

Low-Income Residents and People of Color in Vermont Are Living Near Chemical Dangers

The Center for Effective Government graded states based on the dangers faced by people of color and residents with incomes below the poverty line living within one mile of dangerous facilities. **Vermont scored above average with a “B” grade but still has room for improvement.**

Nationally, 7.5 percent of the population lives within one mile of a hazardous facility.

Key Findings

- More than 7,800 Vermont residents (1.3 percent) live within one mile of a facility storing large amounts of extremely hazardous chemicals. These “fenceline communities” face potential chemical leaks and explosions on a daily basis.
- Six Vermont public schools are located within one mile of a hazardous facility, putting 2,600 students in danger.
- **Elderly people in poverty are one-and-a-half times more likely to live in fenceline communities than elderly residents who are living above the poverty line.**

Chemical dangers are real, and incidents are happening in Vermont.

In 2013, C&S Wholesale Grocers in Brattleboro had a broken valve that released around 100 pounds of anhydrous ammonia into the air. **Anhydrous ammonia** is a toxic, deadly gas that can travel several miles from its source. A major release could endanger the lives of entire neighborhoods.

C&S does not file a federal Risk Management Plan, meaning it likely does not exceed the threshold reporting quantity for ammonia (10,000 pounds or more). However, three facilities in Vermont exceed this threshold and could have a major chemical release. They are all food manufacturing facilities that use the gas in their refrigeration systems. Facilities can switch to safer chemical refrigerants (such as carbon dioxide), which would remove the danger to surrounding communities; however, these facilities continue to rely on deadly chemicals.

Vermont’s eight high-risk facilities that file Risk Management Plans also include petroleum bulk terminals and municipal water treatment facilities. Water treatment plants use **chlorine gas** for use in water purification. This is another toxic gas that can spread quickly from its source – making it a chemical weapon of choice during World War I. Many residents are unaware that the facility that provides them with clean water is capable of causing a catastrophic incident.

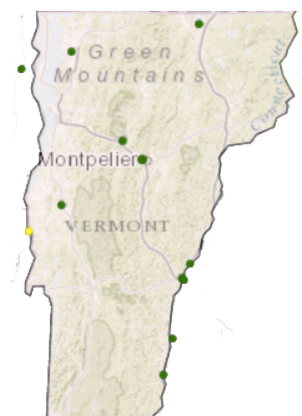
Vermont’s risky facilities are in both urban and rural areas. **They receive shipments of hazardous chemicals, often by rail or truck**, putting additional communities in danger of a chemical incident.

Are people of color and low-income residents of Vermont safe from chemical hazards?

Vermont (and neighboring New Hampshire) have the smallest percentages (1.3 percent) of their total populations living in fenceline communities compared to all other states. Vermont also has the fewest number of high-risk facilities of any state. It also lacks high concentrations of facilities in urban centers. These factors contribute to such a small percentage of Vermont’s population living near hazardous chemicals – including people of color and poor populations.

Additionally, people of color face roughly the same likelihoods of living in fenceline communities as white residents, further contributing to Vermont’s B grade. Unlike most other states, children of color in Vermont are not significantly more likely to live or attend schools near hazardous facilities. This is true for children of every racial category.

However, Vermont does not score an A because people in poverty are slightly more likely to live near chemical hazards. Poor children under age 12, for example, are 1.2 times more likely to live in fenceline communities than non-poor



[Click here to open an interactive map of your neighborhood.](#)

children. Alarming, **poor elderly populations are one-and-a-half times more likely than elderly residents not in poverty.** Poor residents have fewer housing options and may not be able to afford to move to safer neighborhoods.

Inequities in Likelihood of Living in a Fenceline Community

Racial Inequities			Income (Poverty) Inequities		
	Score	Grade		Score	Grade
Percentage of People of Color Who Live in Fenceline	1.2%	A	Percentage of Poor People Who Live in Fenceline	1.5%	A
Likelihood of People of Color to Live in Fenceline (compared to whites)	1.1 times less likely	A	Likelihood of Poor People to Live in Fenceline (compared to those not in poverty)	1.2 times more likely	B
Percentage of Children of Color Under 12 Who Live in Fenceline	1.1%	A	Percentage of Poor Children Under 12 Who Live in Fenceline	1.7%	A
Likelihood of Children of Color Under 12 to Live in Fenceline (compared to white children under 12)	1.3 times less likely	A	Likelihood of Poor Children Under 12 to Live in Fenceline (compared to children under 12 not in poverty)	1.2 times more likely	B
Percentage of Children of Color Who Attend Public Schools in Fenceline	2.8%	A	Percentage of Children Receiving Free Lunch Who Attend Schools in Fenceline	3.3%	A
Likelihood of Children of Color to Attend Public Schools in Fenceline (compared to white children)	1.1 times less likely	A	Likelihood of Children Receiving Free Lunch to Attend Schools in Fenceline (compared to children not receiving free lunch)	1.1 times less likely	B
Percentage of Elderly of Color Who Live in Fenceline	0.8%	A	Percentage of Elderly Poor People Who Live in Fenceline	1.9%	A
Likelihood of Elderly of Color to Live in Fenceline (compared to elderly whites)	1.6 times less likely	A	Likelihood of Elderly Poor People to Live in Fenceline (compared to elderly people not in poverty)	1.5 times more likely	D
People of Color Grade		A	Poverty Grade		B
Overall Grade: B					

What you can do to protect your community from dangerous chemicals.

Vermont residents like you can help. You can organize people in your community and educate others about these dangers. You can learn about your local zoning process (if your state gives local governments zoning authority) and whether it protects community members from nearby industrial plants that use hazardous chemicals – and share what you learn with your friends and neighbors. You can attend public meetings and planning hearings and urge decision makers to think carefully about the sites chosen for new industrial facilities, and you can write, call, and meet with other state, county, and city officials to send the message that **all** Vermont residents deserve to be protected from chemical dangers.

You can also demand that the federal government require facilities to switch to safer chemicals and alternatives whenever feasible and urge the Vermont Department of Environmental Conservation and the state-level OSHA to conduct more thorough and frequent inspections to spot problems before they cause disasters. And Vermont residents can push local governments to require buffer zones around new and expanded chemical facilities to ensure homes and schools are not built nearby.

Table 1: Percentage of Population Who Live in Fenceline Communities, by Age and Race

	Black	Latino	American Indian/ Alaskan Native	Asian/Pacific Islander/ Native Hawaiian	White Not Hispanic	All Races
All Ages	0.9%	0.9%	0.3%	1.3%	1.3%	1.3%
0-17	0.3%	0.6%	0.0%	0.9%	1.4%	1.4%
18-64	1.3%	1.0%	0.3%	1.6%	1.3%	1.3%
65+	0.1%	1.8%	0.3%	0.4%	1.3%	1.3%
Total # in fenceline	51	82	5	98	7,447	7,871
Likelihood of living in fenceline, compared to whites	1.4 times less likely	1.5 times less likely	4.9 times less likely	1.0	---	---

Table 2: Percentage of Poor Population Who Live in Fenceline Communities, by Age and Race

	Black	Latino	American Indian/ Alaskan Native	Asian/Pacific Islander/ Native Hawaiian	White Not Hispanic	All Races
All Ages	0.6%	1.6%	0.1%	1.2%	1.6%	1.5%
0-17	0.3%	1.2%	0.0%	0.0%	1.8%	1.7%
18-64	0.8%	1.7%	0.2%	1.7%	1.4%	1.4%
65+	0.0%	1.3%	0.0%	0.0%	2.0%	1.9%
Total # in fenceline	8	21	1	15	1,002	1,062
Likelihood of living in fenceline, compared to whites in poverty	2.6 times less likely	Just as likely	12.1 times less likely	1.3 times less likely	---	---
Likelihood of living in fenceline, compared to same race not in poverty	1.8 times less likely	2.0	2.5 times less likely	1.1 times less likely	1.2	1.2
Likelihood of living in fenceline, compared to whites not in poverty	2.1 times less likely	1.2	9.9 times less likely	1.1 times less likely	1.2	---

Table 3: Percentage of Children Who Attend Public School in Fenceline Communities, by Grade and Race

	Black	Latino	American Indian/ Alaskan Native	Asian/Pacific Islander/ Native Hawaiian	White Not Hispanic	All Races
All Grades	3.0%	3.5%	7.1%	2.2%	3.1%	3.1%
Pre-K - 2	2.1%	1.9%	0.0%	0.8%	1.3%	1.3%
3-7	1.9%	2.9%	0.0%	0.7%	1.6%	1.6%
8-12	4.6%	5.4%	18.2%	4.2%	6.1%	6.0%
Total # in fenceline	49	45	18	34	2,446	2,632
Likelihood of attending schools in fenceline, compared to white students	Just as likely	1.1	2.3	1.5 times less likely	---	---

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