Over the years, efforts to eliminate disparities and achieve health equity have focused primarily on diseases or illnesses and on health care services. However, the absence of disease does not automatically equate to good health.

Powerful, complex relationships exist between health and biology, genetics, and individual behavior, and between health and health services, socioeconomic status, the physical environment, discrimination, racism, literacy levels, and legislative policies. These factors, which influence an individual’s or population’s health, are known as determinants of health.

For all Americans, other influences on health include the availability of and access to:

- High-quality education
- Nutritious food
- Decent and safe housing
- Affordable, reliable public transportation
- Culturally sensitive health care providers
- Health insurance
- Clean water and non-polluted air

--Healthy People 2020
“Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.” – Robert Wood Johnson Foundation

The purpose of this report is to identify important health disparities in our population. Many disparities are linked to inequities in opportunities and resources needed to ensure the best health possible.

Significant health disparities, or differences in health outcomes, exist by race/ethnicity, income, educational attainment, geography, and gender. These disparities relate to differences in social, economic and environmental conditions, as well as to issues within the health-care system itself.

The determinants of health include living and working conditions, education, income, neighborhood characteristic, and medical care. Increasing opportunities to be healthier benefits everyone, but greater focus needs to be placed on groups that have been excluded or marginalized in the past.

This report includes data available as of December 2019.
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Communities vary in their access to quality child care and education, affordable housing, transportation options, parks, healthy food choices, and health care, all of which are needed to stay healthy and thrive. These differences in opportunity result in health disparities that are evident between different populations and geographic areas.

Imperial County has shown improvement in some targeted areas of health concern but continues to face challenges in others.

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>CHALLENGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improved fitness among children</td>
<td>• High poverty rate</td>
</tr>
<tr>
<td>• Lower percentage of overweight adults</td>
<td>• Low rate of adequate prenatal care</td>
</tr>
<tr>
<td>• Lower rate of emergency department visits for asthma</td>
<td>• High rate of preventable hospitalizations for diabetes</td>
</tr>
<tr>
<td>• Improved air quality</td>
<td>• High rate of prescription drug use</td>
</tr>
</tbody>
</table>
Imperial County’s estimated population in 2018 is 180,216 residents. The County’s population has a median age of 32.4 years and is predominantly Hispanic/Latino (83.8%). A higher percentage of the population is under age 18 (28.7%), compared to California overall (23.2%).

Population in Limited English Households

Imperial County: 16.73%
California: 8.32%

Source: U.S. Census Bureau
SOCIAL AND ECONOMIC FACTORS

Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status, and geographic location all contribute to an individual’s ability to achieve good health. It is important to recognize the impact that social determinants have on health outcomes of specific populations. – Healthy People 2020

HOW WE COMPARE

<table>
<thead>
<tr>
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<th>IMPERIAL COUNTY</th>
<th>CALIFORNIA</th>
<th>U. S.</th>
</tr>
</thead>
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<tr>
<td>Median Household Income</td>
<td>$45,834</td>
<td>$71,228</td>
<td>$60,293</td>
</tr>
<tr>
<td>Children in Poverty</td>
<td>32.1%</td>
<td>19.5%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Poverty, All Ages</td>
<td>24.2%</td>
<td>14.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Disabled</td>
<td>14.4%</td>
<td>10.6%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Uninsured Population</td>
<td>11.8%</td>
<td>10.5%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Public Insurance Coverage</td>
<td>51.6%</td>
<td>37.2%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>20.6%</td>
<td>3.7%</td>
<td>6.6%</td>
</tr>
<tr>
<td>High School Graduate or Higher</td>
<td>69.0%</td>
<td>82.5%</td>
<td>87.7%</td>
</tr>
<tr>
<td>Age 25+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree or Higher</td>
<td>14.5%</td>
<td>33.3%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Age 25+</td>
<td></td>
<td></td>
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</table>

Source: U.S. Census Bureau, American Community Survey, 2014-2018
In 2013-2017, an estimated 13.1% of children aged 0-17 in Imperial County were in living situations with incomes below 50% of their federal poverty threshold. Imperial County has a higher rate of children in poverty than California overall (8.5%). The rate was highest in Calexico (12.1%) and lowest in the city of Imperial (2.0%).

Source: Kidsdata.org

Source: U.S. Census Bureau, Small Area Income and Poverty Estimate, 2017
COST-BURDENED HOUSING

Households that pay 30% or more of their income on housing costs are considered cost burdened. In 2013-2017, cost-burdened households in Imperial County accounted for 35.6% of owners with a mortgage, 14.0% of owners without a mortgage, and 54.7% of renters, according to the U.S. Census Bureau American Community Survey.

Substandard Housing

In Imperial County, 42.87% of housing units have one or more substandard conditions (lacking complete plumbing facilities, lacking complete kitchen facilities, with 1.01 or more occupants per room, and housing cost burden among renters and owners). That is lower than California overall (44.8%).
In 2013-2017, 68.4% of people 25 years and older had at least graduated from high school and 14.3% had a bachelor's degree or higher. An estimated 31.6% did not complete high school.

Source: U.S. Census Bureau, American Community Survey, 2013-2017
**EDUCATIONAL CHALLENGES**

**High School Graduation & Dropouts**

In Imperial County, the high school graduation rate is 88.5%, slightly higher compared to statewide (87.9%). A total of 9.62% of the County’s population aged 16-19 are not in school and not employed.


**4th-Graders Scored "Not Proficient" in Reading**

In Imperial County, 62.89% of children in grade 4 are scoring "not proficient" or worse in reading. This is worse than California overall at 55.16%.

**Free & Reduced-Price Lunch**

Nearly three-quarters (74.14%) of public school students in Imperial County are eligible for Free/Reduced Price lunch. This measure assesses vulnerable populations that are more likely to have multiple health access, health status, and social support needs. This is a higher percentage than statewide (58.11%).

*Source: National Center for Education Statistics, 2016-2017*
IMPERIAL COUNTY: LOCAL DIFFERENCES BY SUBDIVIDED REGIONS

**Imperial County**

Population: 179,957  
Uninsured: 11.8%  
Public Insurance: 48.6%  
Disabled: 14.4%  
Below Poverty Level: 20.7%  
Poverty <18 years: 28.1%

*Source: U.S. Census Bureau, American Community Survey, 2013-2017*
Health Status – Fair or Poor 18-64 years

Health status is an important determinant of health service use and access. Individuals with poor self-assessed health or diagnosed chronic conditions or some risk factors are more likely to seek care or to be directed by their providers to various services. Examining self-assessed health status and risk factors among adults ages 19-64 showed that those with Medi-Cal had the highest rates of fair/poor health, and those with privately purchased insurance had the lowest rates, according to the findings of the 2015-2016 California Health Interview Survey.
Uninsured Population

The lack of health insurance is considered a key driver of health status. In Imperial County, 11.83% of the total civilian non-institutionalized population are without health insurance coverage. The rate of uninsured persons in this county is greater than the state average of 10.5%. The highest percentage of uninsured is among adults age 18-64 (16.64%). Lack of insurance is a major barrier to health-care access including regular primary care, specialty care, and other health services, which contributes to poor health status.

Source: U.S. Census Bureau

Public Insurance - Population Receiving Medicaid (Medi-Cal)

In Imperial County, 48.6% of the population with insurance enrolled in Medi-Cal (or other means-tested public health insurance), compared to 35.8% statewide.

This assesses vulnerable populations that are more likely to have multiple health access, health status, and social support needs. When combined with poverty data, this measure can be used to identify gaps in eligibility and enrollment.
Access to Primary-Care Providers

Access to care requires not only financial coverage, but also access to providers. While a high rate of specialist physicians has been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary-care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.

In 2016, Imperial County had a higher ratio of population to primary-care physicians (4,890 residents to one doctor), compared to 1,090:1 in California overall. This is one of the highest ratios statewide.

Access to Mental Health Providers

In 2018, there was one mental health provider for 790 residents in Imperial County, which is more than double the ratio statewide (310:1).

Access to Dentists

In 2016, Imperial County had one of the highest ratios of population to dentists (2,900 residents to one dentist), compared to 1,200:1 statewide.

Source: US Department of Health & Human Services, Health Resources and Services Administration
TRANSPORTATION

Average Work Commute Time
In Imperial County, the average commute time is 20.85 minutes. However, some families commute more than 60 minutes to work. When families spend more time commuting, they have less time to spend investing in health and education.

Households with No Motor Vehicle
In Imperial County, 7.43% of households do not have a motor vehicle, similar to statewide (7.41%). Older populations, Latinos and other people of color, and those in low-income communities are disproportionately burdened by lack of safe streets, such as pedestrian fatalities and serious injuries, which are preventable. In Imperial County, 2.34% of workers travel to work by walking or biking, and 0.78% commute by public transit.

Source: US Census Bureau, American Community Survey, 2013-2017
This is one of three priority areas selected by community stakeholders for the 2017-2021 Community Health Improvement Plan. The priority measures were selected after reviewing and evaluating dozens of health indicators that focused on health disparities, determinants of health, and other factors.

Good nutrition, combined with physical activity, is essential for reducing the risk of certain chronic diseases and is associated with positive health outcomes. Creating community environments that support healthy lifestyle options requires multi-sector and place-based efforts. The focus is to work collectively on strategies that maximize resources and outcomes to improve health.

These are the priority measures and the progress to date:

**Priority Measure:** In 2014 (baseline), 31% of children living in low-income households in Imperial County were food insecure. In 2015-2016, the most recent data available, 58% of children and 45% of adults were in low-income households affected by food insecurity. This represents an 87% increase over baseline. The goal is a 10% reduction in the percentage of children in food-insecure households by December 2021.

**Priority Measure:** In 2014, 41.9% of adults in Imperial County had a Body Mass Index (BMI) greater than 30. In 2018, 39% of adults had a BMI of 30 or higher. This is a 7% decrease over baseline. The goal is a 5% reduction from baseline by December 2021.

**Priority Measure:** In 2015, 13.9% of 5th graders, 23.6% of 7th graders and 30.3% of 9th graders in Imperial County met all fitness standards. In 2018, 13.1% in Grade 5, 20.5% in Grade 7 and 26.9% in Grade 9 met all fitness standards. The goal is a 10% increase from baseline by December 2021.
Food Insecurity

Across California, 4.7 million adults and 2.0 million children live in low-income households affected by food insecurity. Food insecurity means having limited, uncertain, or inconsistent access to the quality and quantity of food that is necessary to live a healthy life. Having sustained access to enough food is tied to positive social, physical, and mental health outcomes.

In Imperial County, 17.21% of the population has low food access, defined as living more than 1/2 mile from the nearest supermarket, supercenter, or large grocery store. This is higher than California as a whole (13.39%). This indicator reports the percentage of the low-income population with low food access and highlights populations and geographies facing food insecurity.

Source: Feeding America, Map the Meal Gap
In Imperial County, 13 of 18 census tracts are food deserts, meaning 78,277 people are living in food deserts.

*Source: US Department of Agriculture, Food Access Research Atlas*

The non-Hispanic black population has the most limited access to healthy foods.
FOOD CHALLENGES

**Fruit & Vegetable Consumption**
More than three-quarters of Imperial County adults reported inadequate fruit and vegetable consumption, compared to 71.5% statewide.

**Population Receiving SNAP Benefits**
In Imperial County, 23.6% of the population receive Supplemental Nutrition Assistance Program (SNAP) benefits. This is more than double the percentage in California overall (11.2%).

**Grocery Store Rate**
In Imperial County, there are 20.05 grocery stores per 100,000 population. This is lower than California overall (21.14%).

**Fast Food Restaurant Rate**
In Imperial County, there are 59.02 fast food establishments per 100,000 population, compared to 80.51 fast food eateries statewide.

Source: US Dept. of Agriculture, Economic Research Service
HEALTH BEHAVIORS

Physical Inactivity
In Imperial County, 31.2% of the population reported having no leisure time physical activity. This is substantially higher than California overall (17.4%).

Recreation and Fitness Facility Access
There are 7.45 facilities per 100,000 population in Imperial County, compared to 10.75 statewide. Access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

Tobacco Usage—Current Smokers
In Imperial County, 12.4% of the population age 18 years and older smoked cigarettes, which is slightly lower than California overall (12.8%).

Source: County Health Rankings & Roadmaps
COMMUNITY PREVENTION LINKED WITH HIGH QUALITY HEALTH CARE

This priority area of the Community Health Improvement Plan strengthens the broad mix of programs and services that help to keep us healthy. It improves the physical and social environments in which we live, work, and play. Linking healthier community environments with high-quality health care increases our ability to be healthy and to prevent and manage chronic health issues. Target areas are early and adequate prenatal care and detection, management and education for asthma and diabetes.

**Priority Measure:** In 2012-2014 (baseline), 50.3% of pregnant women in Imperial County received adequate or adequate plus prenatal care. In 2015-2017, 50.5% of pregnant women received this level of prenatal care. In 2017-2019, only 47.9% received this level of prenatal care. The goal is to increase from baseline by 15% by December 2019.

**Priority Measure:** In 2014 (baseline year), there were 149.6 asthma-related emergency department visits per 10,000 residents for children under age 18. In 2019, the rate is 111.7. This represents a 25.3% decrease. For adults 18 years of age and older, the baseline rate in 2014 was 55.8 per 10,000 residents. In 2019, the rate is 42.3. This represents a 24.2% decrease. The goal is to reduce the baseline rate by 20% or lower for children and adults by December 2020.

**Priority Measure:** In 2012-2013 (baseline), the average rate of preventable hospitalizations due to short-term complications of diabetes was 39.7 discharges per 100,000 population age 18 and older. In 2019, the rate is 36.4. That is a decrease of 8.3%. The goal is to reduce the rate by 10% (35.7) by December 2020.
**Adolescent Births**

Imperial County’s teen birth rate of 28.2 births per 1,000 females aged 15-19 in 2016-2018 has decreased but remains among the highest in California. Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection, both of which can result in adverse health outcomes for mothers, children, families, and communities. The County’s teen birth rate is highest among Latinos/Hispanics.

**Prenatal Care**

In 2016, 26.3% of pregnant women who gave birth in Imperial County had inadequate prenatal care, compared to 10.1% statewide. Rates of inadequate prenatal care varied by race/ethnicity with African Americans and Latinos/Hispanics reporting the highest rates.

**Teen Birth Rate by Race/Ethnicity, Imperial County, 2016**

Source: California Department of Public Health, Maternal Child and Adolescent Health
Asthma is the most common chronic disease among children in the U.S. In 2019, Imperial County residents sought care for asthma at a higher rate compared to California overall. The County’s overall age-adjusted rate for emergency department visits was 60.2 per 10,000 residents (all ages), compared to 42.6 statewide. The County’s rate was highest among African Americans (87.0).

Source: California Health and Human Services Agency, Open Data
Emergency department visit rates are highest among African Americans.

Asthma - Hospitalizations

In 2018, there were 5.8 hospitalizations due to asthma per 10,000 population overall in Imperial County, compared to 4.4 statewide. The rate was highest among children aged 5 – 17 years (13.5 per 10,000). This was twice the statewide rate (6.5). Imperial County’s age-adjusted asthma hospitalization rate has declined significantly over the past decade.
Diabetes is a chronic condition characterized by high levels of blood sugar due to issues with the body’s insulin production, insulin action, or both. Among US states, California has the highest number of new cases of diabetes. In Imperial County, 7-9% of adults 20 years of age and older are diagnosed with diabetes.

Source: Office of Statewide Health Planning and Development

Note: In 2015, OSHPD only released the first three quarters of data due to a change in the reporting of diagnoses from ICD-9-CM to ICD-10-CM codes, effective October 1, 2015. Due to the significant differences resulting from the code change, the ICD-9-CM data is distinguished from the ICD-10-CM data in the data file beginning in 2016.
HEALTHY & SAFE COMMUNITIES AND LIVING ENVIRONMENT

This priority area in the Community Health Improvement Plan focuses on linkage and coordination among local organizations and groups around dementia, improving air quality, and accountability and appropriate use of prescription medications.

Increasing coordination to meet the needs of families with dementia supports a living environment that is healthy, safe, and offers families the option to keep loved ones at home longer. Efforts to monitor prescription medication are in place, but more is needed to support safe communities and living environments. Air quality, although improved, continues to impact the health of the community.

**Priority Measure:** In 2015 (baseline year), there were 74 prescribers of opioid drugs and 69 prescribers of Schedule II drugs in Imperial County who were registered with CURES (Controlled Substance Utilization Review and Evaluation System), a database of Schedule II-V controlled substance prescriptions dispensed in California. In 2020, there were 78 opioid prescribers and 68 Schedule II drug prescribers using CURES. The goal is a 25% increase from baseline.

**Priority Measure:** In 2015 (baseline year), there were 787 emergency department visits due to dementia, compared to 962 visits in 2018. This represents an increase of 22.2%. The goal is to reduce the number of emergency department admissions for persons with dementia by 10%.
Imperial experienced 16 deaths due to all opioid-related overdoses in 2018. The annual crude mortality rate during that period was 8.8 per 100,000 residents. This represents a 33% increase from 2016. The charts below present 12-month moving averages and annualized quarterly rates for selected opioid indicators. Trend data include the first quarter of 2019. The map displays the annual zip code level rates for all opioid-related overdoses. Synthetic opioid overdose deaths may be largely represented by fentanyl.
Alzheimer’s disease is a leading cause of death in California. In 2015-2017, the age-adjusted death rate due to Alzheimer’s disease was 35.7 per 100,000 residents, which is more than three times higher than the rate in Imperial County (9.2).

Statewide, there has been a 268% increase in the number of deaths since 2000.

Source: http://alzbr.org/alzheimers-disease-dementia/
Air pollution is a serious environmental threat to human health. Particles in the air like dust, dirt, soot, and smoke are one kind of air pollution called particulate matter. Fine particulate matter, or PM$_{2.5}$, is so small that it cannot be seen in the air. Breathing in PM$_{2.5}$ may lead to breathing problems, make asthma symptoms or some heart conditions worse, and lead to low birth weight.

The national standard for annual PM$_{2.5}$ levels is 12.0µg/m$^3$.* When PM$_{2.5}$ levels are above 12, this means that air quality is more likely to affect your health.

In 2017, the annual level of PM$_{2.5}$ in Imperial County was 9.4µg/m$^3$.

* Micrograms per cubic meter (µg/m$^3$)

Source: Air Resources Board
REFERENCES

California Air Resources Board, https://ww2.arb.ca.gov/

California Department of Public Health, Maternal, Child and Adolescent Health Programs, https://www.cdph.ca.gov/Programs/CFH/DMCAH/LocalMCAH/Pages/default.aspx


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Center for Applied Research and Engagement Systems, CARES HQ – Center for Applied Research and Engagement Systems


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