Orange County Health Care Agency’s

Health Improvement Plan 2014-2016
Strategic Plan 2014-2016
Quality Improvement Plan 2013-2014
Workforce Development Plan 2013-2014
Orange County’s
HEALTHIER
TOGETHER

2014-16
Orange County
Health Improvement Plan
A comprehensive assessment and plan to improve Orange County’s health
Orange County’s Healthier Together is a community-wide initiative that aligns public and private resources within the public health system to improve health for all who live, work, and play in Orange County. The initiative is administered by the Orange County Health Care Agency.
ACKNOWLEDGEMENTS AND PARTNERS

Orange County’s Healthier Together initiative is a collaborative effort made possible by the dedication, expertise, leadership, and shared vision of many individuals and organizations.

ORANGE COUNTY COMMUNITY HEALTH PLANNING ADVISORY GROUP

The Orange County Community Health Planning Advisory Group provided guidance and leadership throughout this planning process. Member organizations include:

- California State University at Fullerton
- CalOptima
- Children and Families Commission of Orange County
- Children’s Hospital of Orange County
- Coalition of Orange County Community Health Centers
- Hoag Memorial Hospital Presbyterian
- Hospital Association of Southern California
- Irvine Health Foundation
- Kaiser Permanente
- Latino Health Access
- Memorial Care Health System
- MOMS Orange County
- Orange County Asian and Pacific Islander Community Alliance
- Orange County Department of Education
- Orange County Health Care Agency
- Orange County Medical Association
- Orange County Social Services Agency
- Orange County United Way
- Orange County Women’s Health Project
- St. Joseph Health System
- University of California at Irvine Medical Center

OTHER PARTICIPATING AGENCIES

The Orange County Community Health Planning Advisory Group would like to thank the following organizations for their contribution through participation in assessments, focus groups, and work groups. Your input and feedback was invaluable in shaping this plan.

- 2-1-1 Orange County
- Access California Services
- Alliance for a Healthier Orange County
- AltaMed Health Services
- Alzheimer's Association
- American Academy of Pediatrics
- American Diabetes Association
- Boys and Girls Club
- Braille Institute
- Buena Park Community Clinic
- Camp Fire Orange County
- Casa de la Familia
- Catholic Charities
- Centralia School District
- Children’s Health Initiative of Orange County
- Community Action Partnership Orange County
- Community SeniorServ
- Community Service Programs
- Council on Aging Orange County
- County of Orange Office on Aging
- Dayle Macintosh
- Delhi Center
- Ersyol Consulting
- Fountain Valley School District Genesis Consultants
- Give for a Smile
- Goodwill of Orange County
- Healthcare Partners
- Healthy Relationships Orange County
- Horizon Cross Cultural Center
- Hurtt Family Health Clinic
- Illumination Foundation
- Interval House
- March of Dimes
- Mental Health Association of Orange County
- Mental Health Services Act Community Action Advisory Committee
- Monarch Healthcare
- National Alliance on Mental Illness
- National Council on Alcoholism and Drug Dependence – Orange County
- Newport-Mesa Unified School District
- Nutrition and Physical Activity Coalition (NuPAC)
- Office of Assembly member Sharon Quirk Silva
- Office of Assembly member Tom Daly
- Office of Congresswomen Loretta Sanchez
- Office of Senator Lou Correa
- Orange Coast Interfaith Shelter
- Orange County Breastfeeding Coalition
- Orange County Child Abuse Prevention Center
- Orange County Department of Child Support Services
- Orange County Korean American Health Information and Education Center
- Orange Unified School District
- Planned Parenthood
- Providence Community Services
- Public Law Center
- Regional Perinatal Programs of California
- Susan G. Komen Orange County
- Taller San Jose
- The G.R.E.E.N. Foundation
- University of Southern California Keck School of Medicine
- West Coast University

Special acknowledgements to National Association of County and City Health Officials (NACCHO) for funding and support under the Accreditation Support Initiative and to Ersyol Consulting for assistance with the assessment and planning process.
Orange County
Health Improvement Plan

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**EXECUTIVE SUMMARY**

*Orange County’s Healthier Together* is a community-wide initiative that aligns public and private resources within the public health system to improve health for all communities in Orange County. The initiative began in late 2012 when the Orange County Health Care Agency’s Public Health Services formed the Orange County Community Health Planning Advisory Group (Advisory Group) in order to assess the county’s health and create a community-driven plan for a healthier Orange County. The Advisory Group was composed of representatives from 21 partner organizations including health care providers, academic institutions, collaboratives, community-based organizations, and other government agencies.

Orange County is located in Southern California, between Los Angeles and San Diego counties, and is composed of 798 square miles with 34 cities and several unincorporated areas. The county is home to over 3 million people and is the sixth most populous county in the nation. Orange County is a diverse region, with no single racial/ethnic group making up a majority of the population.

In general, Orange County’s health fares well compared to other areas. The County Health Rankings ranked Orange County the 6th healthiest county in California. However, an assessment of the county’s health shows that real health disparities exist between different populations in the county. A key emphasis of the plan and the *Orange County’s Healthier Together* initiative is that the health of all people, families, and communities is equally important.

After its assessment process, the Advisory Group identified four priority health areas for action:
1) Infant and Child Health; 2) Older Adult Health; 3) Obesity and Diabetes; and 4) Behavioral Health and improvements for the Orange County public health system. The following pages describe the key findings, goals, objectives, and a highlighted strategy for each area.

**Priority Area #1: Infant and Child Health**

**Key Findings:**
- While almost 90% of Orange County women who gave birth in 2010 received early prenatal care, subgroups, including Latinas and younger women, were less likely to do so.
- Despite health benefits to the mother and infant, less than one in five women who gave birth in 2011 exclusively breastfed their babies through 3 months after delivery.

**Goal 1: Improve birth outcomes in Orange County**

**Objective 1.1:** By 2020, reduce disparities in early prenatal care by ensuring that at least 90% of pregnant women in all demographic or geographic subgroups in Orange County will receive early prenatal care.

**Highlighted Strategy:** Improve timeliness and quality of referrals and linkages between portals of entry for low-income women and prenatal care providers.

**Goal 2: Improve infant and child health outcomes in Orange County.**

**Objective 2.1:** By 2020, increase the proportion of mothers exclusively breastfeeding at 3 months by 10%.

**Highlighted Strategy:** Maintain and disseminate a directory of lactation services in Orange County.
EXECUTIVE SUMMARY

Priority Area #2: Older Adult Health

Key Findings:
- By 2030, one in five residents of Orange County will be 65 or older and the county’s health system is challenged to understand and meet the needs of this growing population.
- Complications from chronic conditions, lack of mobility, and elder abuse are important health concerns for older adults.

Goal 1: Improve wellness and quality of life of older adults in Orange County.

Objective 1.1: Increase early identification of conditions and safety risks that commonly affect older adults.

Objective 1.2: Reduce health complications of chronic diseases among older adults.

Objective 1.3: Reduce social isolation among older adults.

Objective 1.4: Reduce the risk for abuse and neglect of older adults.

Highlighted Strategy: Produce and disseminate Annual Wellness Visit toolkit to medical providers.

Priority Area #3: Obesity and Diabetes

Key Findings:
- Almost one in four Orange County adults is obese and only 56.7% of 5th graders have healthy body composition.
- Rates of diabetes increased from 6.6% to 7.7% between 2003 and 2009. 7.4% of adults report having diabetes in 2011-12 (methodology changes prevent comparison to previous years).
- Fewer adults are getting the recommended amount of exercise or fruit and vegetables.

Goal 1: Increase the proportion of Orange County residents who are in a healthy weight category.

Objective 1.1: By 2020, increase the proportion of children and adolescents who are in a healthy weight category and reduce disparities in subgroups with lower rates of healthy weight.

Highlighted Strategy: Work with school districts and educators to explore opportunities to align priorities for health and education.

Goal 2: Reverse the trend of increasing rates of diabetes among Orange County residents.

Objective 2.1: By 2020, stabilize the rates of diabetes among Orange County residents.

Highlighted Strategy: Work with health care providers to increase identification of and interventions for pre-diabetes and gestational diabetes.
EXECUTIVE SUMMARY

Priority Area #4: Behavioral Health

Key Findings:
- Expansion of mental health services due to the Affordable Care Act and the Mental Health Parity and Addiction Equity Act will dramatically alter the system of care.
- Improving understanding of behavioral health issues and services among the community and public health system is a key area for improvement.
- 14.9% of adults report binge drinking in the last month, a key contributor to poor health.
- Community concerns about prescription drug use have increased due to prescription drug overdoses more than doubling in the past 13 years.

Goal 1: Increase the proportion of Orange County residents who experience emotional and mental wellbeing through the lifespan.

Objective 1.1: Improve understanding of mental health needs, gaps, and resources.

Objective 1.2: Improve provider capacity to integrate behavioral health into health assessments and services.

Highlighted Strategy: Conduct an assessment of current tools and capacities related to mental health services.

Goal 2: Reduce alcohol and drug misuse in Orange County.

Objective 2.1: By 2020, reduce adult alcohol misuse.

Objective 2.1: By 2020, reduce prescription drug misuse.

Highlighted Strategy: Assure medical providers have user-friendly resources for referrals and successful linkages.

Orange County Public Health System

Key Findings:
- There are many quality programs and services within Orange County’s public health system.
- Planning and coordination efforts across the system are key areas for improvement.

Proposed Improvements: Establish a permanent advisory group to increase accessibility, coordination, use of best practices, and planning to address public health challenges.

Next steps: The Orange County’s Healthier Together initiative will continue to engage stakeholders and the community in implementing this plan and optimizing health for all in Orange County.
At the end of 2012, the Orange County Health Care Agency created the Orange County Community Health Planning Advisory Group to engage in a process to assess the county’s health and create a plan for a healthier Orange County. The Advisory Group was composed of representatives from 21 partner organizations including health care providers, academic institutions, collaboratives, community-based organizations, and other government programs. Utilizing the Mobilizing Action through Planning and Partnerships (MAPP) model (see Planning Process), the Advisory Group identified four priority health areas for action: 1) Infant and Child Health; 2) Older Adult Health; 3) Obesity and Diabetes; and 4) Behavioral Health and improvements for the Orange County public health system.

This community health improvement plan is the foundation of Orange County’s Healthier Together, a community-wide initiative that aligns public and private resources to improve health for all in Orange County. Because this plan focuses on a restricted number of priorities, not all health issues or community initiatives are identified in the plan. This does not negate the importance of other public health issues; nor does it imply that resources and services should not continue for other public health needs. The plan is intended to bring the community together around a limited number of issues with the greatest opportunity for health improvements through collective efforts.

The plan considered the following foundational principles shown in the graphic below:

- **Life course approach**: The plan reflects an approach that each life stage influences the next and that social, economic, and physical environments interacting across the life course have a profound impact on individual and community health.

- **Cross-cutting health issues**: The goals for the priority areas include health issues that cut across the priority areas. As an example, efforts to improve infant and child health such as promotion of breastfeeding may also reduce rates of obesity and diabetes. In the same way, efforts to improve alcohol and drug misuse, may also improve birth outcomes.

- **Public health system improvements**: At the foundation of these strategies is a well-functioning public health system. Improvements to the system have the potential to impact all of these priority areas; while efforts to improve systems supporting each area would contribute to improvements in the overall public health system.
CONTEXT FOR IMPROVING HEALTH

Orange County is located in Southern California, between Los Angeles and San Diego counties, and is composed of 798 square miles with 34 cities and several unincorporated areas. The county is home to over 3 million people and is the sixth most populous county in the nation. In general, Orange County’s health fares well compared to other areas, ranking 6th in California in the 2014 County Health Rankings. However, an assessment of the county’s health shows that real health disparities exist between different populations in the county. The Orange County Community Health Planning Advisory Group began its assessment process by conducting the MAPP Forces of Change Assessment, which identifies forces such as legislation, technology, and other impending changes that affect the context in which the community and its public health system operate. The following is a summary of the identified overarching forces and the opportunities (+) and threats (-) associated with them.

Changes to Health Care System

There have been many recent changes to the health care system and many more are on the horizon. Most notably, the Patient Protection and Affordable Care Act (ACA), signed March 2010, requires most U.S. citizens and legal residents to have health insurance by 2014. Other provisions of the law make changes to requirements for employer health coverage and health insurance benefits. The ACA also extends the reach of the Mental Health Parity and Addiction Equity Act (MHPAEA), expanding coverage of treatment for mental illness and substance use disorders.

Changing Demographics

Orange County has experienced major changes in its demographic makeup. The county population has grown by 57% in the last 30 years and has become increasingly diverse. Today, no single racial/ethnic group composes a majority of the population. The county’s population is also growing older. By 2030, one in five people in Orange County is projected to be 65 years or older.
Economic Climate
The recession of 2009 and the ensuing period of slow economic growth have impacted the local public health system. The rate of unemployment sharply increased and reached its peak at 9.4% in 2010. This has led to greater reliance on the public health system in a time when local, state, and national budgets have had decreased revenues.

Changing Built Environment
In the last few decades, America has experienced changes in its food and physical activity environments. Increased access to convenience foods and sedentary lifestyles has led to increases in rates of obesity, diabetes, and other chronic diseases. More recently, there has been increased attention on how structural and environmental changes can impact health and alter these trends.

Technology
Changes in how consumers and health care providers use technology can have a real impact on health and health care provision. More providers are implementing electronic medical records (EMRs), especially with incentives provided through the ACA. Meanwhile, more people are using the internet to get health information and communicate with their provider.
CONTENTS OF EACH SECTION

This document includes a section for each of the four priority health areas: 1) Infant and Child Health; 2) Older Adult Health; 3) Obesity and Diabetes; and 4) Behavioral Health and the Orange County public health system. Each section provides an overview of findings from the community health assessment and a plan for addressing the area. The plans for each section were created by work groups composed of members of the Orange County Community Health Advisory Group and other community stakeholders with expertise in the area. The work groups closely considered assessment findings and determined objectives and strategies for each goal based on available data, best use of resources, and alignment with local, state, and national initiatives. Sections for each priority area include the following:

- **Assessment** describing key findings from the various assessments of each priority area.
- **Current activities and assets** describing activities and agencies that are currently working on the priority health area.
- **Key planning partners** indicating organizations who participated in the work groups for each priority health area.
- **Goals** defining the overall mission or purpose of each priority area as it relates to the Orange County’s Healthier Together initiative.
- **Objectives** defining the planned specific improvements to key focus areas of the goal. Some objectives define targets by the year 2020 to be consistent with Healthy People 2020 timeline.
- “**Why is this important?**” section describing findings from the assessment that led to the objective being identified as an important contributor to the goal. This section also includes how the objective aligns with state and national initiatives such as Healthy People 2020, CDC’s Winnable Battles, Let’s Get Healthy California, and the National Prevention Strategy.
- **Short-term strategies** indicating the strategies to be undertaken during the course of this plan (2014-2016). As this is Orange County’s first community health improvement plan, some of the strategies are investigative in nature and will help to inform actions in future plans.
- **Longer-term strategies to consider** indicating the strategies to be undertaken in future plans. These strategies are provided to show the intended future actions, but may change based on findings from assessments conducted for this initial plan or future assessments.

To illustrate the cross-cutting themes among the various priority areas, the following icons for each priority area are shown at the end of objectives and/or strategies throughout the plans:
Priority Area #1: Infant and Child Health

9 Infant and Child Health Assessment

11 Goals, Current Activities and Assets, Key Planning Partners

12 Objective 1.1: Early Prenatal Care

13 Objective 2.1: Exclusive Breastfeeding
**INFANT AND CHILD HEALTH ASSESSMENT**

**Why is this important to health?** Health begins with a healthy pregnancy (getting early prenatal care, preventing gestational diabetes) leading to healthy birth outcomes (healthy birth weight, birth at term) and continues with healthy practices such as breastfeeding, immunizations, physical activity, and proper nutrition through infancy and childhood.

**What does the data show?** This table shows a summary of indicators related to infant and child health. **Indicator** column: [LHI] indicates *Healthy People 2020* Leading Health Indicator. **OC** column: † indicates the Orange County rate or proportion is at least 10% worse than California. **Trend** column: ● indicates improvement of indicator. ● indicates worsening of indicator. † indicates that the indicator is trending at an average of at least 1% worse per year with at least four known data points. **Sub-Group Disparities** column: Shows sub-groups with rates or proportions at least 10% worse than Orange County as a whole.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal care</td>
<td>89.6%</td>
<td>83.5%</td>
<td>73.1%</td>
<td>No change (2001-2010)</td>
<td>&lt;20 year olds: 74.3%</td>
</tr>
<tr>
<td>% women received early prenatal care per 2010 OSPHD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>7.2%</td>
<td>Not available</td>
<td>Not available</td>
<td>+6.7% per year † +2.7 (2001-2010)</td>
<td>APIs: 10.7% 30-34 year olds: 8.5% 35-39 year olds: 12.1% 40+ year olds: 15.7%</td>
</tr>
<tr>
<td>% mothers diagnosed with gestational diabetes per 2010 OSHPD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low birth weight</td>
<td>6.4%</td>
<td>6.8%</td>
<td>8.2%</td>
<td>+0.9% per year ● +0.5 (2001-2010)</td>
<td>APIs: 7.7% African Americans: 12.3% &lt;20 year olds: 7.3% 35-39 year olds: 7.9% 40+ year olds: 10.3%</td>
</tr>
<tr>
<td>% infants weighing less than 5 pounds, 8 ounces per 2010 Birth File</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preterm births [LHI]</td>
<td>8.9%</td>
<td>9.9%</td>
<td>12.0%</td>
<td>-0.7% per year ● -0.6 (2001-2010)</td>
<td>African Americans: 13.5% 35-39 year olds: 10.6% 40+ year olds: 14.4%</td>
</tr>
<tr>
<td>% infants born between 17 and 37 gestational age per 2010 Birth File</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality [LHI]</td>
<td>3.8 per 1,000</td>
<td>4.7 per 1,000</td>
<td>6.5 per 1,000</td>
<td>-1.7% per year ● -0.7 (2001-2010)</td>
<td>Latinos: 4.5</td>
</tr>
<tr>
<td>Rate of deaths of infants under one year of age per 1,000 per 2010 Birth File</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td>19.0%†</td>
<td>23.1%</td>
<td>Not available</td>
<td>Not comparable – methodology change</td>
<td>Latinas: 11.5%</td>
</tr>
<tr>
<td>% mothers exclusively breastfeeding at 3 months per 2011 MIHA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunizations [LHI]</td>
<td>89.3%</td>
<td>90.3%</td>
<td>Not available</td>
<td>-0.4% per year ● -3.6 (2003-2012)</td>
<td>Capistrano USD: 75.4% Laguna Beach USD: 77.9%</td>
</tr>
<tr>
<td>% of kindergarteners with up-to-date immunizations per Kindergarten Assessment Results</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Postpartum depression</td>
<td>12.3%</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>15-19 year olds: 17.2% 20-24 year olds: 17.5% 25-29 year olds: 15.0%</td>
</tr>
<tr>
<td>% women reporting experiencing postpartum depressive symptoms per 2010-2011 MIHA</td>
<td></td>
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<tr>
<td>Child abuse</td>
<td>9.5 per 1,000</td>
<td>9.6 per 1,000</td>
<td>Not available</td>
<td>-2.6% per year ● -2.9 (2002-2011)</td>
<td>Latinos: 12.9 African Americans: 24.9 &lt; 1 year old: 16.9 1-2 years: 12.5 3-5 years: 12.2</td>
</tr>
<tr>
<td>Rate of substantiated abuse per 1,000 children per 2011 Dept. of Social Services</td>
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</tbody>
</table>
What does the community say? The following includes feedback from focus groups about infant and child health. See Listening to Community Voices for more information about these focus groups.

**Vision of optimal health:**
- Infants have healthy birth outcomes
- Children’s health is viewed in a holistic sense
- Infants are breastfed based on American Academy of Pediatrics (AAP) Guidelines
- Children receive immunizations and there are no vaccine preventable diseases
- Children have healthy body weight and access to healthy food
- Children and families are educated about health and health resources

**What’s working:**
- Increased access to services
- Many programs and organizations provide quality services
- Services that provide personalized support are helpful for children and families
- Targeted outreach efforts are effective at reaching broad audiences
- There is accessible health information through CalOptima and other websites
- Faith and school-based efforts provide accessible services

**Areas for improvement:**
- Increase baby-friendly hospitals that support healthy pregnancies
- Increase access and affordability of healthy food
- Increase access to care for all
- Create changes in the environment and infrastructure that supports physical activity
- Ensure health information is based on science
- Increase access to and resources for mental health
- Improve coordination between service organizations

**What should our focus be?** Based on the assessment findings and the criteria for selection of priorities, the following were proposed as goals and focus areas for the Orange County health improvement plan.

**PROPOSED GOALS AND FOCUS AREAS**

**Goal 1: Improve birth outcomes in Orange County.**
**Focus areas:**
1. Early prenatal care
2. Gestational diabetes

**Goal 2: Improve infant and child health outcomes.**
**Focus areas:**
1. Exclusive breastfeeding
2. Childhood immunizations

**Cross cutting issues addressed in other areas:**
1. Obesity and Diabetes: Childhood obesity
2. Behavioral Health: Childhood mental health
3. Public Health System: Developmental screening
INFANT AND CHILD HEALTH PLAN

Goal 1: Improve birth outcomes in Orange County.

Goal 2: Improve infant and child health outcomes in Orange County.

Current Activities and Assets:

There are many programs and resources that work to improve birth, infant, and child health outcomes within Orange County. The Orange County Perinatal Council (OCPC) plans and coordinates activities and messages around perinatal health and distributes messages through community networks of health plans, hospitals, providers, and Women, Infant, and Child (WIC) clinics. OCPC includes members from a broad range of community stakeholders, organizations, and health care providers with a mission to support optimal perinatal health and wellness for Orange County’s women and babies – before, during, and after birth.

Partnerships also exist between Orange County Health Care Agency Public Health programs, professional organizations, local hospitals, medical providers, and local school districts to promote health and well-being of the maternal and child populations by providing access and linkages to medical and social services. Such collaborative efforts have resulted in the development of the Orange County Breastfeeding Resource Guide. There are also a variety of public health and community-based programs including Adolescent Family Life Program (AFLP), Bridges Maternal Child Health Network, Cal-Learn, Medically High Risk Newborns (MHRN), MOMS Orange County, Nurse Family Partnership® (NFP), Perinatal Substance Abuse Services Initiative/Assessment and Coordination Team (PSASI/ACT), and Public Health Community Nursing (PHCN) that work with at-risk populations to ensure early access to care, provide linkage to resources, and support clients in attaining optimal outcomes for moms and babies.

The Baby-Friendly Hospital Initiative, a global effort to implement practices that protect, promote, and support breastfeeding, was created in 1991 by the World Health Organization and UNICEF. Overwhelming evidence exists on the benefits of the Baby-Friendly designation on breastfeeding outcomes. Orange County hospitals are approved or at various stages of the application process seeking Baby Friendly status. As of 2013, six of the 17 birthing hospitals in Orange County achieved Baby Friendly designations.

<table>
<thead>
<tr>
<th>Key Planning Partners</th>
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<tbody>
<tr>
<td>• American Academy of Pediatrics, Orange County Chapter</td>
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<td>• CalOptima</td>
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<tr>
<td>• Children and Families Commission of Orange County (CFCOC)</td>
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<td>• Children’s Hospital of Orange County (CHOC)</td>
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<tr>
<td>• Health Care Agency Public Health Services</td>
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<tr>
<td>• March of Dimes</td>
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<tr>
<td>• MOMS Orange County</td>
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<tr>
<td>• Regional Perinatal Programs of California</td>
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<tr>
<td>• St. Joseph Hospital</td>
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</table>
Early Prenatal Care

**Goal 1: Improve birth outcomes in Orange County.**

**Objective 1.1:** By 2020, reduce disparities in early prenatal care by ensuring that at least 90% of pregnant women in all demographic or geographic subgroups in Orange County will receive early prenatal care.

### Why is this a priority?

 Mothers who receive late or no prenatal care are more likely to have babies with low birth weight, stillborn, or who die in the first year of life [1]. Early prenatal care provides an excellent opportunity to detect and treat maternal medical problems such as anemia and diabetes [1]; it can also prevent major birth defects and increase opportunities for delivering a healthy baby [2, 3]. Fetal health has also been linked to adult health including reducing risks of heart disease, hypertension, and obesity, among other conditions [4]. *Healthy People 2020* identifies early and adequate prenatal care as priorities in addressing maternal, infant, and child health.

According to the Orange County Master Birth File, 89.6% of women who gave birth in 2010 initiated prenatal care within the first trimester. This proportion is higher than the state average (83.5%), the national average (73.1%), and exceeds the *Healthy People 2020* goal of 77.9%. However, some subgroups within Orange County receive prenatal care at a lower rate including Latinas (86.9%), women under 20 years of age (74.3%), women between 20-24 years of age (85.4%), and in 17 cities in Orange County (ranging from 85.0% to 89.7%). Addressing disparities in these groups is an important step in improving birth outcomes in Orange County.

### Strategies

#### Short-term strategies

1. Identify **barriers to prenatal care** for women who are less likely to receive early prenatal care.
2. Improve timeliness, quality, and number of **referrals and linkages** between portals of entry for low-income women and prenatal care providers.

#### Longer-term strategies to consider

1. Create **targeted interventions** that address barriers to prenatal care based on identified barriers for women less likely to receive early prenatal care.
### Objective 2.1: By 2020, increase the proportion of mothers exclusively breastfeeding at 3 months by 10%.

#### Why is this a priority?

Human breast milk is the optimal source of nutrition and provides many benefits for healthy growth and development [5]. Breastfeeding helps protect against SIDS, respiratory infections, childhood obesity, and other conditions [6]. Mothers benefit from reduced risk of breast and other cancers [7]. *Healthy People 2020* identifies various objectives related to breastfeeding, including increasing the proportion of infants who are breastfed exclusively through 3 months from 33.6% to 46.2% by 2020. Breastfeeding is also associated with the Behavioral Health priority area’s goal of increasing mental and emotional wellbeing. Research has shown that breastfeeding may lead to reduced risk of developing postpartum depression and that mothers with postpartum depression may be less likely to breastfeed [8,9].

According to the California Maternal and Infant Health Assessment (MIHA), less than one in five (19.0%) women who gave birth in 2011 exclusively breastfed their babies through 3 months after delivery. This proportion is lower than the state average (23.1%). It is important to note that this proportion is not comparable to previous years and the *Healthy People 2020* goal due to differences in definition and methodology. Recent passage of legislation and renewed efforts in this area has provided unique and timely opportunities to address this issue at this time.

#### Strategies

##### Short-term strategies

1. Identify ways to promote, support, and leverage WIC’s efforts to support breastfeeding.
2. Explore community-capacity building needs identified in the Children and Families Commission Orange County report.
3. Maintain and disseminate a directory of lactation services in Orange County.
4. Promote and support laws and policies increasing the number of hospitals with infant feeding policy and increasing the number of ‘baby friendly’ hospitals.
5. Promote workplace policies and practices supporting lactation.
6. Improve consistency of exclusive breastfeeding data collected through the Maternal and Infant Health Assessment (MIHA).

##### Longer-term strategies to consider

1. Create a centralized breastfeeding hotline.
2. Educate caregivers, providers, and family members to promote a culture that supports breastfeeding.
3. Promote best practices that address breastfeeding as part of postpartum and newborn care and assessments.
Priority Area #2: Older Adult Health

15 Older Adult Health Assessment

17 Goals, Current Activities and Assets, Key Planning Partners

18 Objective 1.1: Early Identification of Conditions of Aging

19 Objective 1.2: Chronic Diseases Health Complications

20 Objective 1.3: Reduce Social Isolation

21 Objective 1.4: Reduce Risk for Elder Abuse and Neglect
Why is this important to health? Older adult health is an emerging issue as it relates to the capacity of the health care system to support their needs. The number of adults aged 65 and over is projected to grow from 377,180 in 2012 to 670,069 in 2030, when one in five residents of Orange County will be 65 or older. Aging is the best known risk factor for developing Alzheimer’s disease, which was the 4th leading cause of death in Orange County in 2010.

What does the data show? This table shows a summary of indicators related to older adult health. Indicator column: [LHI] indicates Healthy People 2020 Leading Health Indicator. OC column: ! indicates the Orange County rate or proportion is at least 10% worse than California. ● indicates improvement of indicator. ○ indicates worsening of indicator. ! indicates that the indicator is trending at an average of at least 1% worse per year with at least four known data points. Sub-Group Disparities column: Shows sub-groups with rates or proportions at least 10% worse than Orange County as a whole.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s disease</td>
<td>34.2 per 1,000 !</td>
<td>29.0 per 1,000</td>
<td>25.1 per 1,000</td>
<td>+12.1% per year ●! +17.8 (2001-2010)</td>
<td>White females: 42.2</td>
</tr>
<tr>
<td>Rate of deaths per 1,000 population per 2010 Death File</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health status</td>
<td>71.7%</td>
<td>72.7%</td>
<td>Not available</td>
<td>Not comparable – methodology change</td>
<td>None</td>
</tr>
<tr>
<td>% adults 65+ reporting good to excellent health per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td>52.7%</td>
<td>51.9%</td>
<td>Not available</td>
<td>Not comparable – methodology change</td>
<td>None</td>
</tr>
<tr>
<td>% adults 65+ disabled due to physical, mental, or emotional condition per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity [LHI]</td>
<td>22.5%</td>
<td>23.1%</td>
<td>25.9%</td>
<td>Not comparable – methodology change</td>
<td>None</td>
</tr>
<tr>
<td>% adults 65+ obese per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes management</td>
<td>67.0%</td>
<td>64.0%</td>
<td>Not available</td>
<td>Not comparable – methodology change</td>
<td>Males: 57.5%</td>
</tr>
<tr>
<td>% adults 65+ with diabetes(16.0%) who are very confident in controlling and managing it per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension medication</td>
<td>91.8%</td>
<td>91.0%</td>
<td>94.3%</td>
<td>Not comparable – methodology change</td>
<td>Not available</td>
</tr>
<tr>
<td>% adults 65+ who have high blood pressure (58.5%) who take medicine for it per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammograms</td>
<td>85.1%</td>
<td>82.9%</td>
<td>81.5%</td>
<td>Not comparable – methodology change</td>
<td>Not available</td>
</tr>
<tr>
<td>% women 50+ who had mammogram in past 2 years per 2011-12 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal cancer screenings</td>
<td>72.4%</td>
<td>67.2%</td>
<td>73.1%</td>
<td>+7.3% per year ●+22.0 (2003-2009)</td>
<td>Latino males: 57.6% Latina females: 54.0% Asian females: 63.6%</td>
</tr>
<tr>
<td>% adults 50-75 years compliant with colorectal cancer screening recommendations per 2009 CHIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elder falls</td>
<td>51.4%</td>
<td>62.8%</td>
<td>Not available</td>
<td>Not available initiated in 2011</td>
<td>Not available</td>
</tr>
<tr>
<td>% adults 65+ who fell and went to ER due to fall in past year per 2011-12 CHIS</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
What does the community say? The following includes feedback from focus groups about older adult health. See Listening to Community Voices for more information about these focus groups.

Vision of optimal health:
- Ability to be independent physically and financially
- Access to healthy food
- Ability to be physically active to the best of their ability
- Planning for advanced care and end of life care
- Engagement in meaningful social activities
- Access to robust social support

What’s working:
- Many programs and organizations provide quality services
- Affordable housing is available in some areas
- One-on-one case management offers individual attention and links older adults to needed services
- Some cultural norms provide more support for older adults

Areas for improvement:
- Ensure that the medical system can meet the needs of the growing older adult population
- Increase awareness of available services
- Increase access to patient navigators
- Reduce gaps in care
- Improve coordination between service organizations
- Provide centralized services
- Reduce cost for medications, medical devices, and care
- Increase access to affordable housing
- Increase resources for transportation

What should our focus be? Based on the assessment findings and the criteria for selection of priorities, the following were proposed as goals and focus areas for the Orange County health improvement plan.

**PROPOSED GOALS AND FOCUS AREAS**

**Goal 1: Improve wellness and quality of life of older adults in Orange County.**

**Focus areas:**
1. Clinical preventive services
2. Chronic disease self-management
3. Physical independence (elderly falls, affordable housing)
4. Supportive care (caregiver, long-term care)

**Cross cutting issues addressed in other areas:**
1. Obesity and Diabetes: Older adult healthy weight
2. Public Health System: Provider capacity and access
Goal 1: Improve wellness and quality of life of older adults in Orange County.

Current Activities and Assets:

Orange County benefits from numerous programs and agencies which serve the needs of older adults, including the Office on Aging (OoA), Council on Aging (CoA), other governmental agencies, healthcare systems, academic institutions with special research/focus on older adults (California State University at Fullerton and University of California at Irvine) and numerous community-based organizations. The Office on Aging is the lead advocate, systems planner, and facilitator relative to all aging issues, and oversees the Senior Citizen Advisory Council (SCAC), manages an information/assistance line for seniors, provides outreach and services, and coordinates state-required planning efforts. Council on Aging oversees the Ombudsman Program, a financial abuse team, a health insurance counseling program, and a friendly visitor program for seniors. Numerous entities and programs, from cities to small non-profits to large county-wide programs, serve specific needs of seniors, such as nutritional assistance, adult day health care, chronic disease self-management classes, and programs to promote health and socialization in seniors.

Seniors in Orange County enjoy a high level of health insurance coverage (almost 98%) and many resources exist to assist seniors with their healthcare and social needs. However, in a county as large and diverse as Orange County, coordination of services and outreach to diverse populations of seniors about these services can be challenging. Two large consortia of senior service providers have existed for a number of years, but they meet primarily for information sharing and networking purposes. In order to strengthen and improve collaboration among governmental and non-profit organizations serving seniors, the Orange County Aging Services Collaborative (OCASC) was formed just four years ago. OCASC serves to bring together many of the larger partners in senior services to jointly work on and advocate for initiatives/activities to benefit older adults. However, many of these agencies are experiencing serious funding cutbacks and the only age-based segment of the OC population that is growing (those 65 and over will account for over 20% of the total OC population by 2030) may suffer from a lack of resources to meet their needs.

<table>
<thead>
<tr>
<th>Key Planning Partners</th>
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</thead>
<tbody>
<tr>
<td>• Alzheimer’s Association</td>
</tr>
<tr>
<td>• CalOptima</td>
</tr>
<tr>
<td>• Council on Aging Orange County (COAOC)</td>
</tr>
<tr>
<td>• California State University at Fullerton Department of Health Science</td>
</tr>
<tr>
<td>• Health Care Agency Behavioral Health Services</td>
</tr>
<tr>
<td>• Health Care Agency Public Health Services</td>
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<tr>
<td>• Hoag Hospital</td>
</tr>
<tr>
<td>• Latino Health Access (LHA)</td>
</tr>
<tr>
<td>• Office on Aging</td>
</tr>
<tr>
<td>• University of California at Irvine Division of Geriatric Medicine and Gerontology</td>
</tr>
</tbody>
</table>
Goal 1: Improve wellness and quality of life of older adults in Orange County.

**Objective 1.1:** Increase early identification of conditions and safety risks (e.g. cognitive disorders, chronic diseases, falls, depression) that commonly affect older adults.

**Why is this a priority?**

Conditions and safety risks that commonly affect older adults include cognitive disorders like Alzheimer’s Disease, chronic diseases like heart disease, diabetes and high blood pressure (hypertension), falls, and depression. More than 75% of our nation’s health care spending is on people with chronic conditions [1], many of which are preventable. Health promotion activities, such as a healthful diet, exercise, and early detection efforts can help reduce the incidence of chronic disease or disability. Lifestyle changes in patients who are pre-diabetic can reduce the incidence of diabetes, and control of blood pressure and cholesterol can reduce the incidence of heart disease.

Chronic conditions are common among older adults in Orange County. According to the California Health Interview Survey (CHIS), almost one in six older adults (aged 65 and above) in Orange County has been diagnosed with diabetes (16.0%) and a similar proportion is obese (17.5%). Over half have ever been diagnosed with high blood pressure (58.5%). And over half (51.4%) of older adults who fell went to the emergency room due to a fall in the past year. Orange County’s rates of Alzheimer’s disease (34.2 per 1,000 older adults) are higher than rates in California and the United States (29.0 per 1,000 and 25.1 per 1,000, respectively). Increasing the proportion of persons with diagnosed Alzheimer’s disease and other dementias who are aware of the diagnosis is an objective in the CDC’s The Healthy Brain Initiative.

Nationally, one in four older adults have some type of mental health problem, such as a mood disorder, not associated with normal aging [2]. Early identification of these conditions and safety risks can lead to earlier treatment and control, and thus less morbidity and disability related to chronic conditions.

**Strategies**

**Short-term strategies**

1. Complete and disseminate Orange County Healthy Aging Initiative’s **Annual Wellness Visit toolkit** to providers.

2. Identify opportunities to implement **preventative screenings and assessments** in community-based (non-medical) settings.

**Longer-term strategies to consider**

1. Increase **Annual Wellness Visit screenings** by health care providers.

2. Promote **health screenings** in groups with regular contact with older adults.

3. Develop and disseminate **non-medical screening tools** and develop provider training to support implementation.
### Goal 1: Improve wellness and quality of life of older adults in Orange County.

**Objective 1.2:** Reduce health complications of chronic diseases among older adults.

**Why is this a priority?**

Chronic diseases are common in older adults in Orange County. According to the California Health Interview Survey, at least 60% of Orange County adults 65 years or older surveyed in 2011 – 2012 reported one or more chronic diseases. Only about two out of three of surveyed seniors with diabetes and/or heart disease reported that they were “very confident” in managing their disease. These diseases can lead to disabling conditions, which reduce older adults’ independence or require expensive care. In the same survey, over half of older adults reported that they were disabled due to a mental or physical condition.

Evidence-based Chronic Disease Self-Management Programs (CDSMP) can help older adults experience reduced health distress, fewer visits to emergency rooms and physician offices, increased self-efficacy, and reduced health care costs [3]. Increasing the proportion who report they are very confident in managing their disease may decrease the number experiencing morbidity due to these diseases.

### Strategies

#### Short-term strategies

1. Promote **evidence-based programs** and promising practices for **disease self-management** (e.g., Chronic Disease Self-Management Program, Savvy Caregiver, Powerful Tools for Caregivers, and Walk with Ease).

2. Increase participation in existing **medication management programs** and identify current and future needs and gaps.

3. See Objective 1.1 related to preventative screening.

#### Longer-term strategies to consider

1. Increase availability of **evidence-based programs** for chronic disease self-management.

2. Increase availability of effective **medication management strategies**.
Goal 1: Improve wellness and quality of life of older adults in Orange County.

Objective 1.3: Reduce social isolation among older adults.

Why is this a priority?
Social isolation affects the overall well-being of seniors, including their health and mental wellness. Social isolation can lead to malnutrition, cognitive impairment, depression and increased vulnerability to elder abuse, among other concerns. Experts on aging have long suspected that socialization improves physical and emotional well-being, increases mental alertness and encourages a more active lifestyle. A variety of research studies confirm these benefits and more, pinpointing the mechanisms behind the protective properties of human interaction that lessen the risk of Alzheimer's disease, promote heart health, lessen chronic pain, improve symptoms of depression and minimize the effects of stress [4]. Although social ties are one of the strongest predictors of well-being, nationally, about 12% of adults aged 65 or older report that they "rarely" or "never" receive the social and emotional support they need [5]. Decreasing social isolation among older adults will help to improve both health and quality of life among older adults. Addressing mental distress among older adults, such as those associated with diminished social ties, are among the calls to action in the CDC's State of Aging and Health in America 2013.

Strategies

Short-term strategies
1. Promote existing Friendly Visitor Programs and assess for needs and gaps.
2. Promote evidence-based interventions and promising practices to reduce social isolation (e.g., Healthy IDEAS, PEARLS, IMPACT, MECCA).
3. Identify opportunities and promote involvement in community programs (including adult day health centers and senior centers) and activities of isolated individuals based on client needs.

Longer-term strategies to consider
1. Increase geographically accessible and culturally/linguistically availability of Friendly Visitor Programs.
2. Increase availability and utilization of evidence-based interventions to reduce social isolation.
Goal 1: Improve wellness and quality of life of older adults in Orange County.

Objective 1.4: Reduce the risk for abuse and neglect of older adults.

Why is this a priority?
Almost one out of seven community-dwelling older adult (not living in assisted living or a nursing home) experiences physical, psychological, or sexual abuse, neglect, or financial exploitation annually [6]. In 2012, Orange County Adult Protective Services (APS) received over 7,700 unduplicated reports of abuse or neglect, with 73% involving elders. This represents a small proportion of those who likely suffer from abuse; for every report of abuse, it has been estimated that many more cases go unreported. Elder abuse and neglect take an enormous toll on victims and the communities they live in. Victims are four times more likely than non-abused older adults to go into nursing homes [7] and are three times more likely to die than their peers of the same age [8]. In order to prevent these occurrences, there is a need to increase public awareness, remove barriers to reporting, and develop and strengthen systems to meet the complex needs of victims of elder abuse.

Strategies

Short-term strategies
1. Increase awareness of risk of elder abuse.
2. Identify areas to coordinate efforts with National Center on Elder Abuse.

Longer-term strategies to consider
1. Strengthen and improve policies relating to elder abuse.
Priority Area #3: Obesity and Diabetes

23 Obesity and Diabetes Assessment

25 Goals, Current Activities and Assets, Key Planning Partners

26 Objective 1.1: Child and Adolescent Weight

27 Objective 2.1: Diabetes
Why is this important to health? Obesity and diabetes are major contributors to the leading causes of death including heart disease, stroke, and certain cancers. Obesity is the 2nd leading contributing factor to death in the United States. Diabetes is itself a major cause of death. In Orange County, it is the 8th leading cause of death overall, 5th among Latinos, and 6th among Asians and Pacific Islanders.

What does the data show? This table shows a summary of indicators related to obesity and diabetes. Indicator column: [LHI] indicates Healthy People 2020 Leading Health Indicator. Trend column: ● indicates improvement of indicator. ○ indicates worsening of indicator. ! indicates indicator is trending at an average of at least 1% worse per year with at least four known data points. Sub-Group Disparities column: Shows sub-groups with proportions at least 10% worse than Orange County as a whole.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult obesity [LHI]</td>
<td>% adults reporting being obese per 2011-12 CHIS</td>
<td>23.8%</td>
<td>25.4%</td>
<td>27.8%</td>
<td>Not comparable – methodology change</td>
<td>Latina females: 39.8% 45-64 year olds: 27.0%</td>
</tr>
<tr>
<td>Child (5th Grade) body composition [LHI]</td>
<td>% 5th graders within healthy fitness zone per 2012/13 OCDE</td>
<td>56.7%</td>
<td>53.2%</td>
<td>Not comparable</td>
<td>-1.2% per year ● -1.4 (2010/12-2012/13)</td>
<td>Latinos: 44.8 Santa Ana USD: 41.1% Orange USD: 50.6%</td>
</tr>
<tr>
<td>Adolescent (9th Grade) body composition [LHI]</td>
<td>% 9th graders within healthy fitness zone per 2012/13 OCDE</td>
<td>65.3%</td>
<td>58.9%</td>
<td>Not comparable</td>
<td>-1.5% per year ● -2.0 (2010/12-2012/13)</td>
<td>Latinos: 56.0% Santa Ana USD: 53.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>% adults reporting having diabetes per 2011-12 CHIS</td>
<td>7.4%</td>
<td>8.4%</td>
<td>9.0%</td>
<td>Not comparable – methodology change</td>
<td>Latino males: 9.3% Latina females: 10.9% 45-64 year olds: 11.6% 65+ year olds: 16.0%</td>
</tr>
<tr>
<td>Physically inactive</td>
<td>% adults reporting no leisure-time activity in last 30 days 2010 per BRFSS</td>
<td>21.1%</td>
<td>20.4%</td>
<td>23.9%</td>
<td>+2.0% per year ● +1.9 (2005-2010)</td>
<td>None</td>
</tr>
<tr>
<td>Fruit &amp; vegetable intake</td>
<td>% adults reporting eating 5 or more fruits &amp; vegetables a day per 2009 BRFSS</td>
<td>27.4%</td>
<td>27.7%</td>
<td>23.4%</td>
<td>-1.6% per year ● -1.8 (2005-2009)</td>
<td>None</td>
</tr>
<tr>
<td>Park access</td>
<td>% of population living within a ½ mile of a one-acre size park per 2013 U.S. Census</td>
<td>87.9%</td>
<td>73.8%</td>
<td>Not available</td>
<td>Not available</td>
<td>Villa Park: 27.9% Stanton: 65.7% Garden Grove: 66.7% Buena Park: 73.5% Seal Beach: 74.8% Orange: 78.2 Santa Ana: 79.1%</td>
</tr>
<tr>
<td>Healthy food availability</td>
<td>Median mRFEI score based on healthy food retailers as proportion of all food retailers per 2009 CDC</td>
<td>11.1</td>
<td>11.0</td>
<td>10.0</td>
<td>Not available</td>
<td>San Clemente: 4.0 Also Viejo: 5.9 Stanton: 6.7 Orange, Westminster: 7.1 Seal Beach: 7.7 Huntington Beach: 8.0 Buena Park, Tustin: 9.1 Lake Forest: 9.5 Cypress: 9.8</td>
</tr>
</tbody>
</table>
What does the community say? The following includes feedback from focus groups about obesity and diabetes. See Listening to Community Voices for more information about these focus groups.

Vision of optimal health:
- Lack of disease associated with obesity and diabetes
- Individuals make healthy choices about food and physical activity
- Everyone has access to healthy and affordable food
- Everyone has access to resources for physical activity
- The community is aware of ways to achieve health
- There is support for healthy lifestyles

What’s working:
- Increased resources, information, and support for obesity prevention
- Increased school and community involvement
- Increased collaborations around nutrition, physical activity, obesity, and diabetes

Areas for improvement:
- Increase access and affordability of healthy food
- Create changes in the environment and infrastructure that support physical activity
- Engage the community about health
- Improve coordination and consistency in policies
- Fund programs that address obesity

What should our focus be? Based on the assessment findings and the criteria for selection of priorities, the following were proposed as goals and focus areas for the Orange County health improvement plan.

PROPOSED GOALS AND FOCUS AREAS

Goal 1: Increase the proportion of Orange County residents who are in a healthy weight category.

Goal 2: Reverse the trend of increasing rates of diabetes among Orange County residents.

Focus areas:
1. Physical activity
2. Nutrition

Cross cutting issues addressed in other areas:
1. Public Health System: Early screening for chronic diseases
Current Activities and Assets:

Many Orange County organizations are working together to address obesity across the lifespan. Several programs champion breastfeeding as one of the first steps to establish a variety of health benefits including healthy weight. Programs are in place to educate individuals and families about healthy food and physical activity. Women, Infants, and Children (WIC) offers education and financial assistance for low-income residents to purchase healthy food. The Nutrition Education and Obesity Prevention (NEOP) program provides financial support that allows for nutrition education in school and community settings. Champion Moms give real life examples of ways to eat healthier and encourage families to be more physically active. Various collaboratives exist to bring together partners working on prevention of obesity and other chronic diseases. The Nutrition and Physical Activity Collaborative (NuPAC) brings together partners throughout Orange County for the purpose of networking and collaboration in the areas of nutrition and physical activity. The Alliance for a Healthier Orange County, a county-wide collaborative whose mission is to champion policy strategies for improved health, has implemented an Move More Eat Healthy campaign to inspire schools and cities to create healthier practices that support physical activity and healthy eating.

Environmental approaches are used by some programs to create community-level changes in the built environment or to increase access to healthy choices. An example is the Health Care Agency’s Fifteen in Twenty-twenty, which partners with jurisdictions to create environments that are walkable and include options for healthy eating. Orange County has been the recipient of several grants that are creating healthier communities and will help individuals to engage in healthier lifestyles. For example, Building Healthy Communities is a ten-year initiative in Central Santa Ana funded by the California Endowment to support the development of healthy communities. Kaiser Permanente has funded the Healthy Eating Active Living (HEAL) Zone in Anaheim to increase access to healthy choices. Many cities have taken steps to promote physical activity through the development of joint use agreements with schools and also through General Plan updates that create bike lanes.

<table>
<thead>
<tr>
<th>Key Planning Partners</th>
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<tbody>
<tr>
<td>• Alliance for a Healthier Orange County (AHOC)</td>
</tr>
<tr>
<td>• American Diabetes Association (ADA)</td>
</tr>
<tr>
<td>• Children and Families Commission of Orange County (CFCOC)</td>
</tr>
<tr>
<td>• Coalition of Orange County Community Health Centers (COCCC)</td>
</tr>
<tr>
<td>• Health Care Agency Public Health Services</td>
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<tr>
<td>• Hoag Hospital</td>
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<tr>
<td>• Kaiser Permanente</td>
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<tr>
<td>• Latino Health Access (LHA)</td>
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<tr>
<td>• Orange County Asian Pacific Islander Community Alliance (OCAPICA)</td>
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<td>• Orange County United Way</td>
</tr>
<tr>
<td>• Nutrition and Physical Activity Coalition (NuPAC)</td>
</tr>
</tbody>
</table>
Goal 1: Increase the proportion of Orange County residents who are in a healthy weight category.

Objective 1.1: By 2020, increase the proportion of children and adolescents who are in a healthy weight category and reduce disparities in subgroups with lower rates of healthy weight.

Why is this a priority?

Obesity is the 2nd leading behavioral contributor to death in the United States [1]. Today’s children may lead less healthy lives and have shorter life spans than their parents due largely to heart disease, cancers, stroke, and diabetes associated with obesity [2]. Obesity is included as a priority in Let’s Get Healthy California and is a CDC Winnable Battle. Healthy eating and active living are contributing causes of obesity are both priorities in the National Prevention Strategy.

According to the California Physical Fitness Test, in 2012/13, only 56.7% of Orange County 5th graders had a healthy body composition in 2012/13. Latino and male 5th graders were less likely to have a healthy body composition with only 44.8% and 52.4%, respectively. Rates of healthy body composition among 5th graders also varied by geography, with some school districts having half or less than half of students with healthy body weight. Among 9th graders, 65.3% had healthy body composition, with only 56.0% of Latino 9th graders having a healthy body composition in 2012/13. Working with schools, families, and communities to increase healthy body composition and address disparities in subgroups are important steps to increasing overall healthy weight status in Orange County.

Strategies (All strategies contribute to Infant and Child Health priority area)

Short-term strategies

1. Work with school districts and educators to explore opportunities to align priorities for health and education.

2. Promote implementation of school wellness plans and use of Wellness Councils in elementary schools.

3. Promote and expand community efforts involving parents and families such as Walk to School Day, Champion Moms, and youth engagement programs.

4. Promote and expand existing environmental efforts such as HEAL Cities, The Wellness Corridor, and increasing joint-use agreements.

5. Identify ways to retain WIC participants through age four to improve a “healthy start” for nutrition.

Longer-term strategies to consider

1. Initiate workplace wellness programs in schools to support healthy lifestyles for school staff.

2. Work with school districts, schools, Parent Teacher Student Associations (PTSAs), and educators to expand school-based programmatic and policy opportunities to improve nutrition and physical activity.

3. Coordinate consistent messages about obesity with health care providers, schools, and others.

4. Work with neighborhood and community-based programs and providers to target interventions for populations at greatest risk.
Diabetes

Goal 2: Reverse the trend of increasing rates of diabetes among Orange County residents.

Objective 2.1: By 2020, stabilize the rates of diabetes among Orange County residents.

Why is this a priority?

Diabetes is a major cause of heart disease and stroke, which are the leading and third leading causes of death in Orange County, respectively [3]. Diabetes is itself a leading underlying cause of death; in Orange County, diabetes is the 8th leading cause of death overall, the 5th leading cause of death among Latinos, and the 6th leading cause of death among Asians and Pacific Islanders. Type 2 diabetes accounts for about 95% of diabetes cases and is associated with healthy eating and regular physical activity [3]. New diagnosed cases of diabetes have tripled since 1990 in the United States and continue to increase [3]. Gestational diabetes, diabetes that develops during pregnancy, increases the likelihood of pregnancy complications and increases risks of diabetes for the mother and the child [3, 4]. Diabetes is included as a priority in Let’s Get Healthy California. Healthy eating and active living are contributing causes of diabetes and are both priorities in the National Prevention Strategy and CDC’s Winnable Battles. Early identification of and reducing complications of chronic diseases such as diabetes are identified as objectives in the Older Adult Health Section of this plan.

According to the California Health Interview Survey (CHIS), between 2003 and 2009, the proportion of Orange County adults reporting having ever been diagnosed with diabetes increased from 6.6% to 7.7%. The proportion of gestational diabetes among women who gave birth increased from 4.5% in 2001 to 7.2% in 2010. In 2011-12, 7.4% of Orange County’s adults reported ever being diagnosed with diabetes [4]. The rates were higher among Latinos, with about one in 10 Latinos reporting having been diagnosed with diabetes. Conclusions about trends in rates of diabetes since 2009 are difficult to draw due to changes in methodology. Regardless, stabilizing rates of diabetes would be an important first step to reversing the trend of increasing rates of diabetes in Orange County that took place between 2001 and 2010.

Strategies

Short-term strategies

1. Work with health care providers to increase identification of and interventions for pre-diabetes and gestational diabetes.
3. Coordinate consistent messages about ways to prevent and manage diabetes (e.g., proper nutrition, physical activity, smoking cessation).

Longer-term strategies to consider

1. Implement a community-wide campaign to increase general awareness about diabetes and ways to improve diabetes prevention and management (e.g., proper nutrition, physical activity, smoking cessation).
2. Expand use of best practices related to obesity and diabetes prevention and intervention at all primary care provider offices.
Priority Area #4: Behavioral Health

29 Behavioral Health Assessment

31 Goals, Current Activities and Assets, Key Planning Partners

32 Objective 1.1: Mental Health Needs, Gaps, and Resources

33 Objective 1.2: Integration of Behavioral Health

34 Objective 2.1: Adult Alcohol Misuse

35 Objective 2.2: Prescription Drug Misuse
**BEHAVIORAL HEALTH ASSESSMENT**

Why is this important to health? A comprehensive view of health also considers mental health and addiction to alcohol and other substances. Mental health conditions can severely impact health and quality of life. Alcohol and drug use are each among the top nine leading behavioral contributors of death in the United States. Chronic alcohol and drug use can lead to heart disease, stroke, and liver disease and can increase risks of injury, violence, and other social harms.

What does the data show? This table shows a summary of indicators related to behavioral health. **Indicator** column: [LHI] indicates Healthy People 2020 Leading Health Indicator. **Trend** column: ● indicates improvement of indicator. ▲ indicates worsening of indicator. ‡ indicates indicator is trending at an average of at least 1% worse per year with at least four known data points. **Sub-Group Disparities** column: Shows sub-groups with rates or proportions at least 10% worse than Orange County as a whole.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mental Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicides [LHI]</td>
<td>8.5 per</td>
<td>9.7 per</td>
<td>12.1 per</td>
<td>No change</td>
<td>All males: 13.6</td>
</tr>
<tr>
<td>Rate of deaths per 100,000 population per 2010 Death File</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td></td>
<td>White males: 19.3</td>
</tr>
<tr>
<td>Depression</td>
<td>Not available</td>
<td>Not available</td>
<td>6.6%</td>
<td>National data – No change (2005-2011)</td>
<td>Asian males: 9.7</td>
</tr>
<tr>
<td>% adults with Major Depressive Episodes per 2011 NSUDH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental diseases and disorders hospitalizations</td>
<td>39.2 per</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>White males: 58.3</td>
</tr>
<tr>
<td>Crude rate per 10,000 population per 2010 OSPHD</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td>White females: 66.0</td>
</tr>
<tr>
<td>Alcohol and Drug Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Af Am males: 78.3</td>
</tr>
<tr>
<td>Adult binge drinking [LHI] % adults binge drinking in past month per 2010 BRFSS</td>
<td>14.9%</td>
<td>15.8%</td>
<td>15.1%</td>
<td>-2.6% per year ● -0.8 (2008-2010)</td>
<td>Af Am females: 74.7</td>
</tr>
<tr>
<td>Adolescent alcohol use [LHI] % 11th graders reporting alcohol use in past month per 2009/10 CHKS</td>
<td>31.9%</td>
<td>Not available</td>
<td>Not available</td>
<td>+1.6% per year ● +1.9 (2005/06-2009/10)</td>
<td>White males: 35.1%</td>
</tr>
<tr>
<td>Adolescent drug use [LHI] % 11th graders reporting drug use in past month per 2009/10 CHKS</td>
<td>20.5%</td>
<td>Not available</td>
<td>Not available</td>
<td>-2.3% per year ● -2.6 (2005/06-2009/10)</td>
<td>Latino males: 36.2%</td>
</tr>
<tr>
<td>Drug-Induced deaths Crude rate per 100,000 population per 2010 Death File</td>
<td>10.3 per</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>White females: 37.1%</td>
</tr>
<tr>
<td>Alcohol-related motor vehicle deaths Rate of deaths per 100,000 per 2011 SWITRS</td>
<td>1.6 per</td>
<td>2.2 per</td>
<td>Not available</td>
<td>-3.7% per year ● -0.8 (2002-2011)</td>
<td>Af Am males: 34.4%</td>
</tr>
<tr>
<td>Alcohol outlet density Off-sale alcohol outlets per 100,000 population per 2012 Calif. Alcohol Beverage Control</td>
<td>60.5 per</td>
<td>76.0 per</td>
<td>Not available</td>
<td>+0.5% per year ● +2.5 (2003-2012)</td>
<td>PI males: 25.0%</td>
</tr>
<tr>
<td></td>
<td>100,000</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Cities shown for alcohol outlet density are highest three of county. For more detail on sub-groups, see Summary of Key Health Indicators and the Orange County Health Profile.*
What does the community say? The following includes feedback from focus groups about behavioral health. See Listening to Community Voices for more information about these focus groups.

Vision of optimal health:
- Individuals live without fear of stigma related to mental illness
- Individuals are independent and productive
- The social environment is safe and supportive
- Individuals are substance abuse free

What’s working:
- Levels and types of services are increasing and use a comprehensive approach including prevention, early intervention, and transitional services
- Good public and private collaboration
- Increasing awareness about mental health issues

Areas for improvement:
- Reduce stigma associated with mental health
- Reduce cost for mental health medications and services
- Increase parity for mental health and primary health services
- Improve coordination and collaboration of services
- Provide more education to medical students
- Reduce gaps in care
- Increase community ownership of mental health issues

What should our focus be? Based on the assessment findings and the criteria for selection of priorities, the following were proposed as goals and focus areas for the Orange County health improvement plan.

PROPOSED GOALS AND FOCUS AREAS

Goal 1: Increase the proportion of Orange County residents who experience emotional and mental wellbeing through the lifespan.

**Focus areas:**
1. Mental health professionals
2. Awareness, education, and advocacy for mental health issues
3. Awareness, education, and advocacy for mental health services

Goal 2: Reduce alcohol and drug misuse in Orange County.

**Focus areas:**
1. Adult binge drinking
2. Underage drinking
3. Drug abuse, including prescription drug abuse
Current Activities and Assets:

Orange County’s mental health system includes a collaboration of private and public partnerships involving Orange County Health Care Agency Behavioral Health Services, CalOptima, the Hospital Association of Southern California, private providers, and community providers. The Orange County Mental Health Board is advisory to the County Board of Supervisors and is the official community body that advocates for an accessible, appropriate, and effective mental health system. Orange County is also a recipient of Mental Health Services Act (MHSA) funds, which help to fund a full continuum of mental health and supportive services to address serious mental illness, as well as prevention efforts. Components of the system include community services and supports, workforce education and training, prevention and early intervention, housing, capital facilities and technology, and innovation.

Orange County agencies have a long history of working together to prevent misuse of alcohol and other drugs. Orange County Health Care Agency’s Alcohol Drug Education and Prevention Team (ADEPT) provides community-based interventions that address underage drinking, prescription drug misuse, and driving under the influence of alcohol or drugs. These programs work with school personnel, members of faith-based organizations, parents, medical providers, youth, business owners and local law enforcement. Strategies include campaigns, trainings, youth development and environmental approaches. Examples of campaigns include one that informs parents of the growing concern about prescription drug use and another aimed at safe disposal of unused medications. The Health Care Agency’s Prevention and Intervention Team also addresses these issues through school-based programs and by working with parents. Several Orange County collaboratives have been successful in securing Drug Free Communities grants, which have brought additional resources to Orange County.

<table>
<thead>
<tr>
<th>Key Planning Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalOptima</td>
</tr>
<tr>
<td>Children and Families Commission of Orange County (CFCOC)</td>
</tr>
<tr>
<td>Coalition of Orange County Community Health Centers (COCCC)</td>
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</tbody>
</table>

Goal 1: Increase the proportion of Orange County residents who experience emotional and mental wellbeing through the lifespan.

Goal 2: Reduce alcohol and drug misuse in Orange County.
Goal 1: Increase the proportion of Orange County residents who experience emotional and mental wellbeing through the lifespan.

Objective 1.1: Improve understanding of mental health needs, gaps, and resources.

Why is this important?
Mental health and depression are among the top priority health issues in Orange County. Suicide is the 10th leading cause of death in the county, which highlights risk factors such as depression and other mental health disorders [1]. Mental disorders such as depression can make common chronic conditions, such as heart disease, cancer, diabetes, and obesity, worse and result in increased work absenteeism and short-term disability [2]. Mental health issues often create a significant personal barrier to seeking and staying in medical care. By some accounts, it is the leading cause of disability. However, there are no local estimates on the prevalence of depression or other mental health conditions.

The implementation of the Affordable Care Act and the Mental Health Parity and Addiction Equity Act has brought about opportunities to expand services and address some existing gaps in mental health services. However, the implementation of these services and how they will impact the public health system and the services for residents in Orange County is still to be determined. The need to increase understanding of the prevalence of mental health conditions and Orange County’s capacity to meet these needs was identified as an area of need during the assessment process. The first step to helping to increase the emotional and mental wellbeing of Orange County residents through the lifespan is to increase public health’s understanding of mental health needs, gaps, and resources to better plan for those needs. These efforts are aligned with the CDC’s four-year action plan to integrate mental health and public health [3].

Strategies

Short-term strategies
1. Conduct a review of current tools and capacities related to mental health services (e.g., Ages and Stages, Help Me Grow, 2-1-1).

2. Monitor impact of legislation including expansion of Medi-Cal mental health benefit due to Affordable Care Act and mental health parity legislation specific to access consumer understanding of benefit, ability to access and navigate benefit, and community capacity to meet need (e.g., adequate number of providers, linguistic/cultural competence).

3. Identify and address data gaps related to population health (e.g., prevalence of depression, anxiety, and other mental health conditions), particularly at a sub-county level.

4. Explore the need to expand upon 2-1-1 as a resource directory for behavioral health services (in conjunction with the new OCLINKS resource).

Longer-term strategies to consider
1. Determine strategies to utilize above information for expanding behavioral health screenings and services among providers.
Goal 1: Increase the proportion of Orange County residents who experience emotional and mental wellbeing through the lifespan.

**Objective 1.2:** Improve provider capacity to integrate behavioral health into health assessments and services.

**Why is this important?**

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), despite the high prevalence of mental health and substance use problems, many Americans go without treatment – in part because their disorders go undiagnosed. Routine screenings in primary care and other healthcare settings enables earlier identification of mental health and substance use disorders, which translates into earlier care and better health outcomes. These screenings should occur across the lifespan, including during childhood, with perinatal and postpartum care, and during transition into older adulthood [4].

The public health system is often a key point of contact for many individuals with mental health or substance use issues. This provides a unique opportunity to screen, link, or serve individuals with behavioral health services who may otherwise go undiagnosed and untreated. Currently, many providers and agencies within the public health system lack the expertise or capacity to integrate behavioral health services into their programs. Improving provider capacity in this area will help to increase the proportion of residents whose mental health and/or substance use issues are addressed and opportunities for improved emotional and mental wellbeing. These efforts are aligned with the CDC’s four-year action plan to integrate mental health [3] and public health and the *National Prevention Strategy*.

**Strategies**

**Short-term strategies**

1. Monitor whether medical providers have user-friendly and current resources for referrals and successful linkages.
2. Promote county-wide concept of wellness that includes behavioral health.

**Longer-term strategies to consider**

1. Increase use of behavioral health screening tools by providers.
2. Assess and address needs of non-medical providers to improve ability to discuss and address mental (and behavioral) health issues with the public in ways that emphasizes overall wellness and promotes mental health as an integrated aspect of health.
3. Implement social marketing strategies to reduce stigma associated with mental (and behavioral) health issues and integrate them into the concept of overall health and well-being.
4. Consider options for mental health care through Telehealth based on potential shortages in local mental health providers. Telehealth is the use of electronic information and telecommunication technologies to support long-distance clinical health care.
5. Ensure appropriate level of care for patients.
Goal 2: Reduce alcohol and drug misuse in Orange County.

Objective 2.1: By 2020, reduce adult alcohol misuse.

Why is this a priority?

Alcohol consumption is the 3rd leading contributor to death in the United States [5]. Acute alcohol abuse increases risks of injury, violence, poor birth outcomes, and alcohol poisoning, while chronic alcohol abuse increases risk of heart disease, stroke, and liver disease [6]. Preventing drug abuse and excessive alcohol use is a priority in the National Prevention Strategy. Addressing alcohol misuse could also potentially impact the Infant and Child Health priority area. Prenatal alcohol exposure is a risk factor for many adverse physical and behavioral outcomes including fetal alcohol syndrome and a continuum of fetal alcohol spectrum disorders [7].

According to the Behavioral Risk Factor Surveillance System (BRFSS), in 2010, 14.9% of Orange County adults reported binge drinking, defined as consumption of five or more drinks for males or four or more for females in a single occasion in the past month. More local data, acquired in the 2012 Survey of Orange County Adults, showed that almost nine out of ten (88%) frequent binge drinkers are males. Half of all frequent binge drinkers are aged 18-34, double their proportion in the population at large. One in ten alcohol users reported having driven a motor vehicle when they had too much to drink at least once during the past year. When combined with survey data on the frequency of drinking and driving, this prevalence rate yields an estimate of nearly 1,000 adult drinking and driving episodes each day in Orange County. Adult high-risk drinking is identified as a key problem in Orange County’s Alcohol and Other Drug Prevention Services Strategic Plan indicating it is as a contributor to health problems and a threat to community safety.

Strategies

Short-term strategies

1. Promote and expand existing efforts to educate the public about alcohol misuse (e.g. Community Services Program-Positive Actions Toward Health and Orange County DUI Task Force).
2. Monitor implementation of newly mandated SBIRT (Screening, Brief Intervention, Referral, and Treatment) by Medi-Cal providers as possible best practice to be promoted with non-Medi-Cal providers. SBIRT is an evidence-based based practice to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs in primary care and emergency room settings.
3. Monitor impact of Mental Health Parity and Addiction Equity Act on availability and accessibility of services.

Longer-term strategies to consider

1. Increase behavioral health screenings by health care and other public health providers.
Goal 2: Reduce alcohol and drug misuse in Orange County.

Objective 2.2: By 2020, reduce prescription drug misuse.

Why is this a priority?

The nonmedical use and abuse of prescription drugs to get high is a serious public health problem. At the core of this problem is the rising tide of prescription opioid abuse, driven primarily by the nonmedical use of opioid pain relievers, such as hydrocodone and oxycodone. Compared to state and national survey results, Orange County residents generally have similar or even lower rates of prescription drug abuse and illicit drug use. According to the Orange County Coroner Annual Report, while the number of drug overdoses due to illicit drugs has declined, overdose deaths related to prescription drugs have more than doubled in the past 13 years. In 1999, 88 people died from prescription drug drugs alone, compared to 188 in 2012, with the relative flattening of annual deaths from 2009 (191 deaths) to 2012 (188 deaths). Overdose deaths due to the combination of prescription and illicit drugs have increased from 21 in 1999 to 77 in 2012, with a doubling in the last five-year period alone (31 in 2008 to 77 in 2012) [8].

According to 2011/12 California Health Kids Survey (CHKs), pain killers (Vicodin, OxyContin) and cough/cold medicines were the most commonly abused prescription and over-the-counter drugs among youth at the local, state, and national levels. In Orange County, 13% of 11th graders report having used prescription pain killers to get high in their lifetime, a decline from a peak rate of 18% in 2005/06. In the case of young people, the relative ease with which they are able to obtain these drugs, and the fact that many believe that prescription drugs provide a “safe” high contribute to the problem. Abuse of prescription drugs and its impact on public health and community safety was identified as a key problem in Orange County’s Alcohol and Other Drug Prevention Services Strategic Plan. Preventing drug abuse and excessive alcohol use is a priority in the National Prevention Strategy.

The National Survey on Drug Use and Health (NSDUH) found that over half (54%) of individuals reporting nonmedical use of psychotherapeutics got them “from a friend or relative for free” [9]. While the proper use of these drugs can be lifesaving, the consequences of their abuse can be as dangerous as those from illegal drugs, leading to emergency department visits and deaths.

Strategies

Short-term strategies

1. Increase education to health care professionals (providers and pharmacists) regarding prescribing practices and drug disposal.

2. Expand community campaigns addressing the consequences of prescription drug misuse.

3. Promote medication management programs. (Also see Older Adult Health Plan).

Longer-term strategies to consider

1. Explore promotion of alternative pain management strategies that reduce dependence on medication.

2. Expand consumer education campaigns that reduce access to prescription drugs for purposes other than as prescribed.
Orange County Public Health System

37 Public Health System Assessment

40 Vision, Current Activities and Assets, Why is this important?

41 Overall Public Health System, Infant and Child Health System

42 Older Adult Health System

43 Obesity and Diabetes System, Behavioral Health System
ASSESSING THE PUBLIC HEALTH SYSTEM

Improving the health of the community requires a well-coordinated and functioning public health system that supports efforts to provide high-quality programs and services. The **Orange County Public Health System Assessment** helped to identify strengths, weaknesses, and opportunities for improvements in the public health system. As depicted in the illustration below, the public health system is a partnership between many entities including residents, health care providers, community-based organizations, schools, businesses, and government that contribute to the public’s health.

At its initial meeting in October 2012, the Community Health Planning Advisory Group established a vision for a public health system that would support a healthy Orange County (shown on right). In August 2013, the Community Health Planning Advisory Group held a four-hour meeting to conduct an assessment of the Orange County public health system. Over 30 stakeholders representing 16 different agencies in the public health system including the Orange County Health Care Agency, social service providers, health care providers, and others participated in this assessment. Participants were asked to rate how well the current system compared to the Advisory Group’s vision of Orange County's public health system on a scale of 1 (not at all) to 5 (optimal). Work groups were then organized to engage discussions about the **strengths, weaknesses, immediate opportunities, and longer-term priorities** for the system. Feedback regarding the public health system that resulted from the community discussions at the Community Alliances forum and Health Care Agency staff forum were also considered in the assessment of the system.

**VISION FOR ORANGE COUNTY PUBLIC HEALTH SYSTEM**

A partnership between many entities including residents, health providers, community-based organizations, schools, businesses, and government that is:

- **responsive**, **accessible**, and **accountable** to the communities it serves
- **well-connected** and **coordinated** across various sectors
- driven by **data** and seeks to promote **best practice**
- positioned to **anticipate** and **respond to** current and future **challenges** and **opportunities** impacting health
The following is a summary of the scores on a scale of 1 (not at all) to 5 (optimally) for each ideal and the number of participants who gave each rating during the Orange County Public Health System Assessment in August 2013.

<table>
<thead>
<tr>
<th>Ideals for Optimal System</th>
<th>Average Score</th>
<th>Number of Participants Giving Each Rating (Highest count is bolded)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not at all=1</td>
</tr>
<tr>
<td>The system is responsive, accessible, and accountable to the communities it serves.</td>
<td>2.8</td>
<td>0</td>
</tr>
<tr>
<td>The system is well connected and coordinated across various sectors.</td>
<td>2.8</td>
<td>0</td>
</tr>
<tr>
<td>The system is driven by data and seeks to promote best practices.</td>
<td>2.6</td>
<td>0</td>
</tr>
<tr>
<td>The system is positioned to anticipate and respond to current and future challenges and opportunities impacting health.</td>
<td>2.4</td>
<td>2</td>
</tr>
</tbody>
</table>

What does the community say? In June 2013, focus groups were conducted to learn community perspectives about the four priority health areas. (See Listening to Community Voices for more information about these focus groups.) Comments about the public health system were a key theme throughout those conversations and are shown below. Letters in parenthesis indicate the priority health area of the focus group in which the bullet was discussed: IC = Infant and Child Health, OA = Older Adult Health, OD = Obesity and Diabetes, and BH = Behavioral Health.

**Vision of optimal system:**
- Services are accessible and easy to navigate for all (IC, OA, OD, BH)
- Programs are culturally competent (IC, OD)
- Services focus on early intervention and prevention (IC, OD)
- Individuals have access to services that allow for self-management of diseases (OA, OD)
- Programs accommodate differences in physical ability and age (OD)
- Services are coordinated between organizations (IC)

**What’s working:**
- Many programs and organizations provide quality services (IC, OA)
- Increased access to services and information (IC, OD)
- Increasing numbers of collaborations (OD, BH)
- Personalized support such as case management to help individuals access services (IC, OA)
- Community-based efforts are increasing and provide accessible services (IC, OD)
- Levels and types of services are increasing and use a comprehensive approach (BH)

**Areas for improvement:**
- Increase access to care (including ability to find and navigate existing services) for all and reduce gaps in care (IC, OA, BH)
- Improve coordination between service organizations (IC, OA, BH)
- Ensure that the medical system can meet the needs of the population (OA, BH)
- Reduce cost for medications, medical devices, and care (OA, BH)
- Increase awareness of available services (OA)
- Provide centralized services (OA)
The following were themes identified as strengths, weaknesses, opportunities for immediate improvements and partnerships, and priorities for longer term improvement during the Orange County Public Health System Assessment in August 2013:

<table>
<thead>
<tr>
<th>System <strong>Strengths</strong></th>
<th>System <strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Many and varied collaborations: There are various collaborations around specific health issues (e.g. tobacco, nutrition, etc.), population groups (e.g. children, youth, older adults), neighborhoods that work to improve health.</td>
<td>1. Lack of shared goals: There is no single, sustained coordinating body working towards a common goal, addressing root cause of issues across populations.</td>
</tr>
<tr>
<td>2. Availability and quality of individual programs and efforts: There are many individual programs that offer quality services, use best practices, and maintain a wealth of data and information.</td>
<td>2. Lack of coordination and information sharing: Providers have little time to coordinate services with each other; this can leave clients to manage their care between health systems and can create duplicative services and efforts. Programs could do more to share their best practices and data with each other to build understanding and improve systems overall.</td>
</tr>
<tr>
<td>3. Addressing acute problems: The system works well to address one-time, immediate problems (e.g. pertussis outbreak, wildfires), but does not do well in addressing longer-term health issues (e.g. obesity, diabetes).</td>
<td>3. Addressing preventative health problems: The system does not do well in addressing prevention issues that require longer-term, sustained efforts (e.g. obesity, diabetes). There are often changes in priorities, funding directives, and leadership and make longer-term goals difficult to meet.</td>
</tr>
<tr>
<td>4. Multitude of data and reports: The Health Care Agency, individual programs, and providers gather a lot of data and publish many reports that show the status of various health topics.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities for ** Immediate Improvements**</th>
<th>Priorities for <strong>Longer Term Improvement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resource inventory: Create an inventory of existing groups and their focus areas across Orange County.</td>
<td>1. Long-term planning: Establish and sustain planning efforts that focus on long-term, shared goals across the public health system.</td>
</tr>
<tr>
<td>2. Resource directory: Streamline existing service information into a single site for referrals (optimize 2-1-1).</td>
<td>2. Broad-based coalition: Create a broad-based coalition to address health that includes stakeholders from outside the healthcare system such as education, social services, and urban planning with the Health Care Agency leading efforts.</td>
</tr>
<tr>
<td>3. Coordinate data efforts: Share data and methodology between providers and standardize activities where possible.</td>
<td>3. Health indicator sharing: Maintain a mechanism for sharing health indicators that can be used to review and set health priorities.</td>
</tr>
<tr>
<td>4. Linkages between providers: Improve information sharing between providers and determine points where linkages can be made to improve patient navigation of services.</td>
<td>4. Emphasize preventive health: Emphasize the value of preventive health, which take longer-term joint efforts.</td>
</tr>
<tr>
<td>5. Better use of technology: Improve use of available technologies to share information with the public, provide services to individuals, and share information between providers.</td>
<td>5. Engage policy makers: Improve engagement of policy makers about public health issues.</td>
</tr>
</tbody>
</table>
PUBLIC HEALTH SYSTEM PLAN

Vision: A partnership between many entities including residents, health providers, community-based organizations, schools, businesses, and government that is:

- responsive, accessible, and accountable to the communities it serves
- well-connected and coordinated across various sectors
- driven by data and seeks to promote best practice
- positioned to anticipate and respond to current and future challenges and opportunities impacting health

Current Activities and Assets:

Orange County’s public health system is composed of a mix of private and public agencies. Government entities that make up the public health system include the Orange County Health Care Agency, Orange County Social Services Administration, Orange County Department of Education, among others. There are over 30 hospitals in Orange County including several large hospital systems. Two of the larger health plans in Orange County, CalOptima and Kaiser Permanente, combine to serve a large portion of the county’s population. CalOptima is the county organized health system that administers health insurance for low-income individuals including Medi-Cal recipients. Orange County has two large public universities with public health programs including California State University at Fullerton and University of California at Irvine. There are also many community-based organizations that provide a range of health and human services throughout the county. Coordination amongst programs largely occurs through collaboratives and planned efforts based on geography, health issue, and population groups. Orange County United Way, the Children and Families Commission of Orange County, and Health Funders Partnership of Orange County all provide planning and coordination functions for various health topics of interest.

Why is this important?

In its assessment process, improving the functioning of the public health system was identified as an important driver in the success of a community health improvement plan. The Orange County Public Health System Assessment showed that stakeholders believe the current public health system is minimally to moderately meeting the ideals of an optimal public health system. The assessment also revealed that while community members and stakeholders felt that there were quality programs in the community, access to and coordination of these programs were a challenge. A more thorough description is provided in the summary of the Public Health System Assessment. Planning efforts for Orange County’s Healthier Together has brought forth opportunities to collectively work on improvements to this system.
Overall and Infant & Child Health Systems

The following are strategies to move the public health system toward the vision of an ideal public health system. Icons indicate the previously identified system ideals that each strategy addresses. Strategies include those addressing the overall public health system as well as system improvements related to each of priority health areas.

Overall Public Health System

1. Formalize the structure of the Community Health Planning Advisory Group as a **planning body** focusing on long-term public health planning and monitoring of the Orange County health improvement plan.
2. Create a **website** to communicate events and community health planning efforts with the community and key partners.
3. Create a **web-based platform for health indicators** accessible to the community and health planners.
4. Establish a core set of **standard indicators** and a mechanism to assure availability in the future of robust data for use in Orange County health planning.
5. Engage 2-1-1 and key partners to determine opportunities for expansion and improvement of **referral and linkage system**.

Infant and Child Health

Short-term strategies related to goals

1. Improve timeliness, quality, and number of **referrals and linkages** between portals of entry for low-income women and prenatal care providers.
2. Maintain and disseminate a **directory** of lactation services in Orange County.

Longer-term strategies related to goals

1. Create a centralized **breastfeeding hotline**.
2. Promote best practices that address breastfeeding as part of **postpartum and newborn care and assessments**.

Strategies addressing improvements in the system

1. Improve **consistency of data** regarding of exclusive breastfeeding collected through the Maternal and Infant Health Assessment.
2. Address **gaps and quality of data** regarding adequate prenatal care, breastfeeding, and developmental screening.
### Older Adult Health

**Short-term strategies related to goals**

1. Promote **evidence-based programs** and promising practices for disease self-management.
2. Increase participation in existing medication management programs and identify current and future needs and gaps.
3. Promote existing Friendly Visitor Programs and assess for needs and gaps.
4. Promote **evidence-based interventions** and promising practices to reduce social isolation (e.g. Healthy IDEAS, PEARLS, IMPACT, MECCA).
5. Identify areas to coordinate efforts with National Center on Elder Abuse.

** Longer-term strategies related to goals**

1. Increase availability of **evidence-based programs** for chronic disease self-management.
2. Increase geographically accessible and culturally/linguistically availability of Friendly Visitor Programs.
3. Increase availability and utilization of **evidence-based interventions** to reduce social isolation.

**Strategies addressing improvements in the system**

1. Address **data gaps** including depression and chronic diseases estimates in older adults.
2. Initiate regular meetings for all senior centers.
3. Further strengthen collaborations with academic institutions (California State University of Fullerton and University of California at Irvine).
4. Expand planning and coordination efforts to include broader-based network (including faith-based organizations, non-governmental organizations, senior housing managers, hospital parish nurses, etc.).
### Obesity and Diabetes

**Short-term strategies related to goals**

1. Work with schools districts and educators to explore opportunities to **align priorities** for health and education.

**Longer-term strategies related to goals**

1. Coordinate **consistent messages** about obesity with health care providers, schools, and others.

**Strategies addressing improvements in the system**

1. Address **data gaps** including more robust estimates sub-county and sub-group estimates for adult obesity and a reliable countywide system for childhood obesity surveillance.
2. Address **data gaps** including more robust estimates for adult diabetes and prediabetes.

### Behavioral Health

**Short-term strategies related to goals**

1. Conduct a review of **current tools and capacities** related to mental health services (e.g. *Ages and Stages*, *Help Me Grow*, 2-1-1).
2. Explore the need to expand upon 2-1-1 as a **resource directory** for behavioral health services (in conjunction with the new OCLINKS resource).
3. Monitor whether medical providers have user-friendly and current resources for **referrals and successful linkages**.
4. Monitor implementation of newly mandated SBIRT (Screening, Brief Intervention, Referral, and Treatment) by Medi-Cal providers as **possible best practice** to be shared with providers.
5. Monitor impact of Mental Health Parity and Addiction Equity Act on **availability and accessibility** of services.

**Longer-term strategies related to goals**

1. Determine strategies to **utilize findings** about mental health needs, gaps, and resources for expanding behavioral health screenings and services among providers.

**Strategies addressing improvements in the system**

1. Address **data gaps** including prevalence of depression and other mental illnesses.
2. Address **data gaps** including improving estimates of current drug and alcohol misuse.
The process involved in creating the Orange County Health Improvement Plan has helped to launch some important community health activities. The following are some next steps that will help ensure the success and sustainability of this plan. The activities below focus on improvements to the public health system and highlight the most immediate needs related to creating a coordinated planning effort to improve health for all in Orange County. Strategies for the priority health areas will continue with guidance and support Community Health Planning Advisory Group in conjunction with existing coalitions and partners.

**Formalize a Community Health Planning Body**
Formalize the structure of Community Health Planning Advisory Group as a planning body focusing on long-term public health planning and monitoring of the Orange County health improvement plan.

**Create a Website to Share Information**
Create a website to communicate events and community health planning efforts with the community and key partners.

**Create a Community Health Indicator Platform**
Create a web-based platform for health indicators accessible to the community and health planners.

**Assure a Core Set of Indicators for Community Health Planning**
Establish a core set of standard indicators and assure the future availability of robust data for use in community health planning.
Planning Process

46 Planning Framework and Timeline
Our planning model and timeline.

47 Vision for a Healthy Orange County
Our vision and values.

48 Criteria for Selection of Priorities
Our guide for deciding what to include in the plan.

49 Organizing and Reviewing Health Indicators
How we organized health indicators for planning purposes.

50 Reviewing Health Indicators
How we reviewed health indicators for the Community Health Status Assessment.

51 Selecting Priority Health Areas
How we selected priority health areas for further assessment.

52 Listening to Community Voices
A description of our Community Themes and Strengths Assessment.

53 Feedback from the Community
A description of our process to gather public comment about the plan.

54 Other Community Assessments
Findings from community health assessments by our partners.
PLANNING FRAMEWORK AND TIMELINE

At the end of 2012, Orange County Health Care Agency assembled the Orange County Community Health Planning Advisory Group to establish a plan to improve health in Orange County. The Advisory Group was composed of representatives from 21 partner organizations including health care providers, academic institutions, collaboratives, community-based organizations, and other government agencies. The plan is the foundation of the Orange County’s Healthier Together initiative and seeks to align efforts by the various parts of the public health system to improve health for all communities in Orange County.

Orange County chose Mobilizing for Action through Planning and Partnerships (MAPP) as its framework for this planning process. MAPP was developed by the National Association of City and County Health Officials (NACCHO) and the CDC as a tool to bring together stakeholders to identify community health issues and take action. Key phases of MAPP include 1) organizing and partnership development; 2) visioning; 3) conducting assessments; 4) identifying strategic issues; 5) formulating goals and strategies; and 6) acting. A distinctive feature of MAPP is the use of four coordinated assessments, each yielding important information and, taken as a whole, providing a comprehensive understanding of a community’s health. The following is a summary of each assessment:

- **Forces of Change Assessment**
  - Conduct a brainstorm session with Advisory Group to determine:
    - What is occurring or might occur that affects the health of our community?
    - What are specific threats or opportunities generated by these occurrences?

- **Community Health Status Assessment**
  - Review key health indicators with Advisory Group to determine:
    - What does the health status of Orange County look like?
    - How healthy are our residents?

- **Community Themes and Strengths Assessment**
  - Hold community focus groups to determine:
    - What is our community’s vision of optimal health?
    - What is working well in how we address health?
    - What are areas for improvement?

- **OC Public Health System Assessment**
  - Conduct assessment with key stakeholders to determine:
    - How responsive, accessible, and accountable is our system?
    - How well connected and coordinated is our system?
    - How data-driven and focused on best practices is our system?
    - How well positioned to anticipate and respond to health impacts is our system?

The table below shows the Advisory Group’s timeline for the completion of this plan. As shown, assessments were conducted and findings were reviewed in a series of meetings to guide the Advisory Group in determining goals, objectives, and strategies to be published in its final plan.

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VISION FOR A HEALTHY ORANGE COUNTY

At its first meeting in October 2012, the Community Health Planning Advisory Group participated in a process to determine a vision for a healthy Orange County and the system that would support it.

VISION

Orange County is a community where everyone feels safe and has opportunities and resources to be healthy and enjoy optimal quality of life.

VALUES

Our vision for a healthy Orange County is driven by the following common values:

- **Equity** - The health of all people, families, and communities is equally important.
- **Comprehensive** - Health includes physical, mental, spiritual, economic, environmental, and educational factors that contribute to it.
- **Collaborative** - Optimal health requires a partnership between many entities including residents, health providers, community-based organizations, schools, businesses, and government.
- **Multi-dimensional** - Health must be understood at the individual, family, and neighborhood level.
- **Prevention and Health Promotion** - Optimal health starts with the prevention of disease and injury, and is supported by access to high quality care and treatment.
- **Self Sufficiency** - Health and wellness includes promotion of self-sufficiency and functional independence for those with disabilities and illness.

VISION FOR A SYSTEM THAT WILL SUPPORT A HEALTHY ORANGE COUNTY

Our vision for a healthy Orange County must be supported by a partnership between many entities including residents, health providers, community-based organizations, schools, businesses, and government that is:

- responsive, accessible, and accountable to the communities it serves
- well-connected and coordinated across various sectors
- driven by data and seeks to promote best practice
- positioned to anticipate and respond to current and future challenges and opportunities impacting health
On February 20, 2013, the Orange County Community Health Planning Advisory Group met and discussed criteria to be used for the selection of priority issues that may be included in Orange County’s community health improvement plan. These criteria would be used to help guide the Advisory Group in determining priority issues that indicated greatest need and opportunity for improvement through collective action as it reviewed findings from the four MAPP assessments.

The criteria were first used to determine the list of preliminary areas of interest after review of the health indicators in March 2013 as part of the Community Health Status Assessment. With the completion of the focus groups and the Orange County Public Health System Assessment, the criteria were used again at the Advisory Group’s November 2013 meeting to determine focus areas for each of the priority areas.

The following were the criteria for selection of priority issues:

1. **Health Impact:** To what degree would action on this health issue improve overall health in Orange County?

2. **Disparity:** To what degree does addressing this health issue reduce health disparities within the county?

3. **Trends:** To what degree does addressing this health issue assist Orange County in intervening with a health indicator that is trending negatively or progressing too slowly?

4. **Root Cause:** To what degree does the health issue address a root cause of disease and disability in Orange County?

5. **Efficiency:** To what degree can action on this health issue address multiple issues?

6. **Economic Impact:** To what degree would addressing this health issue decrease economic impact downstream?

7. **Prevention:** To what degree does the health issue benefit from primary prevention?

8. **Early Intervention:** To what degree does the health issue benefit from early intervention?

9. **Collaboration:** To what degree would collaborative or multi-sector approaches to address this health issue improve chances for success?

10. **Under-addressed Issue:** To what degree is this health issue not addressed or is under-addressed in Orange County?
ORGANIZING HEALTH INDICATORS

Good health planning starts with good data. In mid-2012, the Orange County Health Care Agency assembled the Community Health Indicator (CHI) Work Group to assess the current status of Orange County health data; identify gaps and needs related to data; and develop sustainable mechanisms to provide community heath indicators to planners and stakeholders in both the near and distant future. The group is composed of health and research experts in the Orange County Health Care Agency, with input from community partners.

A review of recent health-related reports in Orange County revealed more than 300 unique health and health-related indicators were being used by community partners. Data were available from a variety of sources. Vital statistics and reportable diseases were available through Orange County’s Master Birth and Death files and Health Care Agency Epidemiology and Assessment. Demographic information was available through the American Community Survey. Information about health behaviors and conditions were available through a variety of surveys including the Behavioral Risk Factor Surveillance System (BRFSS), California Health Interview Survey (CHIS), and the California Healthy Kids Survey (CHKS). Hospital discharge information was available through the Office of Statewide Health Planning and Development (OSHPD). Despite the abundance of data sources, many data sets were not of sufficient methodological consistency to show trends over time or robust enough to show sub-county geographic or demographic information. In addition, data gaps exist for critical issues such as mental health and oral health.

The CHI Work Group narrowed the over 300 indicators to 170 that could become part of an ongoing resource for Orange County partners. They established criteria for prioritizing indicators into the following three tiers:

46 select indicators for use by the Advisory Group in the Community Health Status Assessment. As a whole, these indicators present a general picture of health in Orange County and are potentially actionable by the community. Most of these indicators have reliable data sources that can be trended over time and analyzed at the sub-county geographic and demographic level.

75 indicators to be published in the Orange County Health Profile. These indicators include the 46 select indicators and are useful to the broader community in describing community health.

170 indicators to be maintained, without narrative or physical publication, in an Online Health Indicator Library. These indicators include indicators published in the OC Health Profile and additional indicators that are useful and reliable, but may not be as actionable for community health planning purposes.
REVIEWING HEALTH INDICATORS

After determining which health indicators to review, the Community Health Planning Advisory Group conducted the **Community Health Status Assessment** in March 2013. The assessment involved a review of a demographic profile of Orange County and 46 health indicators (shown below) over a four-hour meeting in March 2013. Staff from the Orange County Health Care Agency provided an overview of each indicator including its impact on health, how Orange County was doing compared to state and national benchmarks and **Healthy People 2020** goals, 10-year trends, and comparisons by demographic and sub-county geographic categories. A summary of trends and disparities of these key indicators is provided in **Summary of Key Health Indicators**. A full account of these and other key health indicators are published in the **Orange County Health Profile**.

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### SOCIAL, ECONOMIC, AND ENVIRONMENTAL FACTORS

<table>
<thead>
<tr>
<th>Demographic Profile (Not considered indicators)</th>
<th>Summary Measures of Health</th>
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</thead>
<tbody>
<tr>
<td>• Population distribution by race/ethnicity</td>
<td>1. Life expectancy</td>
</tr>
<tr>
<td>• Population distribution by age group</td>
<td>2. Summary of deaths</td>
</tr>
<tr>
<td>• Population distribution by educational attainment</td>
<td>3. Summary of births</td>
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<tr>
<td>• Student distribution by English language learning</td>
<td>4. Leading causes of death</td>
</tr>
<tr>
<td>• Population distribution by city of residence</td>
<td>5. Leading causes of hospitalizations</td>
</tr>
<tr>
<td></td>
<td>6. Leading causes of unintentional injury deaths</td>
</tr>
</tbody>
</table>

### SOCIAL AND ECONOMIC INDICATORS

1. % of residents living in poverty
2. % of adults with high school diploma or equivalent
3. % of housing units defined as crowded
4. Violent crime rate

### HEALTH CARE ACCESS AND UTILIZATION

1. % of residents with health insurance
2. % of emergency department visits that are avoidable
3. % of adults and children with dental visit in last year

### HEALTH BEHAVIORS AND OUTCOMES

#### Maternal, Child, and Adolescent Health

1. Infant mortality rate
2. % of births that are preterm
3. % of births with low birth weight
4. % of infants exclusively breastfed at three months
5. % of 2 years olds and kindergarteners immunized
6. Rate of births to teens

#### Chronic Diseases and Conditions

1. % of adults with diabetes
2. % of adults with high blood pressure
3. % of adolescents with healthy body composition
4. % of adults obese
5. Asthma hospitalization rate of children 5 and under

#### Chronic Disease Deaths

1. Heart disease death rate
2. Cerebrovascular disease (stroke) death rate
3. Alzheimer’s disease death rate
4. Chronic lower respiratory diseases (CLRD) death rate

#### Cancer

1. Lung cancer death rate
2. Colorectal cancer death rate
3. Female breast cancer death rate
4. Prostate cancer death rate

#### Communicable Diseases

1. Chlamydia incidence rate
2. HIV incidence rate
3. HIV prevalence rate

#### Injuries and Accidents

1. Injury death rate
2. Unintentional injury death rate

#### Health Behaviors

1. % of adults physically inactive
2. % of adults who smoke
3. % of adolescents who smoke
4. % of adults who binge drink
5. % of adolescents who used alcohol or drugs
6. Drug-related death rate

#### Mental Health

1. Suicide rate
2. % of adults experiencing Major Depressive Episodes
3. Mental disease and disorder hospitalization rate

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Orange County Health Improvement Plan • Planning Process • 50
After reviewing all 46 health indicators as part of the Community Health Status Assessment, the Orange County Community Health Advisory Group rated each health issue based on what they thought were the highest priority issues for collective action. The Advisory Group considered their criteria for selection of priorities including trends, disparities, and the health and economic impact of addressing the issue. The following 10 health issues received the highest average ratings (in order):

1. **Depression**: No local data exists, but an estimated 6.6% of adults in the U.S. experienced Major Depressive Episodes in 2011. Depression interferes with a person’s sense of wellbeing; can worsen chronic conditions such as heart disease, cancer, and diabetes; creates obstacles to accessing care; and, untreated, too often results in disability and loss of life [1, 2].

2. **Obesity**: Obesity is the 2nd leading contributor to death in the U.S. [3], increasing the risk of heart disease, diabetes, stroke, and other conditions [4]. In 2011-12, 23.8% of Orange County adults were obese.

3. **Diabetes**: Diabetes is a major cause of heart disease and stroke and is itself an underlying cause of death [5]. In 2011-12, 7.4% of Orange County adults had been diagnosed with diabetes.

4. **Alzheimer’s Disease**: Alzheimer’s disease (AD) is the 4th leading cause of death and the only leading cause of death with an increase in rate in the last 10 years. [6]. Orange County’s aging population makes health issues associated with aging a growing concern.

5. **Alcohol Abuse**: Alcohol consumption is the 3rd leading contributor to death in the U.S. [3]. Acute alcohol abuse increases risks of injury, violence, and certain chronic diseases [7]. In 2010, 14.9% of Orange County adults reported binge drinking in the past month.

6. **Physical Activity**: Physical activity is a key factor in maintaining a healthy weight and preventing obesity. In 2010, 21.1% of Orange County adults reported no leisure-time physical activity in the past 30 days.

7. **Child Abuse**: In 2011, there were 6,836 substantiated cases of child abuse in Orange County. Child abuse causes stress that can disrupt early development, placing children at higher risk for health problems [8]. Children who are abused or neglected often exhibit emotional, cognitive, and behavioral problems [9].

8. **Immunizations**: Childhood immunizations have largely reduced once-common diseases such as polio, measles, and mumps [10]. Over the past decades, there has been reduced vaccine coverage and herd immunity. In 2012, 89.3% of Orange County kindergarteners were up to date with their immunizations.

9. **Mental Diseases and Disorders**: In 2010, 11,789 hospitalizations were due to mental diseases and disorders. Mental illness often co-occurs with somatic conditions and complicating treatment [11].

10. **Drug Abuse**: Illicit drug use is the 9th leading contributor to death in the U.S. [3]. In 2010, 20.5% of 11th graders reported using drugs in the past month and there were 311 drug-induced deaths among individuals of all ages.

The 10 health issues were considered as representing topical issues and led to the creation of the following four preliminary priority health areas for further review.

- **Infant and Child Health**
- **Older Adult Health**
- **Obesity and Diabetes**
- **Behavioral Health**

The next step in the assessment process included a more detailed look at health indicators, community feedback, and the systems supporting each priority area. Summaries of the assessment findings are provided in the section for each priority area.
LISTENING TO COMMUNITY VOICES

The Community Health Status Assessment helped to identify four health areas of interest for further assessment:

1) Infant and Child Health
2) Older Adult Health
3) Obesity and Diabetes
4) Behavioral Health

The Community Themes and Strengths Assessments helped to find out more about the community’s perspectives on these areas of interest. This was accomplished through two sets of focus groups conducted in June 2013 and a review of community health assessments conducted by planning partners. The first set of focus groups were conducted at the CalOptima Community Alliances Forum on June 12, 2013. The forum included 100 attendees from 40 community partner organizations with representatives from community-based organizations, health care providers, policy makers, and other individuals/organizations that are working to make positive impacts to community health. The second set of focus groups included approximately 80 Orange County Health Care Agency staff on June 26, 2013. At each of these forums, participants were provided information about the planning process and assessment findings. Participants then engaged in focus groups about one of the four priority areas and answered the following questions:

1. What does optimal health look like related to this topic area?
2. What is working well in the way that this topic area is currently addressed in Orange County?
3. What can be improved in the way this topic area is addressed?

Summaries of the focus groups are shown in the “What does the community say” section in the assessment for each priority area. Comments about the public health system were a key theme throughout conversations about the four health areas and are included as part of the Public Health System Assessment.
In April 2014, the Orange County Health Care Agency shared findings from this report with the public. The report was posted on the Health Care Agency’s website and a call for feedback was advertised on the Agency’s homepage. A letter was sent out to community partners to share the plan and invite public comment. Several local media including the Orange County Register and Voice of OC published articles about the plan and invited comments from the public. The public comment period was also shared through social media including Twitter and Facebook.

Comments received showed enthusiasm for the plan and generally supported the identified priority areas. Comments also provided insight about resources and strategies that were helpful in finalizing the plan and directing next steps. Below are examples of some comments received.

- I think this is an excellent report with four worthy priorities. I would like to highlight the importance of tobacco control within each of these priorities and hope that it will be included as an important prevention component.

- This is an inspiring plan to us in the agency as it addresses important health issues in the best possible approach: by bringing the communities together to recognize and strategize the issues most affecting them.

- I am very impressed by the draft of the proposed OC Health Improvement Plan and the work that had gone into it...Early diagnosis of dementia is critical to this process and I am very satisfied to see it was included in your report.

- I believe the guidance and focus [this plan] offers will aid in contributing to better coordinated efforts working toward a healthier Orange County.

- I appreciate the opportunity to be able to read about the new Health Improvement Plan, and give feedback on the plan. I think it is very exciting that the initiative is being taken to look toward the future, and planning for improvement is being worked on now.

- I am active in community events on the topic of prescription drug abuse. I want to help the goal of the plan to reduce prescription drug misuse.
OTHER COMMUNITY ASSESSMENTS

Many partner agencies had recently completed community health assessments for hospital community benefits reports, strategic planning processes, or needs assessments processes. To ensure that the Orange County Health Improvement Plan included as many community voices as possible, the plan also considered findings from these assessments. Methodologies for the assessments varied and included primary and secondary data collection, focus groups, and key informant interviews. Reviewing findings from these assessments allowed the Advisory Group to gain a broader understanding of the health issues and needs in Orange County. It also helped to ensure that priorities included in the health improvement plan would be aligned with those in the community.

Community assessments conducted by the following groups were considered in this planning process:
- Children and Families Commission of Orange County
- Health Funders Partnership of Orange County
- Hoag Hospital
- Kaiser Permanente
- Health Care Agency Maternal, Child, and Adolescent Health Assessment
- Orange County United Way
- St. Joseph Health System

Key health issues, factors impacting health, and strategies identified through these assessments were generally consistent with those found in the Advisory Group’s process and are summarized below.

### Health Issues of Concern
- Asthma
- Birth Outcomes
- Breast Cancer
- Diabetes
- Heart Disease
- HIV/AIDS and STDs
- Immunizations
- Obesity
- Oral Health
- Mental Health
- Postpartum Depression
- Substance Use
- Teen Pregnancy

### Key Factors Impacting Health
- Economic conditions
- Transportation to health and other services
- Access to quality health care
- Community-level programs and efforts
- Access to healthy foods
- Implementation of Affordable Care Act
- Community violence

### Identified Priorities and Strategies
- Addressing disparities in access to quality health services
- Holistic approaches to health that include promotion of wellness
- Comprehensive approaches to health that involve family, community, and environmental strategies
- Focus on prevention and early identification
- Ensuring health throughout the lifespan
Orange County
Health Improvement Plan

Reference Documents

56 Summary of Key Health Indicators
A summary of trends and disparities in key health indicators for Orange County.

62 Citations

65 Acronyms and Abbreviations
SUMMARY OF KEY HEALTH INDICATORS

This table provides an overview of the indicators reviewed as part of the Community Health Status Assessment. A full account of these and other key health indicators are published in the Orange County Health Profile.

Please note the following:
- **Indicator column**: [LHI] indicates Healthy People 2020 leading health indicator.
- **OC column**: ! indicates Orange County rate or proportion is at least 10% worse than California.
- **Trend column**:
  - Percent in the top line indicates the average percentage change per year.
  - Number in the second line indicates the numeric increase (+) or decrease (-) in the indicator over the period shown.
  - ● indicates improvement and ○ indicates worsening of the indicator over the period shown.
  - ! indicates that the indicator is trending at an average of at least 1% worse per year with at least four known data points.
- **Sub-Group Disparities column**: Groups shown are sub-groups with rates or proportions that are at least 10% worse than Orange County as a whole.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
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<tbody>
<tr>
<td><strong>Summary Measures of Health</strong></td>
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<tr>
<td>Life expectancy</td>
<td>81.9</td>
<td>Not available</td>
<td>78.7</td>
<td>+0.3% per year ●</td>
<td>None</td>
</tr>
<tr>
<td>(Average life expectancy at birth of residents in 2010 per Death File)</td>
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<td></td>
<td></td>
<td>+2.0 (2001-2010)</td>
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<tr>
<td><strong>Social and Economic Indicators</strong></td>
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<tr>
<td>Poverty</td>
<td>12.9%</td>
<td>16.6%</td>
<td>15.9%</td>
<td>+7.8% per year ●!</td>
<td>Latino males: 17.8%</td>
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<tr>
<td>(% of population living under 100% of federal poverty level in 2011 per US Census Bureau)</td>
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<td></td>
<td>+4.1 (2005-2011)</td>
<td>Latina females: 20.9%</td>
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<td>PI males: 14.7%</td>
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<td>PI females: 17.5%</td>
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<td>&lt;18 year olds: 16.3%</td>
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<td>Santa Ana: 21.1%</td>
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<td>Stanton: 19.0%</td>
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<td>Costa Mesa: 16.3%</td>
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<td>Garden Grove: 15.8%</td>
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<td>Anaheim: 15.5%</td>
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<td>Westminster: 15.1%</td>
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<td></td>
<td></td>
<td>Fullerton: 15.0%</td>
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<tr>
<td>High school diploma</td>
<td>84.0%</td>
<td>81.1%</td>
<td>85.9%</td>
<td>+0.3% per year ●</td>
<td>Latino males: 57.0%</td>
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<tr>
<td>(% of individuals 25 and older who had a high school diploma or equivalent in 2011 per US Census Bureau)</td>
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<td>+1.4 (2005-2011)</td>
<td>Latina females: 59.1%</td>
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<td>Santa Ana: 52.5%</td>
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<td>Stanton: 66.2%</td>
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<td>Garden Grove: 72.7%</td>
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<td>Anaheim: 73.8%</td>
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<td>Westminster: 74.4%</td>
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<tr>
<td>Indicator</td>
<td>OC</td>
<td>CA</td>
<td>US</td>
<td>Trend</td>
<td>Sub-Group Disparities</td>
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<td><strong>Social and Economic Indicators (Continued)</strong></td>
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</tbody>
</table>
| **Crowded living** | 9.7% | 8.3% | 3.3% | +1.9% per year ● | Latinos: 30.8%  
Pacific Islanders: 20.8%  
Santa Ana: 33.5%  
Stanton: 22.3%  
La Habra: 20.9%  
Anaheim: 18.8%  
Garden Grove: 16.6%  
Westminster: 12.7%  
Buena Park: 12.0%  
+1.0 (2005-2011) | |
| **Violent crime** | 21.3 per 10,000 | 41.1 per 10,000 | 38.6 per 10,000 | -4.1% per year ● | Geographic comparison not shown as population size may impact crime rate. |
| **Health Care Access and Utilization** | | | | | |
| **Health insurance coverage** | 82.7% | 81.9% | 84.9% | +0.3% per year ● | Latinos: 68.5%  
Santa Ana: 65.7%  
Stanton: 71.9%  
+0.5 (2009-2011) | |
| **Avoidable emergency department visits** | 44.6% | Not available | Not available | Not available | Latinos: 50.7%  
AIs: 51.4%  
<1 year olds: 68.6%  
1-17: 49.2%  
Santa Ana: 49.7%  
Anaheim: 49.2%  |
| **Dental visits - Children** | 92.2% | Not available | Not available | Not available | None |
| **Dental visits - Adults** | 75.2% | Not available | Not available | Not available | African Americans: 45.3% |
| **Maternal, Child, and Adolescent Health** | | | | | |
| **Infant mortality [LHI]** | 3.8 per 1,000 | 4.7 per 1,000 | 6.5 per 1,000 | -1.7% per year ● | Latinos: 4.5  
-0.7 (2001-2010) | |
| **Preterm births [LHI]** | 8.9% | 9.9% | 12.0% | -0.7% per year ● | African Americans: 13.5%  
35-39 year olds: 10.6%  
40+ year olds: 14.4%  
-0.6 (2001-2010) | |
| **Low birth weight** | 6.4% | 6.8% | 8.2% | +0.9% per year ● | APIs: 7.7%  
African Americans: 12.3%  
<20 year olds: 7.3%  
35-39 year olds: 7.9%  
40+ year olds: 10.3%  +0.5 (2001-2010) | |
<p>| <strong>Exclusive breastfeeding</strong> | 19.0% | 23.1% | Not available | Not comparable – methodology change | Latinas: 11.5% |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
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</thead>
</table>
| **Immunizations [LHI]**  
% of kindergarteners with up-to-date immunizations per Kindergarten Assessment Results | 89.3% | 90.3% | Not available | -0.4% per year | Capistrano USD: 75.4%  
Laguna Beach USD: 77.9% |
| **Births to Teens**  
Rate of births to teens 15-19 years of age per 1,000 per 2010 Birth File | 22.4 per 1,000 | 31.5 per 1,000 | 34.2 per 1,000 | -4.0% per year | Latinos: 44.3  
18-19 year olds: 37.4  
Santa Ana: 53.5  
Anaheim: 41.2  
La Habra: 32.9  
Stanton: 32.7  
Garden Grove: 27.9  
Costa Mesa: 25.6  
Tustin: 24.9 |
| **Chronic Diseases and Conditions** | | | | | |
| **Diabetes**  
% adults reporting having diabetes per 2011-12 CHIS | 7.4% | 8.4% | 9.0% | Not comparable – methodology change | Latino males: 9.3%  
Latina females: 10.9%  
45-64 year olds: 11.6%  
65+ year olds: 16.0% |
| **High blood pressure**  
% adults reporting having been diagnosed with hypertension per 2011-12 CHIS | 25.4% | 27.2 | 30.8% | Not comparable – methodology change | White males: 28.7%  
45-64 year olds: 33.5%  
65+ year olds: 58.5% |
| **Child (5th Grade) body composition [LHI]**  
% 5th graders within healthy fitness zone per 2012/13 OCDE | 56.7% | 53.2% | Not comparable | -1.2% per year | Latinos: 44.8%  
Santa Ana USD: 41.1%  
Orange USD: 50.6% |
| **Adolescent (9th Grade) body composition [LHI]**  
% 9th graders within healthy fitness zone per 2012/13 OCDE | 65.3% | 58.9% | Not comparable | -1.5% per year | Latinos: 56.0%  
Santa Ana USD: 53.6% |
| **Adult obesity [LHI]**  
% adults reporting being obese per 2011-12 CHIS | 23.8% | 25.4% | 27.8% | Not comparable – methodology change | Latina females: 39.8%  
45-64 year olds: 27.0% |
| **Asthma hospitalizations in children**  
Rate of hospitalizations due to asthma in children under 5 per 10,000 per 2010 OSHPD | 19.3 per 10,000 | Not available | Not available | -2.4% per year | Whites: 22.3 |
| **Chronic Diseases Deaths** | | | | | |
| **Heart Disease deaths**  
Rate of deaths per 100,000 population due to ischemic heart disease per 2010 Death File | 100.1 per 100,000 | 104.5 per 100,000 | 113.6 per 100,000 | -5.0% per year | White males: 151.1 |
### Chronic Diseases Deaths (Continued)

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<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
<th>US</th>
<th>Trend</th>
<th>Sub-Group Disparities</th>
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</thead>
<tbody>
<tr>
<td><strong>Cerebrovascular Disease (Stroke) deaths</strong>&lt;br&gt;Rate of deaths per 100,000 population due to cerebrovascular disease per 2010 Death File</td>
<td>35.8 per 100,000</td>
<td>36.4 per 100,000</td>
<td>39.1 per 100,000</td>
<td>-3.9% per year ● -19.6 (2001-2010)</td>
<td>None</td>
</tr>
<tr>
<td><strong>Alzheimer’s Disease deaths</strong>&lt;br&gt;Rate of deaths per 1,000 population due to Alzheimer’s disease per 2010 Death File</td>
<td>34.2 per 1,000 !</td>
<td>29.0 per 1,000</td>
<td>25.1 per 1,000</td>
<td>+12.1% per year ● +17.8 (2001-2010)</td>
<td>White females: 42.2</td>
</tr>
<tr>
<td><strong>Chronic Lower Respiratory Diseases (CLRD) deaths</strong>&lt;br&gt;Rate of deaths per 100,000 population due to CLRD per 2010 Death File</td>
<td>32.1 per 100,000</td>
<td>35.5 per 100,000</td>
<td>42.2 per 100,000</td>
<td>-2.0% per year ● -7.2 (2001-2010)</td>
<td>White females: 41.6&lt;br&gt;White males: 39.6</td>
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### Cancer Deaths

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<tr>
<th>Indicator</th>
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<th>Sub-Group Disparities</th>
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<tr>
<td><strong>Lung cancer deaths</strong>&lt;br&gt;Rate of deaths per 100,000 population due to lung cancer per 2010 Death File</td>
<td>33.8 per 100,000</td>
<td>35.0 per 100,000</td>
<td>47.6 per 100,000</td>
<td>-2.5% per year ● -9.6 (2001-2010)</td>
<td>White females: 35.2</td>
</tr>
<tr>
<td><strong>Colorectal cancer deaths</strong>&lt;br&gt;Rate of deaths per 100,000 population due to colorectal cancer per 2010 Death File</td>
<td>12.9 per 100,000</td>
<td>13.8 per 100,000</td>
<td>15.8 per 100,000</td>
<td>-1.5% per year ● -2.0 (2001-2010)</td>
<td>White females: 13.7&lt;br&gt;Asian males: 15.6</td>
</tr>
<tr>
<td><strong>Female breast cancer deaths</strong>&lt;br&gt;Rate of deaths per 100,000 female population due to breast cancer per 2010 Death File</td>
<td>20.8 per 100,000</td>
<td>20.0 per 100,000</td>
<td>22.1 per 100,000</td>
<td>-1.1% per year ● -2.2 (2001-10)</td>
<td>Whites: 23.6</td>
</tr>
<tr>
<td><strong>Prostate cancer deaths</strong>&lt;br&gt;Rate of deaths per 100,000 male population due to prostate cancer per 2010 Death File</td>
<td>20.4 per 100,000</td>
<td>20.5 per 100,000</td>
<td>21.9 per 100,000</td>
<td>-1.5% per year ● -3.1 (2001-2010)</td>
<td>Whites: 23.0</td>
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### Communicable Diseases

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<tr>
<th>Indicator</th>
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<th>Sub-Group Disparities</th>
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<tr>
<td><strong>Chlamydia</strong>&lt;br&gt;Rate of diagnosed Chlamydia infection per 100,000 population per 2011 OCHCA</td>
<td>241.3 per 100,000</td>
<td>438.0 per 100,000</td>
<td>426.0 per 100,000 (2010)</td>
<td>+3.0% per year ● +51.3 (2002-2011)</td>
<td>Females 15-24 years: 1623.5&lt;br&gt;Males 15-24 years: 491.4&lt;br&gt;Females 25-44 years: 355.3&lt;br&gt;Santa Ana: 475.2&lt;br&gt;Anaheim: 396.4&lt;br&gt;Stanton: 364.0&lt;br&gt;Garden Grove: 306.6&lt;br&gt;Costa Mesa: 301.0&lt;br&gt;Los Alamitos: 297.0&lt;br&gt;Orange: 293.2&lt;br&gt;Fullerton: 293.0</td>
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<td>Indicator</td>
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<td>Trend</td>
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<td><strong>Communicable Diseases (Continued)</strong></td>
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</table>
| HIV – New Cases                               | 9.8 per 100,000 | 13.2 per 100,000 | 15.8 per 100,000 | -3.0% per year ● | White males: 15.2  
|                                               |        |        |        | -1.7 (2006-2011)  | Latino males: 26.2  
|                                               |        |        |        |                   | Af Am males: 28.0  
|                                               |        |        |        |                   | 19-24 year olds: 20.6  
|                                               |        |        |        |                   | 25-39 year olds: 22.7  
|                                               |        |        |        |                   | Laguna Beach: 33.7  
|                                               |        |        |        |                   | Santa Ana: 21.1  
|                                               |        |        |        |                   | Anaheim: 14.1  
|                                               |        |        |        |                   | Orange: 12.0  
|                                               |        |        |        |                   | Westminster: 11.9  
| HIV – Living Cases                            | 219.6 per 100,000 | 299.7 per 100,000 | Not Available | +3.7% per year ● | White males: 443.3  
|                                               |        |        |        | +34.0 (2006-2011) | Latino males: 452.6  
|                                               |        |        |        |                   | Af Am males: 988.3  
|                                               |        |        |        |                   | Af Am females: 431.3  
|                                               |        |        |        |                   | 25-39 year olds: 242.1  
|                                               |        |        |        |                   | 40-59 year olds: 493.1  
| **Injuries and Accidents**                    |        |        |        |                   |                                                                                        |
| Injury deaths                                 | 31.1 per 100,000 | 41.5 per 100,000 | 57.9 per 100,000 | -1.0% per year ● | All males: 46.1  
|                                               |        |        |        | -3.1 (2001-2010)  | Huntington Beach: 37.4  
| Unintentional injury deaths                   | 18.9 per 100,000 (Male: 26.8; Female: 12.0) | 25.7 per 100,000 | 38.0 per 100,000 | -1.7% per year ● | White males: 36.1  
|                                               |        |        |        | -3.4 (2001-2010)  | White females: 15.3  
|                                               |        |        |        |                   | 45-64: 26.0  
|                                               |        |        |        |                   | 65+ years: 53.2  
| **Health Behaviors**                          |        |        |        |                   |                                                                                        |
| Physically inactive                          | 21.1%  | 20.4%  | 23.9%  | +2.0% per year ● | Not available                                                                                           |
| Adult smoking                                 | 12.0%  | 13.8%  | 21.2%  | Not comparable – methodology change | Males: 15.5%  
|                                               |        |        |        |                   | 18-44 year olds: 14.0%  
| Adolescent smoking                            | 13.0%  | Not available | Not available | -5.1% per year ● | White males: 17.2%  
|                                               |        |        |        | -0.7 (2005/06-2009/10) | White females: 14.3%  
|                                               |        |        |        |                   | Af Am males: 23.5%  
|                                               |        |        |        |                   | PI males: 18.5%  
|                                               |        |        |        |                   | Laguna Beach USD: 23.8%  
|                                               |        |        |        |                   | Newport-Mesa USD: 20.1%  
|                                               |        |        |        |                   | Brea-Olinda USD: 17.7%  
|                                               |        |        |        |                   | Capistrano USD: 17.4%  
|                                               |        |        |        |                   | Orange USD: 14.1%  

### SUMMARY OF KEY HEALTH INDICATORS

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<thead>
<tr>
<th>Indicator</th>
<th>OC</th>
<th>CA</th>
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<th>Trend</th>
<th>Sub-Group Disparities</th>
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<tr>
<td><strong>Health Behaviors (Continued)</strong></td>
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<tr>
<td>Adult binge drinking [LHI]</td>
<td>14.9%</td>
<td>15.8%</td>
<td>15.1%</td>
<td>-2.6% per year ● -0.8 (2008-2010)</td>
<td>Not available</td>
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<tr>
<td>% adults binge drinking in past month per 2010 BRFSS</td>
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<tr>
<td>Adolescent alcohol use [LHI]</td>
<td>31.9%</td>
<td>Not available</td>
<td>Not available</td>
<td>+1.6% per year ● +1.9 (2005/06-2009/10)</td>
<td>White males: 35.1% White females: 37.1% Latino males: 36.2% Latina females: 35.9% Newport-Mesa USD: 50.4% Laguna Beach USD: 47.7% Capistrano USD: 37.2%</td>
</tr>
<tr>
<td>% 11th graders reporting alcohol use in past month per 2009/10 CHKS</td>
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<tr>
<td>Adolescent drug use [LHI]</td>
<td>20.5%</td>
<td>Not available</td>
<td>Not available</td>
<td>-2.3% per year ● -2.6 (2005/06-2009/10)</td>
<td>All males: 23.7% White males: 26.5% Latino males: 26.6% Af Am males: 34.4% PI males: 25.0% Laguna USD: 29.8% Newport-Mesa USD: 27.6% Capistrano USD: 25.0% Orange USD: 23.1% Anaheim USD: 23.0% Tustin USD: 22.9%</td>
</tr>
<tr>
<td>% 11th graders reporting drug use in past month per 2009/10 CHKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Drug-induced deaths</td>
<td>10.3 per 100,000</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>All males: 13.8 White males: 23.8 White females: 13.4</td>
</tr>
<tr>
<td>Crude rate per 100,000 population per 2010 Death File</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicides [LHI]</td>
<td>8.5 per 100,000</td>
<td>9.7 per 100,000</td>
<td>12.1 per 100,000</td>
<td>No change</td>
<td>All males: 13.6 White males: 19.3 Asian males: 9.7</td>
</tr>
<tr>
<td>Rate of suicides per 100,000 per 2010 Death File</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Depression</td>
<td>Not available</td>
<td>Not available</td>
<td>6.6%</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>% adults reporting Major Depressive Episodes per 2011 National Survey on Drug Use and Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mental diseases and disorders hospitalizations</td>
<td>39.2 per 10,000</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>White males: 58.3 White females: 66.0 Af Am males: 78.3 Af Am females: 74.7</td>
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<tr>
<td>Crude rate per 10,000 population per 2010 OSPHD</td>
<td></td>
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### Acronyms and Abbreviations

- Af Am – African-American
- API – Asian and Pacific Islander
- Birth File – Orange County Master Birth File
- BRFSS – Behavioral Risk Factor Surveillance System
- CDC – Centers for Disease Control and Prevention
- CHIS – California Health Interview Survey
- CHKS – California Healthy Kids Survey
- Death File – Orange County Master Death File
- Dept. – Department
- ED – Emergency Department
- HIV – Human Immunodeficiency Virus
- MIHA – Maternal and Infant Health Assessment
- mRFEI – Modified Retail Food Environment Index
- OCDE – Orange County Department of Education
- OCHCA – Orange County Health Care Agency
- OCHNA – Orange County Health Needs Assessment
- OSPHD – Office of Statewide Health Planning and Development
- PI – Pacific Islander
- SWITRS – Statewide Integrated Traffic Records System
- US – United States
- USD – Unified School District
Infant and Child Health Plan


Older Adult Health Plan

1. The Power of Prevention: Chronic Disease...The Public Health Challenge of the 21st Century; National Center for Chronic Disease prevention and Health Promotion, 2009


CITATIONS


Obesity and Diabetes Plan


Behavioral Health Plan


Selecting Priorities


ACRONYMS AND ABBREVIATIONS

Where possible, acronyms and abbreviations are defined on each page of this report where it appears. Due to space limitations, the following acronyms and abbreviations may not have been defined on the page of the report where it appears.

- < – Less than
- + – Before a number indicates increase
- + – After a number indicates age group equal to and older than the number
- - – Before a number indicates decrease
- • – Improvement of health indicator
- ○ – Worsening of health indicator
- Af Am – African-American
- API – Asian and Pacific Islander
- Birth File – Orange County Master Birth File
- BRFSS – Behavioral Risk Factor Surveillance System
- Calif. – California
- CDC – Centers for Disease Control and Prevention
- CHIS – California Health Interview Survey
- CHKS – California Healthy Kids Survey
- Death File – Orange County Master Death File
- Dept. – Department
- ED – Emergency Department
- ER – Emergency Room
- HIV – Human Immunodeficiency Virus
- LHI – Indicates Healthy People 2020 Leading Health Indicator
- MAPP – Mobilizing for Action through Planning and Partnerships
- MIHA – Maternal and Infant Health Assessment
- mRFEI – Modified Retail Food Environment Index
- NSUDH – National Survey on Drug Use and Health
- OC – Orange County
- OCDE – Orange County Department of Education
- OCHCA – Orange County Health Care Agency
- OCHNA – Orange County Health Needs Assessment
- OSPHD – Office of Statewide Health Planning and Development
- PI – Pacific Islander
- SWITRS – Statewide Integrated Traffic Records System
- UNICEF – United Nations Children’s Fund
- US – United States
- USD – Unified School District
Orange County Health Improvement Plan

2014-16

For more information or to get involved contact:
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(714) 796-0404
OCHIP@ochca.com
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About This Plan

The role of Public Health Services is to coordinate and provide services that promote and protect the health of those who live, work, and play in Orange County. The Public Health Services Strategic Plan for 2014-16 will guide our strategic efforts in carrying out this role. The plan provides a vision and a road map for how we will strive to improve health in Orange County.

Though Orange County’s health generally fares well compared to other areas, real health disparities and challenges exist within the county. A review of community health assessments and state and national initiatives led to the identification of key health focus areas where there are opportunities for Public Health Services to create significant improvements in health in the next three years. The planning process also identified strategies that will help enhance our system’s programs and services. Public Health Services programs and issues not in this plan remain important, and will not stop simply because they are not discussed. The plan will be complemented by Division-level plans that provide detail into specific actions and timeframes for strategies identified in this plan.

Message from the Deputy Agency Director

I am pleased to present the Orange County Health Care Agency Public Health Services Strategic Plan for 2014-16. This is a foundational plan for Orange County Public Health Services, providing direction for several strategic priority areas that we have chosen to focus on in coming years.

We are in a time of change for public health. The implementation of the Affordable Care Act and development of the National Prevention Strategy have offered opportunities for Public Health Services to forge new partnerships in protecting and promoting the health of our communities.

This plan highlights some of the great work that is already happening through our various programs, including some of our more recent quality improvement efforts. It also outlines some exciting new activities that we will undertake to expand upon our successes in optimizing the health of all who live, work, and play in Orange County.

We know that Public Health Services cannot fulfill our role and mission on our own. Public Health Services and its partners recently published the Orange County Health Improvement Plan, our first community health assessment and community health improvement plan. Our strategic planning process identifies opportunities for aligning our efforts with those in the community to maximize the use of resources to optimize health in Orange County.

I continue to be proud of the important work of our dedicated staff. I hope that this plan can serve as a living document that energizes us in working toward our vision of “A safe and thriving Orange County where everyone has the opportunity for optimal health and quality of life.”

David M. Souleles, MPH
Deputy Agency Director, Public Health Services
Orange County Health Care Agency
Summary of Goals

Focus Area 1: Optimal Birth Outcomes

Goal 1: Achieve optimal birth outcomes for all babies born in Orange County.

Objective 1.1: By 2017, increase the proportion of at-term births that are a healthy birth weight for clients served within Public Health Services (PHS) prenatal programs.

Objective 1.2: By 2017, reduce the proportion of preterm births by 2% for clients served within PHS prenatal programs.

Focus Area 2: Chronic Disease Prevention

Goal 2: Eliminate preventable chronic disease in Orange County.

Objective 2.1: By 2017, reduce the proportion of adolescents who smoke by 3%.

Objective 2.2: By 2017, increase the proportion of children, adolescents, and adults eating the recommended amount of fruits and vegetables a day by 3%.

Objective 2.3: By 2017, increase the proportion of residents engaging in physical activity by 3%.

Focus Area 3: Chronic Disease Management

Goal 3: Reduce disability and premature death by optimizing management of chronic diseases.

Objective 3.1: By 2017, reduce avoidable hospitalizations or ED visits related to hypertension, diabetes, or cardiovascular conditions by 2%.

Objective 3.2: By 2017, increase the proportion of individuals with chronic diseases that are comfortable with self-management of their chronic disease by 2%.

Focus Area 4: Reproductive and Sexual Health

Goal 4: No new STD or HIV infections in Orange County.

Objective 4.1: By 2017, reduce three-year average gonorrhea rates by 3%.

Objective 4.2: By 2017, reduce the number of new HIV infections by 5%.

Focus Area 5: Food Safety

Goal 5: Improve food safety and prevent foodborne illnesses.

Objective 5.1: By 2017, reduce the rate of foodborne illnesses cases in Orange County by 5%.

Objective 5.2: By 2017, reduce the number of restaurants and markets found to have violations related to improper hand washing during inspections by 10%.

Objective 5.3: By 2017, reduce by 50% the number of days required to complete case investigations on all cases of enteric illnesses where a patient can be contacted.
Public Health Services

FY13-14 Budget: $103,998,812
Total Positions (FTE): 695

Who we are...

Public Health Services is the local health department serving Orange County, California. Public Health Services is one service area under the Orange County Health Care Agency; other service areas within the Health Care Agency include Behavioral Health Services, Correctional Health Services, Medical Services; and Administrative and Financial Services.

Public Health Services monitors the occurrence of disease, injury, and related factors in the community and develops preventive strategies to maintain and improve the health of the public. Below are the six divisions that make up Public Health Services.

Disease Control and Epidemiology
Disease Control & Epidemiology protects the health of Orange County residents by monitoring reportable communicable diseases, investigating communicable disease outbreaks, and through prevention and treatment programs, such as for HIV and TB.

Environmental Health
Environmental Health protects the public’s health and safety from harmful conditions in the environment by enforcing laws and regulations and providing education to businesses and the community about environmental health issues.

Family Health Services
Family Health promotes family-focused preventative health care through developing community linkages and integrated programs such as clinical and community services for maternal, child, and adolescent populations, nutrition services, and dental services.

Health Promotion
Health Promotion protects the health and safety of Orange County residents by providing health education and building the capacity of individuals, organizations, and communities to promote optimal health and prevent disease, disability, and premature death.

Public Health Laboratory
Public Health Laboratory provides clinical diagnostic and environmental laboratory support services for all programs within the Agency, consultation services to other laboratories and the medical community, and biothreat agent testing services for law enforcement.

Public Health Nursing
Public Health Nursing provides community and in-home health education, health assessments, case management, and health access support to promote optimal health across the lifespan.
Our Vision

A safe and thriving Orange County where everyone has the opportunity for optimal health and quality of life.

Our Mission

Working with the community, we promote optimal health for all who live, work, and play in Orange County through assessment and planning, education and services, policy development, and regulatory activities.

Our Values

Our work is guided by the following organizational values:

Excellence

We strive to provide quality services that meet the needs and exceed the expectations of the individuals and communities that we serve. We promote efforts to continuously improve our services and outcomes through best practices and innovation.

Integrity

We adhere to high ethical and professional standards in our work and interactions. We are conscientious stewards of the resources entrusted to us.

Health Equity

We believe in promoting health and wellness for all who live, work, and play in Orange County regardless of social, economic, or cultural factors. We foster policies and programs that are respectful of our diverse communities, consider the social determinants of health, and incorporate practices that reduce health disparities.
About Orange County

Orange County is located in Southern California, between Los Angeles and San Diego counties, and is composed of 798 square miles of land with 34 cities and additional unincorporated areas.

The county is home to more than 3 million people and is the 6th most populous county in the nation. Orange County is a diverse region, with no single racial/ethnic group making up a majority of the population. The population is approximately 43% White, 34% Hispanic, 19% Asian, and 1% African-American. Almost half (46%) of the county’s population speak a language other than English at home.

Orange County’s cost of living is higher compared to other regions. A family with two adults and two school-age children would need a total family annual income of $65,761 to meet its basic needs. In 2011, one in four households had an annual income of less than $35,000.

In general, Orange County’s health fares well compared to other areas. The County Health Rankings ranked Orange County the 6th healthiest county in California. However, an assessment of the county’s health shows real health disparities and challenges in the county.

As shown (left), disparities in the health of the population are apparent when comparing average life expectancy among different racial/ethnic and gender groups. The average life expectancy of Asian & Pacific Islander females is nine years more than that of African-American males.

Most major leading causes of death, including heart disease, cancer, and stroke, have dropped dramatically over the past 10 years. However, deaths associated with Alzheimer’s disease (the 4th leading cause of death in the county) have increased. Aging is the best known risk factor for developing Alzheimer’s disease. The proportion of adults 65 and older in the population is projected to grow from 12% in 2012 to 20% in 2020 in Orange County.

One in four adults in Orange County is obese, which is lower than state and national averages. This rate is higher in some communities; with an obesity rates of 40%, Latina women are nearly twice as likely to be obese as compared to the overall population.

At 12%, adult smoking rates in Orange County are low compared to other areas. Among 11th graders, the smoking rate is 10% in Orange County. However, some regions experience much higher rates. For example, 21% of 11th graders in the Laguna Beach Unified School District reported smoking in the past 30 days compared to 6% in the Irvine Unified and Tustin Unified School Districts.
Engaging Staff

The Public Health Services strategic planning process began with efforts to provide information for and involve staff at all levels. Two sessions of a Managers and Supervisors Meeting and two Special All-Staff Forums were held in January to provide an overview of strategic planning and how staff would be involved in the creation of the plan. During the All-Staff Forums, participants also discussed and voted on the core values of PHS. Staff continued to be engaged through e-mails and posts on a dedicated internal webpage. An all-staff survey about the Vision, Mission, and Values Statements and a comment period for a draft version of the plan allowed all staff to provide feedback regarding the plan at various stages.

Defining Our Role

The Strategic Planning Work Group (see description in left panel) held an all-day meeting on February 18, 2014. The Work Group consisted of 50 individuals from throughout Public Health Services. During the one-day meeting, the group reviewed the 10 Essential Public Health Services and Health Care Agency Goals to better define the role of Public Health Services. The group then agreed on the top three core values for Public Health Services based on the list and votes at the All-Staff Forums, and began work on vision and mission statements.

Assessing Orange County’s Health

The Strategic Planning Work Group reviewed extensive information during its one-day meeting to better understand the county’s health and the larger context of health, including:

- Reviewing findings from the Orange County community health assessment and community health improvement plan
- Conducting Strengths, Weakness, Opportunities, and Threats (SWOT) analysis for the three core functions of Public Health
- Reviewing state and national initiatives including Let’s Get Healthy California, CDC’s Winnable Battles, and National Prevention Strategy

Determining Priorities and Strategies

After assessing Orange County’s health, the Strategic Planning Work Group voted on health issues that would be focus areas for this plan. The Work Group also identified strategies that could enhance the existing service system. Work groups were formed around each focus area and included members of the Strategic Planning Work Group and other PHS staff with expertise in that area. The topic-specific work groups convened in February and March to determine goals, objectives, and strategies for each focus area. The work groups considered best practices including those recommended in the Community Preventive Services Task Force’s Guide to Community Preventive Services.
Aligning Our Plans

The Public Health Services Strategic Plan carefully considered other plans that provide the context for health improvement for Orange County.

The Orange County Health Improvement Plan is Orange County’s community health assessment and community health improvement plan. The plan was created by the Orange County Community Health Planning Advisory Group with Public Health Services as a key partner in leading and maintaining the plan.

The Health Care Agency Business Plan provided an overview of programs and services of the Health Care Agency as well as key goals and Balanced Scorecard performance measures. Public Health Services is one of five service areas within the Health Care Agency and contributes to all goals in the plan.

The Public Health Services Workforce Development Plan is the working plan outlining key assessment findings and training priorities for Public Health Services. The Strategic Plan helps to inform training needs and activities that contribute to a more proficient workforce to meet Public Health Services goals.

The Public Health Services Quality Improvement (QI) Plan provides the context and framework for QI activities within Public Health Services. Performance measures in the Strategic Plan are considered in the selection of QI projects and QI project outcomes contribute to meeting Strategic Plan goals.
Strengths, Weaknesses, Opportunities, and Threats

At its meeting on February 18, 2014, the Strategic Planning Work Group conducted an analysis of Public Health Services' (PHS) internal strengths and weaknesses and external opportunities and threats (known as a SWOT analysis) for each of the three core functions of public health. The analysis contributed to the identification of health focus areas and strategies to enhance the existing service system.

Public Health Core Functions and 10 Essential Services

The three core functions and 10 Essential Public Health Services provide a working definition of public health and a guiding framework for the responsibility of local public health systems.

Core Function 1: Assessment
1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health hazards in the community

Core Function 2: Policy Development
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts

Core Function 3: Assurance
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems (a System Management function of all Essential Services)

Strengths
- PHS has access to robust internal and external health data.
- Balanced Scorecard performance measures help to monitor key health indicators.
- PHS has a strong and collaborative investigation process.
- PHS enjoys a diverse and well-educated workforce.

Weaknesses
- There is missing, inconsistent, or inaccurate data for some health issues and hard-to-reach populations.
- Available online health data can be blocked by internal firewalls.
- Correlating health data with health outcomes can be a challenge.
- Not all staff are proficient in working with data.

Opportunities
- Increased use of electronic data systems (e.g., medical records, labs) may allow for increased accuracy and data sharing.
- The Affordable Care Act may help to maximize resources for data.
- Community collaborations may allow for increased data sharing.

Threats
- Reduced or insufficient funding or staffing may challenge the ability to monitor programs and collaborate around data.
- Transitions to new or differing data systems may jeopardize existing linkages and ability to share information.

Core Function 1: Assessment

This figure (right) shows findings from the SWOT analysis on Public Health Services’ ability to monitor the health status and diagnose and investigate health problems in the community.

Examples of these services within Public Health Services include:
- Disease Control & Epidemiology and Environmental Health monitoring and investigating foodborne illness outbreaks.
- Health Promotion monitoring trends in population health.
- Public Health Lab testing for water quality.

Source: Core Public Health Functions Steering Committee, Fall 1994
Strengths, Weaknesses, Opportunities, and Threats

**Core Function 2: Policy Development**

This figure (left) shows findings from the SWOT analysis on Public Health Services’ ability to **educate and empower** people, **mobilize** community partnerships, and **develop policies** and plans to address health.

**Examples of these services within Public Health Services include:**
- Family Health mobilizing partnerships through the Orange County Perinatal Council.
- Health Promotion providing education about alcohol and drug misuse that can help inform policy.
- Public Health Nursing providing education regarding chronic disease self management.

**Core Function 3: Assurance and Research**

This figure (right) shows findings from the SWOT analysis on Public Health Services’ ability to **enforce laws** that protect health, **link** people to services, **assure** a competent work force, **evaluate** health services, and **research** for innovative solutions.

**Examples of these services within Public Health Services include:**
- Disease Control & Epidemiology providing health assessments and referrals for refugees and asylees.
- Environmental Health enforcing regulations related to storage of hazardous materials.
- Family Health providing coordination and referrals for children with elevated blood lead levels.
- Public Health Nursing providing resources and linkages for homeless families and individuals.

**Strengths**
- Some PHS staff have expertise to guide policy decisions.
- PHS enjoys strong community partnerships with organizations working on policy change.
- PHS staff participate in many state and national associations.

**Weaknesses**
- There is a need for increased clarity about how staff can engage in policy work and what resources exist to support the work.
- Some staff feel they lack adequate expertise in policy development.
- Policy stances on issues can be unclear.

**Opportunities**
- Community partners and coalitions can help to communicate and develop appropriate health policies.
- Existing assessments can be used to develop policies in collaboration with community partners.
- State and national-level support can help to bolster work at the local level.

**Threats**
- There is growing misinformation about health and public health.
- Competition for limited funds can threaten community partnerships.
- Implementation of the Affordable Care Act can create a perception that public health is less needed.
- There are corporate interests that work against public health interests.
- Mistrust in government can impact the perceived legitimacy of public health.

**Strengths**
- PHS has good working relationships with regulatory and legal agencies.
- PHS has strong relationships with health care providers, which allows for linkage to services.
- PHS staff bring knowledge and passion to their work.
- County programs such as certificate programs, lunch-and-learn seminars, and tuition reimbursement support professional development.
- PHS programs use a range of evaluation tools to assess services.

**Weaknesses**
- Limitations in the availability and accessibility of health care services, including dental and mental health services, can restrict appropriate linkage to services.
- PHS is limited in its authority to regulate laws for many health issues.
- Processes can make it difficult to provide timely responses to changes in health issues and technology.
- Developing measures to evaluate the effectiveness of long-term behavioral outcomes can be challenging.

**Opportunities**
- Implementation of the Affordable Care Act can increase availability and linkage of health care services.
- Working toward Public Health Accreditation may help to identify areas for improvement.
- New quality improvement efforts within PHS provide opportunities to identify innovative practices.
- Developing a strategic plan can assist in looking more at impact of services.

**Threats**
- Lack of funding for enforcement activity can threaten existing or future levels and quality of service.
- Fewer numbers of medical providers can make it difficult to link clients to needed health services.
- Threats to salaries and benefits of staff make it difficult to recruit and maintain an optimal work force.
After the assessment process, the Strategic Planning Work Group identified five health issues that would be focus areas for this plan and six strategies to enhance the service system and help Public Health Services in meeting its goals.

The goal of public health is to reduce premature death and disability by preventing and lessening the impact of chronic diseases; reducing transmission of communicable diseases; and ensuring healthy and safe environments.

Orange County’s Public Health Services framework (left) identifies six enhancement strategies that will be used to address the five focus areas in the Public Health Services Strategic Plan.

The five focus areas were identified because they represented unique opportunities for Public Health Services to significantly influence the health of the population over the next three years. The five focus areas include:

1) Optimal Birth Outcomes
2) Chronic Disease Prevention
3) Chronic Disease Management
4) Reproductive and Sexual Health
5) Food Safety

### Public Health Services Enhancement Strategies

The following are six strategies that were identified as capable of enhancing the service system and assisting Public Health Services in meeting its goals. Enhancement strategy types are indicated in brackets in summaries for each focus area.

**Integration:** Collaborating and integrating services and resources across Public Health Services.

**Policy Development:** Improving understanding of health implications of policies and promoting policy platforms that protect and promote health.

**Collaboration:** Expanding partnerships and collaborative efforts with other community and County organizations that help to protect and promote health in Orange County.

**Community Engagement:** Listening to and working with community members and groups to understand and implement solutions to health problems.

**Communication:** Developing and promoting consistent messages about health issues across Public Health Services.

**Evaluation:** Using best practices to assess needs and resources, monitoring work to ensure fidelity in program implementation, and measuring the impact of programs on the health of the community.
Focus Area 1: Optimal Birth Outcomes

Goal 1: Achieve optimal birth outcomes for all babies born in Orange County.

Why is this important?
Health begins with a healthy pregnancy (getting early prenatal care, preventing and managing gestational diabetes) leading to a healthy birth (healthy birth weight, birth at term) and continues with healthful practices such as breastfeeding, immunizations, physical activity, and proper nutrition through infancy and childhood. While almost 90% of Orange County women who gave birth in 2010 received early prenatal care, subgroups, including Latinas and younger women, were less likely to. Low birth weight has risen from 5.9% in 2001 to 6.4% in 2010, with higher rates in babies born to younger women (under 20 years old) and older women (35 and older).

What are we doing now?
Public Health Services works in collaboration with community and hospital programs to improve maternal and child health. The Orange County Perinatal Council, led by Family Health, brings together community stakeholders and providers to improve birth outcomes. Clinical services are provided at Family Health’s Infant, Child, and Adolescent Health Clinic and Family Planning Clinic. Women, Infants, and Children (WIC) provides nutrition education and breastfeeding support to low-income women, infants, and children. Family Health provides technical support to the network of Comprehensive Perinatal Services Program (CPSP) providers to ensure access to quality perinatal services.

A variety of case management programs exist in Public Health Services to support healthy birth outcomes. Public Health Nursing’s Perinatal Substance Abuse Services Initiative/Assessment and Coordination Team (known as “ACT”) provides home visitation to pregnant and parenting women who are substance using, HIV infected, and/or have mental health issues. Nurse Family Partnership® works with low-income first-time parents under 24 years of age who are less than 28 weeks pregnant. Family Health’s Adolescent Family Life Program (AFLP) and Cal-Learn Program provide case management for pregnant and parenting teens at any stage of pregnancy.

Aligning with Community Goals
The goals, objectives, and strategies in this focus area align with those in the Infant and Child Health priority area of the Orange County Health Improvement Plan. The community health improvement plan calls for improving birth outcomes by addressing disparities in prenatal care among women in Orange County.

Lead: Jennifer Sarin, Family Health

Birth Outcomes Work Group:
- Robyn Baran
- Pauline Bui
- Angelica Galvan
- Elizabeth Jimenez
- Sarah Lopez
- Desiree Mares
- Phyllis Munoz
- David Núñez
- Karen Senteno
- Marcia Solomon
Focus Area 1: Optimal Birth Outcomes

What are we going to do?

Objective 1.1: By 2017, increase the proportion of at-term births that are a healthy birth weight (2,500-4,000 grams) for clients served within PHS prenatal programs.

Objective 1.2: By 2017, reduce the proportion of preterm births by 2% for clients served within PHS prenatal programs.

Strategies

1. Integrated Referral System: Increase early linkages to targeted prenatal programs and services by creating a referral system to connect clients to the most appropriate PHS programs and other services and by disseminating information about them. [Integration, Collaboration]

2. Consistent Messaging: Increase knowledge and awareness about preconception/interconception health and prenatal care by disseminating consistent messages about preconception/interconception health and prenatal care to PHS clients, community partners, and health care providers. [Integration, Communication]

3. Consistent Evaluation: Improve Public Health Services’ capacity to evaluate and measure birth outcomes by collecting uniform measures related to birth weight and gestational age at birth across all PHS prenatal programs. [Integration, Evaluation]

Addressing Birth Outcomes through Quality Improvement

In 2013, Public Health Services engaged in a quality improvement project to improve collection and reporting of birth outcome data in an electronic record keeping system. The project team (right) identified improvements for the existing electronic system and lessons learned for future systems capturing maternal and child outcome data. Improving capacity to evaluate and measure birth outcomes across all PHS prenatal programs is a strategy highlighted in this plan.
Focus Area 2: Chronic Disease Prevention

Goal 2: Eliminate preventable chronic diseases in Orange County.

Why is this important?
Chronic diseases such as heart disease, stroke, cancer, and diabetes, are among the most common, costly, and preventable of health problems in the United States. Smoking, insufficient physical activity, and poor diet are responsible for many of these preventable diseases. An estimated 12.0% of Orange County adults and 9.8% of youth smoke. In 2009, 27.4% of Orange County adults reported eating 5 or more fruits and vegetables a day. The current USDA recommendations are to “make half your plate fruits and vegetables.” In 2010, 21.1% of Orange County adults reported engaging in no leisure-time physical activity over the past 30 days. The CDC recommends at least 150 minutes of moderate activity a week and muscle-strengthening activity at least 2 days a week.

What are we doing now?
Health Promotion’s Tobacco Use Prevention Program (TUPP) collaborates with community organizations, cities, and school officials to offer tobacco prevention and cessation services. Personal counseling for smoking cessation is offered in-person and by phone. Family Health and Health Promotion participate in efforts to promote nutrition and physical activity. Family Health’s Women, Infants, and Children (WIC) offers education and financial assistance for healthful food for low-income residents. The Nutrition Education and Obesity Prevention (NEOP) program reaches low-income families and provides nutrition education and support in school and community settings. The Nutrition and Physical Activity Collaborative (NuPAC), led by Family Health, brings together partners to improve nutrition and physical activity. Health Promotion engages in capacity building activities that create changes in the built environment or increase access to healthy choices. The Fifteen in Twenty-twenty initiative partners with jurisdictions to create environments that are walkable and include options for healthy eating. The Chronic Disease and Injury Prevention program works with community partners to assess walkability and bikeability and supports annual Walk to School Day activities.

Lead: Amy Buch, Health Promotion
Chronic Disease Prevention
Work Group:
• Mary Agatha-Okpala
• Emily Bangura
• Janene Bankson
• Kelly Broberg
• Claudia Curiel
• Raphael Garstka
• Sarah Hoang
• Travers Ichinose
• Kasie Leung
• Anna Luciano
• Duc Quan

Aligning with Community Goals
The goals, objectives, and strategies in this focus area align with those in the Obesity and Diabetes priority area of the Orange County Health Improvement Plan. The community health improvement plan calls for increasing the proportion of residents with healthy weight status and reducing rates of diabetes.
Focus Area 2: Chronic Disease Prevention

What are we going to do?

Objective 2.1: By 2017, reduce the proportion of adolescents who smoke by 3%.

Strategies

1. Targeted Interventions: Target youth with highest rates of smoking with evidence-based prevention and cessation services. [Community Engagement, Evaluation]

2. Reducing Youth Access to Tobacco: Provide and promote the “Five Star Merchant” campaign, which publicly acknowledges merchants who follow existing laws and do not sell tobacco to minors. [Collaboration, Communication, Policy Development]

3. Cessation Services: Promote cessation services through a standard protocol for screening and referral to cessation services within PHS, mass media efforts, mobile phone options, and information for referrals. [Integration, Collaboration, Communication]

4. Smoke-Free Environments: Provide technical assistance and support to local government, communities, businesses, and organizations on smoke-free environments. [Collaboration, Policy Development, Community Engagement]

Objective 2.2: By 2017, increase the proportion of children, adolescents, and adults eating the recommended amount of fruits and vegetables a day by 3%.

Strategies

1. Consistent Messaging: Increase knowledge and awareness about healthful food choices by aligning all PHS nutrition education messages with the national “My Plate” message and promoting similar messages in the community. [Integration, Communication]

2. Access to Healthy Food Options: Increase access to high-quality, low-cost, healthy food options through promotion and linkage to Cal Fresh and WIC. [Integration]

3. Assess Food Environment: Conduct assessments of local food environments (e.g., Healthy Retail Campaign, CX3) to better understand access-related needs. [Evaluation]

Objective 2.3: By 2017, increase the proportion of residents engaging in physical activity by 3%.

Strategies

1. Promotional Campaign: Implement or adopt an already established physical activity promotional campaign that offers resources and tips promoting physical activity opportunities. [Communication]

2. Web Resource: Launch web resource for promoting physical activity, proper nutrition, and smoking. [Communication, Community Engagement]

3. Land Use Planning: Increase health-promoting environments by supporting local government and community land use planning-related activities. [Collaboration, Policy Development, Community Engagement]
Focus Area 3: Chronic Disease Management

Goal 3: Reduce disability and premature death by optimizing management of chronic diseases.

Why is this important?
A chronic disease is a long-lasting condition that can be controlled, but may not be cured, such as heart disease or stroke. Chronic diseases account for 7 in 10 deaths in Orange County. As a nation, 75% of our health care dollars are used to treat chronic diseases. Diabetes is a major contributing factor of heart disease and stroke, and is itself the 8th leading cause of death in Orange County. Over 7% of Orange County adults report being diagnosed with diabetes; of those, 64% reported being very confident that they could control and manage their diabetes. Of the estimated 8% of Orange County residents with heart disease, 60% reported being very confident that they could control and manage the disease. Management of conditions such as obesity, high blood pressure (hypertension), diabetes, and high cholesterol can help to decrease illness and death due to these conditions.

What are we doing now?
Public Health Services has several programs that help individuals prevent and manage their chronic disease. Programs that address tobacco use, nutrition, and physical activity all help in management of chronic diseases and are discussed under Focus Area 2: Chronic Disease Prevention. In addition to those programs, Public Health Nursing’s Adult Public Health Nursing Services (APHNS) provides assessment and case management services for adults with chronic illnesses and group education on chronic disease self-management. Public Health Nurses also work with families with children diagnosed with diabetes or asthma.

With the success of antiretroviral therapies in prolonging the lives of those living with HIV, the disease is increasingly treated as a chronic condition. Disease Control and Epidemiology provides HIV ambulatory medical care at 17th Street Testing, Treatment and Care and support services funded through HIV Planning and Coordination that help individuals living with HIV manage their disease.

Aligning with Community Goals
The goals, objectives, and strategies in this focus area align with objectives in the Older Adult Health priority area of the Orange County Health Improvement Plan. The community health improvement plan calls for reducing health complications associated with chronic diseases in older adults.
Focus Area 3: Chronic Disease Management

What are we going to do?

Objective 3.1: By 2017, reduce avoidable hospitalizations or ED visits related to hypertension, diabetes, or cardiovascular conditions by 2%.

Objective 3.2: By 2017, increase the proportion of individuals with chronic diseases that are comfortable with self-management of their chronic disease by 2%.

Strategies

1. **Case Management**: Promote and expand case management for individuals who over-utilize emergency department services. [Integration, Collaboration]

2. **Self-Management**: Promote and expand evidence-based chronic disease self-management programs for individuals with chronic diseases. [Communication, Community Engagement]

3. **Patient Education**: Provide evidenced-based patient education services that build and strengthen self-efficacy skills that foster optimal disease management and healthy behaviors. [Collaboration, Communication, Community Engagement]

4. **Early Identification/Intervention**: Provide health care providers (in clinical and non-clinical settings) with resources useful for screening, diagnostic testing, monitoring, and/or managing select chronic diseases. [Collaboration]

5. **Public Information**: Create and publish public health messages promoting appropriate management of chronic diseases. [Integration, Communication]

6. **Mobilizing Partnerships**: Strengthen collaboration, coordination, and integrated continuum of care service linkages among community providers that will encourage each patients’ active involvement in managing their chronic disease while maintaining healthy behaviors. [Collaboration, Community Engagement]
Focus Area 4: Reproductive and Sexual Health

Goal 4: No new STD or HIV infections in Orange County.

Why is this important?
In 2013, there were about 8,500 cases of chlamydia, 1,400 cases of gonorrhea, nearly 300 cases of infectious syphilis, and over 200 new cases of HIV in Orange County. Sexually transmitted diseases (STDs) can lead to severe medical complications including reproductive health complications, such as infertility and ectopic pregnancy. STDs may also increase the likelihood of transmission of HIV. HIV is a virus that harms the body’s immune system, which leads to more serious infections and causes AIDS.

What are we doing now?
Disease Control and Epidemiology includes programs that monitor, prevent, treat, and provide linkages to services for STDs and HIV. Epidemiology and Assessment and HIV Surveillance monitor trends in STDs and HIV. HIV Planning and Coordination funds HIV prevention, care, and support services through County and community providers. Clinical services, including STD testing and treatment and HIV ambulatory care, are provided at 17th Street Testing, Treatment and Care. The Public Health Lab conducts tests for PHS clinics to determine the type and strains of disease. Health Promotion provides community and provider education and training through its STD Community Intervention Program (SCIP).

What are we going to do?

Objective 4.1: By 2017, reduce three-year average gonorrhea rates by 3%.

Strategies
1. Partner Services: Provide services that help infected individuals in high-risk groups disclose exposure risks to sex partners. [Community Engagement]
2. Medical Provider Education: Educate community providers to improve screening, treatment, and referrals for at-risk individuals. [Collaboration]

Objective 4.2: By 2017, reduce the number of new HIV infections by 5%.

Strategies
1. Linkage to Care: Improve use of laboratory surveillance information to target linkage services to HIV-positive individuals who have fallen out of care in order to bring them back into care. [Integration, Collaboration]
2. Routine HIV Testing: Increase routine HIV testing in medical settings to identify and treat HIV-positive individuals. [Collaboration]
3. Partner Services: Promote and expand services that help infected individuals disclose exposure risks to their sex or needle-sharing partners, test for infection, and provide treatment and linkage services for partners testing positive for disease. [Collaboration, Community Engagement]
Focus Area 5: Food Safety

Goal 5: Improve food safety and prevent foodborne illnesses.

Why is this important?
Each year, the Orange County Health Care Agency receives 800-1,000 reports of foodborne illness, with a resulting 20-40 foodborne outbreaks. Foodborne illnesses can result from exposure to contaminated food prepared at home or at a restaurant or market. Many foodborne illnesses can be prevented with proper food handling and preparation.

What are we doing now?
Various programs within Public Health Services are involved in the prevention, reporting, and investigation of foodborne illnesses. Environmental Health operates a Foodborne Illness Hotline, which takes calls from individuals who believe they have a foodborne illness. Epidemiology and Assessment within the Disease Control and Epidemiology Division receives reports of reportable diseases that are foodborne and, when appropriate, works with Environmental Health to conduct investigations to determine the source and risk of the outbreak. The Public Health Laboratory provides clinical testing to help to determine specific pathogens causing disease and whether individual illnesses may be related. Environmental Health works with restaurants by providing education and conducting inspections to ensure that staff are adhering to health and safety codes regarding food handling. When appropriate, Public Health Services also alerts the public to inform them about possible exposures to a foodborne illnesses.

Addressing Foodborne Illnesses through Quality Improvement

In 2013-14, Public Health Services engaged in two quality improvement projects related to foodborne illness investigations:

One project focused on decreasing the number of days for foodborne illness investigations. The project identified bottlenecks in the case investigation process and explored changes in staffing structures to improve work flow. As a result of this project, Public Health Services has streamlined the process to complete case investigations on enteric illnesses (generally due to food) where the patient can be contacted.

The second project focused on improving communication in the conduct of foodborne illness investigations. The project brought together key stakeholders and decision makers to identify their needs during an investigation. The team is now developing a protocol for foodborne illness outbreak communications.

Lead: Denise Fennessy, Environmental Health
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- Jenafer Forester
- Elisabeth Gonzalez
- Paul Hannah
- Christine Lane
- Karen Newe
- Randy Styner
- Julia Wolfe
- Matthew Zahn
Focus Area 5: Food Safety

What are we going to do?

Objective 5.1: By 2017, reduce the rate of foodborne illnesses cases in Orange County by 5%.

Strategies

1. **Food Worker Education**: Improve education for food workers to stay home when ill through written and web-based materials. **[Communication]**
2. **Restaurant Education Programs**: Implement restaurant education programs that address education about food handling and staying home when ill. **[Collaboration]**
3. **State Certification Curriculum**: Ensure that the subject of illness notification and prevention is addressed in the food handler State certification curriculum. **[Collaboration, Policy Development]**
4. **Education in Schools**: Work with Department of Education to provide safe food handling information to children. **[Collaboration, Communication]**
5. **Community Partnerships**: Coordinate with supermarkets and cities to provide education about food handling. **[Communication, Community Engagement]**
6. **HCA Partnerships**: Partner with Health Care Agency programs to distribute safe food handling information. **[Integration, Collaboration, Communication]**

Objective 5.2: By 2017, reduce the number of restaurants and markets found to have violations related to improper hand washing during inspections by 10%.

Strategies

1. **Educational Materials in Food Facilities**: Develop and distribute improved educational materials on proper hand washing to food facilities consistent with the FDA’s Oral Culture Learner Project. **[Communication]**
2. **Reinforced Messaging During Inspections**: Emphasize proper hand washing with workers during inspections. **[Communication, Community Engagement]**

Objective 5.3: By 2017, reduce by 50% the number of days required to complete case investigations on all cases of enteric illnesses where a patient can be contacted. (See description of Quality Improvement Project One on previous page)

Strategy

**Efficient Investigations**: Using quality improvement processes, identify and address delays and obstacles in current processes. Align existing resources of various divisions working on foodborne illness investigations within Public Health Services. **[Integration, Collaboration]**
Acknowledgements

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Finally, we acknowledge and appreciate the participation of Public Health Services staff who assisted in this process through meetings, staff forums, and surveys.
# Reference Documents

The following are reference documents that are helpful in providing context to this plan.

## Orange County Assessments and Plans

<table>
<thead>
<tr>
<th>Reference DOCUMENT</th>
<th>Description</th>
<th>Available at</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Orange County Health Improvement Plan</strong></td>
<td>Orange County's community health assessment and community health improvement plan.</td>
<td><a href="http://ochealthinfo.com/about/admin/pubs/OChcalthimprovementplan">http://ochealthinfo.com/about/admin/pubs/OChcalthimprovementplan</a></td>
</tr>
</tbody>
</table>

## State and National Resources

<table>
<thead>
<tr>
<th>Reference DOCUMENT</th>
<th>Description</th>
<th>Available at</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Let’s Get Healthy California</strong></td>
<td>10-year plan for improving the health of Californians.</td>
<td><a href="http://www.chhs.ca.gov/pages/LGHCTF.aspx">http://www.chhs.ca.gov/pages/LGHCTF.aspx</a></td>
</tr>
<tr>
<td><strong>The CDC’s Winnable Battles</strong></td>
<td>The Centers for Disease Control and Prevention’s public health priorities with large-scale impact on health and with known effective strategies to address them.</td>
<td><a href="http://www.cdc.gov/winnablebattles/">http://www.cdc.gov/winnablebattles/</a></td>
</tr>
<tr>
<td><strong>The Guide to Community Preventive Services</strong></td>
<td>A website that houses the official collection of all Community Preventive Services Task Force findings and reviews for interventions aimed at improving community health.</td>
<td><a href="http://www.thecommunityguide.org">http://www.thecommunityguide.org</a></td>
</tr>
</tbody>
</table>
Orange County Health Care Agency
Public Health Services
Strategic Plan
2014-2016

For more information, contact:
Jane Chai, MPH
Public Health Projects Manager
Jchai@ochca.com
(714) 796-0404
Purpose, Vision, and Principles

**Purpose:** The purpose of the Public Health Quality Improvement (QI) Plan is to provide context and framework for QI activities within Public Health Services.

**Shared Vision:** Public Health Services (PHS) is committed to a culture of excellence in the provision of services. Applying the principles of continuous QI will help PHS provide quality services to the community and our internal partners. This involves integration of QI into staff training, planning, processes, services, and activities.

The following are the principles of QI that guide our efforts:

- **Customer Focus:** Success is achieved through meeting or exceeding the needs and expectations of internal and external customers.
- **Continuous Improvement:** Improvement is a continuous process to achieve measurable improvements.
- **Data Informed Practice:** Successful QI processes use data to inform practice and measure results.
- **Prevention and Problem Solving:** Quality improvement focuses on improvement through designing good processes that prevent problems and achieve excellent outcomes.
- **Teamwork:** Quality improvement is most powerful when people who are impacted by the improvement opportunity are involved and solve problems together.

Overview of Current Quality Improvement Program

**Capacity Building:** 2013 is the first year of a formal QI Program and QI Committee for Public Health Services. To ensure capacity for this, PHS hired a Public Health Projects Coordinator in late 2012, who acts as the QI Coordinator and the Public Health Accreditation Coordinator. The QI Coordinator, Deputy Health Officer, and Public Health Chief of Operations acted as the initial group responsible for coordinating QI efforts. PHS also utilized an MPH candidate from California State University at Fullerton to assist with launching the QI program. The QI Coordinator was hired with previous training on QI principles and tools. The Deputy Health Officer, who also serves as the Clinical Quality Assurance Coordinator and has a seat on the QI Committee, attended an online course through the University of Minnesota on QI during the 2012 fall semester. In late 2012, the Health Care Agency received grant funding from the National Association of City and County Health Officials (NACCHO) to launch the Public Health Quality Academy and establish a QI Plan.

**2013 Trainings:** One of the main goals for QI in 2013 was to ensure that the roll out of the QI program would generate enthusiasm and support for QI tools and a culture of QI. The Quality Academy was designed to provide initial training on QI to a select cohort of Public Health employees so that they could apply QI tools and diffuse the culture and information to other PHS staff. The Quality Academy consisted of 45 Health Care Agency employees from all divisions within Public Health Services including Disease Control and Epidemiology, Environmental Health, Family Health, Health Promotion, Public Health Laboratory, and Public Health Nursing, as well as representatives from Contract Development and Management and Program Support, which provides contracting and fiscal support for PHS programs.

The trainings included an orientation and two-day training in March, a check-in meeting in May, another two-day training in June, and a follow-up meeting in October. QI training topics included QI principles, writing Aim
Statements, QI tools (e.g. flow charts, fishbone diagrams), and Plan-Do-Study-Act (PDSA) Cycles. The trainings were intentionally designed to be interactive, fun, and engaging to reinforce the principles of teamwork and continuous improvement. To ensure that the learning process was based on practical experience, participants worked in teams on a quality improvement project as part of the training experience. Projects were from various PHS and support programs and ranged from improving direct client services to improving administrative processes.

A second component of the Quality Academy was a train-the-trainer training in June. At this training, participants learned about adult learning theory, facilitating trainings, and how to diffuse information about QI. Each participant had a goal to conduct at least two QI trainings to other PHS staff who did not attend the Quality Academy.

In addition to the Quality Academy, Public Health Services engaged in other QI trainings that would ensure a culture of QI at all levels. Table 1 below provides a summary of training activities that occurred in 2013:

<table>
<thead>
<tr>
<th>Training</th>
<th>Staff Trained</th>
<th>Training Date(s)</th>
<th>Topics Covered</th>
<th>Tracking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to QI</td>
<td>PHS Division and Program Managers</td>
<td>January 14, 2013</td>
<td>• QI vs. QA</td>
<td>Sign-in sheets</td>
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<td>• PDSA Cycle</td>
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<td></td>
<td></td>
<td></td>
<td>• PHS examples of QI</td>
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<td></td>
<td></td>
<td></td>
<td>• Sign-in sheets</td>
<td></td>
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<tr>
<td>PHS QI for Managers</td>
<td>PHS Division and Program Managers</td>
<td>March 29, 2013</td>
<td>• Overview of Quality Academy projects</td>
<td>Sign-in sheets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• QI principles</td>
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<td>• Role of leadership in QI</td>
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<td>• Sign-in sheets</td>
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<td>• QI Tools</td>
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<td>• PDSA Cycle</td>
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<td>• Train-the-Trainer</td>
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2013 QI Projects: Prior to the launch of the Quality Academy, PHS managers determined a preliminary list of projects that they believed would provide a good learning experience and contribute to needed improvements within programs. The projects reflected a range of improvement opportunities and were aligned with greater strategic priorities for Public Health; projects ranged from clinic work flow, to online education, to communication bottle necks. As part of their experience, participants of the Quality Academy worked on one of seven QI projects. Each team was composed of participants who worked within and outside the program area of the project. For instance, a team working on improving utilization of an online WIC nutrition education, a program within the Family Health division, included employees from Health Promotion, Public Health Nursing, Public Health Laboratory, Disease Control and Epidemiology, and Environmental Health. The teams agreed upon the specific improvement project prior to its first Quality Academy training in March. During the course of the training, participants

Project team working on increasing utilization of online WIC nutrition education

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crafted Aim statements, utilized QI tools to determine root cause of problems, gathered input from customers, measured data, and, for some, evaluated their intervention within the context of these projects. At their latest meeting in October, Quality Academy teams provided updates of their projects to other participants. Teams who have completed projects will be creating storyboards to share their QI stories to the Public Health Executive Team in early 2014. Graduates of the Quality Academy now act as Quality Champions and assist in QI Projects where a team member from an outside program may be needed.

The following is a summary of the QI projects and the related programs. See Appendix A for more detailed information about each project.

<table>
<thead>
<tr>
<th>Project Goal</th>
<th>Division/Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Increasing utilization of online Women, Infant, and Children (WIC) nutrition education program</td>
<td>Family Health / WIC Program</td>
</tr>
<tr>
<td>2 Increasing efficiency and quality of care at the Adult Dental Clinic</td>
<td>Family Health / Dental Clinic</td>
</tr>
<tr>
<td>3 Increasing efficiency of enteric disease investigation process</td>
<td>Disease Control and Epidemiology / Epidemiology and Assessment, Public Health Nursing / Community Nursing</td>
</tr>
<tr>
<td>4 Improving communication in the conduct of foodborne illness investigations</td>
<td>Disease Control and Epidemiology / Epidemiology and Assessment, Environmental Health, Public Health Lab</td>
</tr>
<tr>
<td>5 Improving integration of case management and electronic record keeping system (Virtual Case Management System)</td>
<td>Public Health Nursing</td>
</tr>
<tr>
<td>6 Improving the contract procurement process</td>
<td>Contract Development and Management / Procurement Unit</td>
</tr>
<tr>
<td>7 Improving the budgeting process</td>
<td>Program Support</td>
</tr>
</tbody>
</table>

**QI Committee**

The QI Program is guided by the QI Committee. The Public Health QI Committee was established in late 2013. The committee is composed of up to 13 persons who are dedicated to QI and come from a variety of backgrounds. The Public Health Projects Manager acts as the QI Coordinator and chairs QI Committee meetings. To ensure that the committee is composed of a diverse group of individuals with a range of experiences, the committee includes members from the following backgrounds:

1. QI Coordinator (Chair)
2. PHS Chief of Operations (ex-officio)
3. Clinical Quality Assurance Coordinator
4. Management/supervisory-level staff from each division of Public Health Services – 1 seat per division designated by the Division Manager. Each division shall have an alternate member in case the designated member is unavailable.
   - Disease Control and Epidemiology
   - Environmental Health
   - Family Health
   - Health Promotion
   - Public Health Laboratory
   - Public Health Nursing
5. Direct services staff (e.g. clinicians, case managers) – 2 seats selected through application process
6. Support staff (e.g. office support, administrative support) – 2 seats selected through application process
The following are the tasks of the QI committee:

1. Develop, monitor, and revise annual QI Plan
2. Provide technical assistance and support for QI activities occurring at the program level
3. Identify QI training topics and assist in implementing trainings
4. Review, develop, and revise QI materials
5. Identify resources and best practices related to QI
6. Communicate information about QI activities throughout levels of PHS and Health Care Agency management

In order to complete these tasks, QI Committee members have the following responsibilities:

1. Participate in scheduled meetings and trainings. Meetings will occur at least quarterly
2. Commit to at least 2 hours a month for QI Committee-related activities outside of quarterly meetings
3. Assist with 2 QI projects or trainings a year
4. Communicate information about the activities of the QI committee to their program/division
5. Develop a working knowledge of QI best practices

QI Model

Public Health Services has chosen the Model for Improvement as its model for QI. The Model for Improvement is based on the sequential building of knowledge and is centered on three questions that are fundamental to all improvement activities (What are we trying to accomplish? How will we know that a change is an improvement? What changes can we make that will result in improvement?) and the Plan-Do-Study-Act (PDSA) cycle. Multiple PDSA cycles that can adapt changes to local settings allow for knowledge to be built while changes are being tested, thus reducing risk.
Building a Culture of QI: Communication and Coordination

The QI Committee is composed of leadership, management, frontline, and support staff from throughout Public Health Services. These members are responsible for reporting QI activities and needs conducted at the program level to the committee. QI Committee members should support and/or advise in QI projects conducted at the program level and share the progress of those projects with the committee. The QI Committee will communicate its progress to staff through regular reports at staff meetings at the program level. The PHS Director will send out regular emails about the progress and activities related to QI to PHS staff. Specific QI project progress will be shared through story boards at Executive Team meetings, Public Health Week, and other venues. Updates and training opportunities will be posted on the Public Health Services Quality Improvement Webpage available on the Health Care Agency Intranet at http://intranet/phs/training/qi. QI initiatives will be published and shared with agency staff through articles in the Health Care Agency “What’s Up” newsletter. Highlights of the QI Committee meetings will be available for review.

Training is a key element of the QI Program. To ensure coordination of QI trainings with other PHS training efforts, the QI Program also works closely with the Public Health Professional Development (PHPD) Committee. The PHPD Committee is responsible for coordinating trainings that ensure a competent PHS workforce. The Public Health Projects Manager acts as both the QI Coordinator, as well as the PHPD Coordinator. Updates on training activities of the QI Committee are standing items on the PHPD Committee agenda. This ensures that PHPD Committee is aware of and can coordinate the various training activities conducted throughout Public Health Services.

Training

With the completion of the Quality Academy, 40 of the over 700 PHS staff have received intensive training on QI principles and tools. In 2014, PHS intends on diffusing this information to the remainder of PHS staff. PHS staff have already begun to be trained by Quality Academy graduates. Each graduate is responsible for conducting at least two trainings by March 2014. The QI Coordinator and Clinical Quality Assurance Coordinator have also conducted QI trainings to various PHS programs. In addition, online trainings on QI principles and tools are available to all staff through the Public Health Services Quality Improvement Webpage on the Health Care Agency Intranet at http://intranet/phs/training/qi. Table 2 below provides a summary of QI trainings and staff to be trained each year.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Training Topics</th>
<th>Training Method</th>
<th>Responsible Party</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>All employees</td>
<td>• QI principles</td>
<td>• In person training</td>
<td>• QI Committee</td>
<td>One time</td>
</tr>
<tr>
<td></td>
<td>• Model for Improvement/ PDSA Cycle</td>
<td>• Online training</td>
<td>• Quality Academy graduates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spectrum of QI</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Additional Training Topics</td>
<td></td>
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<tr>
<td>PHS Division and Program Managers</td>
<td>• Performance measurement</td>
<td>• In person training</td>
<td>• QI Committee</td>
<td>One time</td>
</tr>
<tr>
<td></td>
<td>• Role of leadership in QI</td>
<td>• Online training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors</td>
<td>• QI Tools</td>
<td>• In person training</td>
<td>• QI Committee</td>
<td>One time</td>
</tr>
<tr>
<td>QI Committee</td>
<td>• QI Tools</td>
<td>• In person training</td>
<td>• QI Coordinator and Clinical Quality Assurance Coordinator</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>• Coaching QI projects</td>
<td>• Online trainings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Performance measurement</td>
<td>• Reading materials</td>
<td></td>
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</tr>
<tr>
<td>Employees participating in QI Projects</td>
<td>• QI Tools</td>
<td>• In person training</td>
<td>• QI Committee</td>
<td>As needed</td>
</tr>
<tr>
<td></td>
<td>• Program-specific QI trainings</td>
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</tbody>
</table>
The goal of these trainings is to encourage and support a culture of QI throughout PHS, with all staff aware of basic QI principles and the Model for Improvement/PDSA cycle. All staff should also be aware of the spectrum of QI activities, such that staff feel confident in applying QI principles to individual-level activities in addition to larger, more formal QI projects. Supervisory and managerial staff will receive additional training to help in coaching staff through QI projects and providing leadership in QI processes.

QI Projects

**Spectrum of QI:** Public Health Services hopes to encourage a culture of continuous QI that will generate interest in conducting QI Projects on a range of levels. Though not all QI projects will be included in the formal PHS QI plan, all QI efforts are integral in creating and supporting a culture of improvement throughout PHS and meeting PHS goals. Staff and programs should be encouraged to apply QI principles to conduct smaller-scale QI projects (“qi”) that require minimal resources. These projects may be tied to individual employee or program objectives that improve processes and performance. With the adoption of QI principles, PHS will also conduct larger-scale projects tied to PHS performance measures. Some of these projects will be selected to be included as part of the formal QI Plan, with efforts that directly impact the PHS Strategic Plan.

**Alignment with Strategic Plan:** Public Health Services will be establishing its first Strategic Plan in 2014. Prior to this, PHS has tracked performance measures using Balanced Scorecard as part of the Health Care Agency Business Plan. Once the Strategic Plan is firmly established, the PHS QI Plan will be closely tied to the PHS Strategic Plan. The PHS Strategic Plan includes specific goals and objectives to track performance on key performance measures within PHS programs. The Strategic Plan will include general goals for PHS and also goals and objectives for each division. The QI Plan will eventually consider these performance measures in determining QI projects for the year. The PHS Strategic Plan will be informed by the Health Care Agency Business Plan and the Orange County Health Improvement Plan. Health Care Agency senior leadership sets direction for the Business Plan, while the Orange County Health Improvement Plan is a collaborative plan created by community stakeholders in partnership with the Health Care Agency. Both plans provide a framework to help ensure that the PHS Strategic Plan and QI Plan are aligned with the Health Care Agency and the community’s goals and priorities.

The following graphic shows how Orange County’s QI Plan will be aligned with the PHS Strategic Plan and the Orange County Health Improvement Plan and Health Care Agency Business Plan.
Selection Process: The following is the selection process for QI projects:

1. Programs will review performance measures and consider best practices, historical performance data, and other national standards to determine potential QI projects for the year.
2. Potential projects will be reviewed by the QI Committee, which has representation from management of all PHS divisions.
3. The final determination will be made jointly by the division and the QI Committee.

Support for QI Projects: The QI Committee provides support for selected QI projects identified and implemented at the program level. QI Committee members and/or Quality Academy graduates may assist in QI projects outside of their program areas to increase the diversity of perspectives for each QI project. Information about progress of QI projects will be reported by QI Committee members.

Quality Goals and Objectives

Goal 1: Public Health staff will promote a culture of quality improvement.

Objective:

• Objective 1.1: PHS divisions will show improved scores within the “Effective Leadership: Empowerment” domain of the Employee Satisfaction Survey.
• Objective 1.1: PHS divisions will show improved scores within the “Teamwork” domain of the Employee Satisfaction Survey.

Supporting Activities

• All staff are valued as experts in their areas and will be provided opportunities to learn about and engage in QI activities.
• QI Committee will highlight QI efforts and successes through newsletters, website activities, and emails from the Director.

Goal 2: All Public Health staff will be familiar with QI principles and the Model for Improvement/PDSA Cycle.

Objective:

• Objective 2.1: By April 2014, 40% of PHS staff will indicate being “familiar” or “very familiar” when asked about QI principles in the PHS Workforce Development Survey.
• Objective 2.2: By April 2014, 30% of PHS staff will indicate being “familiar” or “very familiar” when asked about the Model for Improvement/PDSA Cycle in the PHS Workforce Development Survey.
• Objective 2.3: By December 2014, 75% of PHS supervisors who attend trainings will indicate being “familiar” or “very familiar” when asked about QI tools based on evaluation of QI trainings.

Supporting Activities

• Each Quality Academy graduate will have conducted at least two QI trainings by March 2014.
• The QI Committee will coordinate QI trainings on QI for PHS supervisors by December 2014.
• QI Committee will share information about QI principles, Model for Improvement/PDSA Cycle, and QI tools through newsletters and website activities.
Goal 3: All Public Health divisions will be engaged in quality improvement efforts.

Objectives

• Objective 3.1: By August 2014, all PHS divisions will have initiated at least one QI project.
• Objective 3.2: By December 2014, 50% of QI projects will have completed one PDSA cycle.

Supporting Activities

• The QI Committee will assist in selecting QI projects.
• The QI Committee and Quality Academy graduates will provide support to selected QI projects.

Contact

The Public Health Projects manager serves as the QI Coordinator and is the primary contact for QI activities, including the maintenance of this plan. For questions about this plan, please contact:

Jane Chai, MPH
Public Health Projects Manager
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Email: Jchai@ochca.com
Vision, Mission, Values, and Goals


Mission: To develop and maintain a competent Public Health workforce by providing and supporting quality learning opportunities that support Public Health’s strategic goal of providing quality services to Orange County’s diverse communities.

Core Values:
- We value the diverse backgrounds and skills of our workforce
- We strive for trainings that meet the different learning needs and styles of our workforce
- We emphasize best practices in learning opportunities
- We support a culture of continuous professional development

Goals:
1. Conduct periodic educational needs assessment of the Public Health workforce
2. Provide and facilitate learning opportunities for professional development and advancement
3. Promote access to and collaborations with academic institutions

Professional Development Program

The Public Health Professional Development (PHPD) Program is guided by the Public Health Professional Development Committee. The committee is represented by managers and staff within Public Health Services as well as personnel from outside Public Health Services who offer trainings and assist with continuing education for ongoing licensing and practice. The Public Health Projects Manager serves as the PHPD Coordinator. The PHPD Committee is responsible for regularly assessing the training needs of the Public Health Services and developing a plan to prioritize and address identified needs.

Training needs of the Public Health Services workforce are based on the nationally adopted Core Competencies. The Core Competencies for Public Health Professionals (Core Competencies) are a consensus set of competencies for the broad practice of public health in any setting. Developed by the Council on Linkages, the Core Competencies reflect skills that may be desirable for professionals who deliver the Essential Public Health Services. The Core Competencies exist as a foundation for public health practice and offer a starting point for public health professionals and organizations working to better understand and meet workforce development needs. The Core Competencies are divided into eight domains, or topical areas of knowledge and skills:

1. Analytic/Assessment Skills
2. Policy Development/Program Planning Skills
3. Communication Skills
4. Cultural Competency Skills
5. Community Dimensions of Practice Skills
6. Public Health Sciences Skills
7. Financial Planning and Management Skills
8. Leadership and Systems Thinking Skills

Once public health training needs have been identified, the PHPD Committee works with in-house experts as well as trainers from external programs. Where possible, trainings offer continuing education
credits including CEs, CHES, and CMEs. Trainings are offered to meet the needs of the workforce and include onsite trainings as well as online trainings and webinars when appropriate and available.

**Required Trainings:** Training needs and activities outside of Public Health Core Competencies but required by agency, state, or federal laws are generally coordinated by other departments within County of Orange or Orange County Health Care Agency. See Table 1 on page 4 for detailed information.

**Continuing Education:** Various public health-related disciplines require continuing education for ongoing licensing and practice. Licensures held by staff, and their associated continuing education requirements are shown in the table below:

<table>
<thead>
<tr>
<th>Discipline</th>
<th>California Requirements (as of Nov 2013)</th>
<th>Governing Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurse (RN)</td>
<td>30 hours of Continuing Education (CE) every 2 years</td>
<td>California Board of Registered Nursing</td>
</tr>
<tr>
<td>Certified Health Education</td>
<td>75 Continuing Education Contact Hours (CECH) every 5 years</td>
<td>National Commission for Health Education Credentialing</td>
</tr>
<tr>
<td>Specialist (CHES)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>50 hours of Continuing Medical Education (CME) every 2 years</td>
<td>Medical Board of California</td>
</tr>
<tr>
<td>Marriage and Family</td>
<td>36 hours of Continuing Education (CE) every 2 years</td>
<td>California Board of Behavioral Sciences</td>
</tr>
<tr>
<td>Therapist (MFT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Clinical Social Worker</td>
<td>36 hours of Continuing Education (CE) every 2 years</td>
<td>California Board of Behavioral Sciences</td>
</tr>
<tr>
<td>(LCSW)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Vocational Nurses (LVN)</td>
<td>30 hours of Continuing Education (CE) courses must be completed within 2 years prior to the date of renewal of license</td>
<td>California Board of Vocational Nursing and Psychiatric Technicians</td>
</tr>
</tbody>
</table>

**Collaborations:** Collaborations with local training partners include:

- **California-Nevada Public Health Training Center (CaNvPHTC):** Public Health Services collaborates closely with the CaNvPHTC, a consortium of public health schools and programs in California and Nevada that engages in training activities designed to strengthen the core competencies and capabilities of the public health workforce. CaNvPHTC offers in-person and online trainings for Public Health Services staff.

- **California State University at Fullerton (CSUF):** Public Health Services has several collaborative projects to develop a competent public health workforce with CSUF. In 2012, Public Health Services collaborated with CSUF Department of Public Health to offer the Certificate in Public Health program for Public Health Services staff. The Certificate program is a 12-unit, four-course program that includes Master’s level courses on the issues of public health, health promotion and disease prevention, principles of epidemiology, and advanced environmental health, which can be applied towards a 42-unit Master of Public Health degree at CSUF for students who are accepted into the program. The program is now offered every two years. Public Health Services also provides opportunities for internships and field work for undergraduate and Master’s candidates in public health at CSUF throughout its divisions. When possible and appropriate, Public Health Services staff also provide instruction at CSUF including holding faculty positions or guest lectures.
Assessment and Planning

The PHPD Committee conducts a biennial Public Health Workforce Development Survey to assess the needs of the Public Health Services workforce. The survey assesses interest in participating in trainings on each Core Competency as well as additional topical areas that may be contemporary. The last survey was conducted in March 2012; results of the survey highlighted Public Health Service’s staff’s desires for increased training in Communication Skills, Cultural Competency Skills, Community Dimensions of Practice Skills, and Public Health Sciences Skills. The PHPD Committee will conduct the next Public Health Workforce Development Survey in spring 2014.

The Public Health Professional Training and Staff Development Plan is the working plan outlining key assessment findings and training priorities and schedules for each year. The plan is timed with the school year, from fall through summer. The PHPD Committee’s 2013/14 Training Plan includes the following training activities based on identified areas of need:

1. **Quality Improvement and Quality Assurance Strategies (Core Competency 2.3):** The PHPD Committee will support efforts by the Public Health Services Quality Improvement (QI) Committee which has goals to increase familiarity with QI principles and the Model for Improvement/PDSA Cycle by April 2014.

2. **Communications Skills and Developing Culturally Appropriate Health Materials/Programs (Core Competency 3 and 4.1):** The PHPD Committee will improve communications skills of staff by providing hands-on training courses that focus on making materials more client friendly and presentations more engaging. This is joint effort with the Public Health Services Health Equity Committee.

3. **Developing Culturally Appropriate Health Materials/Programs (Core Competency 4.1):** The PHPD Committee will support trainings to improve interpretation and translation skills among Public Health Services staff who interpret or translate as part of their job duties.

4. **Health Disparity (Core Competency 4.2):** The PHPD Committee will support training efforts by the Health Equity Committee including trainings the social determinants of health to all Public Health Services divisions and the “Think O De Mayo” series exploring social, economic, and cultural impacts of health in April-June 2014.

5. **Fundamentals of Public Health:** The PHPD Committee will increase understanding of the fundamentals of Public Health by creating and distributing a one-page document focusing on the 10 Essential Services of Public Health and the functions of Public Health Services divisions.

See Appendix A for the current year Public Health Professional Training and Staff Development Plan.
Communication and Coordination

Communication about the PHPD Program occurs through regular emails from the PHPD Coordinator as well as the PHS Director. Correspondences highlight training opportunities and provide updates about PHPD Program activities when applicable and appropriate. The PHPD Program also shares information through its intranet website (http://intranet/phs/training). This intranet website allows Public Health Services employees to get information about upcoming trainings and download presentations from past trainings. The website also includes links to webinars and various resources for online trainings and webinars such as the California-Nevada Public Health Training Center.

A comprehensive PHPD Program should include training and support for principles of quality improvement and health equity, two key concepts of the Public Health Core Competencies. To ensure coordination of these trainings, the PHPD Program also works closely with the Public Health Services Quality Improvement (QI) Committee and Health Equity Committee. The Public Health Projects Manager acts as both the PHPD Coordinator as well as the QI Coordinator. The chair of the Public Health Services Health Equity Committee sits on the PHPD Committee. Updates on training activities of the QI Committee and Health Equity Committee are standing items on the PHPD Committee agenda. This ensures that the PHPD Committee is aware of and can coordinate the various training activities conducted throughout Public Health Services.

Required Trainings

The PHPD Program focuses on developing skills that relate to the Public Health Core Competencies. The PHPD Committee’s plan to address those needs for this year is outlined in the Assessment and Planning section and Appendix A. In addition to these training needs, there are required trainings coordinated by various programs within the County of Orange. Table 1 below provides a summary of required trainings for Public Health Services staff including the programs responsible for conducting the trainings, the schedule of the trainings, topics covered, and the method for evaluation and tracking completion.

<table>
<thead>
<tr>
<th>Required Training</th>
<th>Responsible Program</th>
<th>Training Schedule</th>
<th>Topics Covered</th>
<th>Evaluation and Tracking</th>
</tr>
</thead>
</table>
| Compliance Training | Health Care Agency, Office of Compliance | All employees complete a training upon hire and annually thereafter | • HCA Compliance Program  
• Code of Conduct Policies and procedures  
• Reporting  
• Prevention of fraud, waste, and abuse  
• HIPAA Privacy | • Office of Compliance maintains list of staff who completed online training  
• Signed certificate in staff file after passing quiz |
| Safety Training | Health Care Agency, Safety Office | All employees complete a training upon hire and annually thereafter | • Injury and Illness Prevention Program  
• Hazard Communication  
• Emergency Action Plan  
• Fire Prevention Plan  
• Additional topics | • Tracked through Training Partner  
• Signed certificate in staff file after passing quiz |
<table>
<thead>
<tr>
<th>Required Training</th>
<th>Responsible Program</th>
<th>Training Schedule</th>
<th>Topics Covered</th>
<th>Evaluation and Tracking</th>
</tr>
</thead>
</table>
| Defensive Driving                       | Health Care Agency, Safety Office                         | All employees who drive as part of their job assignment complete a training every two years | • Defensive driving techniques  
• HCA accident reporting policies                                                   | • Tracked through Training Partner  
• Signed certificate in staff file after passing quiz                                   |
| Supervisor Safety Refresher             | Health Care Agency, Safety Office                         | All supervisors and managers complete a training every two years                  | • Injury and illness reporting  
• Supervisor safety responsibilities                                                  | • Tracked through Training Partner  
• Signed certificate in staff file after passing quiz                                   |
| Bloodborne Pathogens Training           | Health Care Agency, Safety Office                         | All employees with job duties that may put them at risk for occupational exposure to Bloodborne Pathogens or other potentially infectious material complete training annually | • Modes of Transmission  
• Risk of Transmission  
• Universal Precautions  
• Safe Equipment and Practices  
• Procedure for Exposures                                                               | • Tracked through sign-in sheets and Hep B declinations                                 |
| Aerosol Transmissible Diseases (ATD)    | Health Care Agency, Safety Office                         | All employees with job duties that may put them at risk for Aerosol Transmissible Diseases complete training annually | • Fit testing for N95 masks and other respirators  
• Personal Protective Equipment  
• Practices to limit exposures                                                             | • Tracked through sign-in sheets and Health questionnaire or declinations               |
| Respiratory Protection including Fit testing | Health Care Agency, Safety Office                         |                                                                                  |                                                                                 |                                                                                          |
| Chemical Hygiene                        | Health Care Agency, Safety Office                         | All employees who may be potentially exposed to seriously harmful chemicals complete training annually | • Practices to limit exposures to chemicals  
• Personal Protective Equipment  
• Lab Chemical Hygiene Plan                                                               | • Tracked through sign-in sheets  
• Quiz                                                                                   |
| Equal Employment Opportunity and Anti-Harassment Training | County of Orange, Human Resources Services               | All supervisors and managers must complete a training upon hire and every two years | • Applicable laws  
• Sexual harassment  
• Role of the manager in an investigation  
• Best practices                                                                       | • Tracked through sign-in sheets  
• Signed statement in staff file                                                          |
| Emergency Response                      | Health Care Agency, Medical Services, Health Disaster Management | All employees complete training upon hire                                           | • Introduction to Incident Command System  
• Introduction to National Incident Management System (NIMS)                         | • Health Disaster Management maintains list of staff  
• Signed certificate in staff file after passing quiz                                    |
The Public Health Accreditation Board has indicated trainings that should be documented as having been conducted as part of the standard for Public Health Accreditation. Table 2 below shows information about those trainings.

<table>
<thead>
<tr>
<th>Accreditation Standard and Guidance</th>
<th>Examples of Trainings Meeting Standard</th>
</tr>
</thead>
</table>
| **Standard 6.2.1**  
The health department must document that staff are trained in laws that support public health interventions and practice. Staff must be trained on the specific aspects of the law for which they are programmatically responsible. | Individual programs are trained in laws that support public health interventions and practice that relate to their job. |
| **Standard 8.2.2**  
The health department must provide two examples of its training or development programs for leadership and/or management staff. | Various trainings are available throughout the year to all staff through HCA’s Leadership Development Program. Training topics include conflict resolution, effective communication, team building, creating an Employee Development Plan, budgets and financial overview, and strategic planning. |
| **Standard 9.1.5**  
The health department must documents its staff development in the area of performance management. | Staff development on the development of performance measures to monitor and evaluate Public Health Services outcomes is provided for teams and individuals directly working on quality improvement projects. |
| **Standard 11.1.2**  
The health department must provide evidence of staff training on confidentiality policies, including training content and names of those who received training. | The Office of Compliance conducts an annual compliance training, which includes training on confidentiality and Health Insurance Portability and Accountability Act (HIPAA) practices. |
| **Standard 11.1.3**  
The health department must provide one example of staff training on social, cultural, and/or linguistic factors. Documentation must show the content of the training and record of who attended. | The Health Equity Committee provides training and staff development related to social determinants of health. The “Think-o de Mayo” series includes lunchtime workshops featuring the PBS documentary series “Unnatural Causes,” which discusses how social, cultural, and economic factors impact health. |

In 2012, Public Health Services and the PHPD Program coordinated 21 trainings, with an average of 33 attendees for each course. Where possible, trainings offer continuing education units. A complete list of trainings for Public Health Services staff is provided in Appendix B. The following are a summary of key trainings conducted in 2012/13:

1) **Public Health Communication Certificate Program**: Eight-series program conducted by CaNvPHTC that included in-person and online trainings on topics such as foundational theories of communication, social media social marketing, health literacy, and interpersonal communication.

2) **Public Health Fundamentals series**: In-person training series conducted by CaNvPHTC that focused on fundamentals of public health theory, program planning, program evaluation, and public health theory.
3) **Politics of Public Health**: In-person trainings conducted by CaNvPHTC that informed public health professionals about the politics of public health and implementation of the Affordable Care Act.

4) **Public Health Quality Academy**: Two-part training series in which a cohort of 45 Health Care Agency employees mostly from Public Health Services learned about quality improvement concepts and tools and engaged in quality improvement projects.

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**Contact**

The Public Health Projects manager serves as the PHPD Coordinator and is the primary contact for training and workforce development initiatives, including the maintenance of this plan. For questions about this plan, please contact:

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Telephone: (714) 796-0404
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