución de tasas de muertes provocadas por ciertos tipos de cáncer, enfermedad vascular cerebral y enfermedad coronaria. El Condado de Imperial continúa reportando avances en varios y distintos indicadores claves incluyendo tasas menores de muertes por homicidios.

La iniciación de la lactancia materna en madres después del parto mejoro de manera importante. En los años 1998-2000, en promedio tres-cuartos de madres amamantaban a sus hijos inmediatamente después del parto. Estas cifras aumentaron en el 2004-2006 donde casi el 83% de nuevas madres iniciaron la lactancia materna inmediatamente después del parto. En años recientes el incremento en las tasas de vacunación también ha resultado en la reducción en el número de reportes de casos de ciertas enfermedades tal como la hepatitis A y B. El Condado de Imperial reportó tasas más altas de vacunación entre niños que están en preescolar (*kinder*) en comparación con el estado de California en su totalidad.

Oportunidades para Mejorar la Salud

El acceso a los servicios de salud continúa siendo un caso evasivo para muchos residentes del Condado de Imperial. Durante los años 2004-2006 cerca de un cuarto de las mujeres embarazadas recibieron un control prenatal tardío o no lo recibieron durante su embarazo, dato que sigue vigente desde seis anos hasta la fecha. El Condado de Imperial continúa reportando una de las tasas más altas de nacimientos a madres adolescentes en comparación con otros condados de California. Ciertas enfermedades transmisibles y crónicas impactan nuestra comunidad más que en cualquier otro lugar del estado. El Condado de Imperial continúa reportando las tasas más altas de tuberculosis en el estado de California. Las tasas de hospitalización por causa del asma se encuentran entre las más altas en el estado. El número de muertes causadas por la diabetes es más alto que a nivel estatal o nivel nacional. Demasiadas personas siguen sufriendo lesiones y mueren a causa de accidentes automovilísticos o a causa de lesiones no intencionadas. La obesidad es un problema que continua en aumento no solo en nuestra comunidad sino en todo California y en el resto de la nación.

La Salud Pública en el 2008 y el Futuro

Se han realizado grandes avances en el Departamento de Salud Pública desde el año 2002 para poder mantenernos al día con el crecimiento de la población del Condado de Imperial y con los cambios en las tendencias de salud.

La organización estructural del Departamento de Salud Pública del Condado de Imperial se ha cambiado para poder responder a los retos del Siglo 21. Existen nuevos sistemas para el monitoreo de los reportes de enfermedades y así poder mejorar la vigilancia de enfermedades en el Condado de Imperial. Los proveedores para el cuidado de la salud ya pueden enviar sus reportes de enfermedades electrónicamente al Departamento de Salud Pública. Este sistema está diseñado para alertar al personal de epidemiología en caso que se presente un reporte de una enfermedad poco frecuente o si se presenta un aumento en los casos de enfermedades transmisibles. Existen más programas para promover hábitos alimenticios más saludables a través de una mejor nutrición y el

aumento de la actividad física. También se busca reducir las enfermedades crónicas como la obesidad, el asma y la diabetes.

El personal de Departamento de Salud Pública se encuentra mejor capacitado y equipado para poder responder a emergencias que pueden llegar a tener un impacto en la salud y bienestar de nuestra comunidad. Dicha capacitación incluye campañas de vacunación masivas en preparación para una pandemia de influenza y otros brotes mayores o eventos adversos para la salud. Además, se cuenta con una red electrónica de notificación de salud para el envió de avisos urgentes y otros comunicados a proveedores médicos del Condado Imperial. De ser necesario el personal de salud pública está capacitado para distribuir información actualizada a los medios de comunicación así como a poblaciones de difícil alcance.

Los temas de salud ambiental son de suma prioridad dentro del Departamento de Salud. Las medidas que se han tomado en los programas de Control de Vectores así como Control de Animales han reducido en gran cantidad el riesgo de contraer enfermedades como la rabia o el Virus del Nilo Occidental. Además, se han tomado medidas adicionales para combatir el problema de basureros ilegales, mejorar la sanidad e higiene de los alimentos en restaurantes y eventos comunitarios, y garantizar la seguridad en las albercas públicas.

El Departamento de Salud Pública está comprometido en continuar su colaboración con otras agencias y organizaciones comunitarias con el fin de mejorar la situación de la salud en nuestra comunidad. Para mayores informes acerca de los programas y servicios que ofrece el Departamento de Salud Pública del Condado de Imperial, favor de visitar nuestra página de internet www.icphd.org.

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SELECTED INDICATORS FOR IMPERIAL COUNTY WITH STATUS COMPARISON TO HEALTHY PEOPLE 2010 NATIONAL OBJECTIVES

Indicator	Healthy People 2010 Objective	IMPERIAL COUNTY		
		Year	Rate	Status
Gonorrhea Incidence	19.0	2004-2006	31.4	•
Tuberculosis Incidence	1.0	2004-2006	19.4	•
Breastfeeding Initiation	75%	2004-2006	82.9%	✓
Late or No Prenatal Care	10.0%	2004-2006	24.8%	•
Low Birth Weight Births	5.0%	2004-2006	6.1%	•
Infant Mortality Rate	4.5	2003-2005	4.1*	○
All Cancer Deaths	158.6	2004-2006	153.3	✓
Breast Cancer Deaths	21.3	2004-2006	19.5*	✓
Lung Cancer Deaths	43.3	2004-2006	36.6	✓
Cerebrovascular Disease Deaths	50.0	2004-2006	40.4	✓
Chronic Liver Disease or Cirrhosis Deaths	3.2	2004-2006	15.9	•
Coronary Heart Disease Deaths	162.0	2004-2006	127.9	✓
Motor Vehicle Crash Deaths	8.0	2004-2006	21.3	•
Unintentional Injury Deaths	17.1	2004-2006	43.5	•
Homicide	2.8	2004-2006	2.6*	✓
Suicide	4.8	2004-2006	7.0*	•

Source: County Health Status Profiles 2008

- ✓ = Imperial County met Healthy People 2010 objective.
- ○ = Imperial County came close to meeting HP 2010 objective.
- • = Healthy People 2010 objective not met.

*Rate/percent unreliable due to small number of cases.

Note: Crude case rates and age-adjusted death rates are per 100,000 population. Infant death rate is per 1,000 live births. Birth rates are per 1,000 population. Breastfeeding initiation rate is per 100 live births.

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SECTION 1

HEALTH STATUS

Health Status

WHAT IS IT?

Health status is determined not only by the absence of disease but a myriad of other factors that are more difficult to measure. Health status can be defined by an individual's own perception of wellness and well-being, which is influenced by outside determinants such as income, education, access to health insurance and health care, and other disparities associated with race and ethnicity.

An individual's health status is also influenced by the overall health of the community. To understand the health status of a population, it is essential to monitor and evaluate the consequences of the determinants of health. Health status can be measured by birth and death rates, life expectancy, quality of life, illness caused by specific diseases, risk factors, use of ambulatory care and inpatient care, accessibility of health personnel and facilities, financing of health care, health insurance coverage, and many other factors. The information used to report health status comes from a variety of sources, including birth and death records; hospital discharge data; disease reports submitted by health-care facilities and case investigations, and health information collected from community-based surveys.

WHY IS IT IMPORTANT?

Monitoring health status is a vital tool for Public Health and community leaders. This information can be used to determine areas to target resources to prevent illness and other health problems, as well as improve overall health in the community.

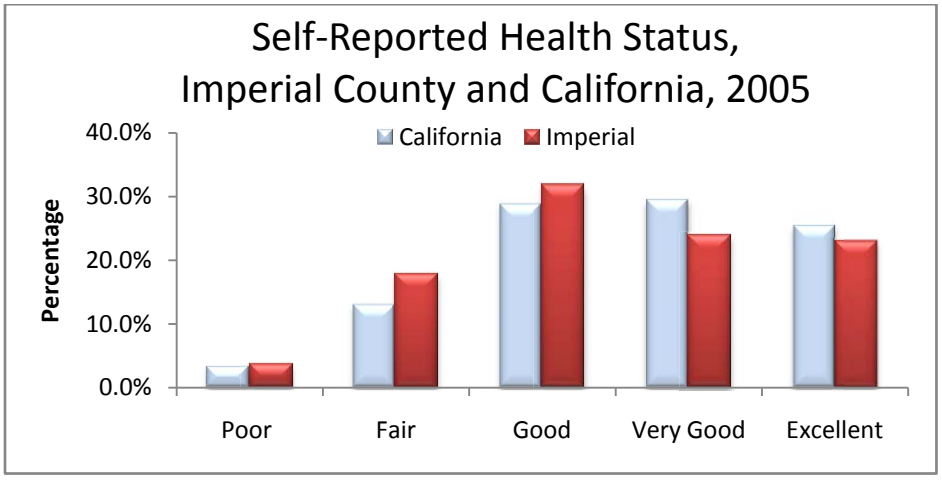
WHAT IS OUR STATUS?

A large majority of Imperial County residents rate their own health favorably, according to the findings of the California Health Interview Survey (CHIS), the country's largest population-based state health survey. However, a smaller proportion of Imperial County residents considered their health to be "very good" or "excellent" compared to California as a whole.

Despite the overall favorable health status reported by most Californians, a number of issues—such as lack of health insurance, asthma, and obesity–continue to challenge the health-care system, according to the findings of CHIS surveys conducted in 2001, 2003, and 2005.

Information in this report will detail, where possible, the progress of Imperial County and California as a whole in achieving the Healthy People 2010 objectives, a set of national guidelines created to encourage improvement in the nation's health for key health measures (Figure 1-1).

FIGURE 1-1



Source: 2005 California Health Interview Survey

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SECTION 2

DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

KEY FINDINGS

Population Growth

- Since 2000, Imperial County's population has grown 21% to an estimated 172,672 as of January 2007. Imperial County ranked first among all counties in California in the percent change (3.38%) in population from 2006 to 2007, adding 5,646 residents.

Age

- Imperial County residents are slightly younger than Californians overall. A larger proportion of Imperial County's population is under age 18 (29.3%) than California's overall population (26.3%).

Race / Ethnicity

- Imperial County's white, non-Latino population continued to decline to 17.4% of the total population, down from 20.2% in 2000. Imperial County has the highest percentage of Latinos of all counties in California, comprising about 76% of the County's population in 2006.

Household Income

- A higher proportion of Imperial County residents live at or below the Federal Poverty Level compared to other counties in California. In 2006, 18% of Imperial County's population was living in poverty, compared to 13% of California's population.

- The median income of households in Imperial County was $37,086, significantly lower than for California households overall ($56,645).

Education

- In 2006, 38% of people aged 25 and older in Imperial County had not completed 12 years of education or received a high school diploma. That is significantly higher than California as a whole, where only 20% had not completed high school.

Demographic and Socioeconomic Characteristics

WHAT ARE THEY?

Many factors influence a community's health outcomes, which are reflected in birth rates, death rates, hospitalization rates, and disease incidence. Among those factors are demographic and socioeconomic conditions such as income, health insurance coverage, housing status, literacy, and education.

WHY ARE THEY IMPORTANT?

Age, race and ethnicity, household income, employment status, and educational attainment have a significant impact on health status. Economic status is an important predictor of poor health, and inequalities in income and education underlie many health disparities. In general, population groups that suffer the worst health status also are those that have the highest poverty rates and the least education. Research shows that people with low socioeconomic status are less likely than their higher-income counterparts to have health insurance or use preventive services. They are more likely to have problems accessing care. They are also more likely to suffer from chronic illnesses and have shorter life spans.

WHAT IS OUR STATUS?

Imperial County faces a greater challenge than other counties in California in meeting residents' basic health needs because a large proportion of the County's population lives in poverty, has limited access to health insurance, or has limited English proficiency or education. Immigration and border crossings also impact the demographics of this County.

DEMOGRAPHIC HIGHLIGHTS

GENERAL POPULATION CHARACTERISTICS

Imperial County continues to experience steady population growth. Since 2000, the County's population has grown 21.3% to an estimated 172,672 as of January 2007. Imperial County ranked first among all counties in California in the percent change (3.38%) in population from 2006 to 2007, adding 5,646 new residents during that period.

The City of Imperial was identified as one of the fastest-growing cities in California (16.6% from January 2006-January 2007) due to a substantial increase in new housing construction. The City of Imperial more than doubled in size between 2000 and 2007 (Table 2-1).

TABLE 2-1

POPULATION CHANGE, IMPERIAL COUNTY, 1990-2007

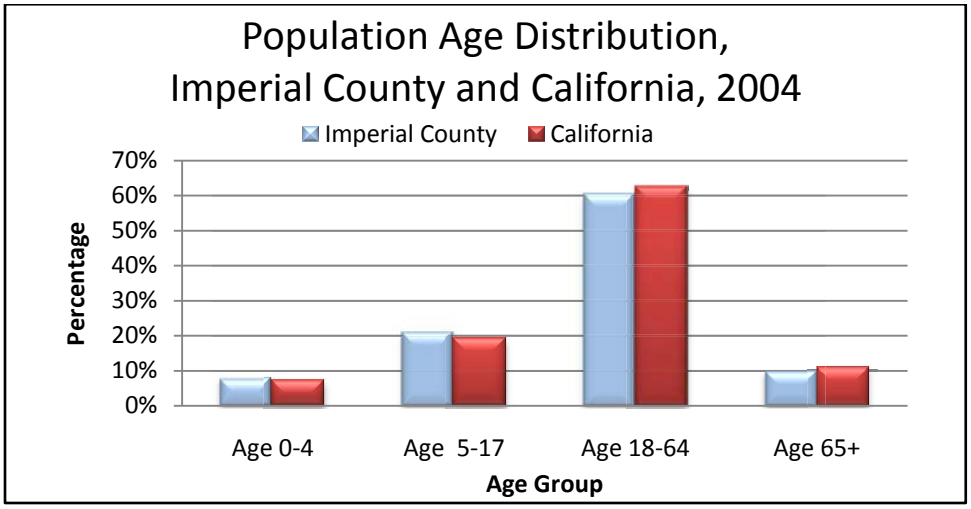
POPULATION	1990	2000	% Change 1990-2000	2007 (estimated)	% Change 2000-2007
IMPERIAL COUNTY	109,303	142,361	30.2	**172,672**	21.3
BRAWLEY	18,923	22,052	16.5	**25,694**	16.5
CALEXICO	18,633	27,109	45.5	**37,552**	38.5
CALIPATRIA	2,690	7,289	171.0	**7,773**	6.6
EL CENTRO	31,405	38,025	21.1	**42,071**	10.6
HOLTVILLE	4,820	5,612	16.4	**6,299**	12.2
IMPERIAL	4,113	7,560	83.8	**11,852**	56.8
WESTMORLAND	1,380	2,131	54.4	**2,372**	11.3
Unincorporated	27,339	32,583	19.2	**39,059**	19.7

Source: California Department of Finance, E-4 Historical Population Estimates for City, County and the State, 1991-2000, with 1990 and 2000 Census Counts. Sacramento, California, August 2007.

AGE

Imperial County residents are slightly younger than Californians overall (Figure 2-1). A larger proportion of Imperial County's population is under age 18 (29.3%) than California's overall population (26.3%).

FIGURE 2-1

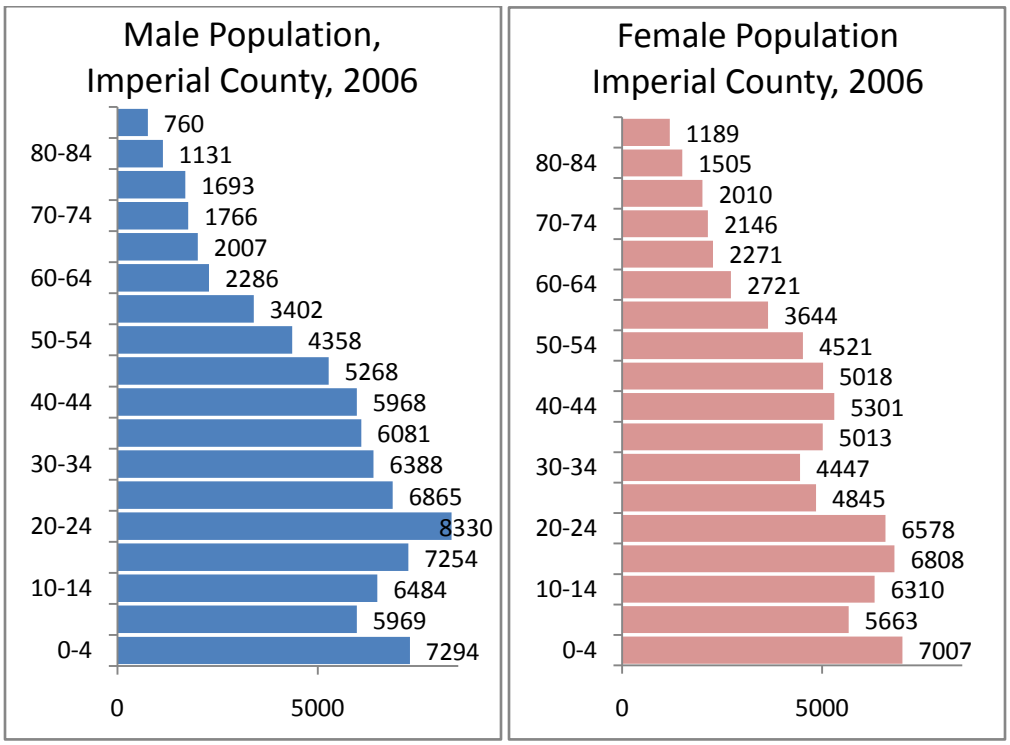


Source: California Department of Finance, 2004 Population Estimates with Age, Sex, and Race/Ethnic Detail, July 2007.

GENDER

In 2006, there were more males (52%) in Imperial County than females (48%). This gender difference was even more pronounced among individuals aged 20 to 49, where 55% of the population was male and only 45% was female. In contrast, for California as a whole, 51% of the population was male and 49% was female in the same 20- to 49-year-old age group (Figure 2-2).

FIGURE 2-2

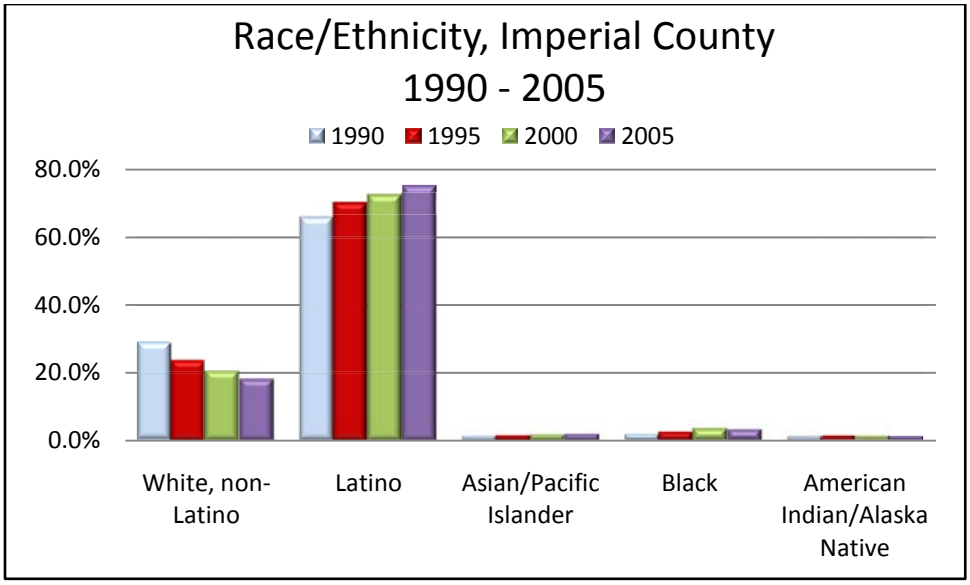


Source: California Department of Finance, 2004 Population Estimates with Age, Sex, and Race/Ethnic Detail, July 2007.

Race / Ethnicity

Imperial County's white, non-Latino population continued to decline to 17.4% of the total population, down from 20.2% in 2000. Latinos now make up an even greater proportion of the County's overall population. Imperial County has the highest percentage of Latinos of all counties in California, comprising an estimated 76% of the County's total population in 2006 (Figure 2-3).

Figure 2-3



Source: Centers for Disease Control, WONDER

Socioeconomic Status

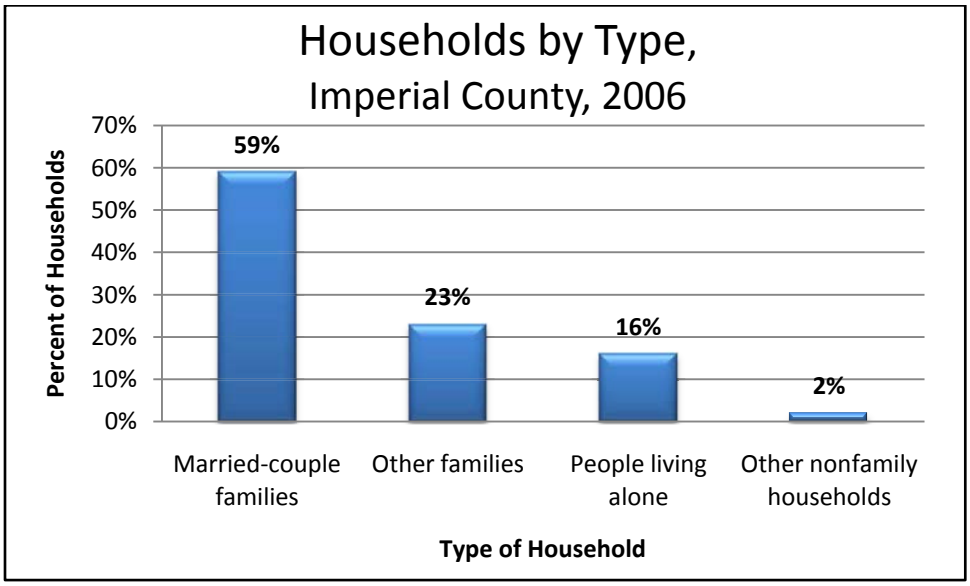
Inequalities in income and education underlie many health disparities in the United States. Income and education are intrinsically related and often serve as proxy measures for each other. In general, population groups that suffer the worst health status also are those that have the highest poverty rates and the least education. Disparities in income and education levels are associated with differences in the occurrence of illness and death in a variety of conditions that include heart disease, diabetes, obesity, elevated blood lead level, and low birth weight.

Higher incomes permit increased access to medical care, enable people to afford better housing and live in safer neighborhoods, and increase the opportunity to engage in health-promoting behaviors.

Households and Families

In 2006, there were 45,000 households in Imperial County. The average household size was 3.3 people. Families made up 82% of the households in Imperial County. This figure includes both married-couple families (59%) and other families (23%). Nonfamily households made up 18% of all households in Imperial County. Most of the nonfamily households were people living alone, but some were composed of people living in households in which no one was related to the householder (Figure 2-4).

Figure 2-4



Source: U.S. Census Bureau, 2006 American Community Survey

Geographic Mobility

In 2006, 86% of individuals of at least one year of age residing in Imperial County were living in the same residence one year earlier; and 7% had moved during the past year from another residence in the same county, 5% from another county in the same state, 1% from another state, and 1% from abroad.

Economic Status

Research has shown that persons with low socioeconomic status have poorer health and less access to health care than those with higher incomes.

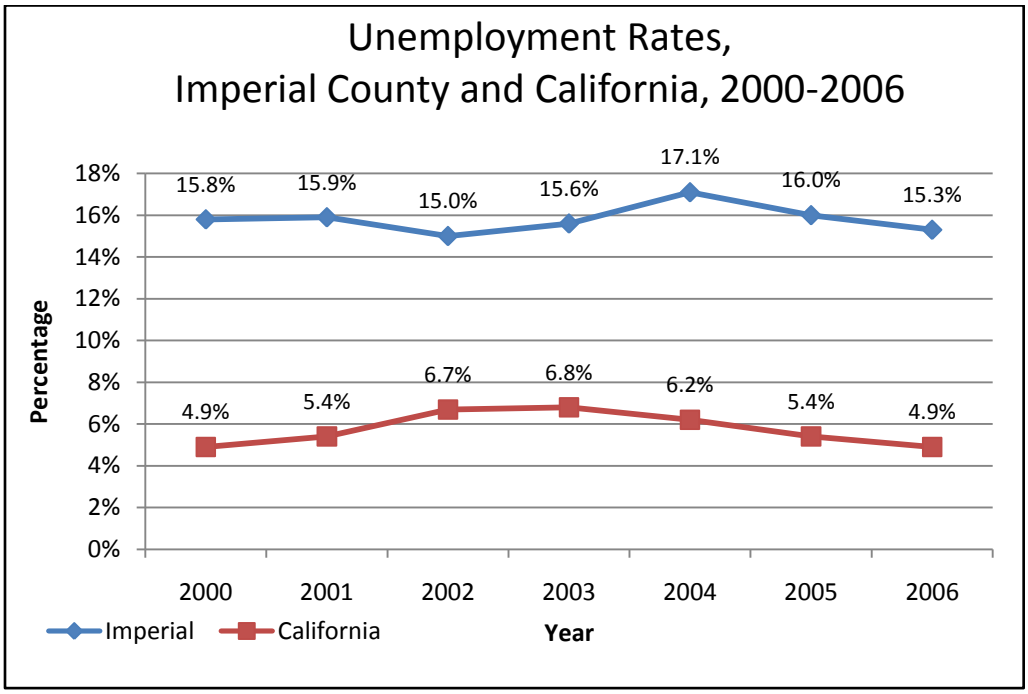
The median income of households in Imperial County was $37,086, significantly lower than for California households overall ($56,645), according to the American Community Survey 2006 (U.S. Census Bureau). Eighty-two percent of Imperial County households received earnings, and 13% received retirement income other than Social Security. Thirty-one percent of the County households received Social Security. The average income from Social Security was $11,690. These income sources are not mutually exclusive; that is, some households received income from more than one source.

LABOR FORCE

Imperial County's labor force has increased 11.7% since 2002, to 64,200 persons in 2006. Industry employment in the County during 2002–2006 gained 5,900 jobs overall. Three industries led job growth during that period: agriculture; trade, transportation, and utilities; and government. Agriculture, the county's 2nd largest industry, gained 2,000 jobs during 2002-2006, representing growth of 19.8%. Imperial County's agriculture commodities are the 10th largest in value by county in California; the leading commodities are alfalfa, lettuce, carrots, and livestock. Retail trade added 1,600 new jobs in trade, transportation, and utilities, with growth concentrating in general merchandise stores and miscellaneous store retailers. Local government accounted for all the job gain (700) in government, while the professional and business services industry had the fastest growth rate (28.6%), adding 600 jobs.

Areas with seasonal economies, such as Imperial County's agriculture industry, tend to have greater seasonal variations in employment, resulting in higher unemployment rates. Historically, Imperial County has had a substantially higher unemployment rate than California as a whole. Imperial County's unemployment rate decreased to 15.3% in 2006, but was still significantly higher than California's rate of 4.9% for the same year (Figure 2-5).

FIGURE 2-5



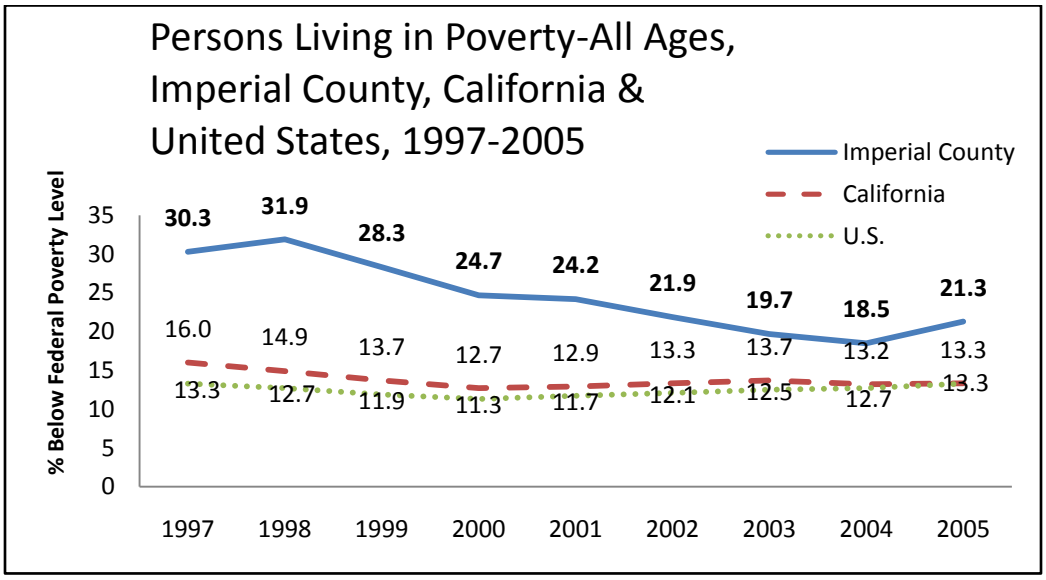
Source: California Employment Development Department, Labor Market Information Division, Local Area Unemployment Statistics (LAUS) Program
NOTE: Rates are not seasonally adjusted.

POVERTY

Imperial County's population is poorer than that of California and the United States overall. A higher proportion of Imperial County residents live at or below the Federal Poverty Level ($21,200 a year for a family of four) compared to other counties in California. In 2005, 21.3% of Imperial County's population was living in poverty, compared to 13.3% of California's overall population (Figure 2-6).

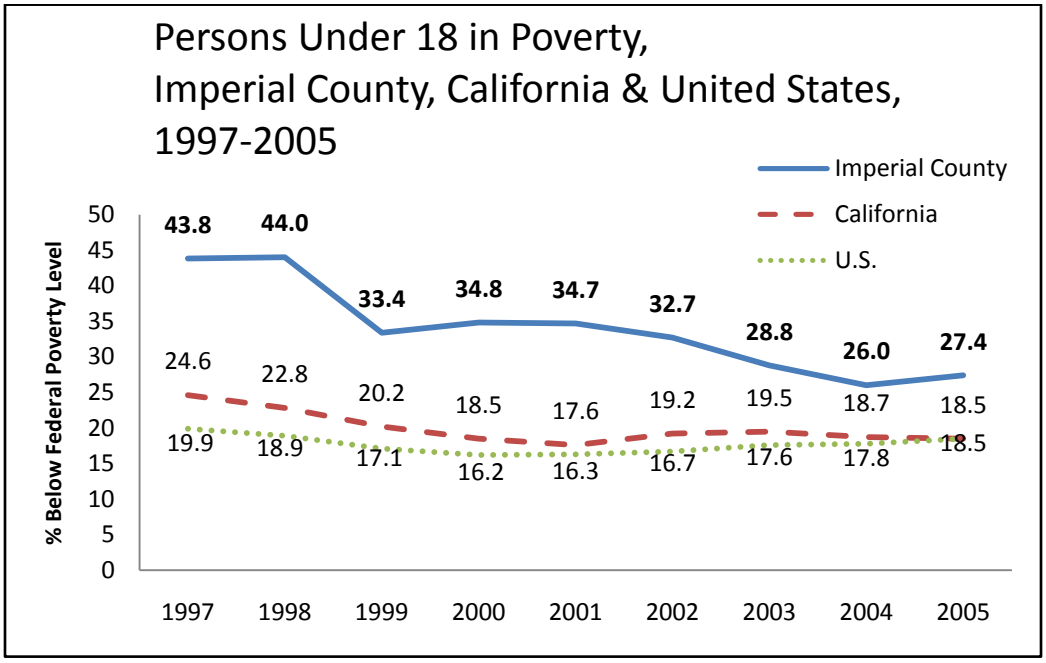
An even higher percentage of children are living in poverty, an indicator of global risk factors that have implications for their ability to access to health services. In 2005, 27.4% of children under age 18 were living in poverty compared to 18.5% in this age group statewide and nationwide (Figure 2-7). The percentage of children living in poverty in Imperial County has decreased over the past decade.

FIGURE 2-6



Source: U.S. Census Bureau, Small Area Income & Poverty Estimates, 1997-2005.

FIGURE 2-7



Source: U.S. Census Bureau, Small Area Income & Poverty Estimates, 1997-2005.

Health Insurance Coverage

Having health insurance is associated with better health status and improved access to care. A significantly greater proportion of Imperial County residents are uninsured, compared to California as a whole. Overall, 20% of Californians, or 6.5 million people, lacked health insurance coverage for all or part of the year in 2005, according to the findings of the 2005 California Health Interview Survey (CHIS). Imperial County reported one of the highest uninsured rates (27.7%) of all counties in California. Imperial County and other counties with high uninsurance rates had correspondingly low rates of employment-based coverage. Only 40.5% of Imperial County residents reported employment-based insurance, compared to 54.3% statewide.

TABLE 2-2

HEALTH INSURANCE COVERAGE, LACK OF COVERAGE, AND DEMOGRAPHIC CHARACTERISTICS

	IMPERIAL COUNTY	CALIFORNIA
HEALTH INSURANCE COVERAGE OF THE NONELDERLY (AGES 0-64)		
% UNINSURED ALL OR PART YEAR	27.7%	20.2%
% INSURED ALL YEAR, EMPLOYMENT-BASED	40.5%	54.3%
% INSURED ALL YEAR, MEDI-CAL/HEALTH FAMILIES	27.7%	15.9%
% INSURED ALL YEAR, PRIVATELY PURCHASED AND OTHER	4.1%	9.5%
% OF UNINSURED NONELDERLY (AGES 0-64) WITH ANNUAL FAMILY INCOMES OF LESS THAN 300%FPL†	80.9%	74.5%
HEALTH INSURANCE COVERAGE OF CHILDREN (AGES 0-18)		
% UNINSURED ALL OR PART YEAR	17.5%	10.7%
% INSURED ALL YEAR, EMPLOYMENT-BASED	35.3%	50.3%
% INSURED ALL YEAR, MEDI-CAL/HEALTHY FAMILIES	45.0%	31.2%
% INSURED ALL YEAR, PRIVATELY PURCHASED AND OTHER	2.3%	7.8%
% OF UNINSURED CHILDREN (AGES 0-18) WITH INCOMES < 300% FPL	81.9%	82.1%
HEALTH INSURANCE COVERAGE OF ADULTS (AGES 19-64)		
% UNINSURED ALL OR PART YEAR	33.8%	24.8%
% INSURED ALL YEAR, EMPLOYMENT-BASED	43.6%	56.2%
% INSURED ALL YEAR, MEDI-CAL/HEALTHY FAMILIES	17.4%	8.7%
% INSURED ALL YEAR, PRIVATELY PURCHASED OR OTHER	5.2%	10.4%
% OF UNINSURED ADULTS (AGES 19-64) WITH INCOMES < 300% FPL	80.6%	72.9%

† FPL = Federal Poverty Level (The 2005 FPL was $9,973 for one person, $12,755 for a two-person family and $15,577 for a three-person family.)

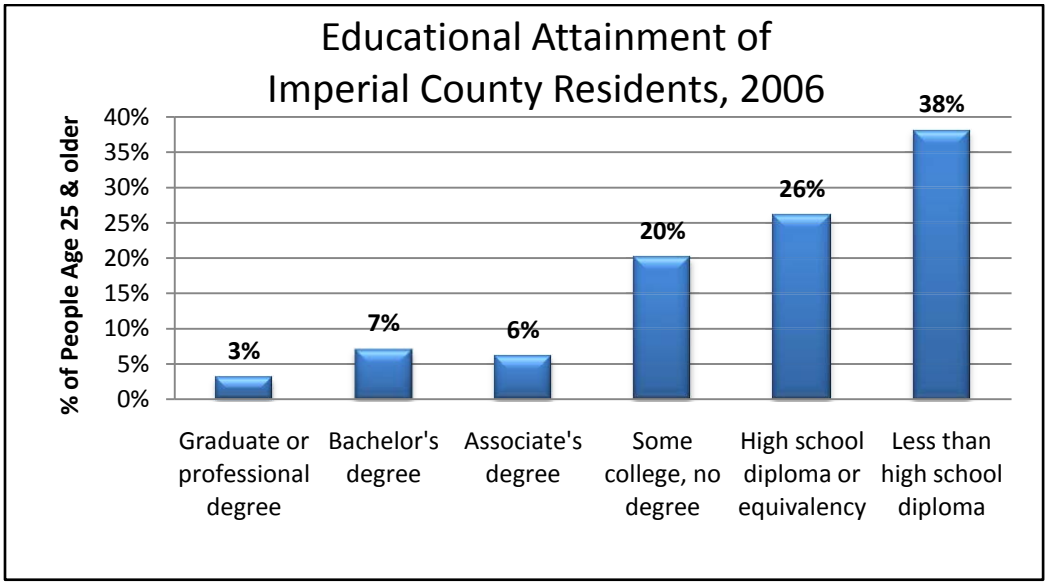
Source: 2005 California Health Interview Survey, UCLA Center for Health Policy Research, March 2007

EDUCATION AND ENGLISH PROFICIENCY

The level of education attained is often considered a measure of economic strength. Imperial County has significantly more residents who have not completed high school than California as a whole. In 2006, 38% of the people aged 25 and older in Imperial County were not enrolled in school and had not graduated from high school. That is significantly higher than California as a whole, where only 20% had not completed high school (Figure 2-8).

Many Imperial County residents have only limited English proficiency. In 2006-2007, 43.1% of the 36,293 public school-aged children needed to learn English. This is a substantially higher proportion of children than in California overall where only about a quarter of the children needed to learn English to succeed in school.

FIGURE 2-8



Source: U.S. Census Bureau, 2006 American Community Survey

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SECTION 3

MATERNAL, CHILD, AND ADOLESCENT HEALTH

KEY FINDINGS

Teen Birth Rates

- Teen birth rates have declined, but Imperial County's teen birth rate (57.2 live births per 1,000 female population) continued to exceed that of California as a whole (37.8 live births per 1,000 female population) in 2004-2006.

Prenatal Care

- In 2004-2006, 63.5% of Imperial County women accessed prenatal care in the first trimester of their pregnancy compared to 78.5% of pregnant women statewide.

Low Birth Weight

- Although above the Healthy People 2010 goal of 5%, Imperial County residents had a smaller percentage of low birth weight babies (6.1%) than the rest of California (6.8%) in 2004-2006.

Breastfeeding Initiation

- In 2004-2006, 82.9% of mothers in Imperial County began breastfeeding their newborns during early postpartum compared to 86.3% of mothers statewide.

Childhood Immunization

- In 2007, Imperial County schools reported 94.6% of kindergarteners completed all required immunizations, higher than statewide (92.1%).

SELECTED CHARACTERISTICS OF LIVE BIRTHS TO IMPERIAL COUNTY AND CALIFORNIA RESIDENTS, 2005

	Imperial County	California
Late or no Prenatal Care	**7.8%**	2.7%
Adequate prenatal care (APNCU index)	**61.5%**	75.2%
Preterm Birth	**12.3%**	11.2%
Cesarean Deliveries	**33.8%**	30.7%
Low Birth Weight	**6.2%**	6.9%
In-hospital exclusive breastfeeding	**8.4%**	42.8%
Mothers completing 12 years or more of schooling	**72.6%**	72.0%
Fathers completing 12 years or more of schooling	**74.8%**	72.3%
Births to teenage mothers	**14.3%**	9.1
Births to teenage fathers	**5.9%**	3.4%
Births to unmarried mothers	**45.5%**	35.7%

Birth Rates

WHAT ARE THEY?

General fertility rates are the number of live births per 1,000 women of childbearing age (15-44 years). Age-specific birth rates refer to the number of live births per 1,000 female population within specified age groups.

WHY ARE THEY IMPORTANT?

Fertility and birth rates play a significant role in determining population growth. Before the 1990s, only half of the population growth in California could be attributed to natural increases or fertility and the remainder was attributed to migration. Since then, fertility rates have accounted for a larger percentage of the population growth. Over the next 20 years, an estimated two-thirds of the population growth in California will be attributable to natural increases or fertility. Tracking trends in fertility and birth rates allows for effective social planning and resource allocation. Age-specific and race/ethnicity-specific birth rate trends provide information on the divergent needs of different population groups, allowing for targeted public health outreach.

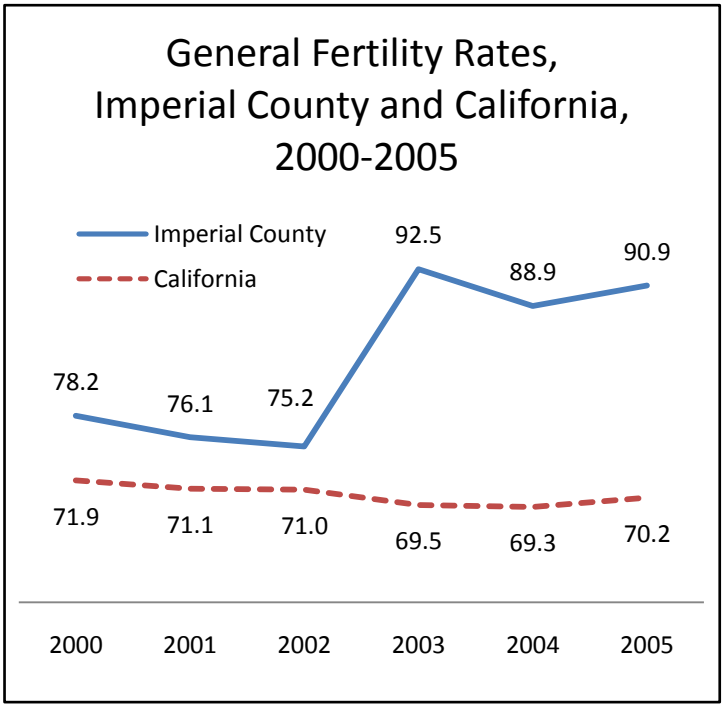
WHAT IS OUR STATUS?

The number of live births in Imperial County has increased by nearly 20% from 2,572 live births in 2000 to 3,127 live births in 2006.

The County's general fertility rate has increased substantially since 2002, in contrast to California's general fertility rate which is continuing to decrease (Figure 3-1). These rates are not influenced by population size or growth so they reflect a true increase in the number of births among women of childbearing age.

Birth rates in Imperial County for 2005 were consistently higher than for California overall for all age groups except for those above 35 years, with the greatest percentage difference for women aged 25 to 29 (Table 3-1).

FIGURE 3 – 1



Source: California Department of Public Health, Vital Statistics

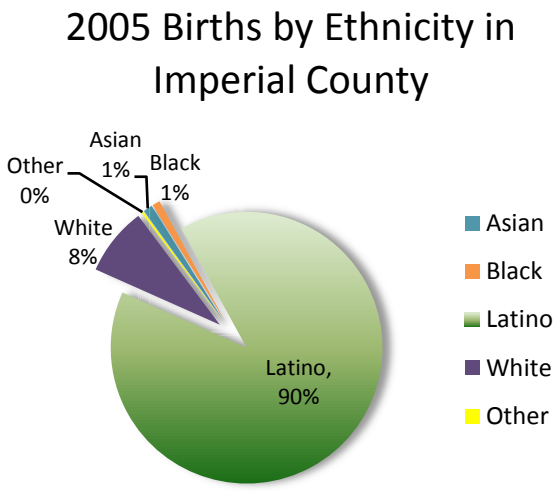
TABLE 3 -1

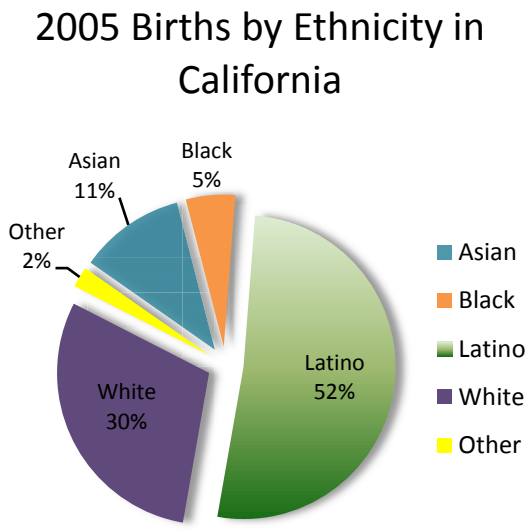
Birth Rates by Age of Mother, Imperial County and California, 2005								
	<15*	15-19	20-24	25-29	30-34	35-39	40-44	≥45 *
Imperial County	a***	58.0	143.3	221.5	128.5	52.1	11.0	a***
California	0.6	37.1	99.7	119.2	101.9	54.9	12.6	1.1

Source: State of California, Department of Health Services, Birth Records. State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail.
*For girls under age 15, the birth rate is calculated using female population 10-14 years of age.
**For women 45 years and older, the birth rate is calculated using the female population 45-49 years of age.
***Rates are not calculated for fewer than five live births.

Imperial County differs significantly from the rest of California with regard to race/ethnicity of newborns. In 2006, 90% of live births in Imperial County were classified as Latino compared to the rest of California where 52% of live births were reported as Latino (Figure 3-2).

FIGURE 3 - 2





Source: Center for Health Statistics, Birth Records

Teen Birth Rates

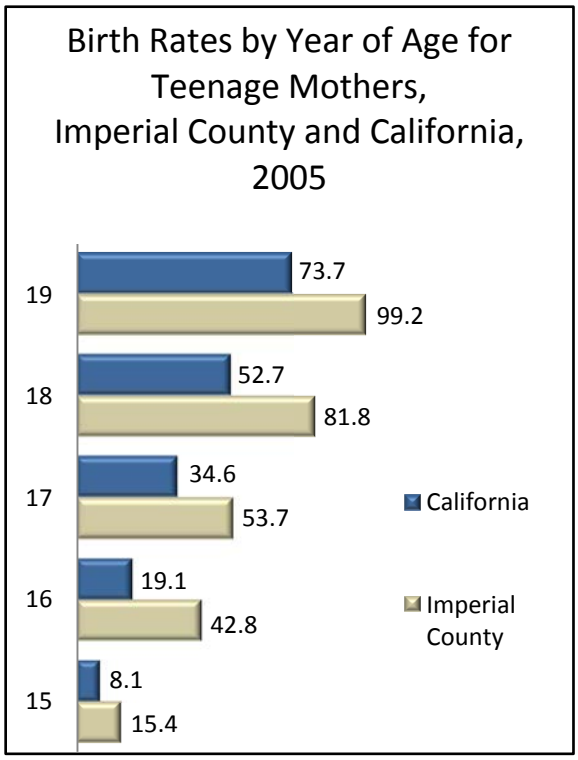
WHAT ARE THEY?

Teen birth rates are defined as number of live births per 1,000 female population in specified teenage groups.

WHY ARE THEY IMPORTANT?

Teenage mothers have a higher incidence of premature births and low birth weight babies than mothers aged 20 to 35. Teen mothers are less likely to complete high school, more likely to remain on state assistance, and their families are more likely to remain in poverty. Children of teen parents are also more likely to become teen parents themselves.

FIGURE 3 - 3



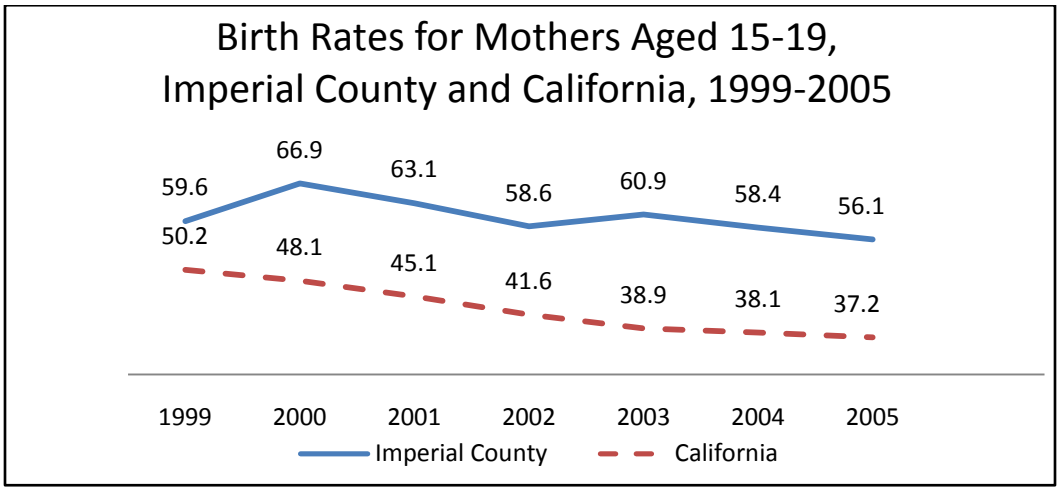
Source: California Department of Public Health, Birth Records

WHAT IS OUR STATUS?

Imperial County has one of the highest teen birth rates of all counties in California. In 2004-2006, there were 446 live births on average to mothers aged 15 to 19 in Imperial County, for a birth rate of 57.2 live births per 1,000 female population, or 14.3% of all live births. In contrast, the teen birth rate for all of California during 2004-2006 was 37.8 live births per 1,000 female population aged 15 to 19 (9.0% of all live births).

Birth rates by year of age for teen mothers were consistently higher in Imperial County than birth rates by year of age for teen mothers in all of California (Figure 3-3). As a general trend from 1999 to 2005, Imperial County teenage birth rates declined following California trends (Figure 3-4).

FIGURE 3 - 4



Source: State of California, Department of Public Health, Birth Records

WHAT ARE WE DOING?

The Adolescent Family Life Program and Cal-Learn provide case management for pregnant and parenting teens to ensure that they receive prenatal care, health education, and other assistance as needed. The program provides voluntary case management for pregnant and parenting teens aged 19 and under, with emphasis on prenatal care, parenting skills resource management, goal setting, and school attendance. Cal-Learn provides mandatory case management for pregnant or parenting teens aged 19 and under who participate in the CalWORKS program and have not yet graduated from high school. Participants receive financial bonuses or sanctions based primarily on their report cards and high school graduation.

Prenatal Care

WHAT IS IT?

Prenatal care is defined as the utilization of health-care services by pregnant women.

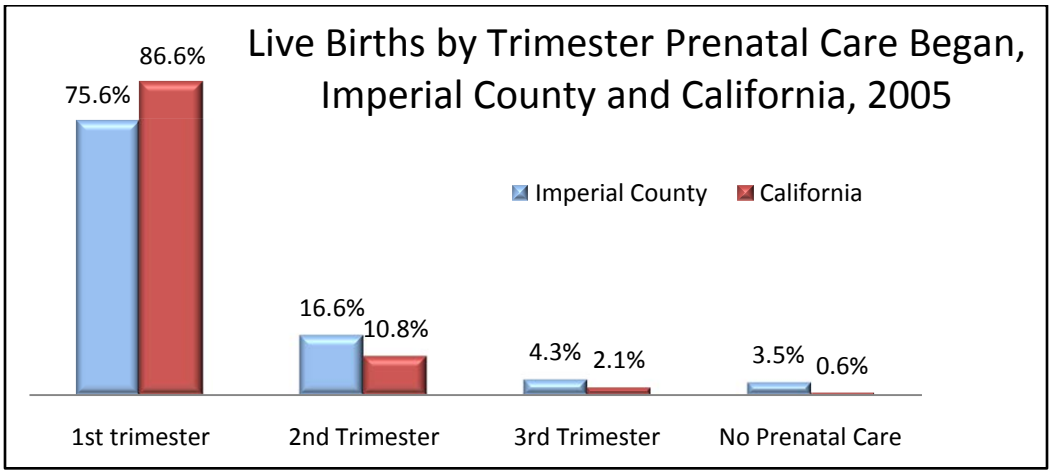
WHY IS IT IMPORTANT?

Receiving timely prenatal care is believed to result in better pregnancy outcomes, reducing the risk for preterm delivery and low birth weight babies, in addition to reducing maternal and infant sickness and death, according to the U.S. Centers for Disease Control and Prevention (CDC).

WHAT IS OUR STATUS?

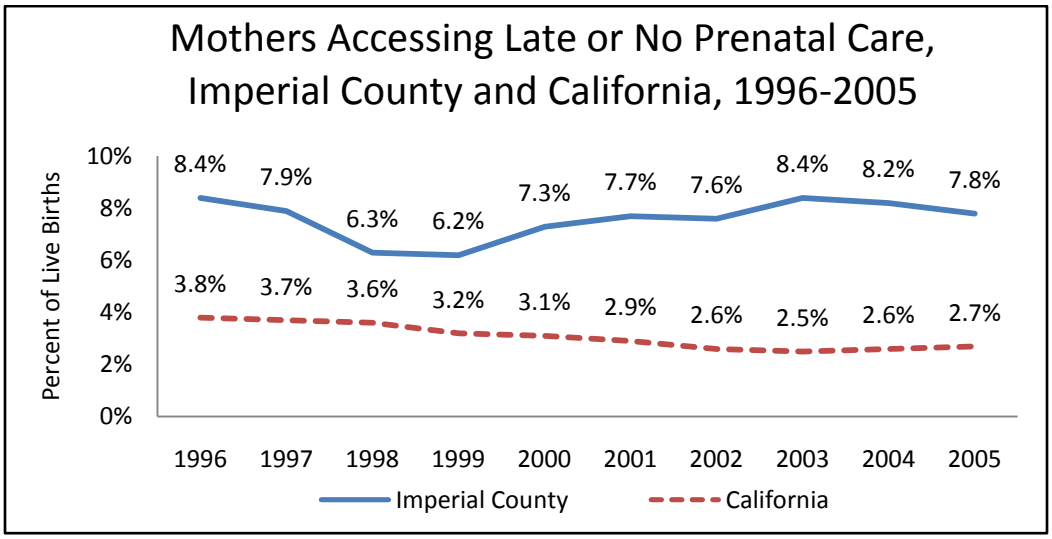
In 2005, 75.6% of Imperial County pregnant women accessed prenatal care during the first trimester of their pregnancy compared to 86.6% of pregnant women in all of California (Figure 3.5). From 1996 to 2005, the number of pregnant women accessing late (defined as care beginning in the third trimester) or no prenatal care has fluctuated, but remained consistently above the statewide average (Figure 3-6).

FIGURE 3 - 5



Source: State of California, Department of Public Health, Birth Records

FIGURE 3 - 6



Source: State of California, Department of Public Health, Vital Statistics

Measures of prenatal care based on the trimester in which a pregnant woman first began accessing prenatal services do not necessarily give a complete picture of how frequently a pregnant woman uses prenatal services. The "adequacy of prenatal care usage index" calculates the appropriate number of prenatal care visits a pregnant woman should receive during the time period she utilizes prenatal services. Based on this measurement, 24.8% of women in Imperial County had not received adequate prenatal care compared to 13.5% of women statewide during 2004-2006.

WHAT ARE WE DOING?

The Prenatal Care Guidance Program encourages early prenatal care through education and offers pregnancy testing, counseling, and referrals to women of childbearing age who seek these services. Perinatal Outreach and Education provides information, education, and referrals for teens and low-income women. Comprehensive Perinatal Services Program encourages and offers early and continuous prenatal care to low-income women of childbearing age.

Low Birth Weight

WHAT IS IT?

Low birth weight is defined as weight at birth of less than 2,500 grams (5.5 pounds).

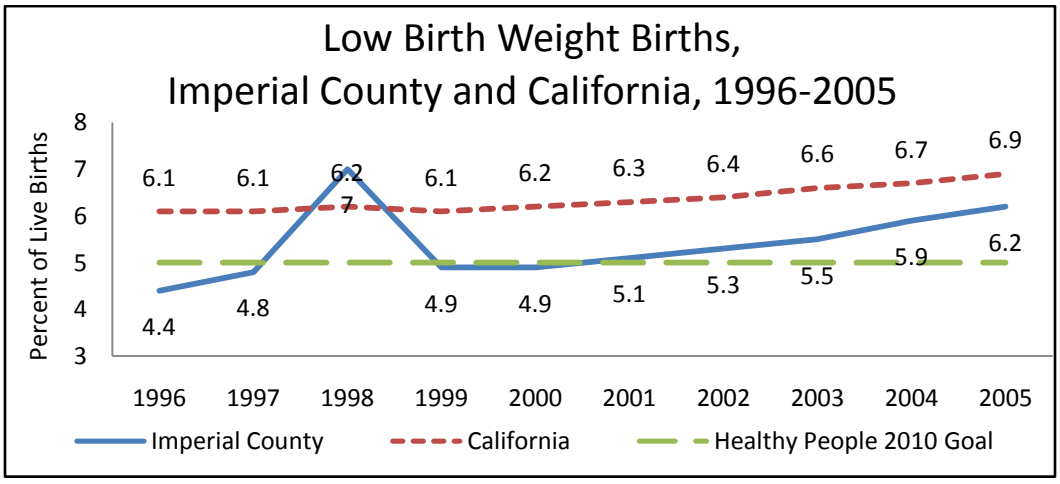
WHY IS IT IMPORTANT?

Low birth weight infants have an increased risk of death and permanent disability.

WHAT IS OUR STATUS?

With the exception of 1998, there has been a steady increase in the number and percent of total births that have been classified as low birth weight in Imperial County from 4.4% in 1996 to 6.1% in 2004-2006. However, Imperial County has remained below the statewide average for the percent of low birth weight births (Figure 3-7). Since 2001, Imperial County has not met the Healthy People 2010 national objective of less than 5% of the total number of births classified as low birth weight.

FIGURE 3 - 7



Source: State of California, Department of Public Health, Birth Records

WHAT ARE WE DOING?

The Comprehensive Perinatal Services Program encourages and offers early and continuous prenatal care to low-income women of childbearing age. Prenatal Care Guidance offers pregnancy testing, education, and referrals to encourage early and adequate prenatal care. Perinatal Outreach and Education offers tobacco use prevention referrals and other education to pregnant and parenting women. The Adolescent Family Life Program offers case management for pregnant teens. Public Health nurses offer support to parents and babies through the High Risk Infant program.

Breastfeeding Initiation

WHAT IS IT?

Breastfeeding initiation can be defined in two ways: as the percentage of infants who are exclusively breastfed *(exclusive breastfeeding)* or as the percentage of infants who are breastfed in conjunction with formula feeding (*any breastfeeding*) during the early postpartum period. Exclusive breastfeeding refers to no other liquids or solids entering the infants' mouth.

WHY IS IT IMPORTANT?

Breastfeeding ensures the best possible health, developmental, and psychosocial outcomes for an infant, according to the American Academy of Pediatrics. Breastfeeding also reduces infant sickness and death by providing optimal brain, retinal, and oral development; decreases the risk of developing chronic health conditions such as asthma, diabetes, obesity, allergies; and lowers the rates of middle ear infections and pneumonia. Breastfeeding also reduces the risk of iron-deficiency anemia, osteoporosis, and breast, ovarian, and uterine cancer for mothers. Breastfeeding also benefits society by reducing health-care costs and reducing employee absenteeism for care attributable to child illness. It is also considered economical and environmentally friendly as it reduces waste and the demand of energy to manufacture artificial breast milk.

WHAT IS OUR STATUS?

In-hospital *exclusive* breastfeeding in Imperial County was reported at 8.4% in 2006, significantly lower than California overall, which reported in-hospital *exclusive* breastfeeding at 42.8%, according to the Newborn Screening Test Form. During 2004-2006, on average 82.9% of Imperial County mothers reported "*any breastfeeding,*" compared to 86.3% of mothers statewide. Imperial County achieved the Healthy People 2010 national objective of 75% of mothers initiating breastfeeding during the early postpartum period.

LACTATION CONSULTANT

The County's Public Health Nutritionist received a scholarship from the Imperial County Breastfeeding Coalition, and successfully completed the Lactation Consultant Training course offered through the University of California-San Diego Extension. Imperial County Public Health Department now has a Lactation Consultant available to provide services to the community.

WHAT ARE WE DOING?

The Imperial County Breastfeeding Coalition is a countywide group whose members include the Public Health Department; Women, Infants, and Children program; hospital birthing centers; private health-care providers; school-based expectant and parenting teen programs; March of Dimes; community clinics; and individuals. The Coalition's mission is to increase breastfeeding initiation and duration rates by providing accurate education, support, and training to the community. Since its inception in 1999, the Coalition has conducted the "World's Largest Baby Shower" during World Breastfeeding Week, professional workshops, and community presentations; awarded scholarships to train Lactation Specialists, Educator Counselors, and Certified Lactation Consultants; and distributed breastfeeding resource bags to new mothers to replace those distributed by formula companies in local hospitals.

Childhood Immunization

What is it?

Routine childhood immunization can provide immunity against more than a dozen infectious diseases. Recommended vaccines for children age 19 to 35 months are: four doses of Diphtheria, Tetanus, and Pertussis combined vaccine (DTaP); three doses of Polio vaccine; one dose of Measles, Mumps, and Rubella combined vaccine (MMR); four doses of *Haemophilus* Influenzae type B vaccine (Hib); three doses of Hepatitis B vaccine (Hep B); three doses of Rotavirus vaccine; four doses of Pneumococcal Conjugate vaccine; two doses of Hepatitis A vaccine (Hep A); one dose of Varicella (chickenpox) vaccine; and yearly Influenza vaccine.

Why is it important?

Vaccines are considered one of the greatest public health achievements of our time.

Immunization Registry

The Imperial County Public Health Department participated in the American Immunization Registry Association (AIRA) Provider Participation Performance Indicator test site pilot project. The project was conducted from July 2007 to June 2008. The 10 test sites include the states of Indiana, Michigan, Utah, Vermont, Washington, West Virginia, New Jersey, New York City, and California counties of San Diego and Imperial. AIRA, along with the U.S. Centers for Disease Control (CDC), are working on identifying registry performance indicators that would better gauge provider participation. AIRA's goal in establishing pilot sites is to test four performance indicators (data entry, data assessment, data use, and registry integration) over a 12-month period. Locally, the project has allowed Immunization Program staff to take a closer look at provider participation, thus identifying possible strategies for increasing immunization registry activity in the county.

Immunizations can prevent disability and death from infectious disease for individuals and can help control the spread of diseases within communities.

California's goal for the year 2010 is to have 90% coverage for all individual vaccines and 80% coverage for all vaccine series by 19 to 35 months of age. Immunization coverage is defined as the percentage of children who have received the minimum recommended doses of vaccine for their age group.

For children age 19 to 35 months of age, immunization coverage is defined as: four doses of DTaP; one dose of MMR; three doses of Hib; three dose of Polio; three doses of Hep B; and one dose of Varicella vaccine (or physician-documented varicella disease).

WHAT IS OUR STATUS?

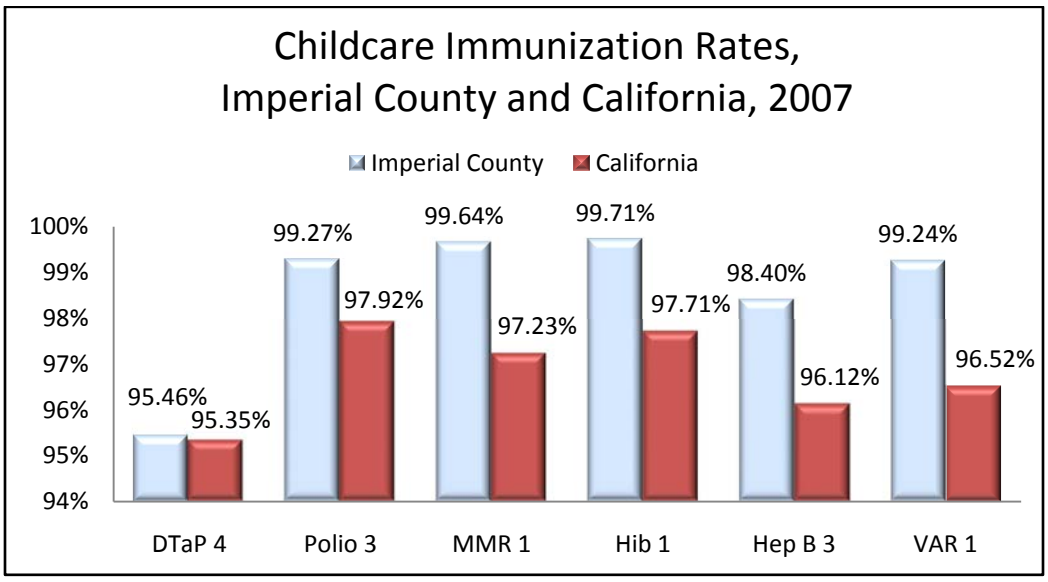
Under California law, children are required to receive a series of immunizations before entry to school or a child-care center. The type and number of vaccines required vary by age. Required vaccines for entrance into kindergarten are: five doses of DTaP (four doses if at least one dose was administered after the child's 4th birthday); four doses of Polio (three doses if at least one dose was after the child's 4th birthday); two doses of MMR; three doses of Hep B; and one dose Varicella vaccine (or physician-documented varicella disease).

Both child-care centers and kindergartens in Imperial County exceeded California's vaccination coverage goal and had higher coverage rates than California as a whole.

In 2007, 94.0% of all children enrolled in child-care centers had completed all required immunizations, compared to the statewide average of 93.5%.

Imperial County also exceeded statewide averages for all individual antigens (Figure 3-8).

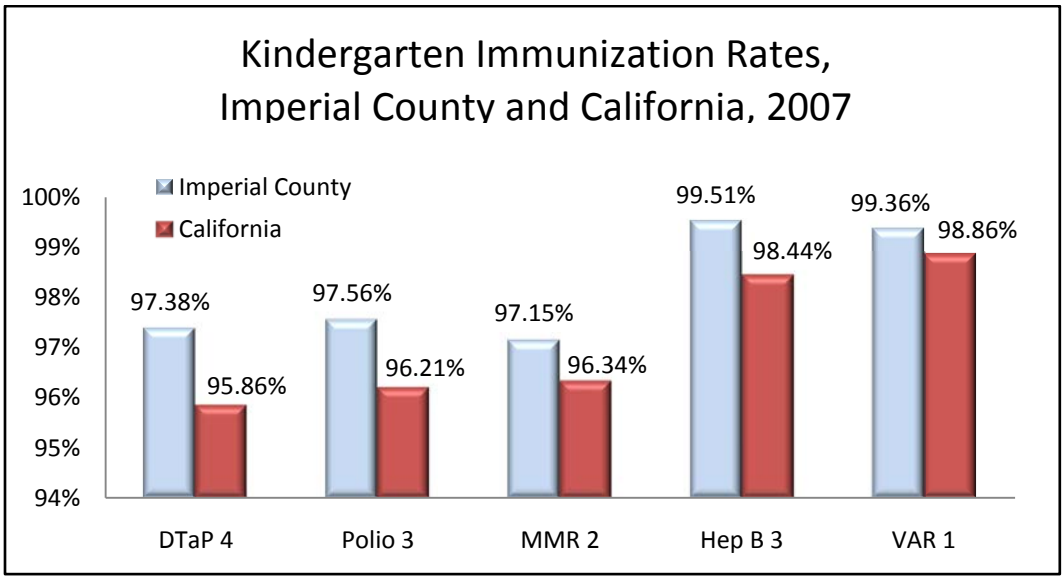
FIGURE 3 - 8



Source: California Department of Health Services, Immunization Branch.

Imperial County also has high rates of immunization coverage for kindergarteners. In 2007, 94.6% of kindergarteners entering school had completed all the required immunizations compared to only 92.1% for the state of California. Rates for individual antigens were consistently higher than the state average (Figure 3-9).

FIGURE 3 - 9



Source: California Department of Health Services, Immunization Branch.

Although kindergarteners are in compliance with the recommended vaccines by the time they enter school, coverage rates at two years of age do not reflect this compliance, indicating that there is some delay in receiving the recommended vaccines on schedule. This is demonstrated by the expanded Kindergarten Retrospective Survey (EKRS) in 2007. A stratified random sample of kindergartens was drawn for the EKRS, and the assessment measured the immunization coverage rate of the 4:3:1:3:3:1 (4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hep B, 1 Varicella) series for kindergarteners at 24 months of age. Survey results indicated that only 70.5% of the children enrolled in the private schools and only 78.7% of children at public schools had completed the immunization series by 24 months of age.

WHAT ARE WE DOING?

The Imperial County Public Health Department conducts annual immunization assessments and quality assurance reviews at Community Health Centers, as well as the department's own clinic. The primary purpose of the assessments and reviews are to provide data that measure the immunization status of 2-year-old children served by the clinics, as well as to provide feedback to medical providers on methods to improve immunization practices. The assessments and reviews also help determine local and statewide progress towards meeting state and national immunization objectives. In addition, each spring a sample of child-care centers and schools (kindergarten and seventh grade only) are selected for an on-site review of immunization records and school staff practices. Public Health staff evaluates immunization records and practices at the child-care centers and schools for compliance with California immunization requirements.

Oral Health

Kindergarten Oral Health Assessments

In September 2006, Assembly Bill 1433 was signed into law, requiring kindergarten students to have an oral health assessment no later than May 31 of their first year of school enrollment. To comply with AB 1433, the Imperial County Dental Program and the California Children's Dental Disease Prevention Program collaborated with eleven elementary schools and screened 933 kindergarten students at school sites with parental permission. Based on students where data collection was feasible, 34% had visible caries, and 4% were classified as needing "urgent" care, meaning they had signs or symptoms that included pain, infection, swelling or soft tissue lesions lasting longer than two weeks.

What is it?

Diseases of the mouth can range from cavities and periodontal disease to cancer. For children, the most common oral health problem is cavities.

Why is it important?

Poor oral health and tooth decay in children may result in pain, dysfunction, and poor appearance, difficulties that can negatively impact a child's nutritional status and speaking ability, in addition to greatly reducing a child's capacity to succeed in school.

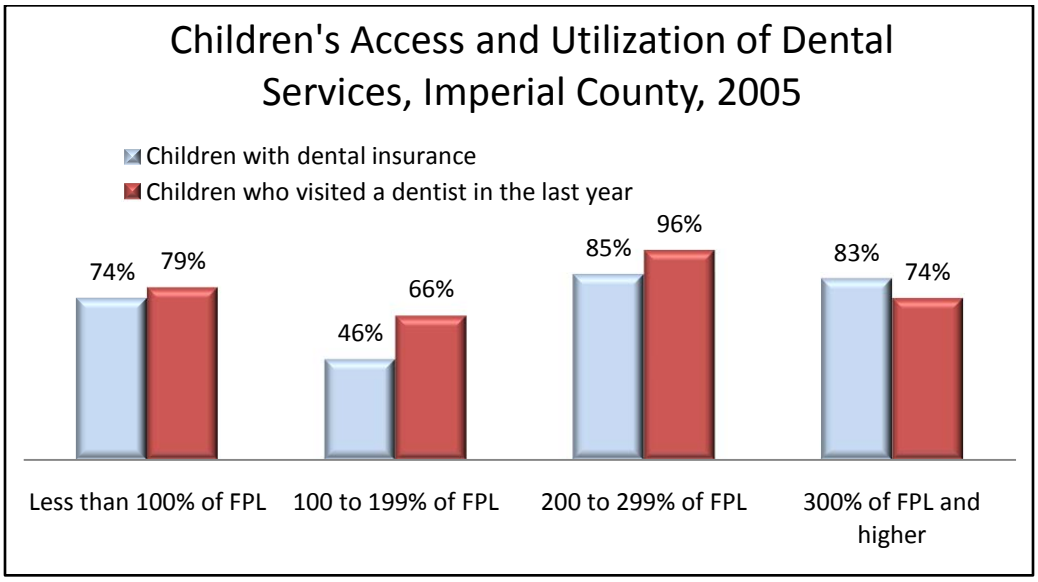
Tooth decay affects more than one-fourth of children aged 2 to 5 in the United States, and half of those aged 12 to 15. Significant disparities have been noted among different economic and racial/ethnic groups.

Thirty-one percent of Latino children aged 6 to 11 had decay in their permanent teeth compared with 19% of non-Latino white children. Children aged 6 to 11 from families with incomes below the federal poverty level were three times more likely to have untreated tooth decay (12%), compared to only 4% of children aged 6 to 11 from families with incomes above the Federal Poverty Level.

WHAT IS OUR STATUS?

In 2005, an estimated 67% of Imperial County children aged 2 to 17 had dental insurance, compared to 79% of children statewide. The largest disparity of dental coverage and usage in Imperial County was among children in families living between the 100% and 199% of the Federal Poverty Level (Figure 3-10).

FIGURE 3 - 10



Source: 2007 California County Data Book

WHAT ARE WE DOING?

A proven strategy for reaching low-income children who are at higher risk for dental disease is through school-based programs that link with health-care professionals and other dental partners in the community. In Imperial County, the California Children's Dental Disease Prevention Program works to promote and protect the oral health of school children through a school-based program that emphasizes the prevention of oral disease, increased student awareness and knowledge about oral health, increased student self-responsibility for personal oral health, and the development of students' positive, life-long health behaviors.

These services are offered at 14 elementary schools and 15 preschools in the communities of El Centro, Heber, Niland, Winterhaven, Westmorland, and Holtville.

Approximately 6,650 preschool through sixth-grade children currently participate in Imperial County's California Children's Dental Disease Prevention Program. They receive oral health education, dental supplies for plaque control, dental screenings, dental sealants, and weekly fluoride mouth rinse to prevent caries.

During the 2006-2007 school year, the program screened 430 students for sealants, and in collaboration with the Imperial County Public Health Department's Dental program, applied sealants to 141 students.

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SECTION 4

COMMUNICABLE DISEASES

Communicable Disease Surveillance

One of the most basic functions of the Public Health Department is the prevention and control of infectious diseases.

Health-care providers and laboratories are required by state law to report certain communicable diseases and health conditions. While Imperial County's reported incidence of measles, pertussis, and other vaccine-preventable diseases is very low or non-existent, the incidence of infectious diseases such as tuberculosis and sexually transmitted infections remains high.

Public Health surveillance depends on timely and complete case reporting to help control outbreaks and prevent the spread of diseases in our community.

KEY FINDINGS

Hepatitis

❖ In 2006, Imperial County reported higher rates of hepatitis A and B in 2006 than the rates reported for California overall.

Tuberculosis

❖ Imperial County's tuberculosis rate declined 28.5% between 1997 and 2006. But the County continues to report the highest TB incidence rate in California; the County's rate is more than double the statewide rate.

Chlamydia

❖ Chlamydia is the most frequently reported infectious disease in Imperial County. The County's average crude case rate was 272.8 per 100,000 population in 2004-2006.

Gonorrhea

❖ Gonorrhea rates have declined in Imperial County since 2002. The County's average crude case rate of 31.3 cases per 100,000 population in 2006 does not meet the Healthy People 2010 goal of no more than 19 cases per 100,000 population.

Syphilis

❖ Imperial County's prevalence rate of primary and secondary syphilis increased to 1.2 cases per 100,000 population in 2006.

HIV/AIDS

❖ The number of newly identified HIV cases in Imperial County has been increasing since 2006 when cases began being reported by name instead of by non-name code.

Hepatitis A

WHAT IS IT?

Hepatitis A is an acute liver disease caused by the hepatitis A virus (HAV), lasting from a few weeks to several months. It does not lead to chronic infection.

WHY IS IT IMPORTANT?

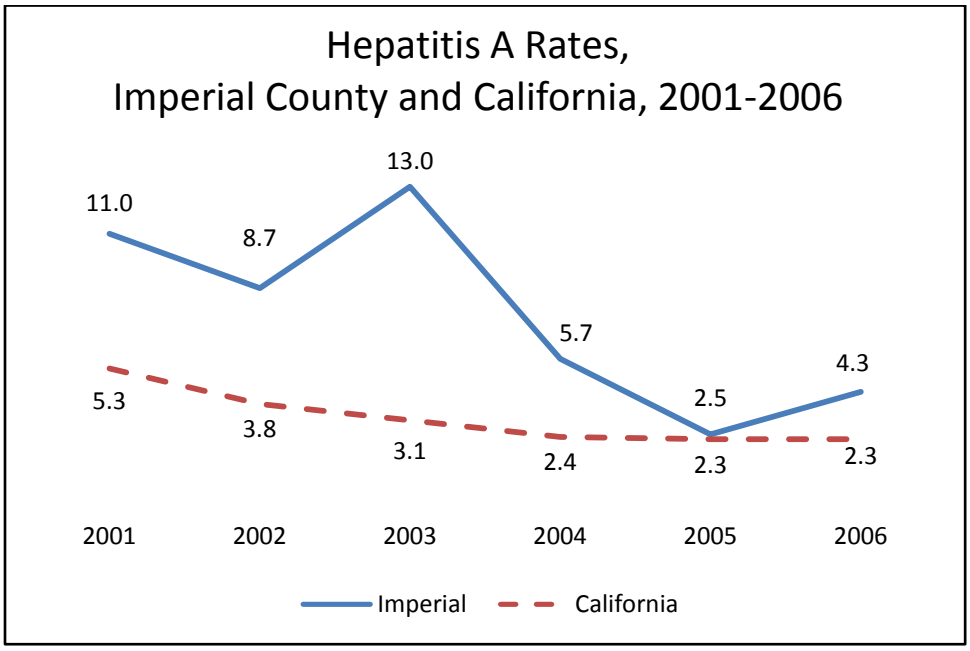
Hepatitis A virus, like other hepatitis viruses, causes liver inflammation. The disease can affect anyone, and is easily spread by drinking water or eating food that has been contaminated with fecal matter containing the virus. The disease also can be spread by close personal contact. Good personal hygiene and proper sanitation can help prevent hepatitis A. Vaccines are also available for long-term prevention of hepatitis A virus infection in individuals 12 months of age and older. Immune globulin is available for short-term prevention of hepatitis A virus infection for all ages.

WHAT IS OUR STATUS?

In 1995, when the hepatitis A vaccine was licensed, hepatitis A was the most common type of hepatitis reported in the United States, with California reporting 6,755 cases. Disease incidence in California in 1995 (21 cases per 100,000 population) was nearly double that of the national incidence (12 cases per 100,000 population).

Since routine childhood vaccination was recommended in 1999, the overall rate has declined steadily both in Imperial County and statewide (Figure 4-1).

FIGURE 4 - 1



Source: California Department of Public Health, Immunization Branch

In 2006, Imperial County reported seven hepatitis A cases, or 4.3 cases per 100,000 population. The County's rate is higher than the statewide rate (2.3 per 100,000 population), but lower than the Healthy People 2010 national objective of 4.5 cases per 100,000 population (Table 4-1).

TABLE 4 - 1

Hepatitis A Incidence, Imperial County and California, 2006		
	Number of Cases	*Cases per 100,000*
Imperial County	7.0	4.3
California	859.0	2.3
Healthy People 2010		**4.5**

Source: California Department of Public Health, Immunization Branch

Hepatitis B

WHAT IS IT?

Hepatitis B is a liver disease caused by the hepatitis B virus (HBV). It ranges in severity from a mild illness, lasting a few weeks (acute), to a serious long-term (chronic) illness that can lead to cirrhosis or liver cancer.

WHY IS IT IMPORTANT?

Hepatitis B virus is spread by contact with infectious blood, semen, and other body fluids from having sex with an infected person, sharing contaminated needles to inject drugs, or from an infected mother to her newborn.

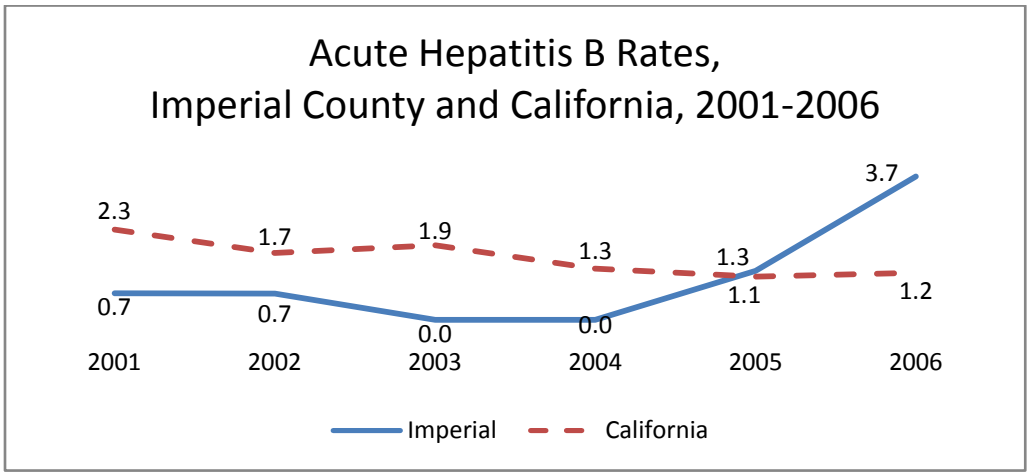
Hepatitis B virus (HBV) can cause lifelong infection, cirrhosis (scarring) of the liver, and death. Approximately 50% of adults who are infected will have asymptomatic acute infections and most will recover completely. However, about 5% will progress to chronic HBV infection. A vaccine is available for all age groups to prevent hepatitis B virus infection.

WHAT IS OUR STATUS?

Acute HBV infection incidence has been declining in California since 1985 when a high of 5,969 cases was reported. Since then, rates of acute disease have been declining across all age and racial/ethnic groups. Unlike California overall, Imperial County has seen an increase in acute hepatitis B cases in recent years (Figure 4-2).

In 2006, Imperial County reported six cases of acute hepatitis B, or 3.7 cases per 100,000 population (Table 4-2). Imperial County's hepatitis B rate is higher than the statewide rate (1.2 per 100,000 population).

FIGURE 4 - 2



Source: California Department of Public Health, Immunization Branch

In California, 99% of all reported acute cases of HBV infection in 2006 occurred in adults. The significant statewide decline in acute HBV infection incidence observed among persons less than 19 years of age may be attributed to increases in vaccination coverage and to the Perinatal Hepatitis B Prevention Program.

The declining rates of acute HBV infection statewide do not accurately represent the burden of chronic HBV infection in California. Persons with chronic HBV infection are often asymptomatic but are capable of infecting others. Approximately 25% of persons with chronic HBV infection die prematurely from cirrhosis or liver cancer. Chronic cases are not reportable in California.

TABLE 4 - 2

Hepatitis B Incidence, Imperial County and California, 2006		
	Number of Cases	*Cases per100,000*
Imperial County	6	3.7
California	428	1.2
Healthy People 2010		**2.4 (ages 19-24)** **5.1 (ages 25-39)** **3.8 (ages 40+)**

Source: California Department of Public Health, Immunization Branch

Tuberculosis

WHAT IS IT?

Tuberculosis (TB) is a disease caused by bacteria called *Mycobacterium tuberculosis.* The bacteria usually attack the lungs, but can also attack any part of the body such as the kidney, spine, lymph nodes, and brain. If not treated properly, TB disease can be fatal. If TB infection progresses to active tuberculosis disease, it takes six months or more of appropriate medications to cure.

WHY IS IT IMPORTANT?

Tuberculosis was once the leading cause of death in the United States. TB is spread through the air from one person to another when a person with active TB disease of the lungs or throat coughs or sneezes. People nearby may breathe in these bacteria and become infected. However, not everyone infected with TB bacteria becomes sick. People who are not sick have what is called latent TB infection. People who have latent TB infection do not feel sick, do not have any symptoms, and cannot spread TB to others. But, some people with latent TB infection go on to get TB disease.

Multidrug-Resistant TB

Tuberculosis bacteria sometimes become resistant to the medicines used to treat the disease. This means that the medication can no longer kill the bacteria. Multidrug-resistant tuberculosis (MDR TB) occurs when the bacteria are resistant to two or more of the most important TB medicines: Isoniazid (INH) and Rifampin (RIF). During 2000-2006, Imperial County had 6 MDR cases.

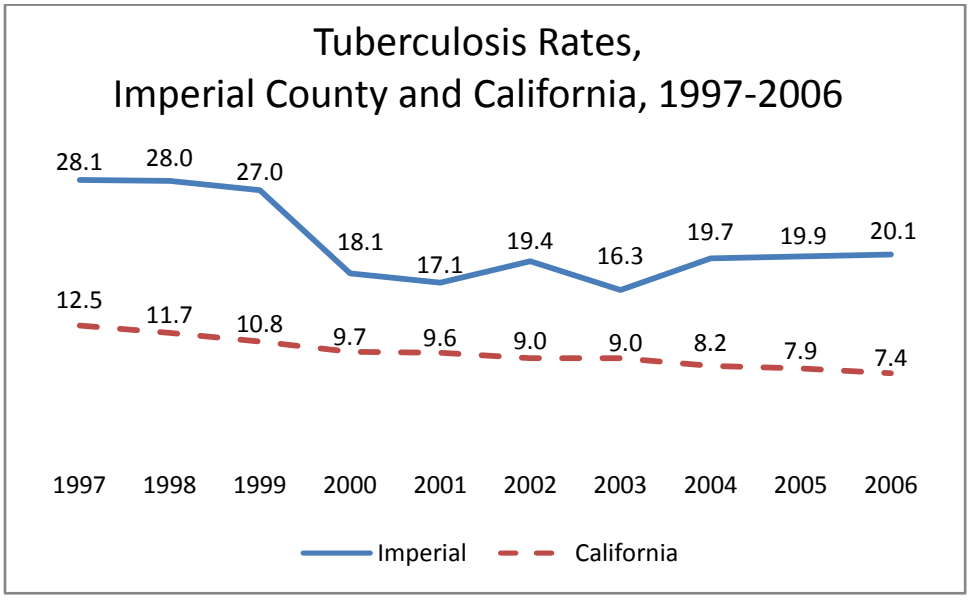
A more serious form of MDR TB is called extensively drug-resistant TB (XDR TB), a rare type of tuberculosis that is resistant to nearly all drugs used to treat tuberculosis.

In the 1940s, scientists discovered the first drugs used to treat tuberculosis, and TB slowly began to decrease in the United States. But in the 1970s and early 1980s, TB control efforts were neglected and the number of TB cases increased. With increased funding and attention to the tuberculosis problem, there has been a steady decline in the number of individuals with TB since 1992. But TB is still a problem: more than 13,000 cases were reported in the United States in 2007. An increasing number of cases are resistant to the drugs that have been used to treat tuberculosis.

WHAT IS OUR STATUS?

California experienced a resurgence in tuberculosis in 1989, with a peak in the number of cases in 1992. Since then, the overall TB rate has steadily declined, but California continues to report among the highest rates of TB in the United States. Imperial County's tuberculosis incidence rate is the highest in California and is more than double the statewide TB incidence rate (Figure 4-3,Table 4-3).

FIGURE 4 - 3



Source: California Department of Public Health

Imperial County's tuberculosis case rate declined 28.5% between 1997 and 2006. In 2006, Imperial County reported 32 tuberculosis cases, or 19.4 per 100,000 population. This is significantly higher than the statewide rate (8.3 cases per 100,000 population), and does not meet the Healthy People 2010 objective of one case or fewer per 100,000 population.

Most of Imperial County's tuberculosis cases reported in 2006 are adults aged 25 and older (24, 72.7%), and Latino (30, 90.9%). Three-quarters of the 2006 TB cases (25, 75.8%) are foreign born, but most of those individuals (17, 68.0%) are longtime U.S. residents who reported living in the United States for 20 years or more.

TABLE 4 - 3

Tuberculosis Incidence, Imperial County and California, 2004-2006		
	Average Number of Cases	*Cases per 100,000*
Imperial County	32.0	19.4
California	3,039.7	8.3
Healthy People 2010		**1.0**

Source: County Health Status Profiles 2008

WHAT ARE WE DOING?

The Imperial County Public Health Department Tuberculosis Control Program staff follows all cases to ensure that anyone with active disease completes treatment. Tuberculosis Control Program conducts Directly Observed Therapy (DOT) to ensure compliance and completion of treatment.

Chlamydia

What is it?

Chlamydia is a sexually transmitted bacterial infection that can be cured easily with antibiotics, but usually occurs without symptoms and often goes undiagnosed.

Why is it important?

Untreated, chlamydia can cause severe health consequences for women. Up to 40% of females with untreated chlamydia infections develop pelvic inflammatory disease (PID), and 20% of those may become infertile. Complications from chlamydia among men are relatively uncommon, but may include epididymitis and urethritis, which can cause pain, fever, and in rare cases, sterility. Chlamydia is the most frequently reported infectious disease in the United States.

What is our status?

Imperial County's chlamydia rates have increased in recent years, after a period of declining rates (Figure 4-4).

Sexually Transmitted Diseases

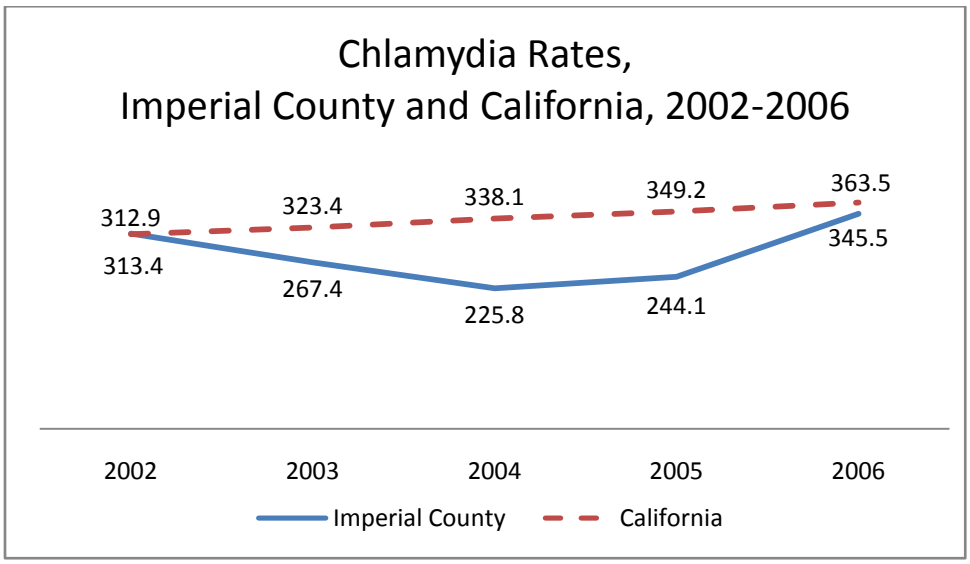
Sexually transmitted diseases (STDs) are a major public health challenge in the United States. While substantial progress has been made in preventing, diagnosing, and treating certain STDs in recent years, the Centers for Disease Control estimates that 19 million new infections occur each year nationwide, almost half of them among young people aged 15 to 24.

Certain STDs are reportable including chlamydia, gonorrhea, syphilis, and pelvic inflammatory disease (PID). The large numbers of reported cases make STDs by far the most commonly reported communicable diseases.

The County's average crude case rate for 2004-2006 (272.8 per 100,000 population) was lower than California's average crude case rate (350.6) for the same period (Table 4-4).

Prevalence data are not available to evaluate the Healthy People 2010 national objective of no more than 3% of the population aged 15 to 24 testing positive for chlamydia.

FIGURE 4 - 4



Source: California Department of Public Health, STD Control Branch

TABLE 4 - 4

Chlamydia Incidence, Imperial County and California, 2004-2006		
	Average Number of Cases	*Cases/100,000*
Imperial County	449.3	272.8
California	129,577.0	350.6
Healthy People 2010		**Not Applicable**

Source: County Health Status Profiles 2008

Gonorrhea

What is it?

Gonorrhea is a sexually transmitted disease that is caused by the bacterium *Neisseria gonorrhoeae*.

Why is it important?

Gonorrhea is the second most commonly reported infectious disease in the United States, with 358,366 cases reported nationwide in 2006. Like chlamydia, gonorrhea is substantially under-diagnosed and under-reported, and approximately twice as many new infections are estimated to occur each year than are reported.

Many gonorrhea infections, especially in females, are asymptomatic and detectable only through screening. Untreated gonococcal infection is associated with adverse reproductive health consequences in both females and males. In addition, infections in pregnant females can lead to serious complications for the newborn child.

Enhanced Gonorrhea Surveillance

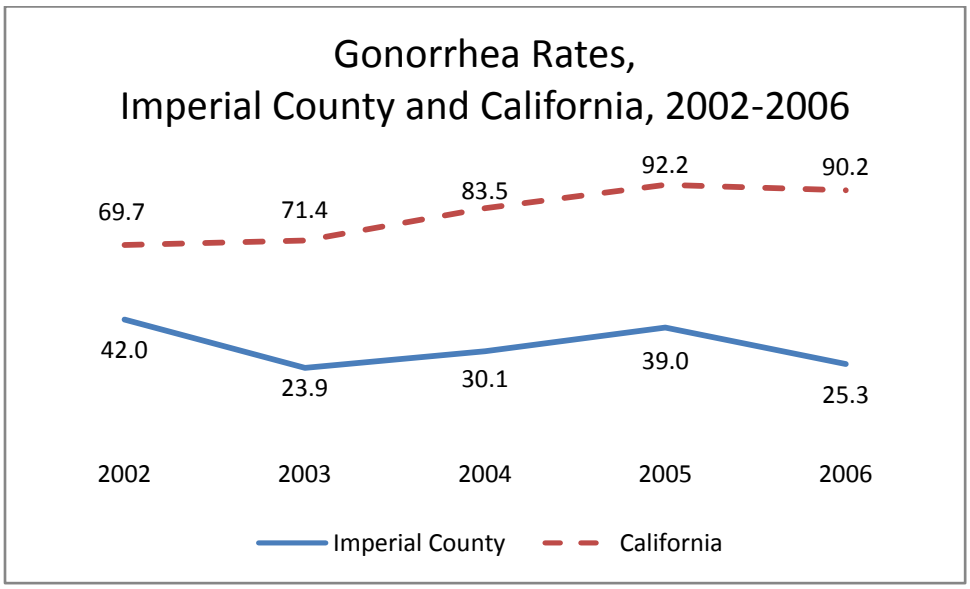
Since the fall of 2006, Imperial County Public Health Department has participated in a statewide surveillance project to gain a better understanding about risk factors associated with gonorrhea infection. Information about symptoms, treatment, and risk behaviors is collected through phone interviews with individuals diagnosed with gonorrhea.

Risk factors reported by 52 individuals interviewed in 2007, the first year for which complete data are available, include having two or more sex partners (31, 59.6%); being incarcerated in the previous 12 months (males: 15, 53.6%; females: 2, 16.7%); and methamphetamine use in the previous 12 months (13, 25.5%).

WHAT IS OUR STATUS?

Imperial County's gonorrhea rates have declined since 2002 (Figure 4-5). However, neither the County's crude case rate of 31.3 cases per 100,000 population in 2006, nor the statewide crude case rate of 88.7 cases per 100,000 population, met the national Healthy People 2010 objective of no more than 19 gonorrhea cases per 100,000 population (Table 4-5).

FIGURE 4 – 5



Source: California Department of Public Health, STD Control Branch

TABLE 4 - 5

Gonorrhea Incidence, Imperial County and California, 2004-2006		
	Average Number of Cases	*Cases per 100,000*
Imperial County	51.7	31.7
California	32,785.0	88.7
Healthy People 2010		**19.0**

Source: County Health Status Profiles 2008

Syphilis

WHAT IS IT?

Syphilis is a sexually transmitted disease caused by the bacterium *Treponema pallidum*. It has often been called —the great imitator" because so many of the signs and symptoms are indistinguishable from those of other diseases.

WHY IS IT IMPORTANT?

Syphilis is passed from one person to another through direct contact with a syphilis sore. Pregnant women can pass the disease to their unborn child.

California continues to report increases in primary and secondary syphilis cases for the 7th consecutive year since a low of 294 cases was reported in 1999. The increases occurred primarily among men who have sex with men (MSM). These increases are of particular concern due to the high percentage of HIV co-infection among primary and secondary syphilis cases.

Syphilis: Signs and Symptoms in Adults

People in the primary or secondary stages of syphilis have symptoms such as a chancre or rash. But these symptoms can go undetected, and the disease may be spread by persons who are unaware of their infection.

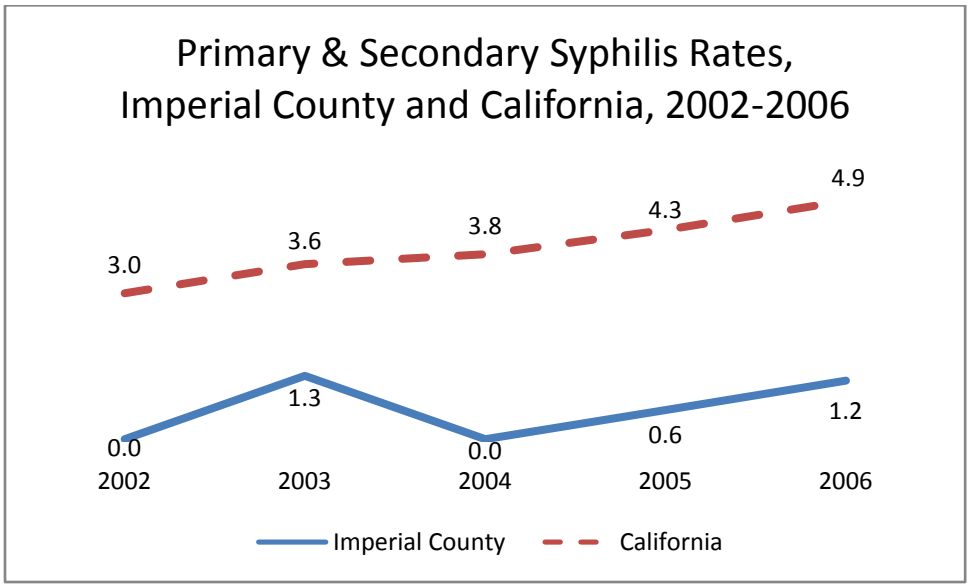
The latent (hidden) stage of syphilis begins when the symptoms disappear. Without treatment, the infected person will continue to have syphilis. This stage can last for many years. The late stages of syphilis develop in about 15% of untreated persons, and can appear 10 to 20 years after infection was acquired. In the late stages, the disease can damage internal organs, including the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints. Signs and symptoms of this stage include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness, and dementia.

WHAT IS OUR STATUS?

Imperial County's rates of primary and secondary syphilis have increased since 2004 (Figure 4-6). Unlike elsewhere in California, most syphilis cases reported in Imperial County are in heterosexuals rather than men who have sex with men.

In 2006, neither Imperial County nor California overall met the Healthy People 2010 national objective of 0.2 or fewer cases per 100,000 population (Table 4-6).

FIGURE 4 - 6



Source: Sexually Transmitted Diseases in California, 2006

TABLE 4 - 6

Primary and Secondary Syphilis Incidence, Imperial County and California, 2006		
	Number of Cases	*Cases per 100,000*
Imperial County	2.0	1.2
California	1,839.0	4.9
Healthy People 2010		**0.2**

Source: Sexually Transmitted Diseases in California, 2006

HIV/AIDS

WHAT IS IT?

The human immunodeficiency virus (HIV) is the virus that causes Acquired Immunodeficiency Syndrome, better known as AIDS. Over time, HIV damages and weakens the body's immune system, making it susceptible to illnesses and infections. If left untreated, HIV infection can progress to AIDS. The virus is spread in four main ways: by unprotected sexual contact with an infected person; by sharing needles or syringes (primarily for injection drug use) with someone who is infected; by being exposed (fetus or infant) to HIV before or during birth or through breastfeeding; and blood-to-blood contact when HIV-infected blood comes into contact with blood or mucous membranes of another person.

WHY IS IT IMPORTANT?

The number of new HIV infections remains high, particularly among African Americans and Latinos. AIDS cases, however, have decreased dramatically since 1996, when new drugs became available.

HIV Rapid Testing

Studies have shown that one out of four HIV-positive Americans is unaware of being infected with HIV. For this reason, it is critical to increase HIV testing opportunities.

In August 2008, Imperial County Public Health Department began offering anonymous and confidential rapid HIV testing. The rapid test offers results in as little as 20 minutes. This testing option is expected to increase the number of persons who receive their HIV results compared to the two-session counseling and testing protocol where patients may not return for their results.

A preliminary positive rapid HIV test result requires confirmatory testing for final diagnosis. Individuals who have a preliminary positive rapid test result will know that there is a high likelihood that they have the HIV virus but must consent to a confirmatory blood test and return for their definitive test result.

WHAT IS OUR STATUS?

Imperial County has a low incidence of AIDS compared to other counties and California as a whole. The annual number of reported AIDS cases ranged from a peak of 21 cases in 1995 to a low of six cases in 1997. Imperial County's crude case rate of 9.5 cases per 100,000 population aged 13 years and older, although statistically unreliable due to small numbers, is lower than the statewide rate of 12.2 cases per 100,000 population aged 13 and older. The County's rate is also higher than the Healthy People 2010 objective of one case per 100,000 population aged 13 and older (Table 4-7).

For many years, only AIDS cases were required to be reported to the local health department. Beginning in 2002, HIV cases in California were reported by non-name code. HIV infection became reportable by name in California in 2006.

TABLE 4 - 7

AIDS Incidence, Imperial County and California, 2004-2006

	Average Number of Cases	*Cases per 100,000*
Imperial County	12.7	9.5*
California	3,653.0	12.2
Healthy People 2010		**1.0**

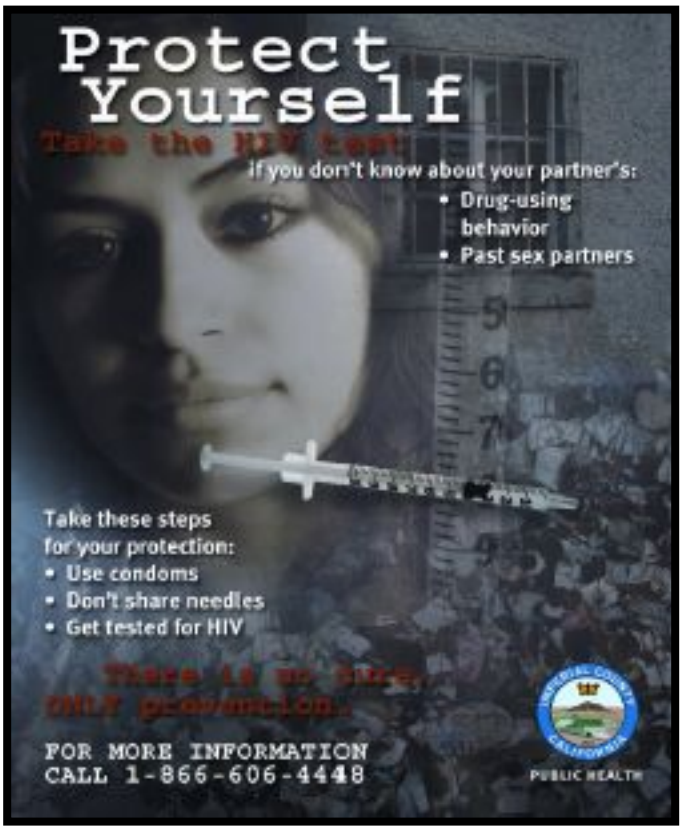
Source: California Department of Public Health, County Health Status Profiles 2008
*Statistically unreliable due to small numbers.

WHAT ARE WE DOING?

The Imperial County Public Health Department Office of AIDS Support (OAS) Services provides HIV- and AIDS-related services for prevention, care and treatment. Prevention services include HIV, STD, and Hepatitis C counseling and testing, as well as education and prevention services targeted towards identified high-risk groups. The Public Health Department subcontracts counseling and testing services with the Imperial Valley Methadone Program and Clinicas de Salud del Pueblo, Inc.

The Education and Prevention Program works with men who have sex with other men (MSM) and substance users, specifically targeting injection drug users (IDUs). Key informant interviews were conducted to assess community readiness for needle exchange programs, and an ethnographic study focused on IDUs and why they don't access care services in the community. The local HIV Planning Group meets monthly and seeks community input on how to improve local HIV/AIDS services.

Care and treatment services include the Early Intervention Program, Bridge Program, Case Management Program, Care Services Program, and the AIDS Drug Assistance Program. Emergency rental and utility financial assistance is provided through the Housing Opportunity for People With AIDS (HOPWA) program.



Methicillin-Resistant *Staphylococcus Aureus*

WHAT IS IT?

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a highly contagious infection with *Staphylococcus aureus* that is resistant to the penicillins, including dicloxacillin and other methicillin-related antibiotics. These bacteria are also resistant to the cephalosporins.

MRSA was once confined to hospitals and long-term care facilities, and taking antibiotics was a risk factor for infection with MRSA. Many of these hospital-associated MRSA infections caused very serious complications and were resistant to all oral antibiotics. More recently, a newer, more virulent strain of MRSA has emerged in the community. This infection–called community-associated MRSA—causes boils, abscesses, and other soft tissue infections and is not linked to previous antibiotic use.

WHY IS IT IMPORTANT?

The frequency of infections with community-associated MRSA appears to be higher than those caused by staphylococcus in the past, particularly among athletic teams. The reasons for this increase are not known, but it is clear that the community-associated MRSA strains did not originate from the strains of MRSA that cause infections in hospitals and other health-care facilities.

WHAT IS OUR STATUS?

Beginning February 13, 2008, severe cases of *Staphylococcus aureus* infections, including MRSA, are required to be reported to local health departments in California.

A severe *Staphylococcus aureus* infection is defined as one resulting in death or admission to an intensive care unit. A previously healthy person is defined as someone who has not been hospitalized or had surgery, dialysis, or resided in a long-term-care facility in the past year, and did not have an indwelling catheter or percutaneous medical device at the onset of illness. A *Staphylococcus aureus* infection in a person without these healthcare-associated risk factors would be considered community-associated.

Between February 13 and August 15, 2008, a total of 92 cases of severe community-associated *S. aureus* were reported by 23 counties to the California Department of Public Health. Of those 92 cases, 36 died. Three cases were Imperial County residents; of those, two died.

PUBLIC HEALTH BULLETIN

The Public Health Bulletin has been published monthly since November 2002 to provide information on current health issues and disease trends to Imperial County's medical community. The Bulletin includes timely information about communicable diseases and certain health conditions affecting our community, local outbreaks, articles on new and emerging health topics, and contact information for Public Health staff.

Binational Disease Reporting

WHAT IS IT?

In 2008, California passed a law (AB 328) that requires U.S. health insurance plans that contract with Mexican health-care providers to comply with state regulations that mandate reporting of certain communicable diseases or conditions to local health departments.

As of July 1, 2008, Mexican health-care providers who are contracted under U.S. health plans must now report disease cases for all individuals who reside or work in the United States to local health departments in California.

WHY IS IT IMPORTANT?

A large number of Imperial County workers and their dependents are enrolled in health plans that contract with Mexico-based medical providers. Before the new law went into effect, Mexican health-care providers were not required to report communicable diseases to the Public Health Department. This made it difficult to investigate disease outbreaks and determine accurate disease estimates and trends.

WHAT IS OUR STATUS?

The Imperial County Public Health Department has successfully coordinated the notification of this new law with health insurance plans. Staff has coordinated with these insurance plans to inform Mexican medical providers about California's reporting requirements and provided information about the reporting process in Imperial County. This new law is expected to increase disease reporting of persons who reside or are employed in the U.S. but are diagnosed and treated in Mexico.

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SECTION 5

CHRONIC DISEASE

KEY FINDINGS

ASTHMA

- In 2005, 14.7% of Imperial County residents reported being diagnosed with asthma by a health-care provider, compared to 13.6% of all California residents.

DIABETES

- Imperial County reported the highest age-adjusted prevalence rates of diabetes among its residents (11.2%) in 2003 of all counties in California, and a significantly higher rate compared to California overall (6.6%).

CORONARY HEART DISEASE

- Death rates due to coronary heart disease in Imperial County have been consistently lower than California as a whole.

CANCER

- Age-adjusted incidence rates for all cancers combined in Imperial County have been consistently lower than California age-adjusted cancer incidence rates.

Chronic Disease

Chronic disease, defined as conditions lasting longer than one year, limiting a person's ability to function, and/or conditions that require continuing care, place a heavy burden on the health-care system. It is estimated that more than 80% of all health-care costs nationwide in 2001 were due to chronic conditions.

In California, nearly 40% of the population lives with at least one chronic condition. Individuals with multiple chronic conditions, accounting for 20% of the population, consume 60% of the state's health-care resources.

Asthma

WHAT IS IT?

Asthma is a chronic disease that inflames the airways and causes recurrent wheezing, coughing, difficulty breathing, and tightness of the chest. Asthma attacks can range from a mild episode to a life-threatening event.

WHY IS IT IMPORTANT?

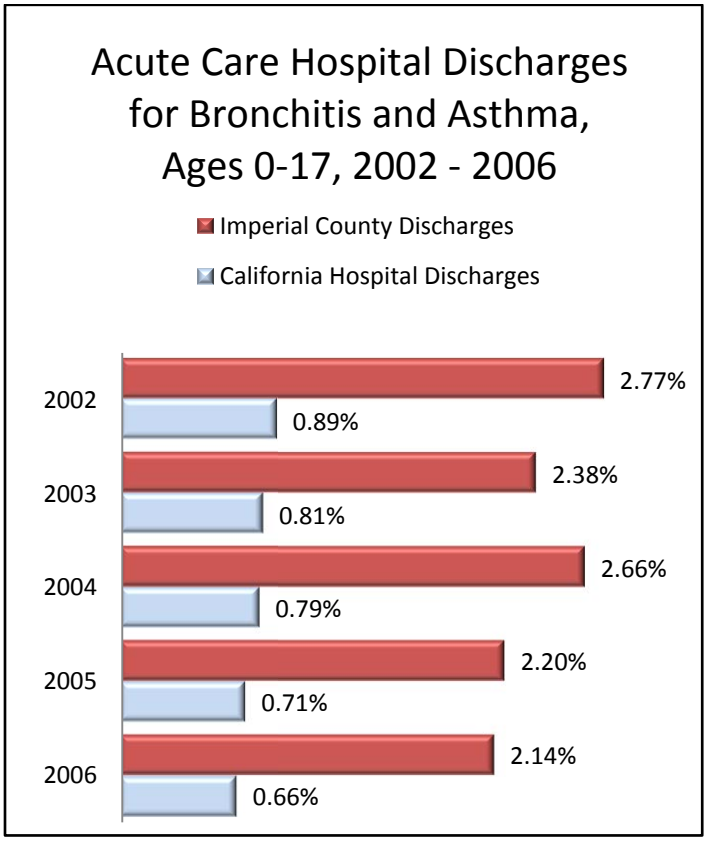
According to the California Health Interview Survey, approximately 14% of the total population 1 year of age and older in California have been diagnosed with asthma, contributing significantly to missed days of school and work, increased visits to the emergency department, and reduced daily activities.

WHAT IS OUR STATUS?

In 2005, 14.7% of Imperial County residents reported having been diagnosed with asthma by a health-care provider during their lifetime compared to 13.6% of all California residents, according to the findings of the California Health Interview Survey. This was a slight increase from 2003 when 14.2% of Imperial County survey respondents reported that they had been diagnosed with asthma, and 2001 when 12.5% of Imperial County survey respondents reported that they had been diagnosed with asthma.

The percentage of acute-care hospital discharges for bronchitis and asthma for children ages 0 to 17 decreased from 2.77% in 2002 to 2.14% in 2006. This trend follows California patterns of decreasing hospital discharges related to asthma, but bronchitis and asthma discharges in Imperial County represent a significantly higher percentage of all discharges compared to California overall (Figure 5-1).

FIGURE 5 – 1



Source: California Office of Statewide Health Planning and Development

WHAT ARE WE DOING?

Since 2001, the Public Health Department has collaborated with other local agencies to improve asthma management in Imperial County. The Imperial County Asthma Initiative was formed to coordinate efforts on this united front. As part of the collaborative effort, the Initiative organized and conducted surveys in 2001, 2005, and 2008 to learn more about health-care provider treatment and diagnosis practices. Other activities include school-based assessments for indoor air quality, local and binational education workshops on asthma management and treatment guidelines for health-care providers, a family-focused informational and skills development workshop, and other health promotion activities for the community.

Diabetes

WHAT IS IT?

Type 1 diabetes, previously known as juvenile diabetes, is a disease that results from the body's failure to produce insulin and is usually diagnosed in children and young adults. There is no known method to prevent type 1 diabetes. Type 2 diabetes, previously known as adult-onset diabetes, is an insulin-resistance disease that accounts for more than 90% of diagnosed cases of diabetes. Maintaining a healthy weight and regular physical activity are important components of a comprehensive plan to successfully managing Type 2 diabetes.

WHY IS IT IMPORTANT?

Diabetes is the 6th leading cause of death in the United States. It is also the leading cause of blindness, amputations, and kidney failure, in addition to being a contributing factor to heart attacks and strokes. According to estimates provided by the California Diabetes Program, 13% of Latinos, 12% of African Americans, 9% of Asians, and 6% of whites statewide had diabetes in 2006. Prevalence rates of diabetes are consistently highest among individuals who are low income and have the least education.

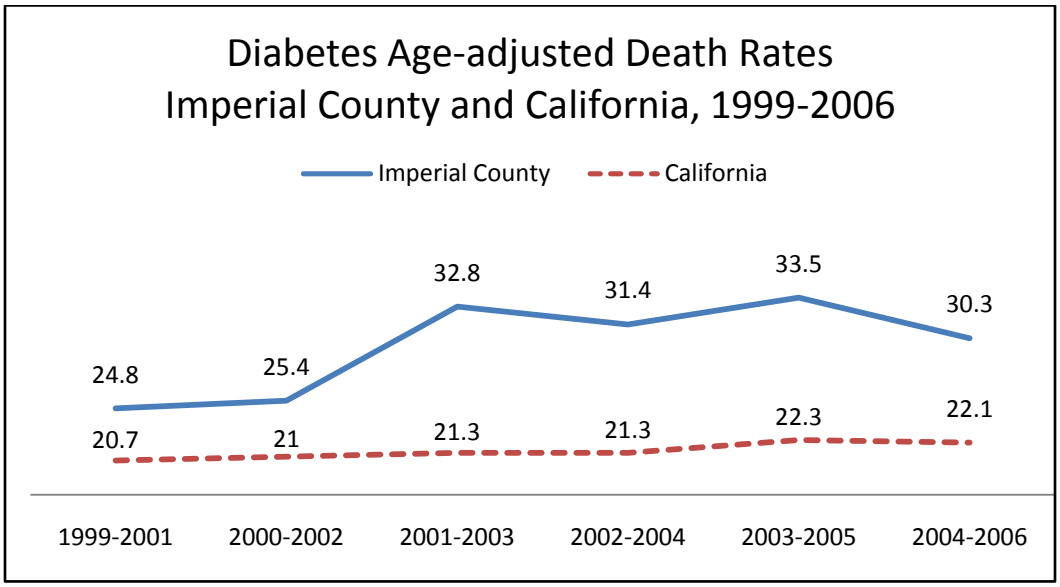
WHAT IS OUR STATUS?

According to the 2003 California Health Interview Survey, Imperial County's age-adjusted prevalence rate for diabetes (11.2%) was significantly higher than California's prevalence rate (6.6%) and was the highest of all California counties. Neither Imperial County nor California overall meets the Healthy People 2010 goal of a prevalence rate of 2.5% or less.

Diabetes hospitalization rates in Imperial County fluctuate but demonstrate similarities to California hospitalization rates, according to data from the California Office of Statewide Planning and Development. In 2006, however, the number of days for diabetes hospitalizations was substantially higher for Imperial County residents (4.1 days for individuals aged 0 to 35, and 4.6 days for individuals aged 35 and older) compared to California residents (2.9 days for individuals aged 0 to 35, and 3.8 for individuals aged 35 and older).

In 2004 to 2006, the age-adjusted death rate due to diabetes was higher in Imperial County (30.3 deaths per 100,000 population) compared to the statewide average (22.1 deaths per 100,000 population). Since 1999, the age-adjusted death rates due to diabetes for Imperial County have increased more than the age-adjusted death rates due to diabetes for all of California (Figure 5-2).

FIGURE 5 - 2



Source: County Health Status Profiles 2008

Cerebrovascular Disease (Stroke)

WHAT IS IT?

Cerebrovascular disease occurs when the blood supply to the brain is cut off (ischemic stroke) or when a blood vessel bursts (a hemorrhagic stroke), and part of the brain is temporarily or permanently affected.

WHY IS IT IMPORTANT?

Cerebrovascular disease is the third leading cause of death in California, as well as a leading cause of workforce disability. It is estimated that nationwide nearly one million individuals are currently disabled from cerebrovascular disease.

WHAT IS OUR STATUS?

Imperial County's age-adjusted death rate for cerebrovascular disease during 2004- 2006 is 40.4 deaths per 100,000 population, lower than the statewide rate of 47.8 deaths per 100,000 population. Imperial County also met the Healthy People 2010 objective of 50 deaths or fewer per 100,000 population (Table 5-1).

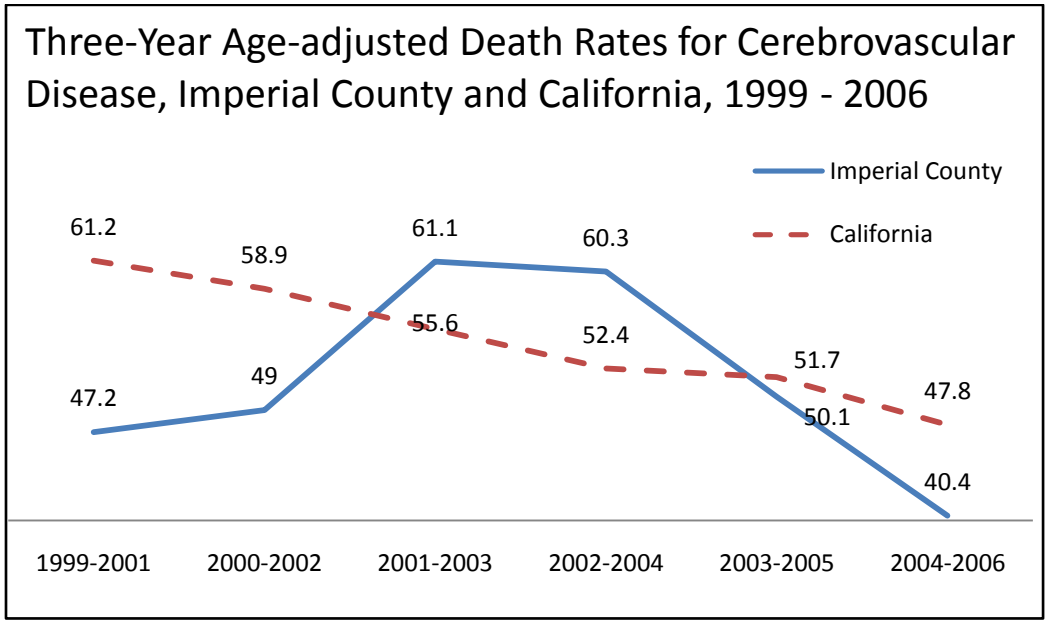
TABLE 5 - 1

Death Due to Cerebrovascular Disease, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	52.7	40.4
California	15,815.0	47.8
Healthy People 2010		**50.0**

Source: County Health Status Profiles 2008

Age-adjusted death rates for cerebrovascular disease have fluctuated in Imperial County since 1999 (Figure 5-3).

FIGURE 5 - 3



Source: County Health Status Profiles 2008

Coronary Heart Disease

WHAT IS IT?

Coronary heart disease occurs when the arteries that supply blood to the heart muscle become hardened, narrowed, or blocked, typically caused by the buildup of plaque inside the coronary arteries. This buildup impedes the supply of oxygen and blood to the heart muscle and can cause permanent heart damage or death.

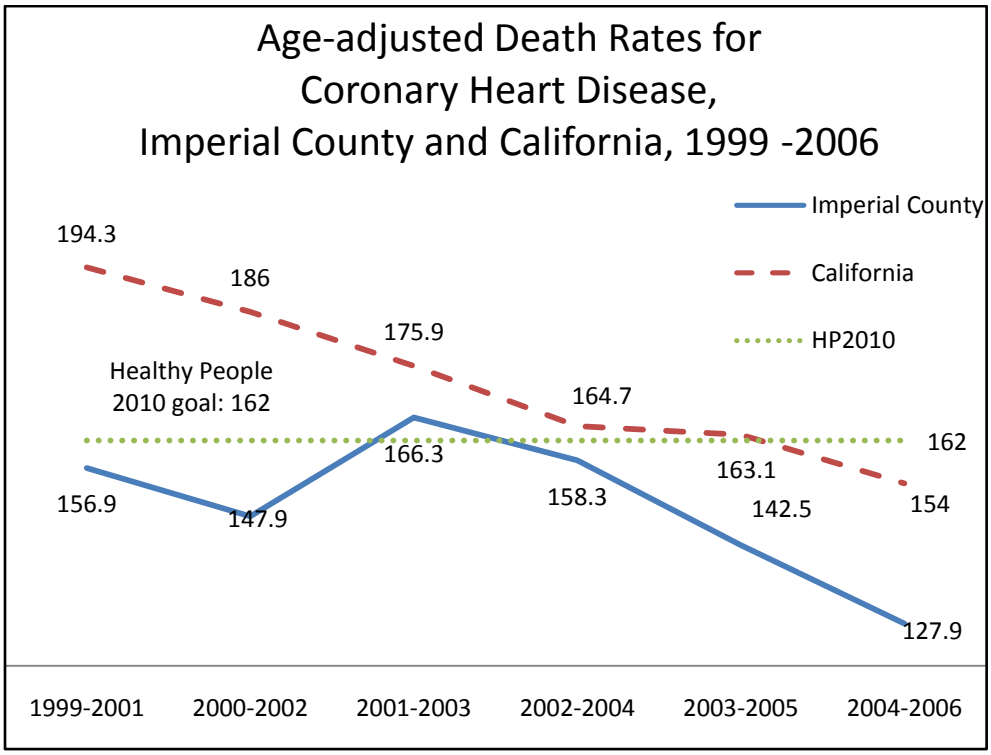
WHY IS IT IMPORTANT?

Coronary heart disease is the second leading cause of death in California. Although heart disease is more common among older adults, more than 17% of coronary heart disease deaths nationwide in 2004 were among individuals younger than 65.

WHAT IS OUR STATUS?

Since 1999, age-adjusted death rates due to coronary heart disease in Imperial County have been consistently lower than California's age-adjusted death rates (Figure 5-4).

FIGURE 5 - 4



Source: County Health Status Profiles 2008

Imperial County's age-adjusted coronary heart disease death rate for 2004 to 2006 is 127.9 deaths per 100,000 population, which is lower than the overall California rate of 154 deaths per 100,000 population. Both Imperial County and California as a whole met the Healthy People 2010 goal of less than 162 heart disease deaths per 100,000 population (Table 5-2).

TABLE 5 - 2

Death Due to Coronary Heart Disease, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	168.7	127.9
California	51,246.3	154.0
Healthy People 2010		**162.0**

Source: County Health Status Profiles 2008

Chronic Liver Disease and Cirrhosis

WHAT IS IT?

Cirrhosis is a result of chronic liver disease, and is characterized by the replacement of liver tissue with scar tissue leading to the loss of liver function. In the United States, chronic liver disease is most often caused by hepatitis C infection or long-term alcohol abuse. Other causes include hepatitis B, certain types of medications, autoimmune diseases, and metabolic disorders.

WHY IS IT IMPORTANT?

Historically, cirrhosis and chronic liver disease was a leading cause of death in California. Although deaths from cirrhosis and chronic liver disease have declined in recent years, this remains the 12th leading cause of death in the United States.

WHAT IS OUR STATUS?

Imperial County's age-adjusted death rate for chronic liver disease and cirrhosis –15.9 deaths per 100,000 population in 2004-2006— is higher than the statewide age-adjusted death rate of 10.6 per 100,000 population during the same period, and the Healthy People 2010 goal of less than 3.2 deaths per 100,000 population (Table 5-3).

TABLE 5 - 3

Death Due to Chronic Liver Disease and Cirrhosis, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	23.3	15.9
California	3,777.0	10.6
Healthy People 2010		**3.2**

Source: County Health Status Profiles 2008

Cancer

WHAT IS IT?

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells.

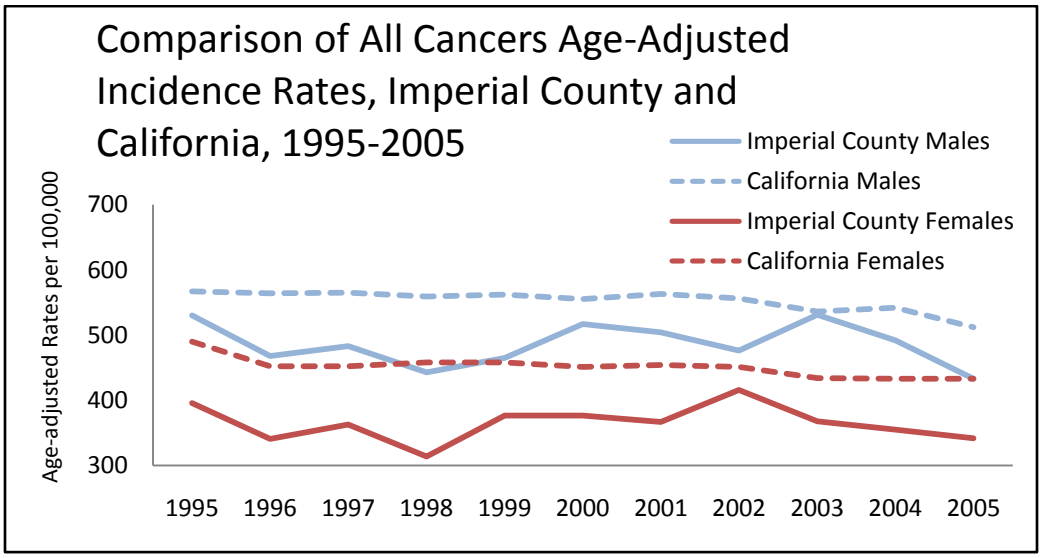
WHY IS IT IMPORTANT?

Cancer is a leading cause of death in California, accounting for nearly a quarter of all deaths statewide.

WHAT IS OUR STATUS?

In general, age-adjusted incidence rates due to all cancers are lower in Imperial County than in California overall (Figure 5-5). This could be in part because of the race/ethnic composition of Imperial County. According to the California Cancer Registry's Report of Cancer by Race and Ethnicity, Latinos have lower rates of new cases for most cancers than other race/ethnic groups. However, Latinos are more likely to be diagnosed with certain specific cancers including liver cancer, stomach cancer, acute lymphocytic leukemia, Kaposi's sarcoma, and cervical cancer.

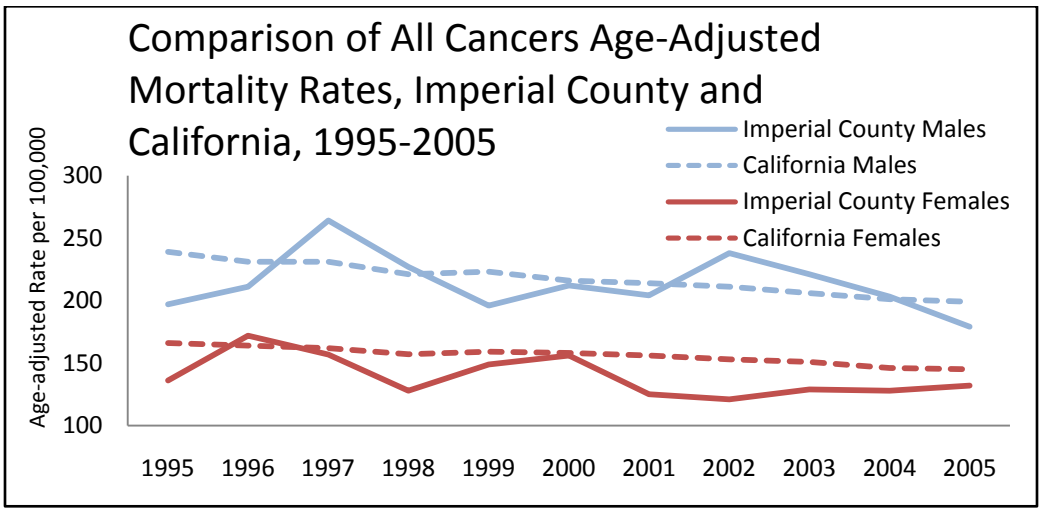
FIGURE 5 – 5



Source: California Cancer Registry

Age-adjusted death rates for males and females in Imperial County, however, are more similar to statewide rates, and the male age-adjusted death rate even surpassed the statewide rate multiple times from 1998 to 2005 (Figure 5-6).

FIGURE 5 - 6



Source: California Cancer Registry

From 2004 to 2006, the age-adjusted cancer death rate for males and females combined in Imperial County (153.3 deaths per 100,000 population) was less than the statewide average (161.3deaths per 100,000 population), and met the Healthy People 2010 objective of less than 158.6 deaths per 100,000 population (Table 5-4).

TABLE 5 - 4

Death Due to All Cancers, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	213.0	153.3
California	54,121.3	161.3
Healthy People 2010		**158.6**

Source: County Health Status Profiles 2008

LUNG CANCER

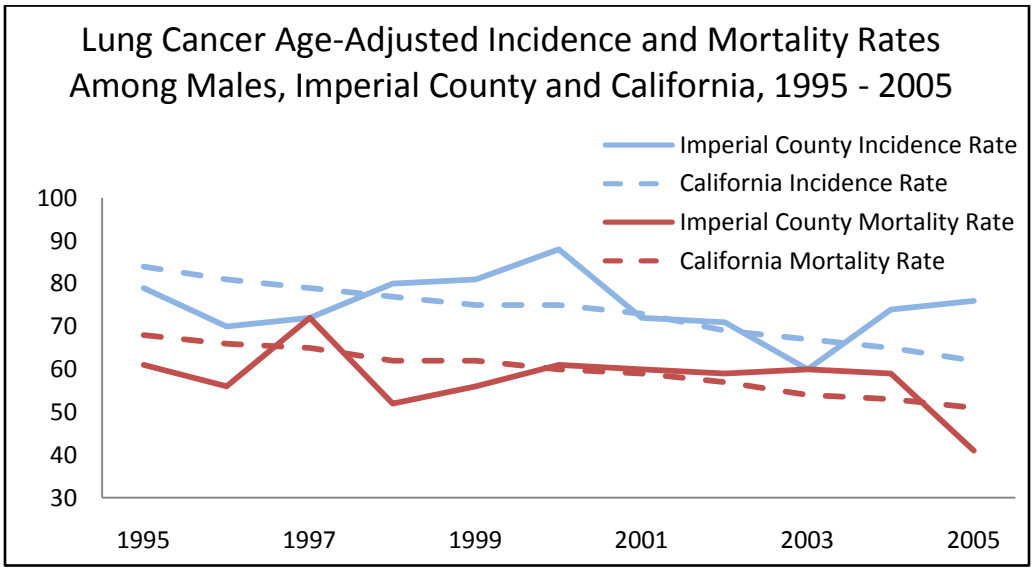
The age-adjusted death rate for lung cancer for Imperial County in 2004-2006 (36.6 deaths per 100,000 population) is lower than California's age-adjusted death rate (40.2 deaths per 100,000 population), and lower than the Healthy People 2010 objective of 43.3 deaths per 100,000 population (Table 5-5). Since 1995, Imperial County's age-adjusted death rates due to lung cancer have decreased dramatically (Figure 5-7).

TABLE 5 - 5

Death Due to Lung Cancer, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	50.0	36.6
California	13,305.7	40.2
Healthy People 2010		**43.3**

Source: County Health Status Profiles 2008

FIGURE 5 - 7



Source: California Cancer Registry

Female Breast Cancer

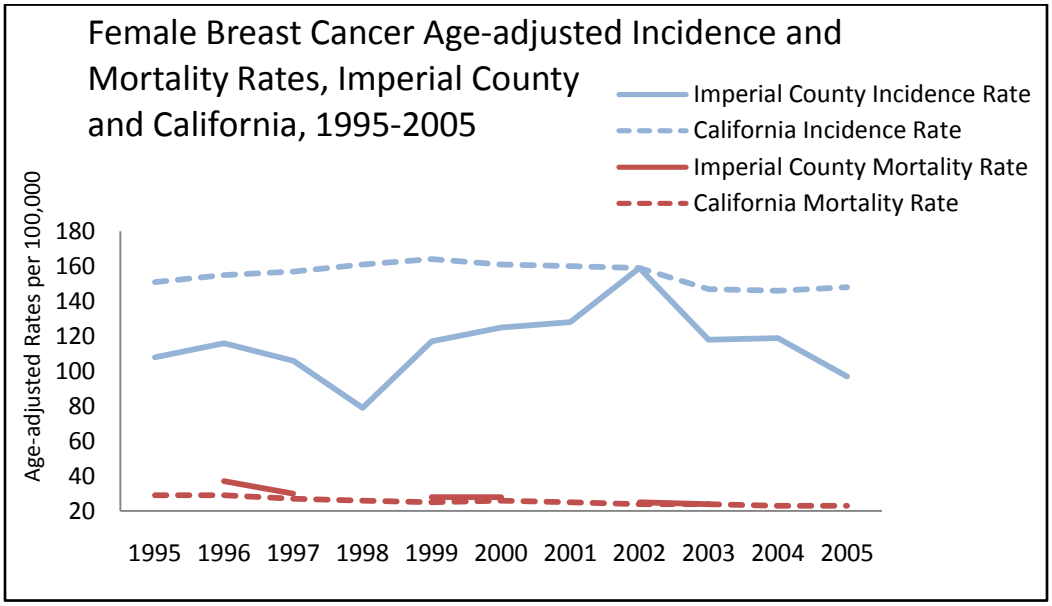
The average age-adjusted incidence rate for breast cancer in Imperial County from 1988 to 2005 is the lowest rate of any county in California. Death rates for breast cancer in Imperial County are statistically unreliable due to the low number of cases (Table 5-6, Figure 5-8).

Table 5 - 6

Death Due to Female Breast Cancer, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	14.3	19.5*
California	4,176.7	22.1
Healthy People 2010		**21.3**

**Death rate unreliable, relative standard error is greater than or equal to 23 percent.*
Source: County Health Status Profiles 2008

Figure 5 - 8

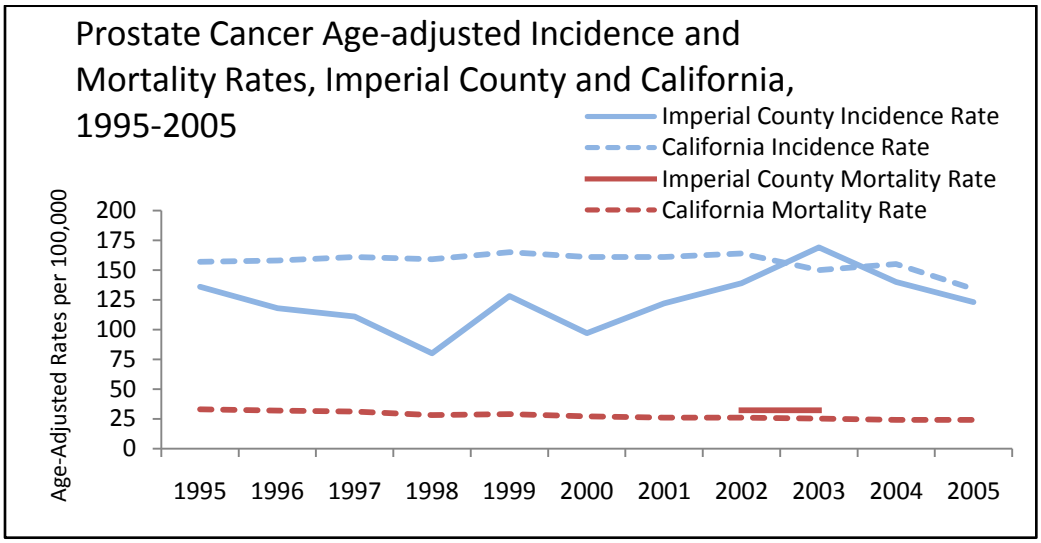


Note: Rates are suppressed if fewer than 15 deaths were reported in the specified category.
Source: California Cancer Registry

PROSTATE CANCER

Imperial County's incidence rate for prostate cancer is lower than California as a whole (Figure 5-9). Imperial County's age-adjusted death rate for 2004 to 2006 (20.7 deaths per 100,000 population) is lower than California overall (22.9 deaths per 100,000 population). Both Imperial County and California met the Healthy People 2010 goal of less than 28.2 deaths per 100,000 population (Table 5-7).

FIGURE 5 - 9



Note: Rates are suppressed if fewer than 15 deaths were reported in the specified category.
Source: California Cancer Registry

TABLE 5 - 7

Death Due to Prostate Cancer, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	12.0	20.7*
California	2,982.3	22.9
Healthy People 2010		**28.2**

**Death rate unreliable, relative standard error is greater than or equal to 23 percent.*
Source: County Health Status Profiles 2008

COLORECTAL CANCER

The age-adjusted death rate due to colorectal cancer for Imperial County in 2004-2006 (15.6 deaths per 100,000 population) is similar to California's age-adjusted death rate (15.4 deaths per 100,000). However, both rates are still higher than the Healthy People 2010 objective of 13.7 deaths per 100,000 population (Figure 5-8).

TABLE 5 – 8

Death Due to Colorectal Cancer, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	21.7	15.6
California	5,171.7	15.4
Healthy People 2010		**13.7**

Source: County Health Status Profiles 2008

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SECTION 6

ENVIRONMENTAL HEALTH

KEY FINDINGS

Air Quality

- The number of days that exceed state or national standards for ozone and particulate matter (PM_{10}) levels in Imperial County has decreased over the past 10 years, although the County has not yet achieved the Healthy People goals for 2012 and 2018 of zero days that exceed state or national standards for these pollutants.

Water Quality

- Seventy-eight out of the 79 public water systems in Imperial County do not exceed any of the maximum contaminate levels set by the United States Environmental Protection Agency for both naturally occurring and man-made contaminates. The exception is one small water system that exceeds the fluoride maximum contaminate level and uses hauled water for drinking purposes.

Solid Waste

- In 2005, Imperial County residents disposed of 0.99 pounds of municipal solid waste per person per day, less than half of the California average of 2.1 pounds per person per day.

Vector-borne Disease Control

- Imperial County was one of the first counties in California to detect the presence of West Nile virus (WNV) in both sentinel chicken flocks and mosquito pools in 2003 when it first appeared in the state.

Animal Control

- The Animal Control's shelter capacity has grown along with the number of animals rescued. In 2007, the shelter reported housing a total of 2,818 animals. The number of animals has increased over the years from 1,564 animals housed in 1998.

Air Quality

WHAT IS IT?

Air quality standards define the maximum amounts of pollutants that can be present in ambient (outdoor) air without harm to the public's health. Both the California Air Resources Board (ARB) and the United States Environmental Protection Agency (U.S. EPA) are authorized to set ambient air quality standards for common pollutants.

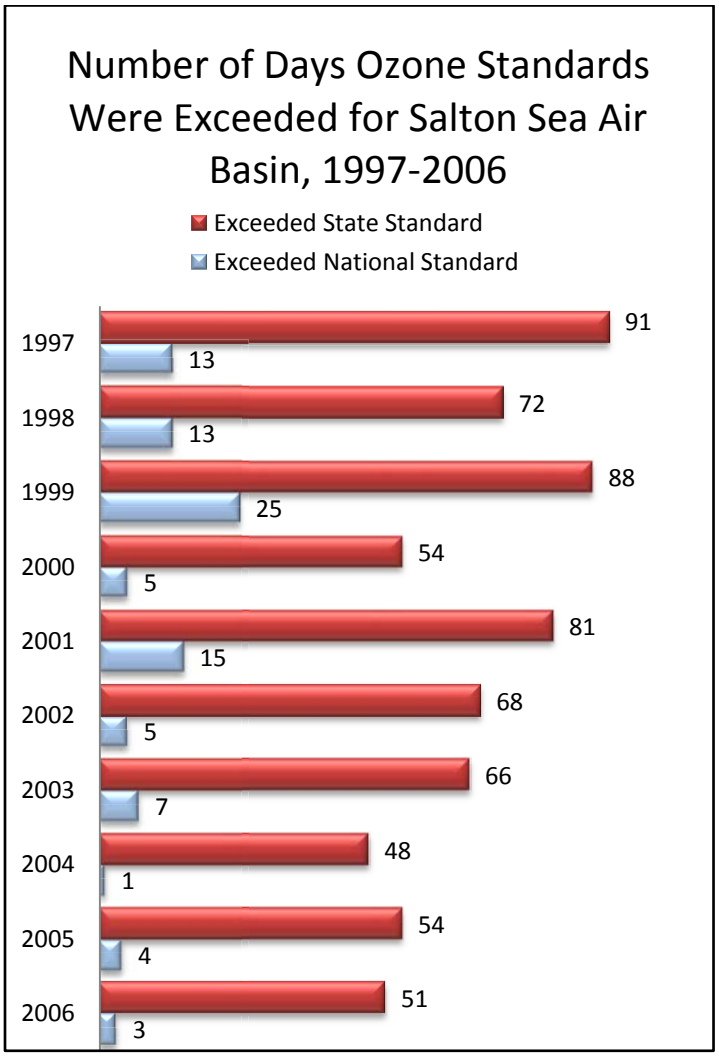
WHY IS IT IMPORTANT?

Air pollutants impact the public's health, and can be particularly harmful to the very young, the very old, and those with certain preexisting medical conditions. Air pollutants can cause breathing difficulties, asthma, lung damage, bronchitis, cancer, and brain and nervous system damage. Also, air pollutants can irritate the eyes, nose and throat, and reduce resistance to colds and other illnesses. According to the ARB, more than 90 percent of Californians breathe unhealthy levels of one or more air pollutants during some part of the year.

WHAT IS OUR STATUS?

Areas that meet either state or national standards for criteria pollutants are called "attainment areas," and areas that don't meet the standards are called "non-attainment areas." California sets standards for 10 criteria pollutants: ozone, suspended particulate matter (PM_{10}), fine suspended particulate matter ($PM_{2.5}$), carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and visibility-reducing particles. The U.S. EPA sets national standards for five criteria pollutants: ozone (1-hour and 8-hour standards), PM_{10}, carbon monoxide, nitrogen dioxide, and sulfur dioxide. In 2006, Imperial County was considered a "non-attainment area" for only two criteria pollutants: ozone and PM_{10}.

FIGURE 6 - 1

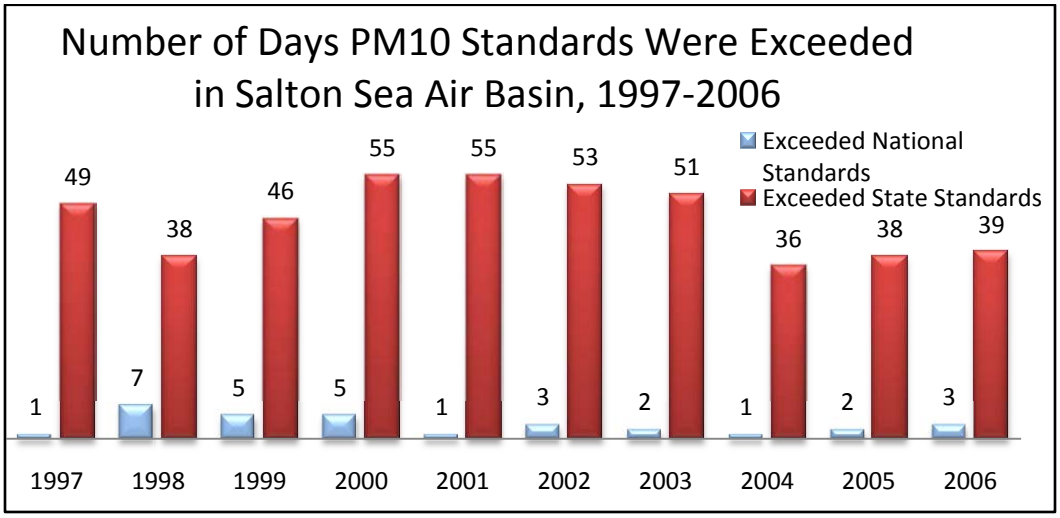


Source: California Air Resources Board

California's ozone concentrations standard is 0.09 parts per million (ppm) for maximum one-hour concentration and the federal standard has been 0.12 ppm for the maximum one-hour concentration but was recently changed to 0.075 ppm for maximum eight-hour concentration. From 1997 until 2006, the number of days that both the state and national one-hour concentration standards were exceeded in the Salton Sea Air Basin has declined (Figure 6-1).

Since 1997 no significant trends have been observed in the Salton Sea Air Basin for particulate matter (PM_{10}). Levels peaked from 2000 to 2003 and since that time have maintained at lower levels (Figure 6-2).

FIGURE 6 - 2



Source: California Air Resources Board

Imperial County has not reached the Healthy People objective of reducing the proportion of persons exposed to air that does not meet the U.S. EPA standards for harmful air to zero percent for ozone by 2012 and zero percent for particulate matter by 2018.

Water Quality

WHAT IS IT?

The federal Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency (U.S. EPA) to set standards for drinking water to protect the public against both naturally occurring and man-made contaminates found in drinking water. Maximum Contaminate Levels (MCLs) are set as close as economically or technically feasible to levels below which there is no known or expected health risk. All public drinking water systems providing water to at least 15 connections or 25 persons for at least 60 days out of the year must comply with these standards. In Imperial County, the California Department of Public Health monitors larger public water systems with typically more than 200 connections, and Imperial County Environmental Health monitors smaller public water systems with typically fewer than 200 connections to ensure that the levels of contaminates present in the water do not exceed MCLs.

WHY IS IT IMPORTANT?

Clean drinking water is basic to life and health. Contaminated drinking water is a major cause of sickness and death resulting from exposure to bacteria, viruses, parasites, or chemical contaminants.

WHAT IS OUR STATUS?

Small public water systems from the western area of Imperial County obtain their water from groundwater wells which do not exceed any MCLs. In the southwestern portion of the County, there is a single system that exceeds the fluoride MCL and uses hauled water for drinking.

Small public water systems located in the central part of Imperial County use surface water from the Colorado River due to the high mineral content in the groundwater in this area.

Water systems in the eastern part of the County use groundwater. The groundwater from this area is treated by the community water systems due to the higher levels of iron and manganese, although neither one exceeds the MCLs.

All of the larger state-monitored water systems are serviced by Colorado River water through Imperial Irrigation District (IID) canals. Water from the Colorado River typically does not contain any contaminates that exceed the MCLs. The most significant challenge for these larger water treatment facilities is disinfection, which can lead to excess levels of disinfection byproducts. Currently, no systems exceed maximum allowable levels of disinfection byproducts.

WHAT ARE WE DOING?

Imperial County Environmental Health monitors 60 small public water systems, 28 of these systems obtain their water from underground wells, and 32 systems are classified as surface water systems and obtain water from the Colorado River via Imperial Irrigation District (IID) canals. These surface water systems are routinely treated for biological pathogens.

The California Department of Public Health monitors 19 larger public water systems in the County. All 19 systems obtain water from the Colorado River via IID canals. Source water testing for all systems that use surface water is performed by IID.

Pesticides

What are they?

Pesticides are substances that are used to control living organisms that cause damage or economic loss, or transmit or produce disease. Pests include insects, fungi, weeds, rodents, nematodes, algae, viruses, or bacteria. Pesticides include herbicides, fungicides, insecticides, rodenticides, and disinfectants, as well as insect growth regulators. In California, adjuvants (substances added to enhance the efficacy of a pesticide) are also subject to the regulations that control pesticides.

Why is reporting important?

Pesticide exposure surveillance is integral in the process of evaluating the effectiveness of exposure control measures, identifying areas where improvements are needed, and determining the direction of future regulations regarding worker health and safety.

Pesticide Use Reporting Program

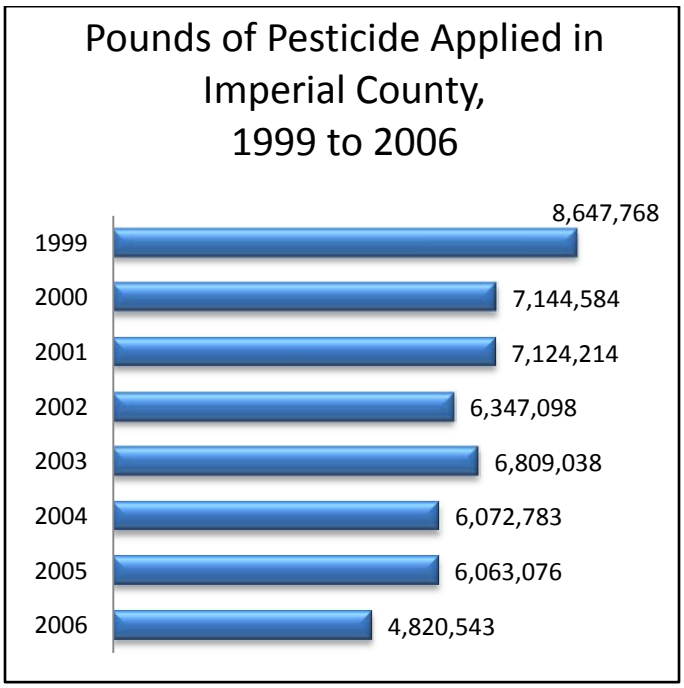
California's pesticide use reporting program is internationally recognized as the most comprehensive of its kind. In1990, California became the first state to require full reporting of agricultural pesticide use in response to demands for more realistic and comprehensive pesticide use data. Agricultural use encompasses pesticide application for the production of any agricultural commodity, except livestock; pesticide application for the treatment of postharvest agricultural commodities; and pesticide applications to parks, golf courses, cemeteries, rangelands, pastures, and along roadside and railroad rights-of-way. Under the program, all agricultural pesticide use must be reported monthly to the county agricultural commissioner, who in turn reports the data to the state Department of Pesticide Regulation.

Monitoring pesticide application through reporting leads to improved evaluation of pesticide impacts on human health and allows for improved protection of air and water quality.

WHAT IS OUR STATUS?

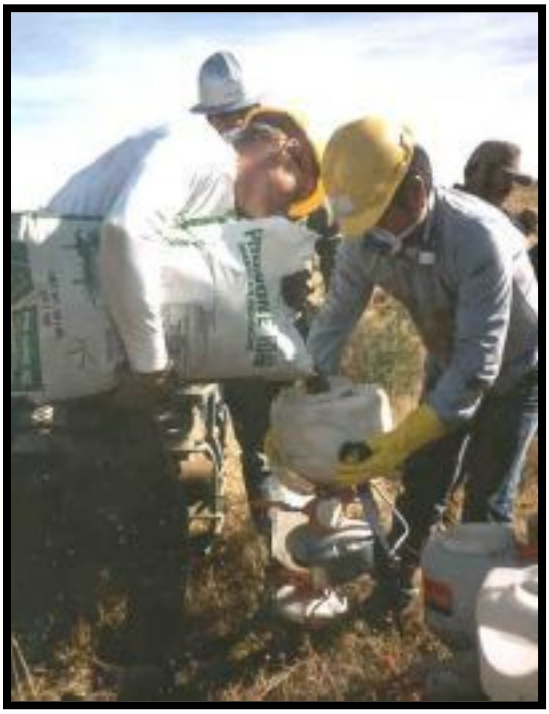
The amount of pesticides applied in Imperial County has decreased significantly overall in the past seven years, even while accounting for fewer acres harvested. In 1999, 8,647,468 pounds were applied in the County, compared to 4,820,543 pounds in 2006 (Figure 6-3). Imperial County's pesticide use has gone from 7th in the state in 1999 to 11th in the state in 2006.

FIGURE 6 - 3



Source: California Department of Pesticide Regulation

From 1997 to 2006, there were 13 cases of reported exposures to pesticides in Imperial County that were classified as definite, meaning there was a high degree of correlation between the pattern of exposure and the resulting symptomatology, requiring both medical evidence and physical evidence of exposure. During that same period, there were 72 probable cases, which indicated a relatively high degree of correlation evident, but medical or physical evidence was inconclusive or unavailable; and 29 possible cases, which had some degree of correlation evident but both medical and physical evidence were inconclusive or unavailable.



Source: Department of Pesticide Regulation, Cal-EPA

Lead Poisoning

WHAT IS IT?

Lead is an element that occurs in nature and if ingested is harmful to the human body. When food, dust, soil, or other items contaminated with lead are ingested, small amounts of lead can accumulate in the body and this buildup of lead is referred to as lead poisoning.

WHY IS IT IMPORTANT?

Lead poisoning is the most common environmental illness in California children. Children are more susceptible to lead poisoning than adults because of their increased likelihood of exposure to dust and soil and are at greatest risk from the time they begin to crawl until 6 years of age. Children less than 6 years old and fetuses are also the most vulnerable to the harmful effects of lead poisoning because their brains and nervous systems are still forming. Ingestion of large amounts of lead can damage the nervous system and other major organs and can lead to brain damage, seizures, or even death. At lower levels of exposure, lead can affect a child's mental and physical growth. By impairing brain function, low levels of lead exposure can make it more difficult for children to learn, pay attention, and succeed in school. The Healthy People 2010 objective is to eliminate elevated blood lead levels in all children.

WHAT IS OUR STATUS?

Under California law and according to the recommendations of the Centers for Disease Control, children with identified risk factors should be screened at 1 year of age and again at age 2. Because there is no mandate to screen all children, childhood lead poisoning prevalence rates are unknown. In 2007, there were approximately 5,190 children screened in Imperial County. Five children were identified as having elevated blood lead levels (Table 6-1).

TABLE 6 - 1

IMPERIAL COUNTY CHILDHOOD LEAD POISONING DATA, 2004-2007

Year	Number of New Cases	Number of Screenings
2004	2	unknown
2005	1	unknown
2006	3	3,658
2007	5	5,190
Total	**11**	

Source: Imperial County Childhood Lead Poisoning Prevention Program

Note: Cases were defined as a child who had lab results submitted to the California Department of Public Health, and entered into the RASSCLE system with either one blood lead level (BLL) equal to or greater than 20 ug/dl or two BLLs equal to or greater than 15 ug/dl. These must be at least 30 and no more than 600 calendar days apart.
Screenings were defined as the total number of blood lead reports received via paper and electronically during Calendar Year 2006. These counts are not unique children, but relatively few children would be tested more than once in a year (typically those with elevated levels).
Note: The data upon which these analyses are based should be considered preliminary and are subject to change as additional information becomes available. RASSCLE 1 and Consolidated data sources (January 2008 extracts) were used for these analyses.

WHAT ARE WE DOING?

The goal of Imperial County's Childhood Lead Poisoning Prevention Program (CLPPP) is to prevent and reduce the harmful effects of lead poisoning among Imperial County's children under 6 years of age, as well as other high-risk children.

The CLPPP works to achieve this goal by identifying and caring for lead-burdened children, and preventing environmental exposures to lead through community outreach and education. Imperial County provides information and resources for lead poisoning prevention, community resources for lead screening, case management by a Public Health Nurse for lead-burdened children, environmental assessment for poisoned children, and medical nutrition therapy. Fingerstick testing is provided in the County for children who qualify for the Child Health and Disability Prevention Program.

Solid Waste

What is it?

Municipal solid waste is defined as nonhazardous trash from homes, industries, and commercial and institutional offices. Waste disposed is the actual tons of waste being dumped in landfills that is not being reused or recycled.

Why is it important?

Waste management is an important aspect of Public Health. It can help promote healthy living conditions, reduce pollution of water sources, reduce exposure to harmful substances in discarded materials, and conserve resources.

What is our status?

In 2005, Imperial County residents disposed of 0.99 pounds of municipal solid waste per person per day, significantly less than the California average of 2.1 pounds of municipal solid waste per person per day.

Illegal Dumping

Illegal dumping poses significant negative health, social, environmental, and economic consequences for Imperial County residents.

In 2007, per the directive of the Imperial County Board of Supervisors, the Public Health Department worked with community leaders, key stakeholders, and business representatives to create a framework to address illegal dumping in Imperial County. Ongoing discussions are being held to design prevention strategies, to create solutions to remediate current illegal dump sites, and to develop enforcement options through the creation of a local ordinance.

WHAT ARE WE DOING?

Serving as the Local Enforcement Agency for the California Integrated Waste Management Board, Imperial County Environmental Health inspects 34 solid waste operations including landfills, transfer/processing facilities, and agricultural composting facilities to ensure that state regulations are being followed, and that the public's health and the environment are being protected (Table 6-2).

TABLE 6 - 2

IMPERIAL COUNTY SOLID WASTE OPERATIONS, 2008

Type of Facility	Number of Facilities	Frequency of Inspections
Active Landfills	10	Monthly
Landfills (closing or partial closure)	5	Quarterly
Transfer/Processing Operations	6	Monthly or Quarterly
Abandoned or Illegal Sites	4	Quarterly
Agricultural Composting Operations	9	Annually
Total	**34**	

Source: Imperial County Environmental Health

Vector-Borne Disease

WHAT IS IT?

Vector-borne diseases include infectious diseases that are transmitted to humans by vectors such as mosquitoes, ticks, fleas, lice, or rodents. The purpose of vector control is to decrease contact between humans and vectors through education, surveillance, and integrated pest management strategies.

WHY IS IT IMPORTANT?

Control and surveillance of vector-borne disease is an integral part of the protection of human health by reducing vector-borne disease transmission and incidence of human disease.

WHAT IS OUR STATUS?

Surveillance is conducted primarily for the three most prevalent mosquito-borne viruses in California: West Nile virus (WNV), St. Louis Encephalitis (SLE), and Western Equine Encephalomyelitis (WEE).

In 2003, Imperial County reported one of the first three indigenous human cases of West Nile virus (WNV) in California, in addition to being one of the three counties that detected WNV in mosquito pools and sentinel chicken flocks that year. WNV has been detected in either mosquito pools or sentinel chicken flocks every year since 2003. Both WEE and SLE have also been detected in mosquito pools or sentinel chicken flocks, although not consistently each year, during the last five years.

WHAT ARE WE DOING?

Imperial County Vector Control works to protect the public's health primarily through surveillance of vector-borne disease, abatement and control of vectors, and public education and outreach.

Surveillance is conducted through the collection and testing of mosquitoes for the presence of WNV, WEE, and SLE, in addition to monitoring the abundance and type of mosquitoes. Four sentinel chicken flocks are also maintained by Imperial County Vector Control and are routinely tested during the mosquito season for evidence of infection from WNV, WEE, or SLE. Control of the mosquito populations is achieved through the destruction of mosquito larva (larvicide application) and adult mosquitoes (adulticide or localized fogging).

Additionally, Imperial County Vector Control also responds to a variety of public health complaints, which include bat and rodent encounters, flea infestations, and bee swarms.

Animal Control

WHAT IS IT?

Imperial County Animal Control coordinates with other County agencies in matters of public health and communicable diseases related to animals for the unincorporated areas in Imperial County.

WHY IS IT IMPORTANT?

The Animal Control program enforces County ordinances and state regulations concerning rabies, animal and human safety, and humane treatment of animals. This includes operation of the County Animal Control Shelter.

WHAT IS OUR STATUS?

The Animal Control's shelter capacity has grown along with the number of animals rescued. In 2007, the shelter reported housing a total of 2,818 animals. This number has increased over the years from 1,564 animals housed in 1998.

WHAT ARE WE DOING?

In addition to providing shelter for animals in need, County Animal Control hosts community adoption events for the placement of homeless animals. The program also offers low-cost spay/neutering services for animals adopted through the community events. Animal Control officers provide patrol services in the unincorporated areas of the County, enforce county ordinances and state law, and educate the community about animal health and safety issues.

Animal Control also works in conjunction with the Public Health Department's Field Nursing and Laboratory for the response and investigation of possible rabies cases. In 2007, a total of 132 animal bites of humans were investigated.

Rabies Control

In California, most cases of rabies occur in skunks and bats. Routine testing of suspect animals is integral to assessing potential human exposure. In 2007, 20 specimens were submitted for rabies testing in Imperial County: six bats, three cats, eight dogs, and three skunks. Of the animals submitted, only one bat was found positive for rabies.

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SECTION 7

INJURIES AND VIOLENCE

Injuries

Injuries are generally defined as events that cause physical damage to a person's body and can include trauma, falls, poisonings, burns, drownings, homicides, suicides, and assaults.

Injuries can be classified as unintentional, which are incidents that occur without the intent of harm; self-inflicted or suicide, incidents that are deliberately intended to cause harm to oneself; and assault or violence, events that are intended to harm another person or other persons.

Unintentional Injuries and Deaths

❖ During 2004-2006, unintentional injuries were the third leading cause of death for all age groups in Imperial County. The County's age-adjusted death rate for unintentional injuries was 43.5 deaths per 100,000 residents, higher than the California age-adjusted death rate of 30.2 deaths per 100,000 residents and the Healthy People 2010 objective (17.1).

❖ In 2005, there were 796 nonfatal hospitalized unintentional injuries in Imperial County. Of those, 316 (40%) were due to falls, and 163 (20%) were due to motor vehicle collisions.

❖ In 2005, there were 74 unintentional injury deaths in Imperial County. Thirty-five (47%) of those unintentional injury deaths were due to motor vehicle collisions, 13 (18%) were due to poisoning, and seven (9%) were due to falls.

Motor Vehicle Collisions

❖ In 2005, there were 1,681 motor vehicle collisions in Imperial County. Of those, 58% (975) resulted in property damage, 39.6% (667) resulted in injuries, and 2.3% (39) resulted in fatalities.

Unintentional Injuries

WHAT ARE THEY?

Unintentional injuries are injuries that are not caused purposefully or with the intent to harm. Unintentional injuries and the events leading up to them are not random and many times can be prevented by choosing safe behaviors, using safety equipment, and obeying safety laws.

WHY ARE THEY IMPORTANT?

In 2005, unintentional injuries were the leading cause of death in California for individuals aged 1 to 44. But death is only part of the health burden; serious injuries can lead to disability and can have long-term impacts on quality-of-life outcomes and costs to society.

WHAT IS OUR STATUS?

In 2005, there were 74 deaths in Imperial County caused by unintentional injuries. Thirty-five (47%) of those deaths involved motor vehicle collisions, 13 (18%) were due to poisoning, and seven (9%) were due to falls. During 2004-2006, unintentional injuries were the third leading cause of death for all age groups In Imperial County. The County's age-adjusted death rate for unintentional injuries during 2004-2006 was 43.5 deaths per 100,000 residents, which was higher than the California age-adjusted death rate of 30.2 deaths per 100,000 residents, and the Healthy People 2010 objective of 17.1 deaths per 100,000 residents (Table 7-1).

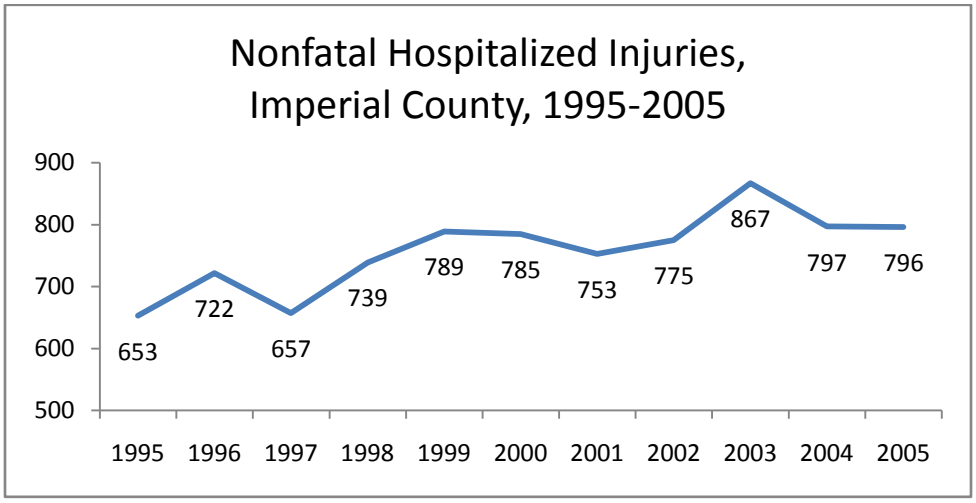
TABLE 7- 1

Death Rates Due to Unintentional Injuries, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	73.3	43.5
California	10,925.3	30.2
Healthy People 2010		**17.1**

Source: County Health Status Profiles 2008

Based on patient hospital discharge data for 2005, there were 796 nonfatal unintentional injuries involving individuals who were hospitalized in Imperial County. Approximately 40% (316) of those nonfatal hospitalized injuries were due to falls, and 20% (163) were due to motor vehicle collisions. Sixty-nine percent of hospitalized nonfatal injuries due to falls occurred in individuals aged 65 and older. Figure 7-1 illustrates the trend of unintentional injury hospitalizations in Imperial County from 1995 to 2005.

FIGURE 7 - 1



Source: California Office of Statewide Health Planning and Development, Patient Discharge Data.

Motor Vehicle Traffic Collisions

WHAT ARE THEY?

A motor vehicle traffic collision is an event that causes death, injury, or property damage involving a motor vehicle in transport on a roadway that is open to the use of the public for the purposes of vehicular travel.

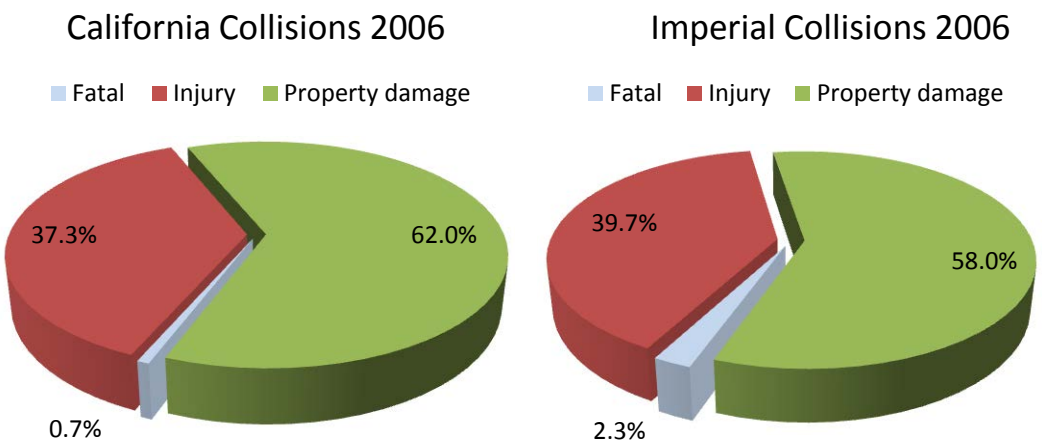
WHY ARE THEY IMPORTANT?

Motor vehicle collisions are a major cause of death and disability. It is estimated that motor vehicle traffic collisions kill nearly 4,000 people, injure approximately 280,000 people, and cost $15 billion annually in California. The number of motor vehicle collisions is influenced by a variety of factors including driver education and behavior, vehicle safety features, roadway conditions, traffic congestion and the total number of miles driven.

WHAT IS OUR STATUS?

In 2005, Imperial County reported 1,681 collisions, more than half of which did not result in injuries or fatalities. Property damage was reported in 58% of all collisions, while injuries occurred in 39.6% and fatalities in 2.3% of those collisions. The percentage of fatal collisions in Imperial County (2.3%) was greater than that statewide (0.7%) (Figure 7-2).

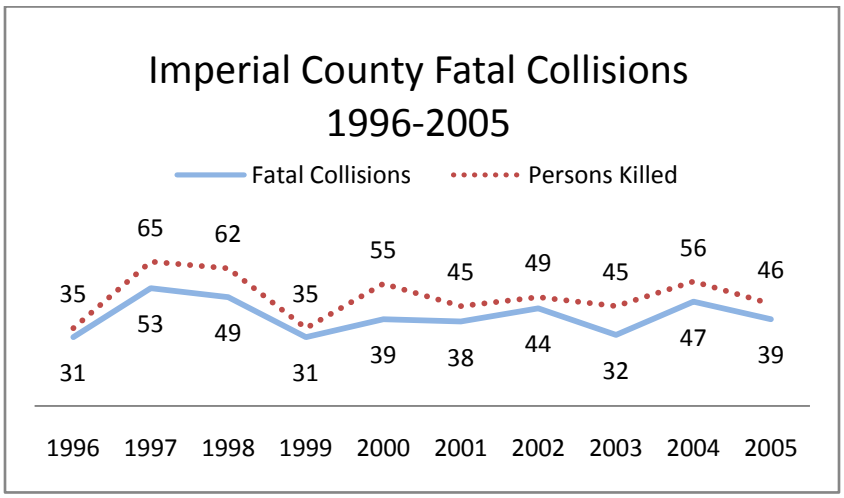
FIGURE 7 - 2



Source: California Highway Patrol SWITRS

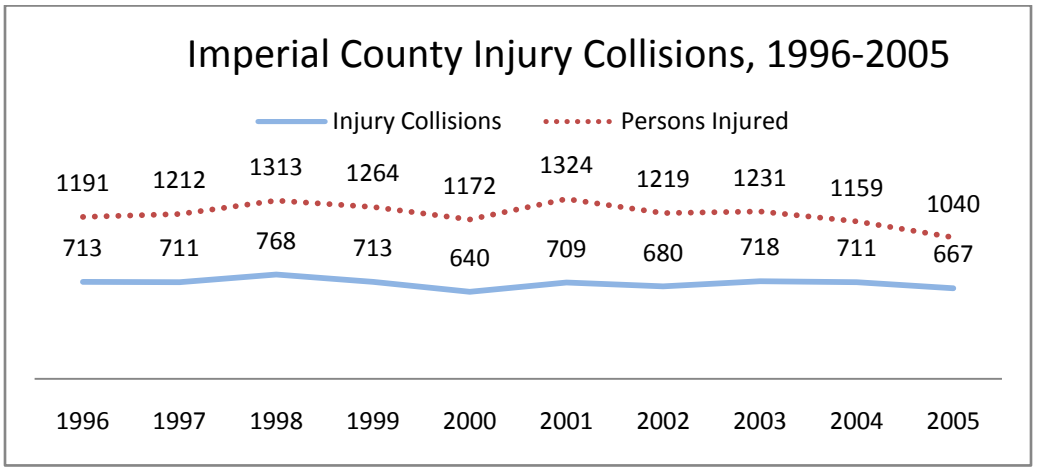
The total number of injuries, fatalities, and collisions in Imperial County fluctuates from year to year, and has not exhibited any significant trends in the past decade (Figures 7-3 and 7-4).

FIGURE 7 - 3



Source: California Highway Patrol SWITRS

FIGURE 7 - 4



Source: California Highway Patrol SWITRS

During 2004-2006, the County's age-adjusted death rate from motor vehicle collisions was 21.3 deaths per 100,000 residents. This was higher than California as a whole (11.9 deaths per 100,000 residents), and did not meet the Healthy People 2010 objective of 8.0 deaths per 100,000 residents (Table 7-2).

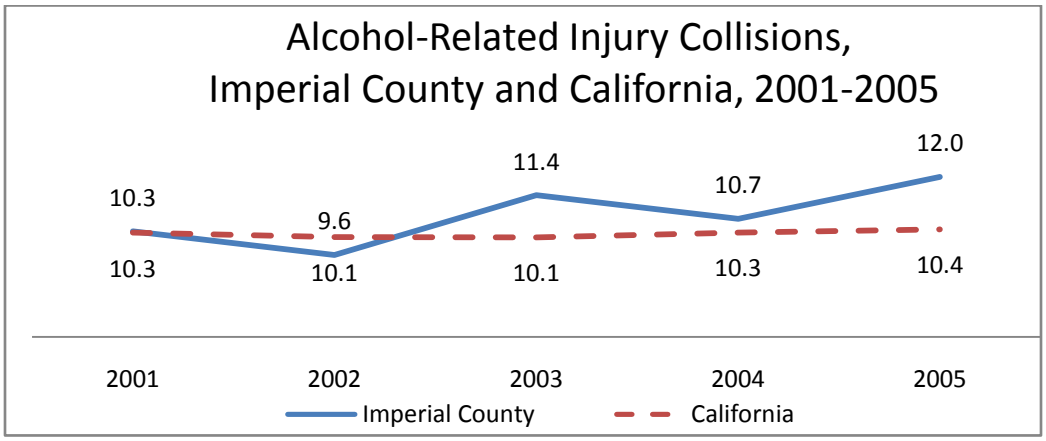
TABLE 7 - 2

Death Rates Due to Motor Vehicle Crashes, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	34.7	21.3
California	4,371.3	11.9
Healthy People 2010		**8.0**

Source: County Health Status Profiles 2008

Statewide, alcohol-related collisions accounted for approximately 35% of all fatal collisions and approximately 10% of all injury collisions that occurred from 2001 to 2005. During the same period in Imperial County, alcohol-related collisions accounted for nearly 30% of all fatal collisions and 11% of all injury collisions (Figure 7-5).

FIGURE 7 - 5



Source: California Highway Patrol SWITRS

WHAT ARE WE DOING?

The Public Health Department provides no-cost child passenger safety seat education, inspections, and restraints for low-income Imperial County residents. Also, in collaboration with local non-profit agencies, hospitals and clinics, and law enforcement, Imperial County provides car seat clinic inspections and installations for all County residents.

Homicide

WHAT IS IT?

Homicide is defined as an intentionally inflicted fatal injury to another individual.

WHY IS IT IMPORTANT?

Homicide is a major cause of death overall in California. For males aged 15 to 34, homicide is the second leading cause of death, and for females aged 15 to 24, it is the third leading cause of death. Because homicide deaths primarily impact young people, they account disproportionately for years of potential life lost.

WHAT IS OUR STATUS?

During 2004-2006, Imperial County's average age-adjusted death rate due to homicide was 2.6 deaths per 100,000 residents. This rate was lower than California's age-adjusted death rate of 6.8 deaths per 100,000 residents, and than the Healthy People 2010 objective of 2.8 deaths per 100,000 residents. Imperial County's rate is considered statistically unreliable due to the small numder of deaths (Table 7-3).

TABLE 7 - 3

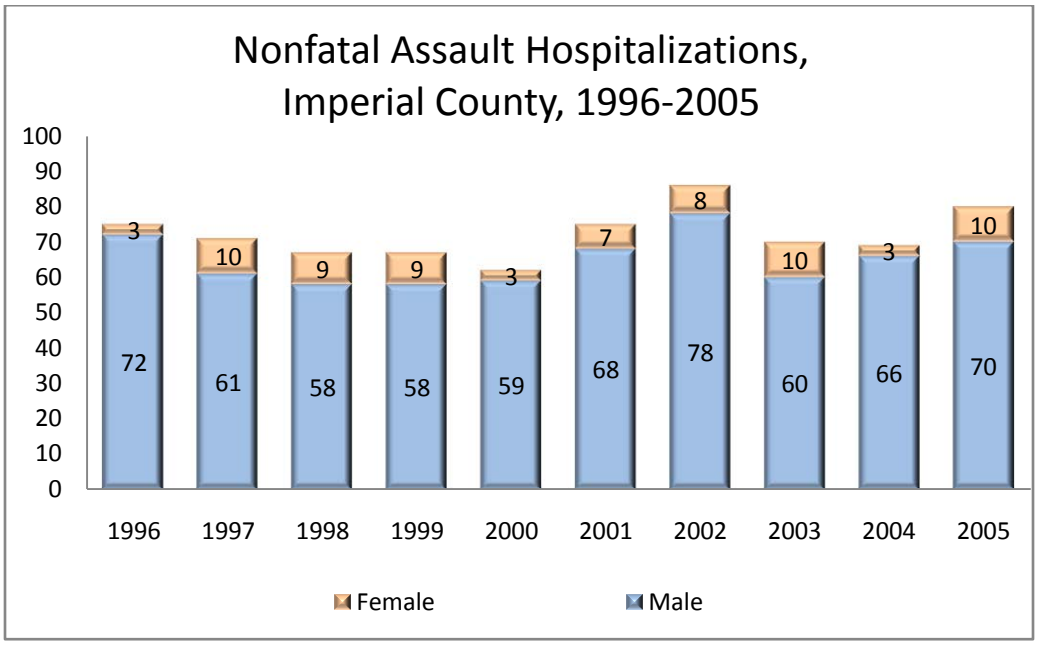
Death Rates Due to Homicide, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	4.3	2.6*
California	2,537.7	6.8
Healthy People 2010		**2.8**

**Death rate unreliable, relative standard error is greater than or equal to 23%.*

Source: County Health Status Profiles 2008

From 1996 to 2005, 81% of all homicide deaths in Imperial County occurred among males. Hospitalization rates among males for nonfatal assault injuries were even greater. During the same period, 1996 to 2005, 90% of all hospitalizations for nonfatal assault injuries in Imperial County were among males (Figure 7-6). Nearly half of all hospitalizations occurred among individuals aged 15 to 29.

FIGURE 7 - 6



Source: EPICenter, California Injury Data Online

Suicide

WHAT IS IT?

Suicide is defined as a self-inflicted destructive act with explicit or inferred intent to die.

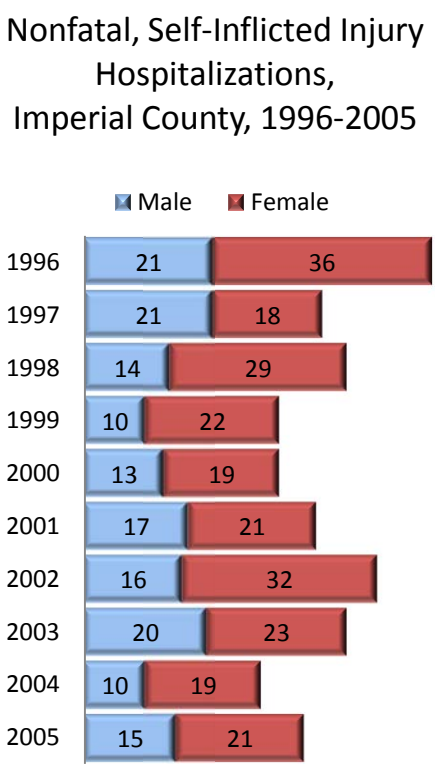
WHY IS IT IMPORTANT?

Suicide deaths only represent part of the problem; more people survive suicide attempts than actually die. Those who survive can be seriously injured and can require extensive medical care.

WHAT IS OUR STATUS?

From 1996 to 2005, 82.6% (76) of suicide deaths in Imperial County were among males. This is consistent with national statistics which show that males represent 78.8% of all U.S. suicide deaths. Although women represent a much smaller percentage of suicide deaths, they attempt suicide about two to three times more often than men. During 1996 to 2005, 60% (240) of nonfatal, self-inflicted injury hospitalizations in Imperial County were among females (Figure 7-7).

FIGURE 7 - 7



Source: EPICenter, California Injury Data Online

From 2004-2006, Imperial County's average age-adjusted death rate due to suicide was 7.0 deaths per 100,000 residents, the second lowest of all California counties. Imperial County's suicide death rate was lower than California's age-adjusted rate of 9.0 deaths per 100,000, but was higher than the Healthy People 2010 objective of 4.8 deaths per 100,000 residents. However, the County's rate is considered statistically unreliable due to the small number of deaths (Table 7-4).

TABLE 7 - 4

Death Rates Due to Suicide, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	11.0	7.0*
California	3,282.7	9.0
Healthy People 2010		**4.8**

**Death rate unreliable, relative standard error is greater than or equal to 23%.*
Source: County Health Status Profiles 2008

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SECTION 8

HEALTH IMPACTS OF LIFESTYLES AND BEHAVIORS

KEY FINDINGS

Adult Obesity

- In 2005, 62.0% of Imperial County females were classified as overweight or obese compared to 46.9% of California females; and 72.1% of Imperial County males were classified as overweight or obese compared to 65.6% of California males.

Childhood Obesity

- In 2007, 15.3% of Imperial County's 2- to 5-year-old residents were overweight and 17.7% were obese. For the County's 5- to 20-year-old population, 17.7% were overweight and 24.8% were obese.

Adult Substance Abuse

- In 2006, drug-related arrests accounted for 28% of all misdemeanor arrests in Imperial County compared to only 15% in California overall. Drug-related arrests also accounted for a larger portion of felony arrests in Imperial County (34%) compared to California as a whole (29%).

Adolescent Substance Abuse

- In Imperial County, 14% of 7th graders, 31% of 9th graders, and 42% of 11th graders reported alcohol use during the previous 30 days, compared to 13% of 7th graders, 28% of 9th graders, and 37% of 11th graders statewide who reported alcohol use during the previous 30 days.

Healthy Lifestyles and Behaviors

Choosing a healthy lifestyle can reduce a person's risk of heart disease and diabetes and improve overall health. Healthy lifestyles include eating a nutritious diet, maintaining a healthy weight, being physically active, quitting smoking (or not starting), and minimizing stress.

Providing the tools to empower people to make healthy choices is essential to the well-being of our community. Imperial County Public Health Department has several projects in place to foster positive behavioral and lifestyle changes as a way to prevent detrimental health outcomes.

Adult Obesity

WHAT IS IT?

Being overweight or obese is defined as being in a weight range that is greater than what is generally considered healthy for a given height, and has been shown to increase the likelihood of certain diseases or health problems. There are a variety of methods to define these weight ranges and estimate body fat, including measurement of waist circumference or techniques such as ultrasound and magnetic resonance imaging. But for adults the most common method to define weight range is by determining an individual's body mass index (BMI) using a weight and height calculation.

The Physical Activity and Healthy Eating (P.A.H.E.) Coalition's mission is to increase awareness and knowledge of the importance of eating fruits and vegetables and being physically active for at least 30 minutes most days for adults and 60 minutes daily for children. The P.A.H.E. Coalition includes representatives from schools, community groups, and health agencies who come together to promote healthy eating and physical activity in Imperial County by organizing events, distributing materials and information, and providing presentations on topics of interest.

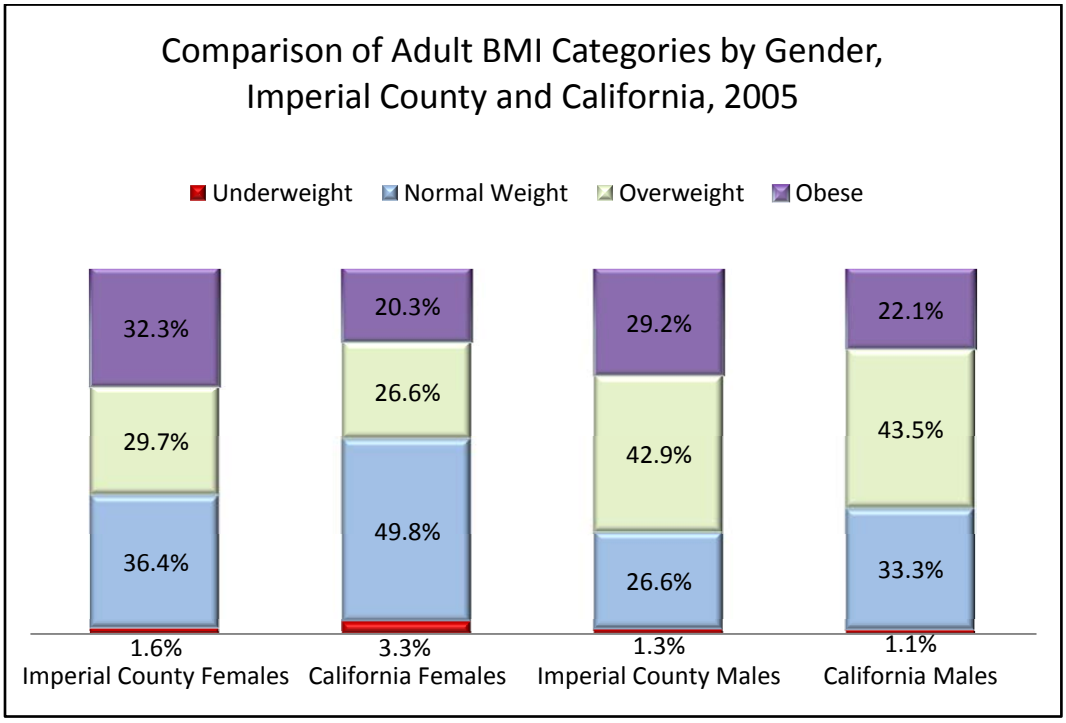
WHY IS IT IMPORTANT?

California is experiencing an epidemic of obesity. More than half of all Californians are considered overweight or obese. Both genders and all racial/ethnic groups are affected, although those living below the poverty level are disproportionately affected. Being overweight or obese increases an individual's risk of acquiring chronic diseases or health conditions such as hypertension (high blood pressure), type II diabetes, coronary heart disease, and cardiovascular disease (stroke). There is no single identified cause or cure for the epidemic of obesity.

WHAT IS OUR STATUS?

A greater proportion of Imperial County residents are overweight or obese than California residents overall. As part of the 2005 California Health Interview Survey, respondents aged 18 or older were asked their height and weight. From this information, BMI was calculated and respondents were categorized into four groups: underweight (BMI 0-18.49), normal weight (BMI 18.5-24.99), overweight (BMI 25.0-29.99), and obese (BMI 30.0 or higher). In 2005, 62.0% of Imperial County females were classified as overweight or obese compared to 46.9% of all California females. A total of 72.1% of Imperial County males were classified as overweight or obese compared to 65.6% of California males (Figure 8-1).

FIGURE 8 – 1



Source: California Health Interview Survey, 2005

WHAT ARE WE DOING?

The Healthy Lifestyles Program promotes healthy eating and physical activity through various types of activities. These activities include planning and conducting Cooking Healthy sessions at various locations countywide to demonstrate how to buy, safely store, and prepare fruits and vegetables; Healthy Lifestyle sessions focusing on nutrition and physical activity offered in Spanish and English; group sessions for families who want to learn how to adopt healthy eating and physical activity habits; and other nutrition and physical activity promotions such as interactive games, displays, and dissemination of literature at health fairs and community events. One project promotes the consumption of fruits and vegetables, as well as physical activity, among low-income Latino families. Activities include food demonstrations at grocery stores frequented by Latino families, cooking healthy classes, and physical activity demonstrations.

Childhood Obesity

WHAT IS IT?

For children and adolescents, there is no single —one definition fits all" for obesity due to a child's changing body shape and size as they progress through normal growth and development. The Centers for Disease Control recommends using the Body Mass Index (BMI) as a screening tool to identify children and adolescents who experience an unusual growth pattern.

The BMI is a number calculated from a child's weight and height and is a reliable indicator of body fat for most children and teens. The BMI result is plotted on a gender-specific, BMI-for-age growth chart. A BMI-for-age that falls below the 5th percentile is considered an indication for underweight, while a BMI-for-age between the 85th and 95th percentiles indicates overweight, and one above the 95th percentile indicates obesity as defined by the American Medical Association.

WHY IS IT IMPORTANT?

Obesity is considered to be one of the leading causes of death, disease, and disability. Obesity increases the risk of developing serious and debilitating chronic conditions including type II diabetes, high blood pressure, asthma, and heart disease. Further evaluations may be necessary as determined by a medical provider for a BMI-for-age that is greater than the 85th percentile (or below the 5th percentile).

Overweight children and youth are more likely to develop serious and chronic health conditions that may impact both physical and psychological health. Childhood obesity can also lead to discrimination causing social stigmatization, low self-esteem, and depression among children.

Seventy-five percent of children who are overweight are expected to be overweight as adults, translating into significant and rapidly increasing health-care costs to society. In California, an estimated one in three children and one in four teens are overweight or obese.

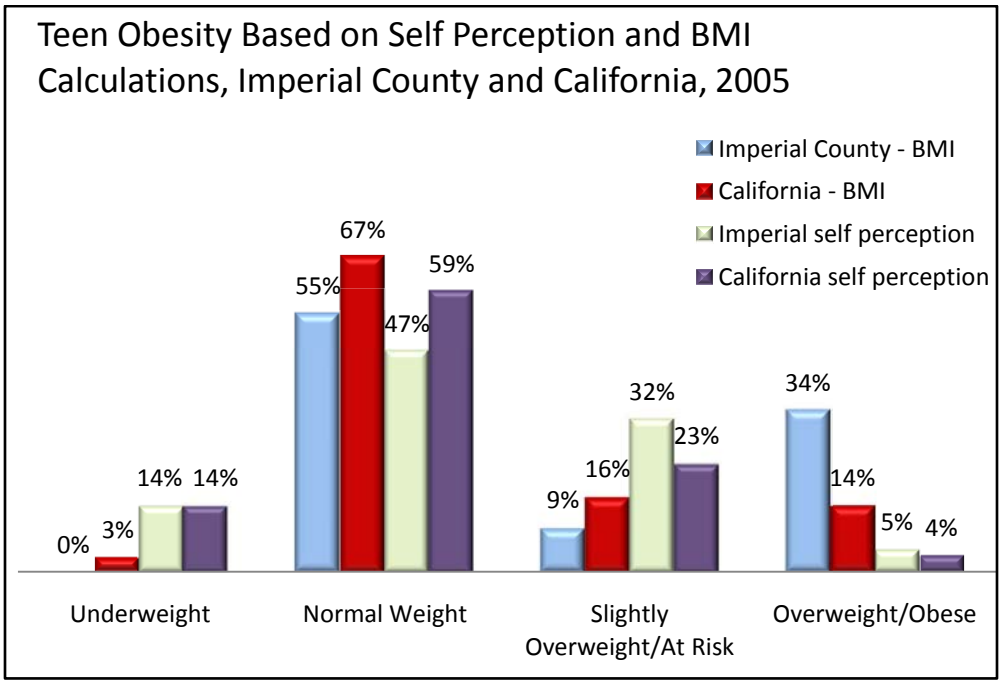
WHAT IS OUR STATUS?

In 2007, 15.3% of Imperial County's children aged 2 to 5 were overweight and 17.7% were obese, compared to 16.2% and 17.4% of 2- to 5-year-olds statewide who were overweight and obese, according to the Pediatric Nutrition Surveillance System. The system collects data from the Children's Health and Disability Prevention Program. For Imperial County's 5- to 20-year-old population, 17.7% were overweight and 24.8% were obese, compared to 18.4% overweight and 23.1% obese for 5- to 20-year-olds statewide.

Based on two height and weight questions on the California Healthy Kids Survey done in the 2004-2005 and 2005-2006 school years, 23% of 7th graders, 20% of 9th graders, and 18% of 11th graders in Imperial County were overweight based on calculated BMI. For California overall, 15% of 7th graders, 14% of 9th graders, and 12% of 11th graders were overweight.

In the 2005 California Health Interview Survey (CHIS), Imperial County respondents aged 12 to 17 reported their self perception of weight, in addition to their height, weight, and age, from which BMI was calculated. Due to the small sample size several numbers were considered statistically unstable, but when compared to respondents statewide, fewer Imperial County youth viewed themselves as normal weight, and more Imperial County youth considered themselves at risk of being or being overweight or obese. These self perceptions were confirmed with BMI calculations. Thirty-four percent of Imperial County youth were considered overweight/obese compared to only 14% of youth in all of California (Figure 8 - 2).

FIGURE 8 – 2

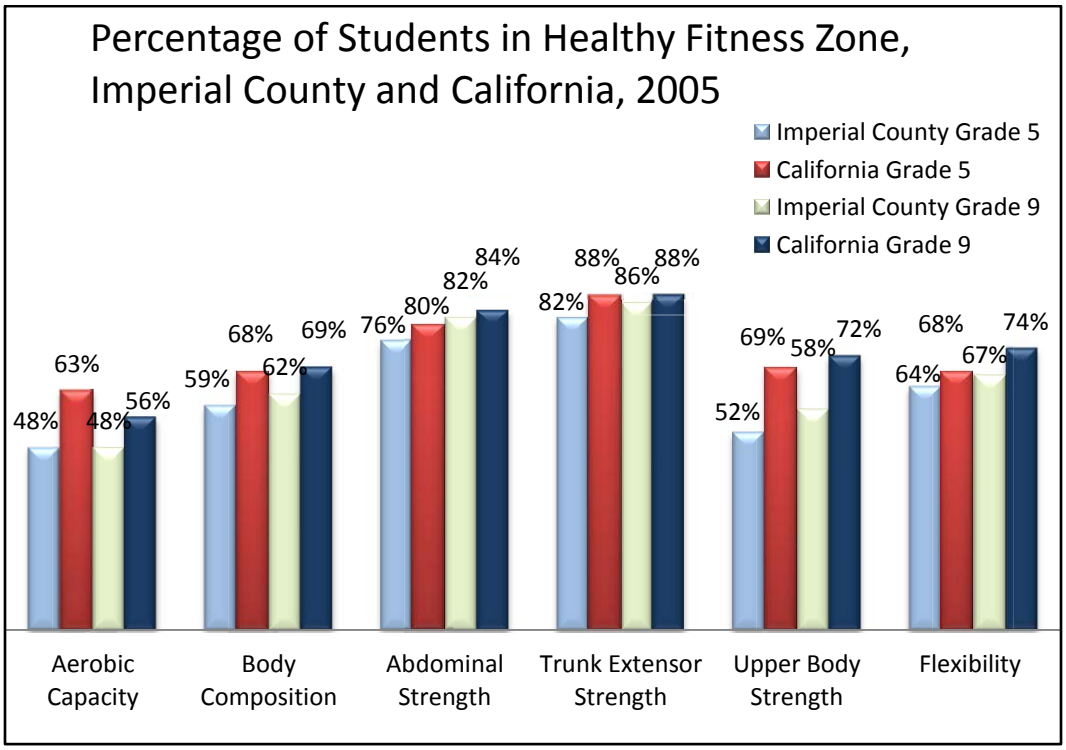


Source: 2005 California Health Interview Survey

The 2005 CHIS survey also obtained information for children aged 0 to 11. Based on sex, age, and weight, 24% of Imperial County children were considered overweight compared to 13% of children aged 0 to 11 in California as a whole. (This assessment was based on the California Health Interview Survey using a variable that assigns overweight for age to children and is constructed using sex and age in month's data.)

According to the physical fitness reports from the California Department of Education, fewer Imperial County students were classified as being in the —healthy fitness zone," meaning they showed less physical fitness ability based on strength, flexibility, and aerobic capacity than students from the rest of California (Figure 8 - 3).

FIGURE 8 - 3



Source: California Department of Education

WHAT ARE WE DOING?

The Healthy Lifestyles Program encourages families to increase their consumption of fruits and vegetables and be physically active. The program focuses on providing information about nutrition and physical activity during community events and conducting healthy cooking demonstrations, as well as group sessions for families who want to learn how to adopt healthy eating and physical activity habits. The program also works with 9- to 11-year-old children from schools in lower-income areas to improve child's awareness, knowledge, attitudes, skills, self-efficacy, and behaviors related to fruit and vegetable consumption and physical activity.

The Healthy Lifestyles Program provides training for 4th and 5th grade teachers and also works with school food/nutrition service departments to promote and increase offerings of appealing fruits and vegetables.

Walk to School Month, Nutrition Olympics, and Spring Into Health events are also coordinated to promote improved nutrition and increased physical activity throughout the school year. Funding for the aforementioned activities is provided by the U.S. Department of Agriculture's Food Stamp Program, *the Network for a Healthy California*.

The First 5: Healthy Eating, Healthy Lives Project, funded by the Imperial County Children and Families First Commission, provides age-specific nutrition and physical activity information to help families develop a healthy lifestyle, optimize children's growth, and reduce the proportion of children who are overweight. The project provides information and education regarding obesity prevention to local physicians, child-care providers and families with children 0-5 years of age.

Tobacco

WHAT IS IT?

Tobacco products once were limited to cigarettes, cigars, pipe tobacco, and chewing or spit tobacco. Today, tobacco products come in more flavors, forms, shapes and sizes, all with the goal of facilitating the consumption of–and addiction to–nicotine.

WHY IS IT IMPORTANT?

Cigarette smoke contains more than 4,800 chemicals, 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90% of lung cancer deaths and approximately 80%-90% of chronic obstructive pulmonary disease (COPD) deaths.

In addition to COPD (which includes chronic bronchitis and emphysema), diseases caused by smoking include coronary heart disease, stroke, abdominal aortic aneurysm, acute myeloid leukemia, cataracts, pneumonia, and cancer (bladder, esophageal, laryngeal, lung, oral, throat, cervical, kidney, stomach, and pancreatic). Smoking is also a major factor in a variety of other health conditions and disorders, such as slowed healing of wounds, infertility, and peptic ulcer disease.

The Coalition for a Tobacco-Free Imperial County is made up of community volunteers, private citizens, and public and private organizations. The coalition is dedicated to eliminating tobacco advertising. The coalition conducts promotions targeting youth and other high-risk groups, and works to reduce youth access to tobacco products and decrease exposure to environmental tobacco smoke.

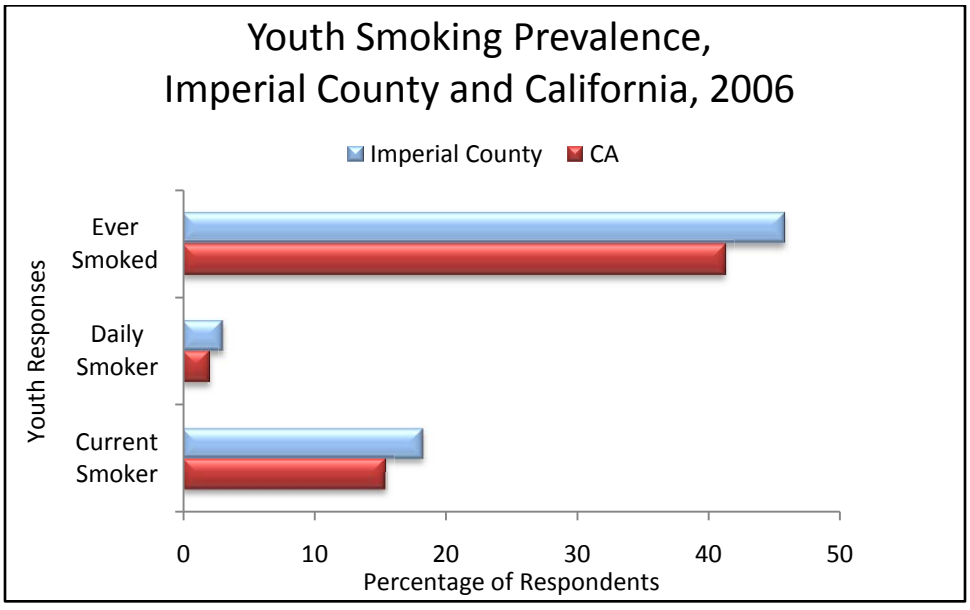
Tobacco use, including cigarettes, cigars, and smokeless tobacco, remains the leading preventable cause of death in the United States. Each year cigarette smoking accounts for approximately one out of every five deaths, or about 438,000 people. In California, smoking kills more than 40,000 people each year, or approximately 110 each day.

WHAT IS OUR STATUS?

Based on the 2005 California Tobacco Survey, 18.9% of adult respondents in Imperial County were classified as ~~"c~~urrent smokers," compared to 14.3% of adult respondents statewide. Of those, 14.5% identified themselves as ~~"d~~aily smokers" compared to 10.0% in California as a whole, and 4.4% were classified as ~~"o~~ccasional smokers" compared to 4.3% statewide.

In 2006, the California Student Tobacco Survey was conducted among middle and high school students to identify youth smoking prevalence rates. In Imperial County, 18.3% of youth respondents identified themselves as ~~"c~~urrent smokers" compared to 15.4% of California respondents overall, and 3.1% identified themselves as ~~"d~~aily smokers" compared to 2.0% statewide. A total of 45.8% of Imperial County youth responded as having ~~"e~~ver smoked," which was higher than 41.3% of statewide respondents (Figure 8 - 4).

FIGURE 8 – 4



Source: California Student Tobacco Survey, 2006

According to the California Healthy Kids Survey conducted during the 2005-2006 school year, 84% of 7th graders, 70% of 9th graders, and 59% of 11th graders in California reported never having smoked a cigarette or used smokeless tobacco, compared to 84% of 7th graders, 64% 9th graders, and 52% of 11th graders in Imperial County.

WHAT ARE WE DOING?

The Imperial County Tobacco Education Project promotes a tobacco-free community through education and intervention activities for teens and adults. The project strives to restrict youth access to tobacco products by working with local policy leaders and merchants in eleven cities countywide: Brawley, Calexico, Calipatria, El Centro, Heber, Holtville, Imperial, Niland, Ocotillo, Seeley, and Westmorland. Other activities include reducing tobacco-related litter at local parks and playgrounds; working toward the adoption and implementation of a written voluntary smoke-free policy in low-income housing; conducting tobacco retailer checks to ensure compliance with the posting of STAKE Act age-of-sale and self-service display signage; and providing tobacco education materials to agencies serving low-income residents.

Adult Substance Abuse

WHAT IS IT?

Substance abuse is the overindulgence and/or dependence on drugs or other chemicals that lead to harmful effects to an individual's mental or physical health and/or to the welfare of others.

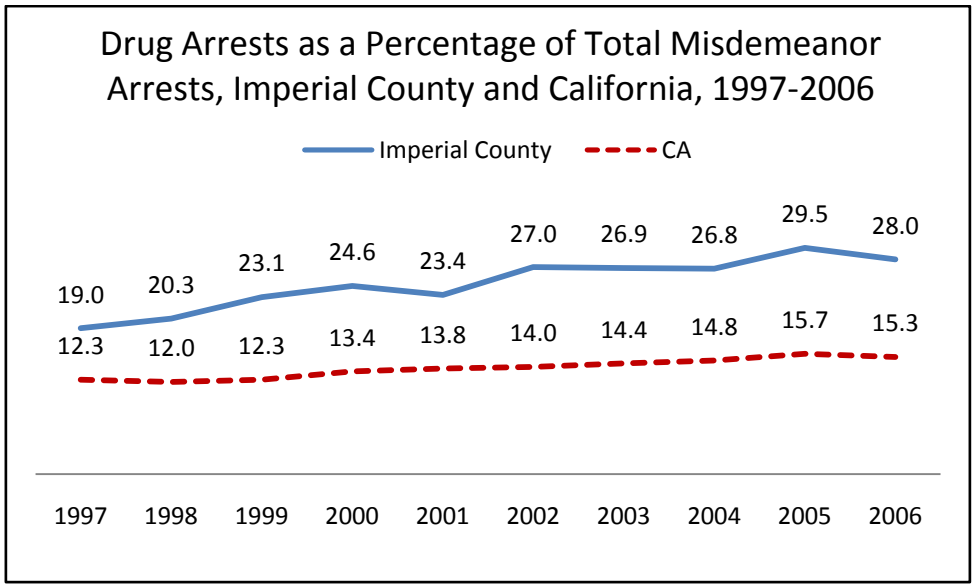
WHY IS IT IMPORTANT?

Substance abuse negatively affects not only those who abuse drugs but also their families, friends, co-workers, and government resources. Individuals who abuse drugs suffer from the ill effects of drugs and have a significantly increased risk of contracting other needle-borne diseases such as hepatitis and HIV/AIDS. Children whose parents abuse drugs are also impacted by substance abuse, as they may be physically or emotionally abused, and often lack proper medical or dental care and necessities such as food, water, and shelter. Ultimately, society as a whole is burdened financially by individuals who abuse drugs through the government programs and law enforcement agencies that must address the adverse environmental and societal impacts of substance abuse.

WHAT IS OUR STATUS?

Based on arrest data, drug-related offenses account for a greater number of both felony and misdemeanor arrests in Imperial County when compared to California overall. In 2006, drug-related arrests accounted for 28% of all misdemeanor arrests in Imperial County compared to only 15% statewide (Figure 8 - 5).

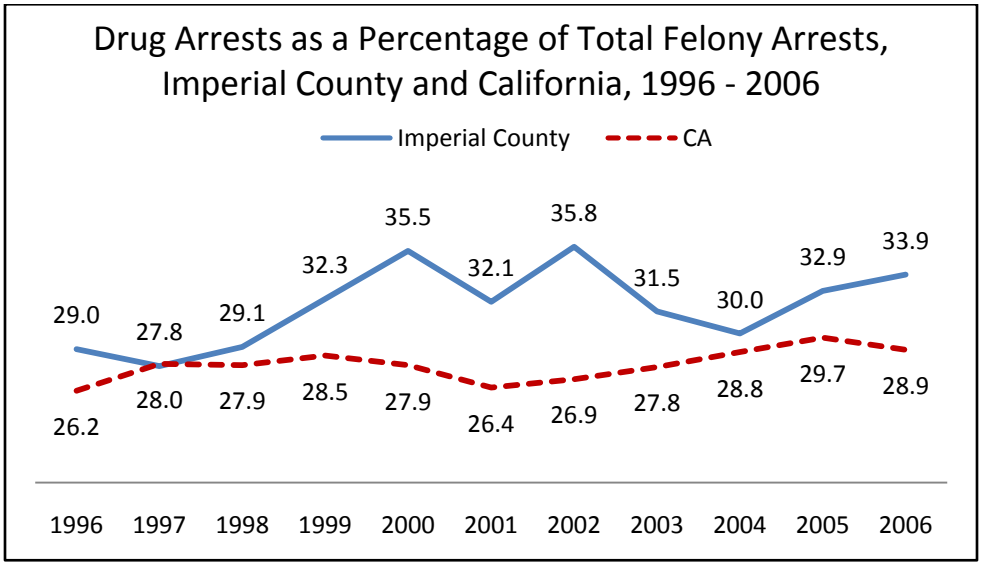
FIGURE 8 – 5



Source: California Criminal Justice Statistics Center, Office of the Attorney General

Drug-related arrests also accounted for a larger portion of felony arrests in Imperial County (34%), compared to 29% for California as a whole (Figure 8 - 6).

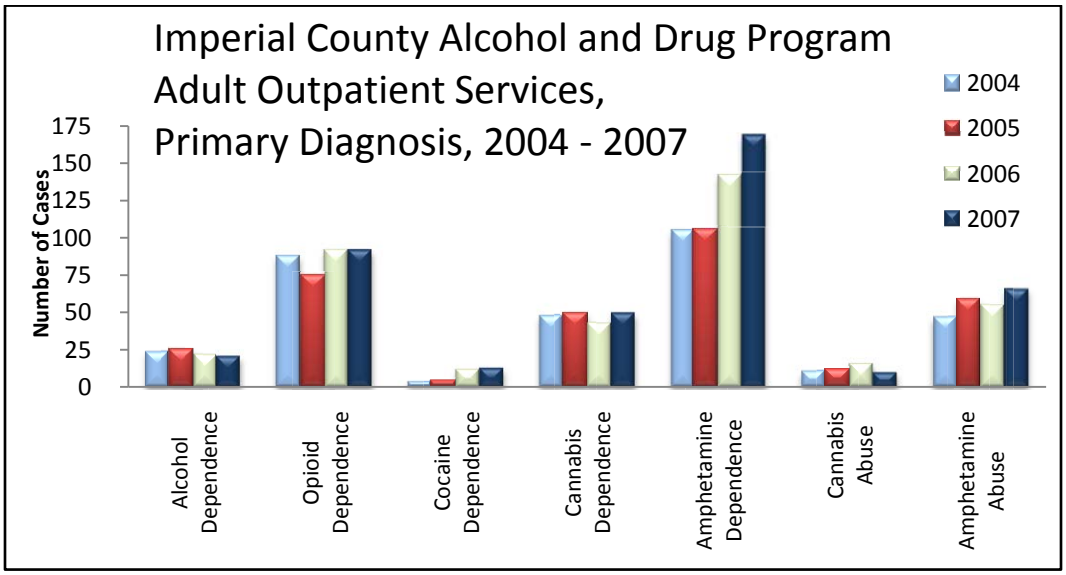
FIGURE 8 – 6



Source: California Criminal Justice Statistics Center, Office of the Attorney General

In 2007, Adult Outpatient Services provided treatment services to 571 adults. Between 2004 and 2007, most adults sought outpatient treatment for amphetamine and opioid dependence (Figure 8-7).

FIGURE 8 – 7



Source: Imperial County Behavioral Health Services - Alcohol and Drug Programs
Note: A small percentage of cases resided outside of Imperial County, but received services in this County.

During 2004-2006, Imperial County's average age-adjusted death rate due to drugs was 10.0 deaths per 100,000 population. The County's death rate was lower than California's age-adjusted death rate of 10.3 deaths per 100,000 population, but higher than the Healthy People 2010 objective of 1.2 deaths per 100,000 population. Imperial County's death rate is statistically unreliable due to the small number of deaths (Table 8 - 1).

TABLE 8 – 1

Deaths Due to Drugs, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	16.0	10.0*
California	3,819.0	10.3
Healthy People 2010		**1.2**

Source: County Health Status Profiles 2008
*Note: Death rate unreliable, relative standard error is greater than or equal to 23%.

WHAT ARE WE DOING?

Imperial County Behavioral Health Services provides substance abuse counseling to individuals who are dealing with drug addiction and alcoholism.

- Alcohol and Drug Prevention Services provides prevention and education outreach presentations and services to the community. Events include the Red Ribbon Coalition, Children's Fair, Drug Store project, and Binational Committee on Mental Health and Alcohol and Drug Awareness.
- The Adult Outpatient Services program provides group and individual substance abuse counseling for individuals 21 years of age and older.

- The Drug Court Program offers substance abuse counseling to individuals who end up in the County's Superior Court and want to break out of their addiction.
- The Cal-WORKs System of Care Program provides services for participants in an effort to overcome obstacles to employment.
- The Dual Diagnosis Program provides substance abuse counseling, in addition to case management and transportation services.
- The Healthy New Life Perinatal Program works to decrease the incidence and prevalence of alcohol, drug, and tobacco use among pregnant and parenting women to reduce negative health consequences due to this behavior.
- The HIV/AIDS and TB Prevention Services provide services to clients in the Adolescent Outpatient Services, Adult Outpatient Program, and Healthy New Life Perinatal Program. These services include prevention, education, and information on HIV/AIDS and tuberculosis.
- Proposition 36 program, also known as *Route 36 "Pathway to Recovery,"* diverts non-violent drug offenders from incarceration to community-based alcohol and drug treatment programs.

Adolescent Substance Abuse

WHAT IS IT?

Adolescent substance abuse is the overindulgence and/or dependence on drugs or other chemicals that lead to effects that are harmful to an adolescent's mental or physical health and/or to the welfare of others.

WHY IS IT IMPORTANT?

Adolescent substance abuse is a national public health problem. Substance abuse among adolescents contributes to premature loss of lives, traffic collisions, unwanted pregnancies, suicides, and violence among teenagers. Despite recent indications that substance abuse among teenagers has stopped rising, rates remain high. Studies suggest that using substances at a young age increases the likelihood that individuals will develop substance use disorders that will continue into adulthood.

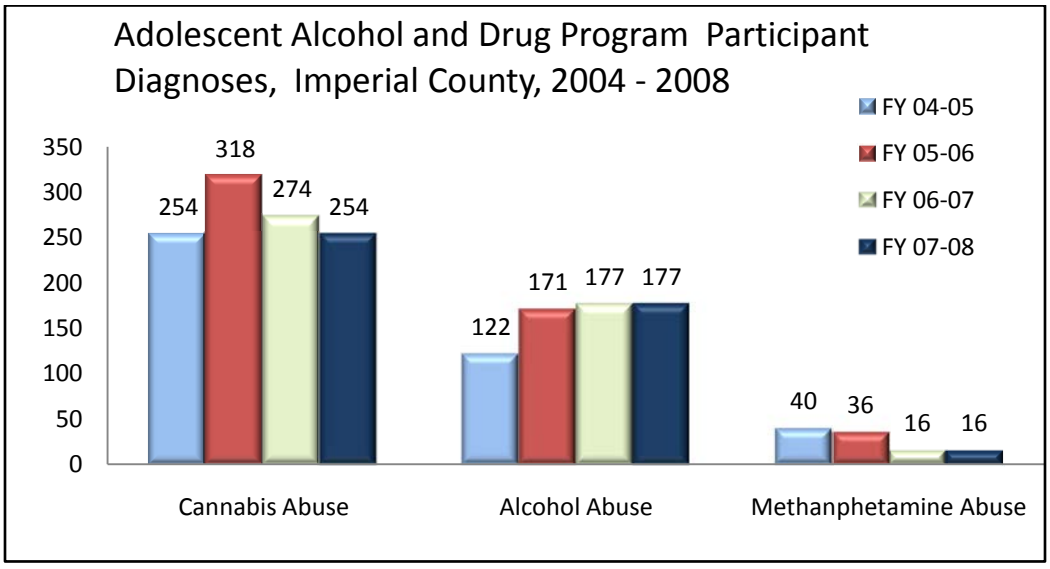
WHAT IS OUR STATUS?

According to the California Healthy Kids Survey conducted during the 2005-2006 school year, 70% of 7th graders, 45% of 9th graders, and 32% of 11th graders in Imperial County reported that they had never used or tried alcohol or any other drugs in their lifetime. These rates were similar to statewide averages that showed 70% of 7th graders, 48% of 9th graders, and 33% of 11th graders reported never having used or tried alcohol or any other drugs in their lifetime.

Those Imperial County students who did try or use alcohol reported slightly higher recent alcohol use when compared to all California students. In Imperial County, 14% of 7th graders, 31% of 9th graders, and 42% of 11th graders reported alcohol use during the previous 30 days, compared to 13% of 7th graders, 28% of 9th graders, and 37% of 11th graders statewide who reported alcohol use during the previous 30 days.

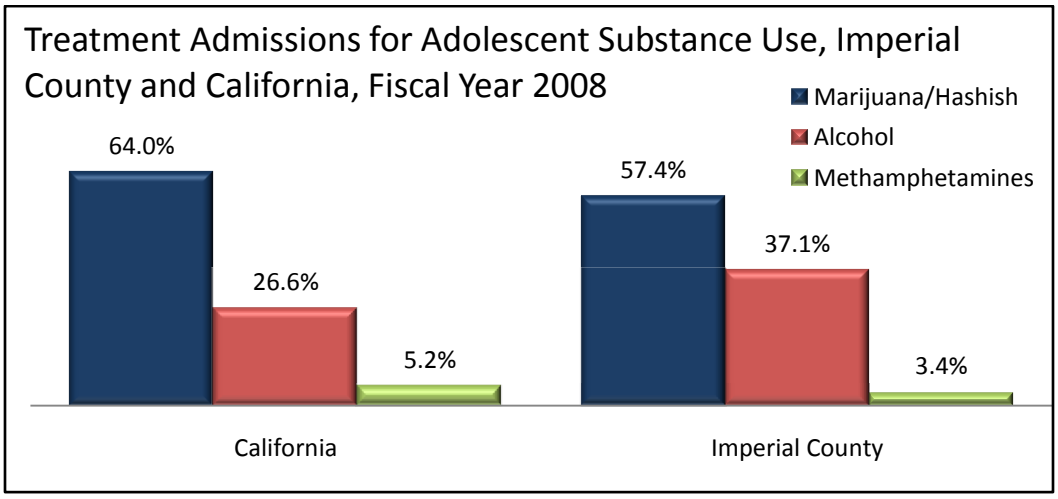
Most adolescents who sought treatment for substance abuse through the Imperial County Adolescent Alcohol and Drug program in 2004-2008 were treated for cannabis abuse and alcohol abuse (Figure 8 - 8). A greater percentage of Imperial County adolescents sought treatment for alcohol use compared to statewide adolescent treatment admissions; and a smaller percentage sought treatment for marijuana or hashish use compared to statewide treatment admissions (Figure 8 - 9).

FIGURE 8 – 8



Source: Imperial County Behavioral Health Services - Alcohol and Drug Programs

FIGURE 8 – 9



Source: Imperial County Behavioral Health Services - Alcohol and Drug Programs

WHAT ARE WE DOING?

Adolescent Alcohol and Drug Programs offered by Imperial County Behavioral Health Services provide treatment, education, and awareness to individuals and their families to assist adolescents in becoming capable persons who are able to make effective personal choices. The Adolescent Outpatient Services program focuses on young people aged 12 to 20 who abuse substances or are at risk of substance dependence. The program offers counseling services at an outpatient clinic and 13 satellite clinics on school campuses across the valley. The Adolescent Expanded Program provides alcohol and drug case management, screenings, and after-care services for high-risk adolescents aged 12-17 and their families. Services are provided at the outpatient clinic in El Centro, Juvenile Hall, and satellite school clinics in El Centro, Brawley, Calexico, Holtville, and Winterhaven. The Adolescent Drug Abuse Prevention Program also provides a variety of prevention and education outreach presentations and services to the community.

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SECTION 9

EMERGENCY PREPAREDNESS

Emergency Preparedness

WHAT IS IT?

Emergency preparedness involves planning for a response to an emergency caused by natural disasters, disease outbreaks, terrorism attacks, chemical spills, or other disaster situations. Enhanced surveillance can be used to detect unusual disease or illness patterns, and increased numbers of illnesses associated with outbreaks.

WHY IS IT IMPORTANT?

Preparing for an emergency is important to ensure an effective and efficient response to a disaster. Being prepared can save lives, protect property, and reduce costs associated with an emergency. Since emergencies are typically local, the preparedness and training of local first responders is critical to the success of emergency response efforts. Emergency preparedness is an ongoing process and although a region can never be fully prepared, the level of readiness depends significantly on local agencies' training and the resources that are available.

WHAT ARE WE DOING?

HOSPITAL AND HEALTH-CARE PREPAREDNESS

Since 2001 Imperial County Emergency Medical Services (EMS) has instituted a Hospital Preparedness Program. Local hospitals have established decontamination centers and at present have equipment to support surge events and accommodate large numbers of individuals for triage and treatment. The Imperial County Medical Reserve Corps is currently recruiting volunteers to assist with alternative care sites, points of distribution, mass vaccination clinics, as well as other needs during health-care emergencies.

A memorandum of understanding between Imperial County Office of Education and the County of Imperial allows the use of school facilities in the event of an emergency or disaster.

COMMUNICATION SYSTEMS

Communication between first responders is critical for a timely and coordinated response. Since 2001, Imperial County EMS has developed an interoperable communication system between law enforcement, health-care services, health-care transportation, and fire personnel. This network, as part of the San Diego Regional Communication System, has been recognized by the U.S. Department of Homeland Security as one of the best in the nation. Additionally, Imperial County received a grant to set up a mass notification system for the entire County based on the 9-1-1 emergency call database. EMS is working with various cities and towns within the County to ensure a coordinated implementation of this system.

Training and Community Outreach

Imperial County EMS has conducted a variety of trainings and table-top exercises for local first responders, including the County's annual emergency response training and participation in the statewide emergency response drills. These trainings have included local law enforcement, fire responders, hospital and health-care providers, U.S. Customs and Immigration personnel, the federal Bureau of Land Management, Border Patrol, and the Naval Air Station. Imperial County EMS is also responsible for the certification of local pre-hospital medical providers.

EMS and other public health staff, in partnership with area hospitals and clinics, have conducted trainings and informational presentations for service organizations regarding planning and preparation for disasters such as earthquakes and pandemic disease outbreaks. As part of these efforts, active recruitment was conducted for the Imperial County Medical Reserve Corps and Community Emergency Response Team (CERT), volunteer organizations that will provide medical and other support during disasters or large emergencies.

Mass Vaccination Clinic

As part of Imperial County's overall preparedness effort, a mass vaccination "drive-through" clinic was held in October 2007 to prepare for and assess the County's ability to rapidly distribute vaccine in the event of pandemic influenza or exposure to other disease agents.

A total of 377 vehicles brought 694 adults and children for influenza vaccine during the three-hour clinic. On average, the vaccination process took 11 minutes to complete. If observation for contraindications was required, the process was completed in about 25 minutes. This proved to be an effective strategy for vaccinating people of all ages and physical limitations in a timely way.

Collaborators included Clinicas de Salud del Pueblo, Imperial Valley Expo, Imperial County Public Health Department, Imperial County Public Works, Imperial County Office of Employment Training, and Imperial County Fire Department.

Another mass vaccination clinic is planned for October 2008.

Enhanced Disease Surveillance and Pandemic Preparedness

Since 2001, several disease surveillance mechanisms have been put into place to ensure timely response to disease outbreaks. The Imperial County Public Health Department created a Duty Officer program to ensure that there is an organized 24/7 response to urgent public health issues.

An electronic disease reporting system has been developed to allow web-based reporting of certain reportable diseases and health conditions. The system is designed to send health alerts to Public Health staff when unusual diseases or higher than expected numbers of disease cases are detected.

The Public Health Department is also responsible for coordinating the local health alert network, and has trained and enrolled more than 90 key health-care providers, first responders, and other community leaders to link them with the California Health Alert Network (CAHAN). Health alerts and advisories are dispatched through this system.

Active Syndromic Surveillance Project

The Active Syndromic Surveillance Project (ASSP) is a targeted surveillance system used to obtain health information for hard-to-reach populations with limited access to care. The objective is to improve surveillance of reportable illnesses, most importantly infectious disease. Venues include direct street outreach, packing sheds, payroll offices, and homeless shelters. Based on participant interviews, symptoms are identified and a suspected diagnosis is shared with the participant. Referrals are provided based on findings. Between March 2005 and March 2006, 921 people participated in the assessment. Of those, 234 participants reported 333 cases of suspected illnesses and health problems. The most frequently reported suspected diseases were influenza-like illness (48, 20.5%), and gastrointestinal illness (45, 19.2%). Suspected pesticide-related illnesses were documented for 127 cases (54.3%).

Syndromic Surveillance Projects

In partnership with El Centro Regional Medical Center (ECRMC) and San Diego County Health and Human Services, a syndromic surveillance system was launched in January 2008 to improve Imperial County Public Health Department's ability to detect and manage extraordinary health events, such as biological attacks or large outbreaks, in the local population. Through advanced anomaly detection algorithms, County epidemiologists and ECRMC staff are alerted if unusual diseases or unusual disease patterns are detected. Information is also used to support other active surveillance systems in Imperial County.

Active surveillance for influenza-like illness (ILI) has been conducted by the Public Health Department at Clinicas de Salud del Pueblo in Calexico since 2004. Surveillance for lab-confirmed influenza and RSV cases is conducted at both local hospitals during the influenza season. Year-round ILI surveillance was conducted in 2006 and 2007, with support from the Early Warning Infectious Disease Surveillance (EWIDS) project.

In addition, passive ILI surveillance is conducted during the influenza season at four nursing homes and long-term-care facilities in the County. In 2008, Clinicas de Salud del Pueblo in Brawley and Centinela State Prison also began seasonal surveillance for influenza-like illness.

Imperial County Public Health Department was part of the first binational influenza surveillance project along the California-Baja California border during the 2007-2008 influenza season. Active surveillance for influenza-like illness was conducted using the same protocol at border clinics in Imperial County, San Diego County, and Mexicali.

In other preparedness efforts, a draft plan for pandemic influenza response is currently under review.

Reports on heat surveillance, respiratory illness surveillance, and other projects are published in the Epidemiology section of the Public Health Department's web site at www.icphd.org.

Heat-Related Illness and Death Surveillance

Heat-related illness and deaths are preventable, yet every year many people succumb to extreme heat. In 2007, the state Office of Emergency Services asked local health departments to monitor the heat situation and take appropriate actions as needed to protect vulnerable populations.

The Imperial County Public Health Department has been conducting active surveillance for heat-related illnesses and deaths since 2006 in collaboration with El Centro Regional Medical Center, Pioneers Memorial Hospital, and the Imperial County Coroner's office.

In 2007, Imperial County hospitals reported 94 cases of heat-related illness, which included heat syncope, heat fatigue, heat cramps, and dehydration. Seventeen heat-related deaths were identified, compared to 16 deaths reported in 2006. Of the 17 deaths in 2007, seven were undocumented immigrants from Mexico. In 2006, a total of 60 cases of heat-related illnesses were reported. Heat stroke cases had more than a two-fold increase in 2007 with 13 cases compared to five in 2006. This information is useful to guide efforts to refine department policies and practices during future heat waves.

REFERENCES AND DATA SOURCES

California Department of Public Health, Be Prepared California.
Available at: http://bepreparedcalifornia.ca.gov/epo

The Governor's Office of Emergency Services.
Available at: http://www.oes.ca.gov/

U.S. Centers for Disease Control and Prevention, *Emergency Preparedness and Response.* Available at: http://www.bt.cdc.gov/

SECTION 10

DEATH/MORTALITY

Death Rates

A simple way to assess the heath status of a population is to look at the major causes of death and at what age people are dying. Crude death rates can be calculated by dividing the number of deaths in a year by the population being assessed. But, because populations are rarely the same and continually change, these crude death rates are not very useful when comparing deaths between populations. One solution to this problem is to calculate what the death rate would be if the populations being compared had the same composition. This is accomplished by adjusting the population to match a "standard" or known population, such as that of a census year. The age-adjusted death rates in this report are based on the "standard" 2000 United States census population.

Leading Causes of Death

❖ From 2004 - 2006, the leading cause of death for Imperial County and California was cancer which accounted for 24% of all deaths. In both Imperial County and California, the top two leading causes of death are cancer and heart disease, which together accounted for nearly half of all deaths.

Deaths by Gender

❖ In 2006, 41.2% of deaths in Imperial County were among women, who represented 48% of the total population, and 58.8% of deaths were among men who comprised only 52% of the total population. During the same year, the number of deaths was evenly split in California with each gender accounting for about 50% of the total number of deaths.

Death

WHAT IS IT?

Death (or mortality) is one of the primary measures of a population's health. Death statistics are analyzed because of their importance for identifying and monitoring health problems, developing programs for disease prevention and health promotion, and for portraying trends and patterns.

WHY IS IT IMPORTANT?

Leading causes of death are used frequently to describe the heath status of the nation. Over the past century, the United States has experienced great changes in leading causes of death. In the early 1900s, infectious diseases were rampant both in this country and worldwide. Today, with the control of many infectious agents and the increasing age of the population, chronic diseases and injuries are the major causes of death.

WHAT IS OUR STATUS?

From 2004-2006, the average age-adjusted death rate from all causes in Imperial County was 653.1deaths per 100,000 residents, which was less than California's rate of 697.5 deaths per 100,000 residents (Table 10-1).

TABLE 10 - 1

Deaths, Imperial County and California, 2004-2006		
	Average Number of Deaths	*Age-Adjusted Death Rate*
Imperial County	903.0	653.1
California	235,045.3	697.5
Healthy People 2010		**none**

Source: County Health Status Profiles 2008

LEADING CAUSES OF DEATH

In 2004-2006, the leading cause of death for Imperial County and California was cancer (malignant neoplasms), accounting for 24% of all deaths. In both Imperial County and California, the top two leading causes of death are cancer and heart disease, which together accounted for nearly half of all deaths (Table 10-2).

Unintentional injuries, cerebrovascular disease (stroke), diabetes, and chronic lower respiratory disease also ranked as leading causes of death in Imperial County. Other leading causes of death in Imperial County are chronic liver disease and cirrhosis, influenza and pneumonia, and suicide.

TABLE 10 - 2

Leading Causes of Death, Imperial County and California, 2004-2006

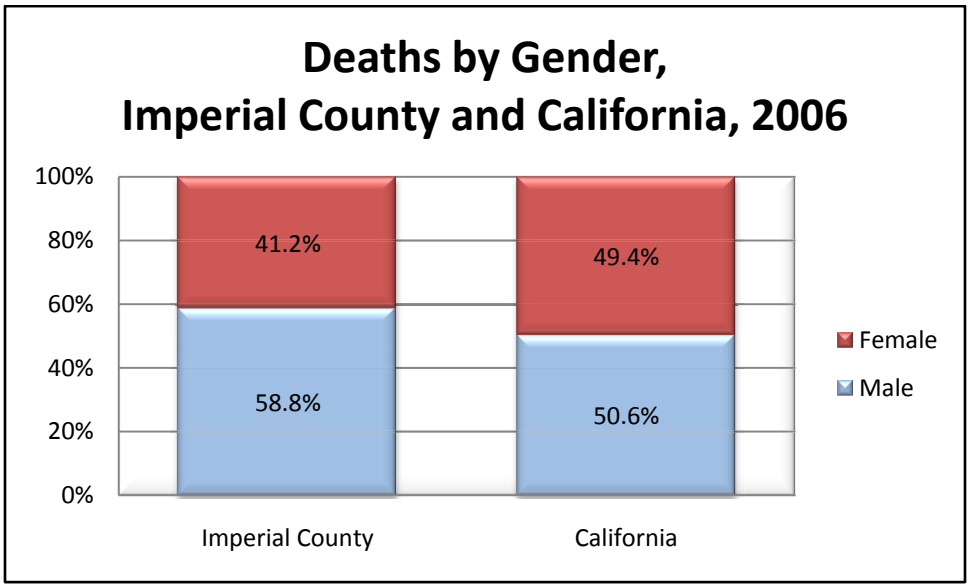
	Average Number of Cases	Percent
Imperial County		
Malignant Neoplasms (Cancer)	213	24%
Heart Disease	168.7	19%
Unintentional Injuries	73.3	8%
Cerebrovascular Disease (Stroke)	52.7	6%
Diabetes	41.0	5%
Chronic Lower Respiratory Disease	38.0	4%
California		
Malignant Neoplasms (Cancer)	54,121.3	23%
Heart Disease	51,246.3	22%
Cerebrovascular Disease (Stroke)	15,815.3	7%
Chronic Lower Respiratory Disease	12,831.0	5%
Unintentional Injuries	10,925.3	5%
Alzheimer's disease	7599.0	3%

Source: California Center for Health Statistics, Vital Statistics Query System

DEATHS BY GENDER

In 2006, 41.2% of deaths in Imperial County were among women, who represented 48% of the total population, and 58.8% of deaths were among men who comprised 52% of the total population (Figure 10-1). In California in 2006, the number of deaths was evenly split, with each gender accounting for about 50% of the total number of deaths and the total population (Figure 10-2).

FIGURE 10 - 1

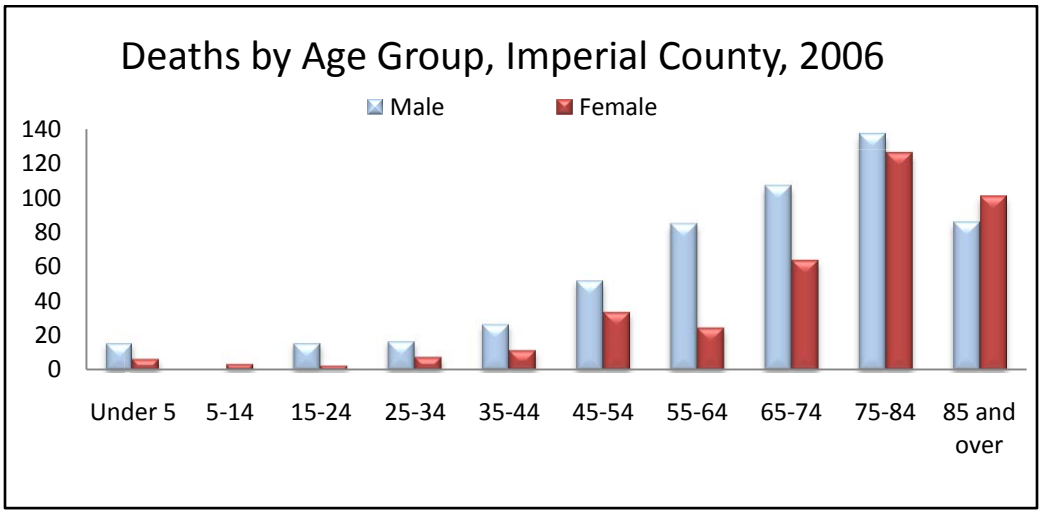


Source: California Center for Health Statistics, Vital Statistics Query System

DEATHS BY AGE GROUP

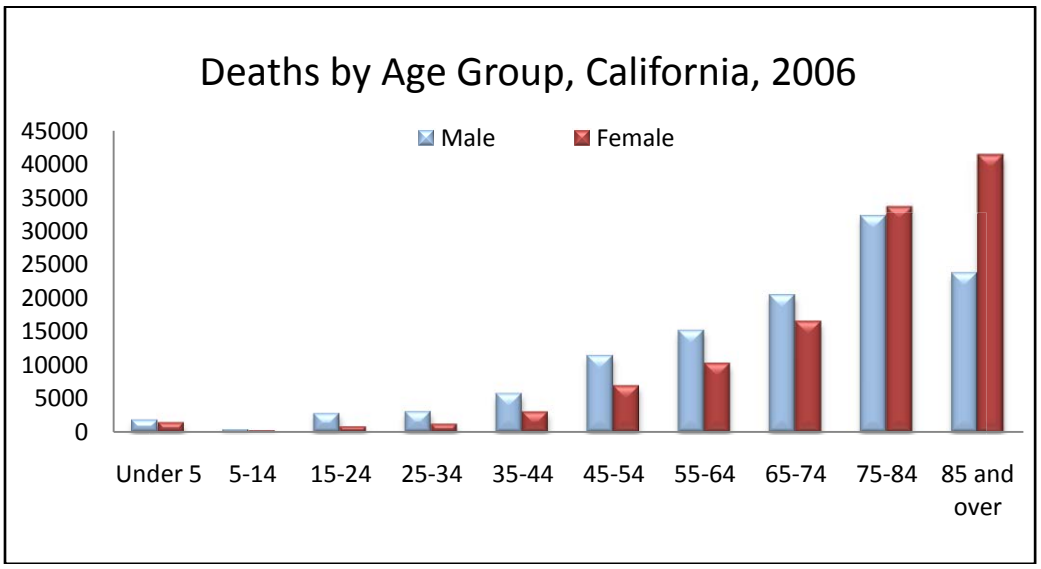
In 2006, there were more deaths among males in all age groups than among females in Imperial County, except in children 5 – 14 years of age and individuals 85 years of age and older (Figure 10-3). In contrast to California, a smaller percentage of women died when compared to men in each age category in Imperial County (Figure 10-4).

FIGURE 10 - 2



Source: California Center for Health Statistics, Vital Statistics Query System

FIGURE 10 - 3



Source: California Center for Health Statistics, Vital Statistics Query System

DEATHS BY RACE / ETHNICITY

Deaths by race/ethnicity differ significantly between Imperial County and California as a whole, and reflect the differing race/ethnic composition of the general populations in both Imperial County and California.

FIGURE 10 - 4

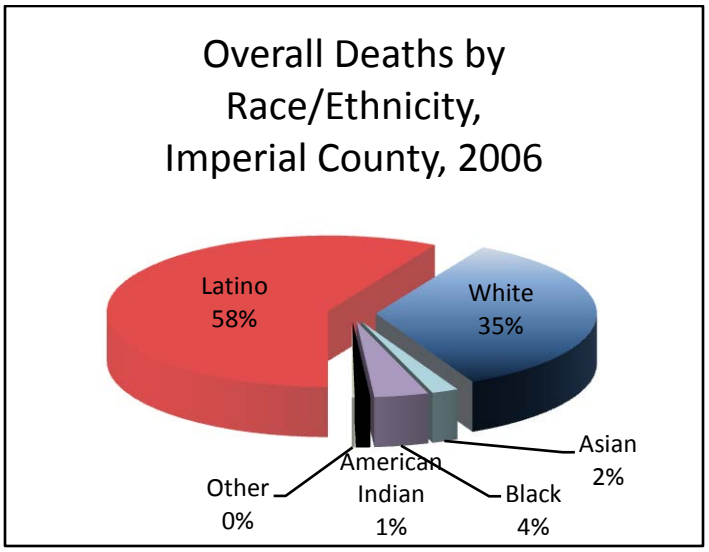
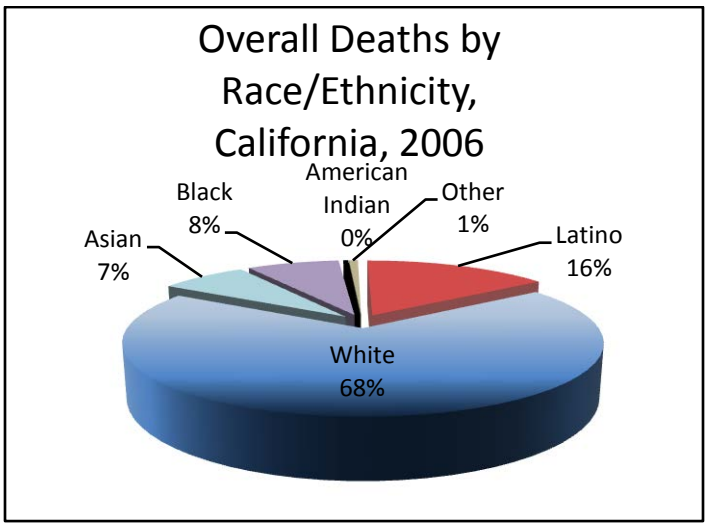


FIGURE 10 - 5



Source: California Center for Health Statistics

INFANT DEATHS

On average, there were 12 infant deaths a year during 2003 to 2005 in Imperial County. Imperial County's birth cohort death rate was 4.1 deaths per 1,000 live births. This is less than California's birth cohort death rate of 5.4 deaths per 1,000 live births and that of the Healthy People 2010 goal of less than 4.5 deaths per 1,000 live births (Table 10-4).

TABLE 10 - 3

Infant Deaths, Imperial County and California, 2003-2005		
	Average Number of Deaths	*Birth Cohort Death Rate*
Imperial County	12.0	4.1*
California	2,925.0	5.4
Healthy People 2010		**4.5**

*Death rate unreliable, relative standard error is greater than or equal to 23 percent.
Source: County Health Status Profiles 2008

REFERENCES AND DATA SOURCES

California Center for Health Statistics, *Vital Statistics Query System.* Available at: http://www.applications.dhs.ca.gov/vsq/default.asp

U.S. Centers for Disease Control and Prevention. Achievements in Public Health, 1990–1999: Decline in deaths from heart disease and stroke—United States, 1990–1999. MMWR 1999;48(30):649–56. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4830a1.htm

U.S. Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER On-line Database. Available at: http://wonder.cdc.gov/population.html

Technical Notes

HEALTHY PEOPLE 2010 NATIONAL OBJECTIVES

Healthy People 2010 is a comprehensive set of health objectives for the nation to achieve over the first decade of the new century. Healthy People 2010 identifies a wide range of public health priorities and specific, measurable objectives. The overarching goals are to increase quality and years of healthy life and eliminate health disparities. Note that some of the Healthy People 2010 objective target rates were changed in accordance with midcourse review recommendations, and have been used since 2006 in the County Health Status Profiles published by the California Department of Public Health, as well as in this report.

RATES

Reliability of Rates

All vital statistics, including morbidity rates, are subject to random variation. This variation is inversely related to the number of events (i.e., deaths) used to calculate the rate. The smaller the number of events, the greater is the likelihood of random variation within a specified time period. For this reason, counties with only a few deaths, or a few cases of illness, can have highly unstable rates from year to year.

Crude Rates

A rate is a common estimate used to compare events or characteristics across different populations. A crude rate is calculated by dividing the total number of events, such as deaths due to cancer, by the total population at risk (all residents of Imperial County). Most rates are reported as the number of events per 100,000 population.

Group-Specific Rates

Rates can pertain to a specific subgroup of the population. For example, rates are reported by age or race. In this case, the rate is calculated by dividing the total number of events for the specific subgroup (i.e., number of deaths due to cancer in Latinos) by the total population at risk within the same subgroup (i.e., all Latino residents in Imperial County).

Adjusted Rates

Comparing crude rates across different populations can be misleading if those populations have different age, race/ethnicity or gender distributions. For example, if Imperial County has a higher crude death rate than California, the high rate may be due to a higher concentration of older people compared to the state as a whole, because age strongly impacts the risk of death. To address this issue, rates are adjusted for demographic factors so that different groups can be compared even though they have different characteristics and age, gender or age/ethnicity distributions in the population. Rates used in this report are not adjusted unless indicated.

Adjusted rates are calculated by applying the specific rates for subgroups observed in each of the populations to a single reference population considered to be a "standard." For data through 1998, the standard chosen by the National Center for Health Statistics is the 1940 U.S. population. Beginning in 1999, rates are adjusted to the 2000 U.S. Standard Population because the national objectives in Healthy People 2010 are based on this standard.

Death rates in this report have been age-adjusted. By removing the effect of different age compositions, counties with age-adjusted rates are directly comparable to the Healthy People 2010 National Objectives.

Birth Cohort Infant Mortality

The infant mortality rate is the number of deaths among infants under one year of age per 1,000 live births. Infant mortality rates in this report are based on linked birth and death infant records in the Birth Cohort-Perinatal Outcome Files.

SMALL NUMBERS

Rates based on small numbers of events can fluctuate widely from year to year for reasons other than a true change in the underlying frequency of occurrence of the event (i.e., the number of AIDS deaths in white, non-Latino residents in Imperial County). Several years of data are often combined to help stabilize rates that would otherwise be based on very small numbers.

PRENATAL CARE INDICATORS

The prenatal care indicator, Month Prenatal Care Began, has been associated with access to care. Late prenatal care is defined as the percentage of mothers who did not begin prenatal care in the first three months of their pregnancy. However, documenting the percentage of births in which the mother's prenatal care began in the first trimester may not provide a complete assessment because it fails to document whether prenatal care continued for the course of the pregnancy. For this reason, in addition to Prenatal Care Not Begun in the First Trimester of Pregnancy, this report included adequacy of prenatal care based on the Adequacy of Prenatal Care Utilization Index developed by Milton Kottlechuck. This index attempts to characterize prenatal care utilization in two distinctive dimensions: adequacy of initiation of prenatal care and adequacy of received services (once prenatal care has begun). Adequacy of initiation of prenatal care indicates the month prenatal care began. Adequacy of received services characterizes the adequacy of prenatal care visits (number of visits) received during the time the mother is actually in prenatal care (from initiation until delivery). The adequacy of prenatal visits is based on the recommendations set by the American College of Obstetricians and Gynecologists.

Acknowledgments

The Imperial County Public Health Department appreciates the contribution and collaboration of various programs both within and outside the department, as well as the following individuals: Marva Seifert, MPH; Debbie Garcia, BSHS; Rosyo Ramirez, MPA; and Maria Peinado, BAPS.

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