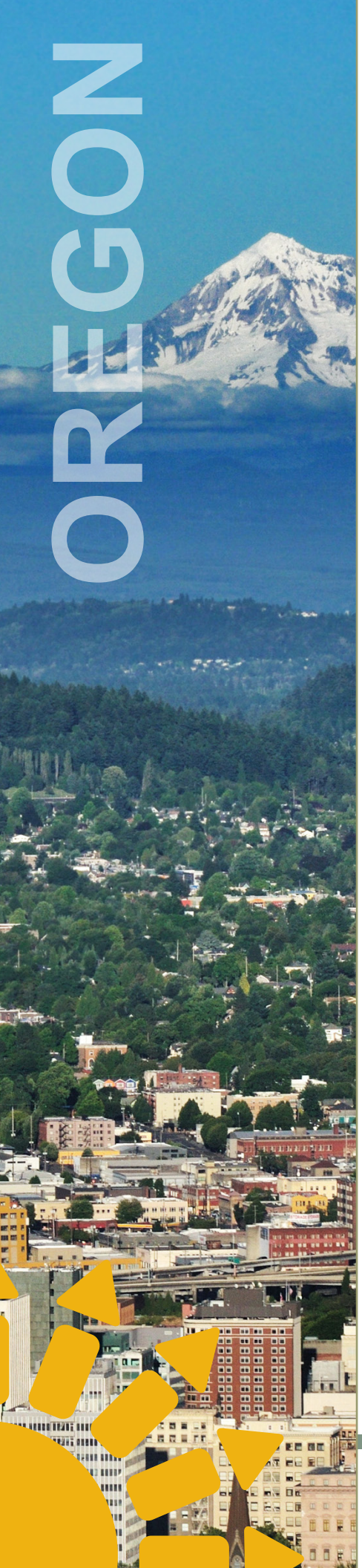


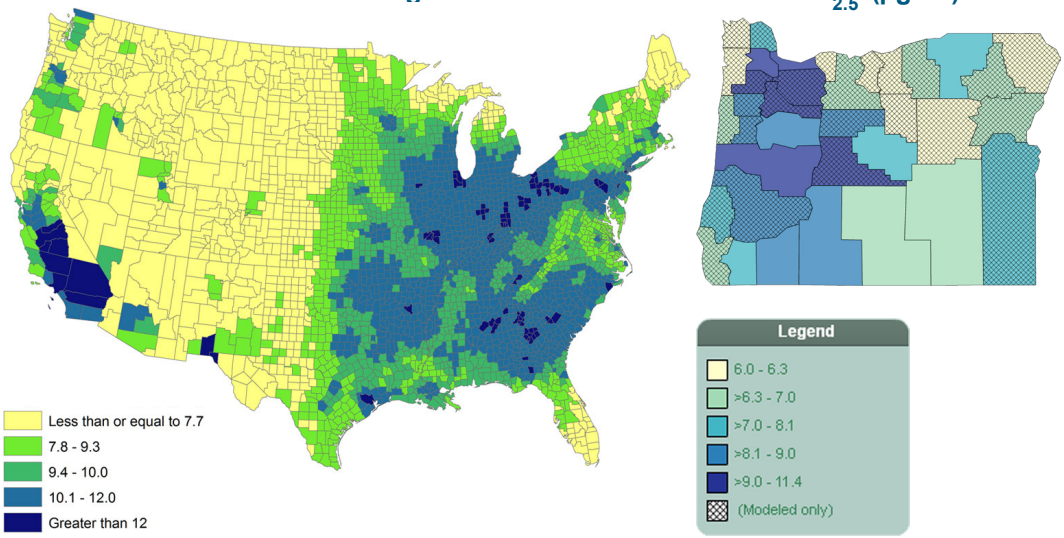
CDC's National Environmental Public Health Tracking Network

The Environmental Public Health Tracking Network is a dynamic system that provides information and data about environmental hazards and potentially related health problems. It presents what is known about environmental hazards, such as air pollution, and where they might exist, where people are exposed to hazards, and how targeted action can protect health, reduce illness, and save lives.

AIR POLLUTION ($PM_{2.5}$) AND HEALTH

Air pollution is a leading environmental threat to human health. Particles in the air such as dust, dirt, soot, and smoke are kinds of air pollution that have been linked with health problems. Some particles in the air are large or dark enough to be seen, like some kinds of smoke and soot. Other particles are so small that you cannot see them. Very small particles that are less than 2.5 micrometers wide (smaller than a grain of sand) are known as fine particulate matter or $PM_{2.5}$.

2011 Annual Average Ambient Concentrations of $PM_{2.5}$ ($\mu g/m^3$)

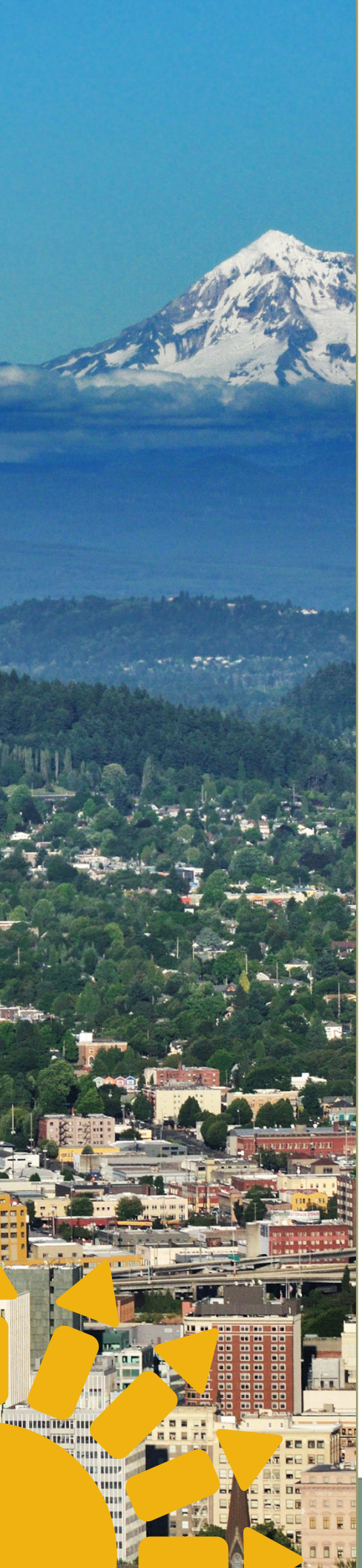


$PM_{2.5}$ particles are small enough to be inhaled deeply into the lungs. Once fine particles are in the lungs, they can affect the heart, blood vessels, and lungs. People exposed to fine particles over a long period of time can have more heart and lung problems than people who are not breathing this kind of air pollution. Being exposed to any kind of particulate matter may lead to increased emergency department visits and hospital stays for breathing and heart problems and other health problems. In Oregon:

5 /10,000 *Age-adjusted Rate of Emergency Department Visits for Asthma - 2013*

24 /10,000 *Age-adjusted Rate of Hospitalizations for Heart Attacks (over 35) - 2012*

cdc.gov/ephtracking



CDC's National Environmental Public Health Tracking Network

Active Transportation and Body Mass Index

Overweight and obesity can lead to health problems. The Oregon Environmental Health Tracking Program (Oregon Tracking Program) is examining commuting habits and average body mass index (BMI) among adults. BMI is a simple index used to classify people as underweight, healthy weight, overweight, or obese. Commuting methods analyzed include driving, walking, bicycling, and taking public transportation. The design of a community influences which commute methods are practical in different parts of the state. A few elements of the built environment that affect commuting choices include access to public transportation and the presence of sidewalks and bicycle lanes. Oregon hopes to encourage increased physical activity through increased use of active transportation, such as walking, bicycling, and public transportation.

Environmental Hazards

82.4% of working Oregonians commuted by car, **4.2%** by public transit, **3.9%** walked, and **2.2%** bicycled in 2011

10.3% of working Oregonians commuted to work using active transportation in 2011

Health Effects

43.2% of adult Oregonians were of normal weight, **34.7%** were overweight, **20.5%** were obese, and **1.6%** were underweight in 2012

The age-adjusted adult mean BMI in the state of Oregon was **26.5** in 2012

Radon Testing and Lung Cancer

Radon is a naturally occurring radioactive gas that seeps into homes from soil and bedrock. It is the second leading cause of lung cancer after smoking. The U.S. Environmental Protection Agency recommends that people take action to reduce radon exposure when levels measure higher than 4 picocuries per liter (pCi/L). The Oregon Tracking Program is tracking radon test results and rates of lung cancer in an effort to increase awareness of the danger of radon and to encourage testing. Based on the underlying geology in the state, there are several regions, including population centers such as the Portland and Salem metro areas, that are identified as having higher potential for radon. In partnership with the Oregon Radon Program, the Oregon Tracking Program developed sub-county radon hazard maps that residents can access to see where radon levels are high in the state.

Environmenal Hazards

Rn

Out of approximately **20,000** locations in the state, there was at least 1 radon test at or above 4 pCi/L at **28.8%** of those of locations*

Health Effects

The age-adjusted rate of lung and bronchus cancers was **63.5** per 100,000 for the state of Oregon during 2006-2010

In 2010, there were **2,503** new lung cancer cases reported and **2,062** Oregonians died from lung cancer

*It is important to note that the sampling locations are unevenly distributed across the state. High concentrations are found in densely populated areas while testing in less populated ares is very limited