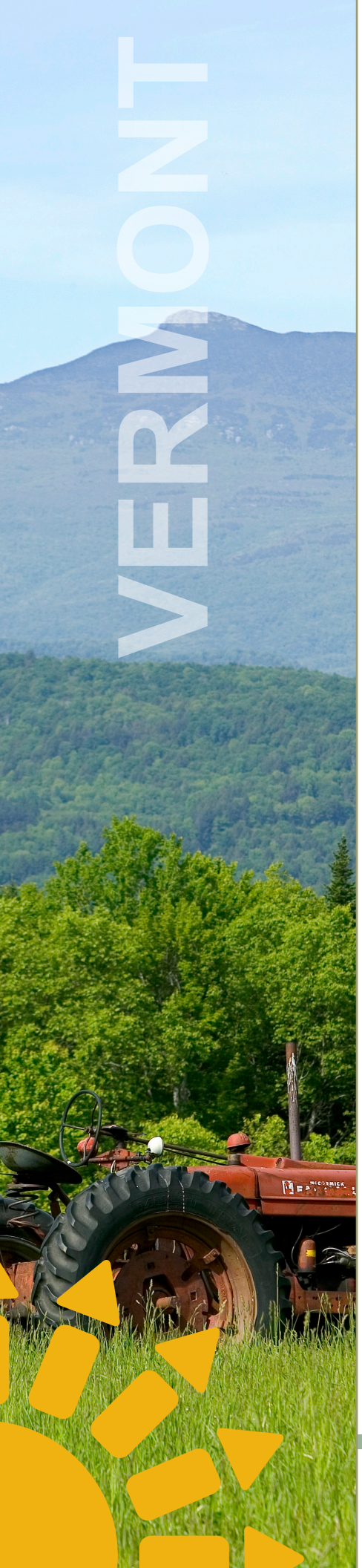


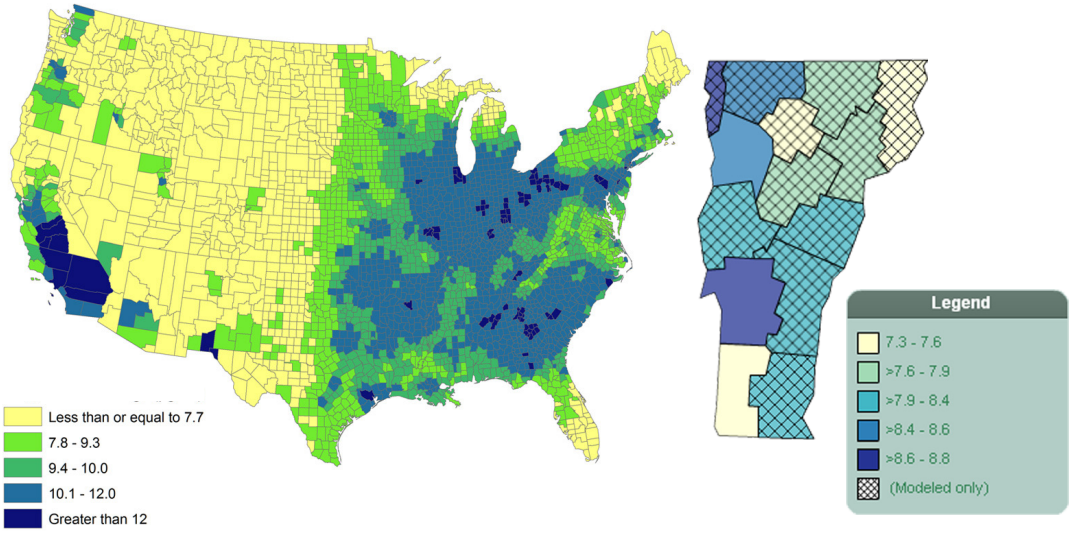
CDC's National Environmental Public Health Tracking Network

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 Vermont:

42 /10,000 *Age-adjusted Rate of Emergency Department Visits for Asthma - 2010*

25 /10,000 *Age-adjusted Rate of Hospitalizations for Heart Attacks (over 35) - 2010*

cdc.gov/ephtracking

CDC's National Environmental Public Health Tracking Network

Radon and Smoking: A Risky Combination

One out of every eight homes in Vermont has elevated levels of radon, a naturally occurring radioactive gas that seeps into homes from soil and bedrock. Radon is the second leading cause of lung cancer in the country after smoking. The U.S. Environmental Protection Agency (EPA) recommends that people take action to reduce radon levels in their home if their test result measures 4.0 picocuries per liter (pCi/L) or above. If you smoke and your home has high levels of radon, your risk of getting lung cancer is especially high. The Vermont Environmental Public Health Tracking Program (Vermont Tracking Program) developed the Radon, Smoking and Lung Cancer (RSLC) Data Explorer to allow users to investigate the connections between radon, smoking and lung cancer in their communities. This resource has also been used by the Vermont Radon Program to target radon testing and mitigation efforts where risks are greatest.

Environmental Hazards

17% of Vermont homes exceed the EPA action level for radon in 2014

6% of Vermont homes exceed twice the EPA action level in 2014

Health Effects

An estimated **50** Vermonters die from radon-related lung cancer each year

86% of radon-related lung cancer deaths occur among smokers

Childhood Lead Poisoning

Childhood lead poisoning is a serious but preventable problem. Lead from paint in older houses is a major source of lead poisoning in children. No safe level of lead has been identified. Even low levels of lead in children's blood have been shown to affect IQ, ability to pay attention, and academic achievement. In 2008, the Vermont legislature followed federal recommendations and revised the state's lead law by defining an elevated blood lead level as 5 micrograms per deciliter (µg/dL). The law imposes fines on owners of older rental properties who fail to take required disclosure and maintenance actions to prevent children's exposure to lead. In the year following these changes, the number of children 3 or younger with elevated blood lead levels decreased by 25%. Vermont Tracking data reflect state law by displaying the number of children with blood lead levels greater than or equal to 5 µg/dL and the percentage of homes built before lead paint was banned. These state-specific data track progress in reducing lead poisoning and help to target areas with a higher risk of lead paint hazards.

Environmental Hazards

About **70%** of homes in Vermont were built before 1978, the year lead-based house paint was banned

Since 2009, the percent of children screened for lead poisoning before age 3 has exceeded **90%**

Health Effects

Between 2004 and 2012, the percent of young children with elevated blood lead levels has decreased by **66%**