

Low-Income Residents and People of Color in Virginia 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, compared to white and non-poor people in these areas. **Virginia scored a “C” grade.**

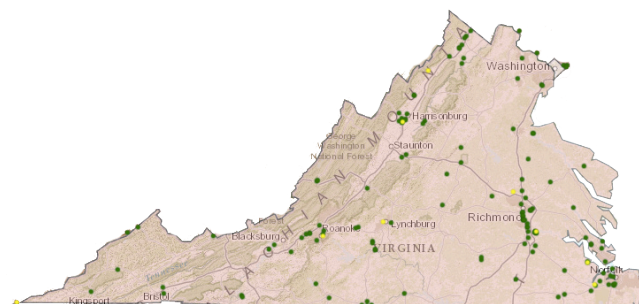
Nationally, 7.5 percent of the population lives within one mile of a hazardous facility.

Key Findings

- Nearly 250,000 Virginians (3.2 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.
- Roughly 57,000 children in Virginia live in the shadow of a hazardous chemical facility, and **almost half of them are Latino or Black.**
- **Poor black children are more than twice as likely to live near facilities as white children not in poverty.**

Chemical dangers are real, and several recent incidents have occurred in Virginia.

Virginia has seen several recent industrial incidents involving toxic, flammable, and explosive chemicals. In April 2014, a highly toxic vapor cloud of hydrochloric and hydrofluoric acids formed at a water treatment plant near Danville after other chemicals were inadvertently mixed. Eighteen workers were injured. No community members were hurt, but they had to evacuate their homes until plant workers and hazmat teams were able to eliminate the dangerous gases.



Virginia's 141 high-risk facilities are dotted across the state but are largely concentrated near Richmond and Norfolk. They include everything from chemical manufacturing plants and food production facilities in cities and suburbs to rural water treatment plants.

These facilities use and store a variety of chemicals, including **anhydrous ammonia**, which is sold as a fertilizer and is also used in commercial refrigeration. Water treatment plants and other industrial facilities store **chlorine gas**, a deadly substance that can be used as a chemical weapon. A leak from one of these plants could sicken and kill surrounding neighbors before they have time to evacuate.

But the plants themselves aren't the only risk. **Companies ship these dangerous chemicals** to the facilities, often by train or by truck, and accidents in transit can also lead to fatal releases.

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

Just under four percent of kids of color under age 12 live near potentially dangerous facilities, a much lower percentage than other states in the eastern part of the country. Fewer than three percent of children of color attend public schools close to a risky industrial facility, the same percentage as white students, giving Virginia one of the best scores on this measure of equality. Nevertheless, all of these children face acute dangers and daily exposures to toxic

chemicals that put them at a distinct disadvantage because young children are much more susceptible to chemical hazards than adults.

Unfortunately, poor children under age 12 face unequal chemical dangers in Virginia, with five percent of them living in a fenceline community, compared to fewer than three percent of non-poor kids. **Poor black children fare even worse, being more than twice as likely to live near a dangerous facility as white children who aren't poor.** Living in the shadow of an industrial facility increases stress on poor communities as they worry about the potential for a catastrophic disaster and daily exposures to toxic emissions. Living near these facilities can also decrease home values, meaning many poor families can't afford to move to safer neighborhoods if they want to do so.

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	3.7%	A	Percentage of Poor People Who Live in Fenceline	4.9%	B
Likelihood of People of Color to Live in Fenceline (compared to whites)	1.3 times more likely	B	Likelihood of Poor People to Live in Fenceline (compared to those not in poverty)	1.7 times more likely	D
Percentage of Children of Color Under 12 Who Live in Fenceline	3.6%	A	Percentage of Poor Children Under 12 Who Live in Fenceline	5.1%	B
Likelihood of Children of Color Under 12 to Live in Fenceline (compared to white children under 12)	1.3 times more likely	B	Likelihood of Poor Children Under 12 to Live in Fenceline (compared to children under 12 not in poverty)	1.8 times more likely	D
Percentage of Children of Color Who Attend Public Schools in Fenceline	2.6%	A	Percentage of Children Receiving Free Lunch Who Attend Schools in Fenceline	3.7%	A
Likelihood of Children of Color to Attend Public Schools in Fenceline (compared to white children)	Just as likely	B	Likelihood of Children Receiving Free Lunch to Attend Schools in Fenceline (compared to children not receiving free lunch)	1.5 times more likely	D
Percentage of Elderly of Color Who Live in Fenceline	3.7%	B	Percentage of Elderly Poor People Who Live in Fenceline	3.7%	B
Likelihood of Elderly of Color to Live in Fenceline (compared to elderly whites)	1.2 times more likely	B	Likelihood of Elderly Poor People to Live in Fenceline (compared to elderly people not in poverty)	1.2 times more likely	B
People of Color Grade		B	Poverty Grade		C
Overall Grade: C					

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

Virginians 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** Virginians 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 Virginia Department of Environmental Quality and the state-level OSHA to conduct more thorough and frequent inspections to spot problems before they cause disasters. And Virginians 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	4.6%	3.3%	3.2%	1.6%	2.9%	3.2%
0-17	4.5%	3.2%	4.0%	1.7%	2.7%	3.1%
18-64	4.7%	3.5%	2.9%	1.6%	2.9%	3.2%
65+	4.6%	2.0%	3.7%	1.5%	3.0%	3.2%
Total # in fenceline	68,662	21,442	751	7,429	145,555	248,922
Likelihood of living in fenceline, compared to whites	1.6	1.2	1.1	1.8 times less likely	---	---

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	5.9%	5.0%	4.8%	2.4%	4.4%	4.9%
0-17	6.0%	5.3%	6.0%	2.0%	4.1%	5.1%
18-64	6.1%	4.9%	4.2%	2.8%	4.7%	5.0%
65+	4.0%	1.4%	8.5%	1.1%	3.8%	3.7%
Total # in fenceline	17,355	4,942	168	916	19,057	43,660
Likelihood of living in fenceline, compared to whites in poverty	1.3	1.1	1.1	1.8	---	---
Likelihood of living in fenceline, compared to same race not in poverty	1.4	1.6	1.7	1.5	1.6	1.7
Likelihood of living in fenceline, compared to whites not in poverty	2.2	1.8	1.8	1.1 times less likely	1.6	---

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	3.5%	2.1%	2.5%	0.9%	2.6%	2.6%
Pre-K - 2	3.4%	2.8%	2.7%	0.9%	2.6%	2.7%
3-7	3.6%	2.3%	3.0%	1.1%	2.8%	2.8%
8-12	3.4%	1.2%	2.1%	0.6%	2.5%	2.4%
Total in fenceline	10,230	3,293	103	701	17,573	33,185
Likelihood of attending schools in fenceline, compared to white students	1.3	1.3 times less likely	Just as likely	3 times less likely	---	---

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