

# STATE OF COLORADO

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## **Colorado Department of Public Health and Environment**

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Strategic Plan 2011-2016

## ***Introduction***

The Colorado Department of Public Health and Environment is one of 16 cabinet-level departments whose executive directors are appointed by the Governor. The mission of the Colorado Department of Public Health and Environment is to protect and preserve the health and environment of the people of Colorado. Dr. Chris Urbina serves as executive director and chief medical officer of the department.

The department is organized into 11 divisions that fall under three broad groupings: health programs, environmental programs and administration.

The department also serves as staff to five state-appointed boards or commissions: Colorado Board of Health, Air Quality Control Commission, Water Quality Control Commission, Solid and Hazardous Waste Commission, and the Water and Waste Water Facility Operators Certification Board.

The department serves the people of Colorado by providing high-quality, cost-effective public health and environmental protection services. The department focuses on evidence-based best practices in the public health and environmental fields and plays a critical role in educating our citizens so they can make informed choices. In addition to maintaining and enhancing our core programs, we continue to identify and respond to emerging issues that could affect Colorado's public and environmental health.

The department pursues its mission through broad-based public health and environmental protection programs, including, among other programs, working on Colorado's ten winnable battles: Clean Air, Clean Water, Infectious Disease Prevention, Injury Prevention, Mental Health and Substance Abuse, Obesity, Oral Health, Safe Food, Tobacco, and Unintended Pregnancy. The winnable battles will be discussed in more detail later in the strategic plan.

The department has a staff of approximately 1,284 employees, with the vast majority working at the department's offices in Glendale. The state Laboratory is in Lowry and there are small satellite offices in Grand Junction and Pueblo. The department receives approximately 95 percent of its \$442 million funding from fees, grants and other non-General Fund sources.

## ***Statutory Authority***

The statutory authority for the Department of Public Health and Environment is found in Title 25 of the Colorado Revised Statutes (2011).

**Overview of the Department's Strategic Plan:**

This strategic planning document summarizes the Strategic Plan for the Colorado Department of Public Health and Environment for 2011-2016. It includes the following major elements:

- \*The Mission Statement for the department
- \*The Vision for the department
- \*The Strategic Map for the department
  - Central Challenge
  - Strategic Priorities (performance based goals)
- \*Performance Measures for the department
- \*Strategies for achieving department goals

***Mission***

The mission of the Colorado Department of Public Health and Environment is to protect and improve the health of Colorado's people and the quality of its environment.

***Vision***

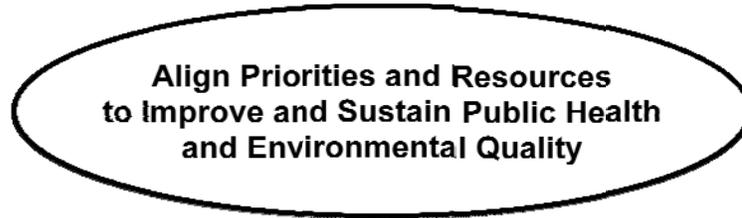
Colorado will be the healthiest state with the highest quality environment.

***Strategic Map***

The strategic map of CDPHE summarizes the department's strategy for the next five years and what it must do to carry out the mission and achieve the vision. It contains the following main elements:

**Central Challenge**

The oval at the top of the map represents the central challenge facing the department over the next five years. It is the focal point for the department’s strategies and guides what the organization needs to do to support its mission.



**Strategic Priorities (Performance Based Goals)**

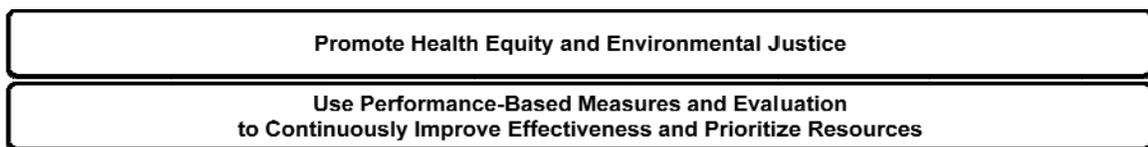
The central challenge is supported by five strategic priorities or performance-based goals labeled A-E on the strategic map. These are the critical things the department must do in order to meet our central challenge.



**Cross-cutting Strategic Priorities**

At the bottom of the strategic map are three cross-cutting strategic priorities. There are several characteristics of a cross-cutting strategic priority:

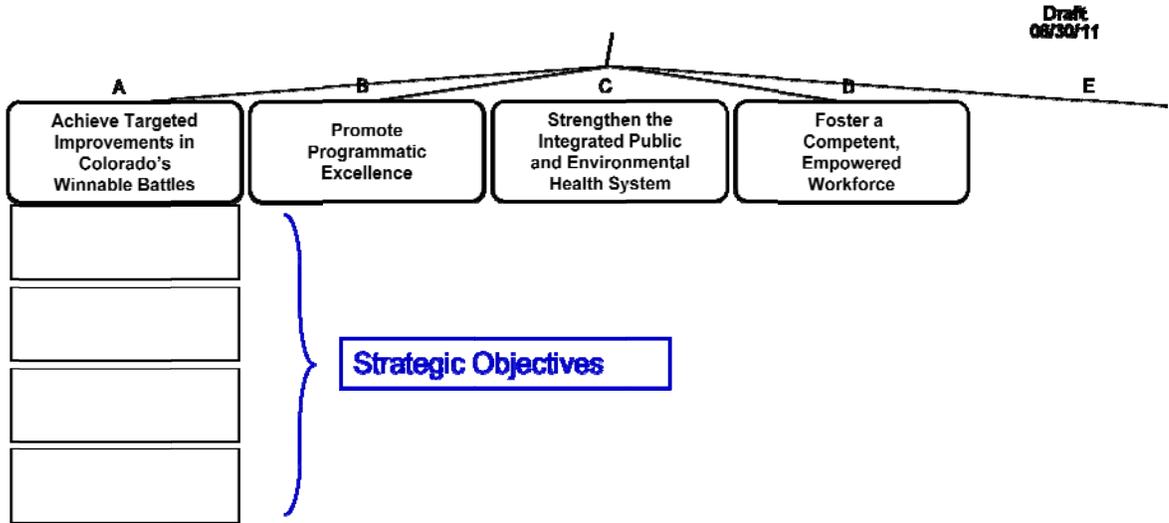
- A cross-cutting strategic priority is foundational to achieving the central challenge so it is placed at the bottom of the strategic map to show this.
- A cross-cutting strategic priority also spans the map from left to right to show that the work of implementing it needs to be embedded in all of the other strategic priorities.



**Strengthen Internal and External Communication**

**Strategic Objectives**

The boxes under each strategic priority are strategic objectives and correspond with the strategies component of the SMART Act. Strategic objectives are the next level of “what to do.” They represent the areas of focus in the coming year in order to make progress toward success in achieving the strategic priority.



In order to move toward success in achieving the performance based goals (strategic priorities), the department will be focusing on the following four strategies (strategic objectives from the strategic map) for the coming fiscal year.

The objective number (i.e. A1) corresponds to the position on the strategic map

- Objective A1. Develop and Implement Strategies to Achieve Winnable Battles
- Objective D1. Attract, retain and recognize talented and diverse employees.
- Objective D2. Align Employee Roles and accountability with Department Priorities
- Objective E2. Employ LEAN Methodologies to Improve Business Processes

**Strategies, Performance measures and evaluation for strategic priorities**

**Strategic Priority A – Achieve Targeted Improvements in Colorado’s Winnable Battles**

**Strategy overview**

## **Objective A1. Develop and Implement Strategies to Achieve Winnable Battles**

Colorado has identified 10 Winnable Battles:

- **Clean Air**
- **Clean Water**
- **Infectious Disease Prevention**
- **Injury Prevention**
- **Mental Health and Substance Abuse**
- **Obesity**
- **Oral Health**
- **Safe Food**
- **Tobacco**
- **Unintended Pregnancy**

Colorado's Winnable Battles align with the Centers for Disease Control and Prevention's (CDC) Winnable Battles and the seven priorities for EPA's Future and are Colorado's greatest opportunities for ensuring the health of our citizens and visitors. Based on data, these winnable battles have been selected as key public health or environmental issues where progress can be made in the next five years.

The Winnable Battles were chosen for the following reasons:

1. They are important:
  - Many people are affected or at risk (mortality and morbidity rates, disability, etc.).
  - They involve a large degree of health disparities.
  - They impose a large economic burden or risk on quality of life.
2. We have an ability to impact these areas:
  - Evidence-based strategies or best practices exist.
  - There is community-level readiness and support for change.
  - We can have an impact on a large percentage of the target population.
3. There is capacity to improve these areas:
  - There is political will and there are champions to support these issues.
  - There are organizations prepared to take the lead and to move forward.
  - There is sufficient staff available, and funding is available or obtainable.

Colorado's Winnable Battles were chosen with consideration of national and local goals (CDC's Winnable Battles, the Seven Priorities for EPA's Future and local public health and environmental priorities). Alignment of national, state and local efforts allow for maximum effectiveness and efficiency. To make a difference, we need our schools/universities; workplaces/businesses/industries; state health care, human services, natural resources and transportation agencies; conservation/environmental groups; foundations; faith-based organizations; elected officials; and nonprofit organizations to be active participants in the Winnable Battles.

## **Performance evaluation**

The following performance measures are targeted to strategic priority A—Winnable Battles. However, each group of performance measures may list other strategic priorities that are impacted secondarily.

## **Clean Air**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- E). Create a More Efficient, Effective, Customer-Oriented Department

	Baseline (Year)	Colorado 2016 Target
<b>Clean Air</b>		
Reduce emissions of mercury.	80% mercury capture at three large CO power plants (2011)	80% mercury capture from large power plants in CO
Emissions of harmful ground-level ozone forming pollutants from major sources in the ozone non-attainment area	16,500 tons per year of NOx (nitrogen oxides) (2008)	Reduction of 11,000 tons of NOx in Denver metro and North Front Range

### **Strategies to meet the Clean Air Winnable Battle**

- Implement Colorado regulations for mercury reductions from Colorado power plants.
- Implement retirements of older, less efficient coal-fired power plants, fuel switching from coal to natural gas, and emission controls provided for by the Colorado Clean Air - Clean Jobs Act.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

**Clean Water**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- E). Create a More Efficient, Effective, Customer-Oriented Department

	Baseline (Year)	Colorado 2016 Target
<b>Clean Water</b>		
Percent of water bodies that attain compliance with water quality standards	52% of river/stream miles attain standards  30% of lakes/reservoirs attain standards (2010)	60% of river/stream miles attain standards  40% of lakes/reservoirs attain standards (2010)
Improve the quality of surface water and ground water that contains hazardous contaminants by treating the contaminated water	2,441 million gallons of water treated (2010)	2,628 million gallons of water treated
Number of people served by public drinking water systems that are not in compliance with uranium and radium standards	21,204 people (28 systems – 1.7% of total systems) (2010)	4,116 people (16 systems – 0.8% of total systems)

**Strategies to meet the Clean Water Winnable Battle**

- The Department provides technical and financial assistance to the communities with elevated uranium and radium levels in their drinking water supplies.
- The Department coordinates with local and federal agencies to support the Arkansas Valley Conduit that will bring fresh, clean water to many communities along the Lower Arkansas River Valley.
- Prioritize permits that discharge to waters that do not meet standards.
- Respond to violations for discharges to waters not meeting standards and for compliance schedules requiring construction of new/modified wastewater treatment facilities.

- Develop and implement Total Maximum Daily Loads of pollutants (TMDLs) directed at those situations where meeting standards can be achieved in an efficient/effective manner.
- Reduce nutrient concentrations from sources contributing to standards exceedances beginning in 2012.
- Provide for a robust monitoring program to identify whether additional controls might be necessary to meet more specific water quality goals anticipated to be set after 2022.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Infectious Disease Prevention**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Infectious Disease Prevention</b>		
Percent of children who are up to date on their DTaP immunization at school entry	92.6% (2010)	95%
Gonorrhea rate in 15-29 year olds	206.7 per 100,000 (2010)	188. per 100,000 (2013)

### **Strategies to meet the Infectious Disease Prevention Winnable Battle**

- Increase DTaP immunizations by expanding access and utilization of the Colorado Immunization Information System (CIIS) in child care facilities, head start programs, WIC programs, and elementary schools. Colorado has pertussis disease (whooping Cough) that this vaccine can prevent. In addition, Colorado can compare our coverage rates to other states using an individual vaccine, but the requirements for the complete series differ state by state.
- CDPHE and the Colorado Department of Education will work with at least one school district in the coming year to assist them in adopting the sexual health education related curriculum standards.
- Address increased rates of gonorrhea in the most affected communities by sharing information about the problem and facilitating a community-based strategy to address the increased rates.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Injury Prevention**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	<b>Baseline (Year)</b>	<b>Colorado 2016 Target</b>
<b>Injury Prevention</b>		
Decrease teen motor vehicle deaths rates (15-19 year olds)(expressed as X per 100,000 teens)	12.7 (2009)	10.5
Increase the percent of adults who wear a seat belt	82.9% (2010)	90.0%
Rate of fall related hospitalizations among adults ages 65+ (expressed as X per 100,000 adults)	1952.7 (2009)	1757.0

### **Strategies to meet the Injury Prevention Winnable Battle**

- Strengthen graduated driver’s licensing laws.
- Enact a primary seat belt law.
- Support the implementation of evidence-based exercise programs to increase balance, gait and strength among older adults.
- Integrate clinical care practice with community falls prevention programs.
- Enable fall strategy avoidance by offering a rebate on the installation of stabilization equipment and devices for long and short term care facilities.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

**Mental health and Substance Abuse**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Mental Health and Substance Abuse</b>		
Decrease the percent of 9 <sup>th</sup> -12 <sup>th</sup> graders who attempted suicide in the past 12 months	7.6% (2009)	4.6%
Decrease the percent of adults who report current depression	7.0% (2008)	5%
Decrease the percent of adults who report binge drinking in the past 30 days	15.4% (2010)	12% (2016)
Decrease the percent of 9 <sup>th</sup> -12 <sup>th</sup> graders who report binge drinking in the past 30 days	25.1% (2009)	20% (2016)

**Strategies to meet the Mental Health and Substance Abuse Winnable Battle**

- In collaboration with the Department of Health Care Policy and Financing and the Department of Human Services, develop action plans for addressing these Winnable Battles. Action plans will clearly delineate CDPHE’s role. Implement action plans.

**Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Obesity**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Obesity</b>		
Percent of adults maintaining a healthy weight	42.4% (2010)	50.0%
Percent of children 2-14 years who are at a healthy weight	77% (2010)	80%
Percent of high school students who are at a healthy weight	82% (2009)	83%
Percent of mothers who are still breastfeeding their infants at 6 months of age	61.2% (2010)	65.0%

### **Strategies to meet the Obesity Winnable Battle**

- Promote physical activity and nutrition in school, community and worksite settings.
- Ensure health insurance reimbursements and benefits align with US Preventive Services Task Force Recommendations for obesity counseling and control.
- Collaborate with internal and external partners to produce updated regulations for healthy eating and physical activity in child care centers for adoption by the Board of the Department of Human Services.
- Promote the policy adoption of the ‘Colorado Can Do 5’ in healthcare settings to advance support of breastfeeding.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Oral Health**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Oral Health</b>		
Percent of children ages 1-5 who first went to the dentist by 12 months of age	3.4% (2010)	5.0% (2014)
Percent of children ages 1-14 with pain, cavities, broken or missing fillings, teeth pulled because of cavities, or bleeding gums	15.2% (2010)	13.0% (2014)

### **Strategies to meet the Oral Health Winnable Battle**

- Increase use of evidence-based interventions and practices
  - Increase number of children receiving dental sealants
  - Increase the number of community water systems that are optimally fluoridated for oral health and/or support community efforts to provide alternative sources of fluoride
- Increase oral health equity/decrease oral health disparity
  - Increase the number of dental providers in Health Professional Shortage Areas
  - Increase the number of Medicaid dental providers
  - Increase oral health literacy
- Promote community-based oral health champions/coalitions
- Align oral health projects across the state
- Promote integration of dental homes within health homes

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Safe Food**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Safe Food</b>		
Decrease the occurrence of 3 or more foodborne illness violations in Colorado restaurants.	14.36% (2010)	10%
The percent of restaurant and grocery store inspections resulting in food being thrown out due to unsanitary conditions.	9.8% (2009)	7.5%

### **Strategies to meet the Safe Food Winnable Battle**

- Ensure a technically competent and effective inspectional workforce.
- Continue to collaborate with federal partners to maintain national food safety expertise and be a part of national policy development.
- Collaborate with LPHA partners and other food safety stakeholders to enhance an effective food safety program which includes effective inspections, enforcement, and response and investigation to foodborne illness and food emergencies.
- Identify and provide food safety training to food handlers to give them the knowledge to assess and reduce foodborne illness risk factors in full service restaurants.
- Implement innovative program approaches focused on the reduction of the occurrence of foodborne illness risk factors.
- Identify and utilize the necessary data to drive effective program outcomes.
- Investigate the cause of foodborne illness, which can lead to the identification of ways to prevent future foodborne illness. Maintain the reportable disease surveillance system that is used to detect many foodborne illnesses and monitor trends to assess the impact of various food safety strategies.

- During investigations, emphasize preventive measures, both to those involved (to prevent recurrences) and to the general public in press releases.
- Scientifically (i.e. through DNA testing) link the cases of foodborne illnesses to sources in order to prevent or reduce the spread of illness.
- Support local public health agencies by providing guidance in case investigation and control. This includes writing and maintaining the Communicable Disease Manual and doing formal (CD training program) and informal training with local public health agency staff. Individual case investigation and disease control is vital to prevent spread of foodborne pathogens.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Tobacco**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Tobacco</b>		
Percent of adults who are current smokers	16.0% (2010)	12%
Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors	Baseline available 10/2011	5%
Percent of adolescents who are current smokers	17.7% (2009)	16%
Percent of children who are exposed to secondhand tobacco smoke in the home	30.9% (2010)	28%

### **Strategies to meet the Tobacco Winnable Battle**

- Secondhand Smoke and Cessation
  - Implement state and local initiatives to disseminate information about secondhand smoke and tobacco-free policies
  - Create and enforce tobacco-free policies in worksites and communities
  - Disseminate information about cessation, support cessation programs including the Colorado QuitLine
  - Increase insurance coverage for cessation interventions
  - Fund and implement the Colorado QuitLine to help low income people who smoke and pregnant women who smoke successfully quit
  - Implement media campaigns to encourage smokers to quit and to use the QuitLine.
- Reduce Youth Initiation
  - Implement state and local initiatives to counteract pro-tobacco messages
  - Increase tobacco-free policies
  - Increase restrictions on tobacco sales to minors and to enforce those restrictions
  - Require a license for tobacco retailers
  - Increase penalties for violations of the state law prohibiting tobacco sales to minors

- Provide school-based, youth-friendly programs such as Second Chance and NOT on Tobacco to provide cessation assistance and education to youth who use tobacco.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Unintended Pregnancy**

- A). Achieve Targeted Improvements in Colorado’s Winnable Battles
- B). Promote Programmatic Excellence
- C). Strengthen the Integrated Public and Environmental Health System

	Baseline (Year)	Colorado 2016 Target
<b>Unintended Pregnancy</b>		
Rate of effective birth control in sexually active men and women ages 18-44 (self report)	73.3% (2010)	80.0%
Rate of effective methods of birth control in sexually active high school students (self report)	26.4% (2009)	30.0%
Number of births to teens ages 15-17 per 1,000 teens ages 15-17	19.9 (2009)	18

### **Strategies to meet the Unintended Pregnancy Winnable Battle**

- Develop and implement a statewide action plan in partnership with other state agencies, local communities, and youth across Colorado that employs specific, evidence based strategies to improve youth sexual health.
- To increase consumer knowledge of available and effective contraceptive methods through a public awareness effort.
- To increase provider awareness of effective contraceptive methods, particularly long-acting, reversible contraceptives, through the wide-spread distribution of the HealthTeamWorks Contraceptive Guidelines.
- To inform the public of increased eligibility for coverage of family planning and contraceptive services under the Patient Protection and Affordable Care Act.

### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

## **Strategic Priority D – Foster a Competent, Empowered Workforce**

### Strategy Overview

Objective D1. Attract, Retain, and Recognize Talented and Diverse Employees.

Objective D2. Align Employee Roles and Accountability with Department Priorities

### **Strategy overview**

#### **D3. Align Employee Roles and Accountability with Department Priorities**

By aligning each employee's goals and roles with the five strategic priorities we ensure that employees are aware of how their contributions directly forward these goals. Employees at all levels of the organization will be held accountable for the work they do in support of department goals.

#### **D1. Attract, Retain, and Recognize Talented and Diverse Employees.**

Organizational psychology literature supports the fact that employees who feel valued within an organization are more productive. Recognizing employee contributions that result in progress toward strategic objectives ensures that employees are in line with the goals of the organization.

### **Performance evaluation**

The performance measures listed below are targeted to this specific strategic priority. However, each group of performance measures lists other strategic priorities that are impacted secondarily.

**Foster a Competent, Empowered Workforce**

D). Foster a Competent, Empowered Workforce

E). Create a More Efficient, Effective, Customer-Oriented Department

	Baseline 2011 State wide employee engagement Survey	FY 2011-12 Employee Engagement Survey (Targeted CDPHE)
Percent of employees who “Strongly Agree” with this statement: In my work group, we have the processes and systems to provide consistent customer or public service.	Baseline identified with results of survey	Increase by 10%
Work Units complete and follow a standard work plan template that aligns the work of the Unit with the strategic goals of the department	0	100% (by 2016)
Each employee has 2-4 Individual Performance Goals that directly relate to the strategic goals of the work unit and department	0	100% (by 2016)

**Strategies to address the strategic priority of Foster a Competent, Empowered Workforce**

- To ensure that all employees understand how their work furthers the winnable battles and program excellence the department will:
- Develop a comprehensive communication plan to ensure that Colorado’s winnable battles are communicated to and understood by employees.
- Adopt a standardized work plan template that is aligned with the department’s strategic plan; this will be implemented by all work units.
- Hold supervisors and managers accountable to ensure that each employee has IPG’s that are linked to the strategic plan through work unit and division work plans.

**Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.

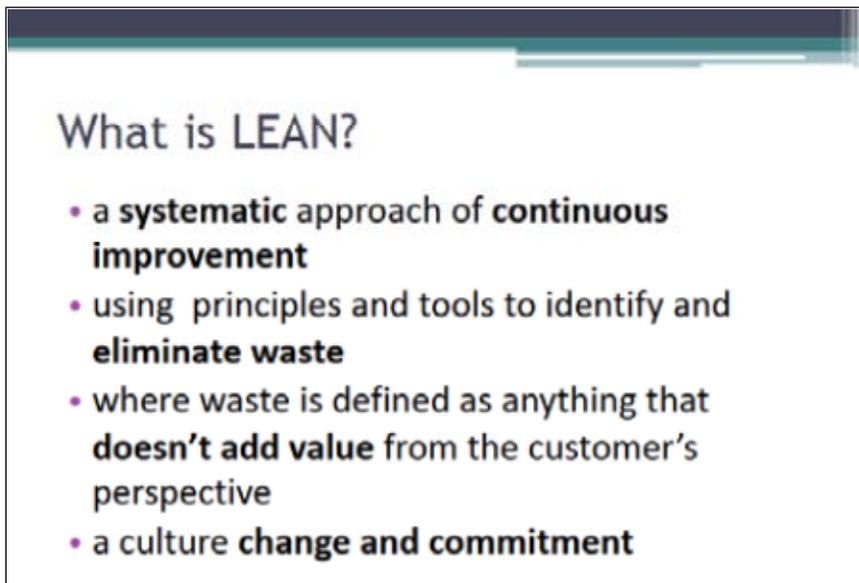
## **Strategic Priority E Create a More Efficient, Effective, Customer-Oriented Department**

### **Strategy overview**

#### **Objective E2. Employ LEAN Methodologies to Improve Business Processes**

LEAN is a process improvement approach that looks at reallocating resources to achieve better results for customers, both internal and external, with whom the department works. It is about efficiently deploying the department's resources.

The department's goal is to embed LEAN methodologies into everyday work processes to eliminate waste and improve customer service.



Performance measures are in development for this strategic priority.

#### **Strategies to Create a More Efficient, Effective, Customer-Oriented Department**

- Utilize LEAN experts to train departmental staff in LEAN methodologies.
- Utilize LEAN experts and trained staff to facilitate LEAN events to improve the efficiency of programs and activities.
- Require divisions to identify LEAN activities within their expertise areas and implement as part of their adopted work plans.

#### **Performance Evaluation**

CDPHE will annually review outcomes compared to benchmarks for each performance measure. Adjustments to strategies will be made as appropriate given the findings of the review.