THE STATE OF CHILDREN'S ENVIRONMENTAL HEALTH

VERMONT

All children deserve and need a safe and healthy environment to grow and develop. They need clean air to breathe and safe water to drink, nutritious food to eat, and healthy places in which to live, learn, and play. Early exposure to harmful agents can lead to acute and chronic adverse outcomes. Infants and children are especially vulnerable to environmental exposures because they breathe, eat and drink more in proportion to their body size than do adults and because their bodies and brains are still developing.

There are nearly 115,000 children in Vermont, and 9% live in poverty.

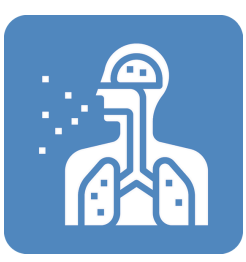
Poverty is an important social determinant of health; poverty hurts children and their families.

Children of color and young children are disproportionately poor and experience many issues that lead to adverse health outcomes.

Children's environmental health indicators (CEHIs) are measures that can be used to assess environmental hazards, environmental exposures, and their resulting health outcomes in children. Below are some key CEHIs for Vermont:

Safe Drinking Water

32.7% of public water utilities
had drinking water violations (2023)
National Average: 27.6%

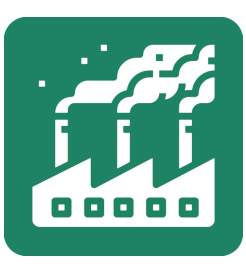


Air Quality

0% of children under age 18 live in counties with unhealthy levels of air pollution
Air quality was monitored in 3 out of 14 counties in Vermont in 2024[1]
Nationwide: 39.88% of children

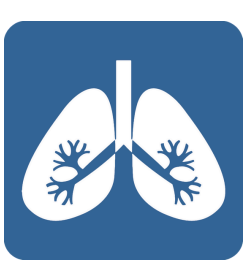
Warming Temperatures

5.3 degrees F warmer
in 2024 than in 1970[2]
Nationwide average: 3.9 degrees F warmer



Toxic Chemical Releases

310 thousand pounds of toxic chemicals
were disposed of or released (2023)[3]
United States: 3.3 billion pounds



Asthma

9.0% of children under age 18 have asthma (2022-2023)[4]
Nationwide: 6.6%

Pediatric Cancer

185.4 cases of pediatric cancer
per 1 million population (2021)[5]
Nationwide: 179 per 1 million population

Blood Lead Levels

4.5% of tested children under age 6
have elevated blood lead levels (2023)[6]
Nationwide: 1.3% (2021)

Neuro-Developmental Disorders

12.4% of children aged 3-17
have ADHD (2022-2023)[7]
Nationwide: 10.5%

2.6% of children aged 3-17
have Autism Spectrum Disorder (2022-2023)[7]
Nationwide: 3.9%

For references and more information visit www.cehn.org/states/vermont

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INDICATOR NOTES

1. In this profile, counties with "unhealthy" levels of air pollution are those receiving a grade of F for ozone and/or short-term particle pollution (PM2.5), and/or a grade of "Fail" for year-round particle pollution (PM2.5) in the American Lung Association's 2024 State of the Air report. According to the report, 0% of Vermont children under age 18 live in counties that received a failing grade for at least one pollutant. This only considers the 3 counties where air quality data is monitored, collected, and sufficient (out of 14). Across the US, 39.88% of children under the age of 18 live in counties with unhealthy levels of at least one measure of air pollution. Nationwide, air quality data is monitored, collected, and sufficient in 885 counties (out of 3,243 total).

2. Children are more vulnerable to the hazards driven by warming temperatures, such as heatwaves, droughts, flooding, and many other cascading effects. Climate change causes an increase in the frequency and severity of temperature anomalies, extreme weather, and natural disasters globally.

3. EPA's Toxics Release Inventory (TRI) tracks the management of certain toxic chemicals that may threaten human health and the environment. Industrial facilities across the U.S. are required to annually report the amount of each chemical disposed of or released into the environment, both on- and off-site. Many of these chemicals are known carcinogens, developmental toxicants, and neurotoxicants that adversely impact children's health, such as arsenic, lead, and mercury.

4. A wealth of research links exposure to poor outdoor air quality, including high ground-level ozone concentrations, with the exacerbation of children's respiratory illnesses. Several studies have linked unhealthy air quality with the onset of childhood asthma.

5. Although cancer in children is rare, the rate of pediatric cancer has been increasing since the 1970s. It is the leading disease-related cause of death past infancy in U.S. children. Neither genetics nor improved diagnostic techniques can explain the increased rate. According to the 2020 Childhood Cancer Prevention report, no more than 10% of all childhood cancers are derived from heritable genetic risk factors, and hazardous chemicals are a preventable risk factor that contributes to the remaining cases.

6. In 2023, 29.0% of Vermont children under age 6 were tested for blood lead levels (BLLs). Of those tested, 4.5% had a BLL ≥ 3.5 µg/dL. Often the most vulnerable children are not tested, and not all who are tested get reported, so this is likely an underestimate of the true scope of children's elevated blood lead in Vermont. There is no safe level of lead exposure for children. A potent neurotoxicant, lead reduces IQ and impairs other cognitive, behavioral, and developmental functions. In 2021, the CDC lowered the BLL reference value from 5 to 3.5 µg/dL, but much of the available data still categorizes "elevated" BLLs as being 5 ug/dL or higher.

7. Mounting scientific research links environmental exposures with the risk of Attention-Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD). Neither genetics nor changing diagnoses or other artifacts fully account for the increased incidences of these conditions. ADHD and ASD data are for children aged 3-17 years in this state.

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FEDERAL SUPPORT FOR VERMONT

within past 5 years

- [x] **CDC-funded Climate-Ready States & Cities Initiative**
- [x] **CDC-Funded Lead Poisoning Prevention Program**
- [ ] **ATSDR State Cooperative Agreement Program**
- [x] **CDC National Asthma Control Program**
- [x] **CDC-Funded Environmental Public Health Tracking Program**
- [ ] **CDC State Biomonitoring Cooperative Agreement Program**

Children are our future—society has a moral obligation to protect them. Exposure to environmental hazards can and must be prevented. Prevention requires strong environmental regulations and fully funded and supportive public and environmental health programs, and a robust workforce.

The Children's Environmental Health Network set out to identify a set of CEHIs that would provide an understanding of children's environmental health at the state level. Through this process, CEHN found that robust, valid, and regularly updated state-level data comparable across most states was not readily accessible. States need adequate funding and capacity to collect and make accessible, reliable CEHI data to set goals and track progress towards improving children's health.