

Low-Income Residents and People of Color in North Dakota 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. **North Dakota scored in the middle with a “C” grade.**

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

Key Findings

- **North Dakota ranks the worst in the nation for the percentage of its population (12.8 percent) living within one mile of a chemical facility.** This means one in every eight North Dakotans lives in a “fenceline community” and faces potential chemical leaks and explosions.
- **North Dakota ranks second-worst for the percentage of poor populations living in fenceline communities (17.7 percent).** Poor people are one-and-a-half times more likely to live in fenceline communities than non-poor residents.
- **Poor Asian/Pacific Islander children are over four times more likely to live near chemical facilities than white children who are not in poverty.**

Chemical dangers are real, and incidents are happening across North Dakota.

Over the past decade, the JR Simplot plant in Grand Forks had ten reported incidents that together leaked over 1,100 pounds of anhydrous ammonia. This toxic gas can be fatal if inhaled and can travel several miles from its source. The Simplot plant is located less than a mile from the University of North Dakota campus that serves around 15,000 students. A major anhydrous ammonia leak would be disastrous for this community.

North Dakota’s 333 high-risk facilities are dotted across the state and include everything from rural fertilizer storage facilities to municipal water treatment plants to food processing plants. Many are related to agriculture, North Dakota’s number one industry.

The most common chemical reported by these facilities is anhydrous ammonia, which is sold as a fertilizer and is also used in commercial refrigeration. This is the same gas that was released in the deadly train derailment in Minot in 2002, which killed one resident and injured more than 300. At least 275 facilities in North Dakota store anhydrous ammonia onsite and could produce similar catastrophic disasters.

These dangerous chemicals must travel to the facilities somehow, often by train or by truck, and accidents in transit can also lead to fatal releases, as witnessed in Minot.

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

North Dakota ranks second-worst for the percentage of children of color (22.3 percent) attending schools near a hazardous facility. North Dakota received an “F” grade for this category. Additionally, a large share of children of color under age 12 (11.9 percent) live in fenceline communities. The proximity to hazardous facilities means that these children face acute dangers as well as daily exposure to toxic chemicals in their air and water. Similarly, nearly 10 percent of elderly people of color live in fenceline communities. They face their own health and mobility challenges that make responding to chemical disasters even more difficult.



As a whole, children of color under age 12 are just as likely to live in fenceline communities as white children. But when you look at individual race categories, you see some glaring disparities. Black, Latino, and Asian/Pacific Islander children under age 12 are all significantly more likely to live in fenceline communities than white children. However, American Indians (North Dakota’s second largest racial group) are two times *less* likely be in danger than whites, mainly due to the absence of many of these dangerous facilities on the state’s Indian reservations.

North Dakota also ranks second-worst for the percentage of people in poverty (17.7 percent) who live within one mile of a hazardous facility. Compare that to the percentage of people above the poverty line who live in near facilities (12.2 percent), and the disparity becomes apparent. This makes poor people in North Dakota one-and-a-half times more likely to live in fenceline communities than those living above the poverty line.

Poor children of color face an even greater likelihood of living in danger. For example, **poor Asian and Pacific Islander children are over four times more likely to live near dangerous facilities than whites above the poverty line.** 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	12.3%	D	Percentage of Poor People Who Live in Fenceline	17.7%	F
Likelihood of People of Color to Live in Fenceline (compared to whites)	Just as likely	A	Likelihood of Poor People to Live in Fenceline (compared to those not in poverty)	1.5 times more likely	D
Percentage of Children of Color Under 12 Who Live in Fenceline	11.9%	D	Percentage of Poor Children Under 12 Who Live in Fenceline	13.2%	D
Likelihood of Children of Color Under 12 to Live in Fenceline (compared to white children under 12)	Just as 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	22.3%	F	Percentage of Children Receiving Free Lunch Who Attend Schools in Fenceline	28.9%	F
Likelihood of Children of Color to Attend Public Schools in Fenceline (compared to white children)	1.2 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	9.8%	C	Percentage of Elderly Poor People Who Live in Fenceline	9.7%	D
Likelihood of Elderly of Color to Live in Fenceline (compared to elderly whites)	1.2 times less likely	A	Likelihood of Elderly Poor People to Live in Fenceline (compared to elderly people not in poverty)	1.2 times less likely	A
People of Color Grade		C	Poverty Grade		D
Overall Grade: C					

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

North Dakotans 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* North Dakotans 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 North Dakota Department of Health and the federal OSHA to conduct more thorough and frequent inspections to spot problems before they cause disasters. And North Dakotans 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	17.9%	16.1%	6.4%	22.1%	12.9%	12.8%
0-17	15.6%	15.7%	6.0%	22.0%	11.4%	11.3%
18-64	19.3%	16.3%	6.8%	22.5%	13.8%	13.7%
65+	7.6%	18.8%	5.7%	15.3%	11.4%	11.3%
Total # in fenceline	1,530	2,451	2,276	1,608	75,922	85,378
Likelihood of living in fenceline, compared to whites	1.4	1.3	2 times less likely	1.7	---	---

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	24.3%	18.9%	8.1%	39.7%	19.0%	17.7%
0-17	20.6%	19.7%	7.5%	45.9%	13.9%	13.1%
18-64	27.3%	18.4%	8.9%	39.1%	23%	21.5%
65+	57.0%	14.8%	1.9%	1.5%	9.9%	9.7%
Total # in fenceline	794	643	1,130	683	10,468	14,066
Likelihood of living in fenceline, compared to whites in poverty	1.3	Just as likely	2.4 times less likely	2.1	---	---
Likelihood of living in fenceline, compared to same race not in poverty	1.8	1.2	1.5	2.4	1.5	1.5
Likelihood of living in fenceline, compared to whites not in poverty	2.0	1.5	1.5 times less likely	3.2	1.5	---

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	22.3%	24.1%	21.2%	23.1%	27.1%	26.3%
Pre-K - 2	22.2%	23.2%	22.0%	21.5%	26.6%	25.7%
3-7	19.3%	23.8%	22.2%	22.4%	27.1%	26.2%
8-12	25.9%	25.5%	19.4%	24.6%	27.6%	26.8%
Total # in fenceline	647	811	1,926	350	22,524	26,550
Likelihood of attending schools in fenceline, compared to white students	1.2 times less likely	1.1 times less likely	1.3 times less likely	1.2 times less likely	---	---

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