

## Low-Income Residents and People of Color in South 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. **South Dakota scored a “B” but still has room for improvement.**

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

### Key Findings

- Over 26,000 South Dakota residents (3.3 percent of the total population) 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.
- **Latino children are over two-and-a-half times more likely to live near hazardous facilities than white children.**
- **Poor black children are three-and-a-half times more likely to live in fenceline communities than white children who are not in poverty.**

### Chemical dangers are real, and incidents are happening all across South Dakota.

In 2014, the Wilbur-Ellis fertilizer distributor in Chester leaked a small amount of anhydrous ammonia, injuring one worker. Anhydrous ammonia is a deadly toxic gas that can travel several miles from its source. A much larger release could injure or even kill surrounding residents.

South Dakota is dotted with similar fertilizer facilities that distribute **anhydrous ammonia** to farmers. Other facilities using this fatal gas include cold storage warehouses and food manufacturing plants, which use the chemical in their refrigeration systems. The eastern half of the state has a higher concentration of facilities, with the majority near rural communities.

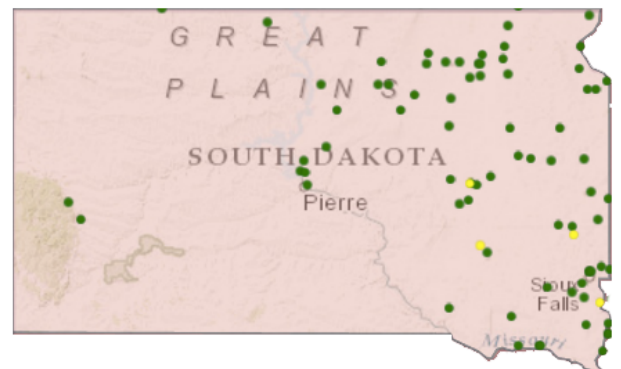
Cities are not without danger, however. Sioux Falls’ water treatment facility holds 76,000 pounds of **chlorine gas** for use in water purification. Chlorine gas is highly toxic and can travel quickly from its source – properties that made it a deadly chemical weapon during World War I.

**South Dakota’s 75 high-risk facilities** receive shipments of chemicals, which travel by rail or truck and put additional communities in danger of a catastrophic disaster.

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

Compared to most states, South Dakota has a relatively small proportion of its total population living within one mile of a hazardous facility (3.3 percent). Additionally, children of color under age 12 are not significantly more likely to live in fenceline communities than white children (3.9 percent compared to 3.1 percent). This results in South Dakota earning a “B” on the people of color grade.

However, when you look at individual race categories, you see some glaring disparities. **Black, Latino, and Asian/Pacific Islander children are all significantly more likely to live in fenceline communities than white children.** American Indian children (South Dakota’s second largest racial group), however, are over two times *less* likely to be in danger than white children, mainly due to the absence of many of these dangerous facilities on the state’s reservations.



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

Poor children of color, however, face even higher disparities. For example, **poor black children are three-and-a-half times more likely to live in fenceline communities than non-poor white children**; Latino children are three times more likely.

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   | 3.8%                  | A        | Percentage of Poor People Who Live in Fenceline  | 3.8%                  | A        |
| Likelihood of People of Color to Live in Fenceline (compared to whites)                             | 1.2 times more likely | B        | 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                                      | 3.9%                  | A        | Percentage of Poor Children Under 12 Who Live in Fenceline   | 4.1%                  | A        |
| Likelihood of Children of Color Under 12 to Live in Fenceline (compared to white children under 12) | 1.2 times more likely | B        | Likelihood of Poor Children Under 12 to Live in Fenceline (compared to children under 12 not in poverty)                   | 1.3 times more likely | B        |
| Percentage of Children of Color Who Attend Public Schools in Fenceline                              | 9%                    | C        | Percentage of Children Receiving Free Lunch Who Attend Schools in Fenceline  | 10.9%                 | C        |
| 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) | Just as likely        | B        |
| Percentage of Elderly of Color Who Live in Fenceline  | 1.7%                  | A        | Percentage of Elderly Poor People Who Live in Fenceline  | 3.6%                  | B        |
| Likelihood of Elderly of Color to Live in Fenceline (compared to elderly whites)                    | 1.9 times less likely | A        | Likelihood of Elderly Poor People to Live in Fenceline (compared to elderly people not in poverty)                         | 1.2 times more likely | B        |
| <b>People of Color Grade</b>  |                       | <b>B</b> | <b>Poverty Grade</b>   |                       | <b>B</b> |
| <b>Overall Grade: B</b>   |                       |          |  |                       |          |

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

South 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** South Dakotans deserve to be protected from chemical dangers. South Dakotans like you can help make these solutions a reality.

You can also demand that the federal government require facilities to switch to safer chemicals and alternatives whenever feasible and urge the South Dakota Department of Environment and Natural Resources and federal OSHA to conduct more thorough and frequent inspections to spot problems before they cause disasters. And South 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/<br>Alaskan Native | Asian/Pacific<br>Islander/<br>Native Hawaiian | White Not<br>Hispanic | All Races     |
|---|-------------|--------------|------------------------------------|---|-----------------------|---------------|
| <b>All Ages</b>                                       | <b>7.8%</b> | <b>8.0%</b>  | <b>1.5%</b>                        | <b>5.2%</b>                                   | <b>3.2%</b>           | <b>3.3%</b>   |
| 0-17  | 6.6%        | 8.4%         | 1.3%                               | 5.3%  | 3.2%                  | 3.3%          |
| 18-64   | 8.8%        | 8.0%         | 1.7%                               | 5.3%  | 3.2%                  | 3.4%          |
| 65+   | 3.2%        | 2.2%         | 1.3%                               | 2.7%  | 3.2%                  | 3.1%          |
| <b>Total # in fenceline</b>                           | <b>849</b>  | <b>1,855</b> | <b>1,020</b>                       | <b>440</b>                                    | <b>21,646</b>         | <b>26,392</b> |
| Likelihood of living in fenceline, compared to whites | 2.4         | 2.5          | 2.1 times less likely              | 1.6   | ---                   | ---           |

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

|   | Black       | Latino      | American Indian/<br>Alaskan Native | Asian/Pacific<br>Islander/<br>Native Hawaiian | White Not<br>Hispanic | All Races    |
|---|-------------|-------------|------------------------------------|---|-----------------------|--------------|
| <b>All Ages</b>   | <b>9.7%</b> | <b>8.6%</b> | <b>1.7%</b>                        | <b>3.6%</b>                                   | <b>4.1%</b>           | <b>3.8%</b>  |
| 0-17  | 10.6%       | 9.1%        | 1.7%                               | 6.8%  | 4.7%                  | 4.0%         |
| 18-64   | 9.2%        | 8.4%        | 1.8%                               | 2.1%  | 3.9%                  | 3.7%         |
| 65+   | 5.1%        | 0.8%        | 0.4%                               | 0.0%  | 4.0%                  | 3.6%         |
| <b>Total # in fenceline</b>   | <b>303</b>  | <b>524</b>  | <b>566</b>                         | <b>58</b>                                     | <b>2,678</b>          | <b>4,245</b> |
| Likelihood of living in fenceline, compared to whites in poverty        | 2.3         | 2.1         | 2.4 times less likely              | 1.1   | ---                   | ---          |
| Likelihood of living in fenceline, compared to same race not in poverty | 1.4         | 1.1         | 1.3                                | 1.5 times less likely                         | 1.3                   | 1.2          |
| Likelihood of living in fenceline, compared to whites not in poverty    | 3.1         | 2.8         | 1.8 times less likely              | 1.2   | 1.3                   | ---          |

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

|  | Black        | Latino       | American Indian/<br>Alaskan Native | Asian/Pacific<br>Islander/<br>Native Hawaiian | White Not<br>Hispanic | All Races     |
|--|--------------|--------------|------------------------------------|---|-----------------------|---------------|
| <b>All Grades</b>  | <b>13.1%</b> | <b>11.6%</b> | <b>7.8%</b>                        | <b>6.9%</b>                                   | <b>8.7%</b>           | <b>8.8%</b>   |
| PreK - 2   | 13.7%        | 12.5%        | 7.8%                               | 7.6%  | 9.4%                  | 9.4%          |
| 3-7  | 16.8%        | 13.3%        | 7.8%                               | 8.5%  | 8.5%                  | 8.8%          |
| 8-12   | 8.5%         | 8.3%         | 7.8%                               | 5.1%  | 8.4%                  | 8.2%          |
| <b>Total # in fenceline</b>  | <b>469</b>   | <b>645</b>   | <b>1,167</b>                       | <b>163</b>                                    | <b>8,826</b>          | <b>11,442</b> |
| Likelihood of attending schools in fenceline, compared to white students | 1.5          | 1.3          | 1.1 times less likely              | 1.3 times less likely                         | ---                   | ---           |

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