Low-Income Residents and People of Color in Ohio 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. Ohio scored poorly with a “D” grade.

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

Key Findings

- More than 900,000 Ohioans (one in 12) 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.

- Children of color under age 12 are roughly twice as likely to live in the shadow of a hazardous chemical facility compared to white children in Ohio.

- Poor Latino children are over three times more likely to live near facilities than white children not in poverty.

Chemical dangers are real, and Ohio has experienced recent industrial incidents.

In one example, a leak at the Cloverleaf cold storage warehouse southwest of Toledo released toxic anhydrous ammonia in February 2014, injuring one worker and forcing the evacuation of 46 others.

Ohio’s 403 high-risk facilities are scattered across the state, with higher concentrations near Cincinnati, Cleveland, and Toledo. They include everything from chemical manufacturing plants, food production facilities, oil and gas refineries, and water treatment plants in cities and suburbs to rural fertilizer and chemical distribution facilities.

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.

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 Ohio safe from chemical hazards?

More than 15 percent of Latinos and 13 percent of blacks live in fenceline communities, compared to only seven percent of white residents. Nearly 13 percent of kids of color under age 12 live near potentially dangerous facilities, compared to only seven percent of white kids in this age group. The numbers are about the same for children of color who attend public schools close to a risky industrial facility as compared to white students. 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.
Poor children under age 12 also face unequal chemical dangers; almost 13 percent live in a fenceline community, compared to seven percent of non-poor children. **Poor Latino children fare even worse, being more than three times more 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

<table>
<thead>
<tr>
<th>Racial Inequities</th>
<th>Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of People of Color Who Live in Fenceline</td>
<td>12.6%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of People of Color to Live in Fenceline (compared to whites)</td>
<td>1.8 times more likely</td>
<td>D</td>
</tr>
<tr>
<td>Percentage of Children of Color Under 12 Who Live in Fenceline</td>
<td>12.8%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Children of Color Under 12 to Live in Fenceline (compared to white children under 12)</td>
<td>1.9 times more likely</td>
<td>D</td>
</tr>
<tr>
<td>Percentage of Children of Color Who Attend Public Schools in Fenceline</td>
<td>12.9%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Children of Color to Attend Public Schools in Fenceline (compared to white children)</td>
<td>1.9 times more likely</td>
<td>D</td>
</tr>
<tr>
<td>Percentage of Elderly of Color Who Live in Fenceline</td>
<td>12.3%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Elderly of Color to Live in Fenceline (compared to elderly whites)</td>
<td>1.9 times more likely</td>
<td>D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income (Poverty) Inequities</th>
<th>Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Poor People Who Live in Fenceline</td>
<td>12.2%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Poor People to Live in Fenceline (compared to those not in poverty)</td>
<td>1.7 times more likely</td>
<td>D</td>
</tr>
<tr>
<td>Percentage of Poor Children Under 12 Who Live in Fenceline</td>
<td>12.8%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Poor Children Under 12 to Live in Fenceline (compared to children under 12 not in poverty)</td>
<td>1.8 times more likely</td>
<td>D</td>
</tr>
<tr>
<td>Percentage of Children Receiving Free Lunch Who Attend Schools in Fenceline</td>
<td>10.9%</td>
<td>C</td>
</tr>
<tr>
<td>Likelihood of Children Receiving Free Lunch to Attend Schools in Fenceline (compared to children not receiving free lunch)</td>
<td>1.1 times more likely</td>
<td>B</td>
</tr>
<tr>
<td>Percentage of Elderly Poor People Who Live in Fenceline</td>
<td>9.8%</td>
<td>D</td>
</tr>
<tr>
<td>Likelihood of Elderly Poor People to Live in Fenceline (compared to elderly people not in poverty)</td>
<td>1.4 times more likely</td>
<td>C</td>
</tr>
</tbody>
</table>

**People of Color Grade:** D  
**Poverty Grade:** D  
**Overall Grade:** D

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

Ohioans 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 Ohioans 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 Ohio Environmental Protection Agency and federal OSHA to conduct more thorough and frequent inspections to spot problems before they cause disasters. And Ohioans 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

<table>
<thead>
<tr>
<th>Age</th>
<th>Black</th>
<th>Latino</th>
<th>American Indian/Alaskan Native</th>
<th>Asian/Pacific Islander/Native Hawaiian</th>
<th>White Not Hispanic</th>
<th>All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>13.1%</td>
<td>15.4%</td>
<td>10.6%</td>
<td>7.2%</td>
<td>7.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>0-17</td>
<td>13.5%</td>
<td>15.3%</td>
<td>7.5%</td>
<td>6.3%</td>
<td>6.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>18-64</td>
<td>13.0%</td>
<td>15.7%</td>
<td>11.5%</td>
<td>7.5%</td>
<td>7.4%</td>
<td>8.3%</td>
</tr>
<tr>
<td>65+</td>
<td>13.1%</td>
<td>13.2%</td>
<td>9.7%</td>
<td>6.5%</td>
<td>6.6%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Total # in fenceline</td>
<td>175,699</td>
<td>54,863</td>
<td>2,096</td>
<td>14,146</td>
<td>646,507</td>
<td>914,393</td>
</tr>
<tr>
<td>Likelihood of living in fenceline, compared to whites</td>
<td>1.9</td>
<td>2.2</td>
<td>1.5</td>
<td>1.0</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Age</th>
<th>Black</th>
<th>Latino</th>
<th>American Indian/Alaskan Native</th>
<th>Asian/Pacific Islander/Native Hawaiian</th>
<th>White Not Hispanic</th>
<th>All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>15.4%</td>
<td>20.5%</td>
<td>13.5%</td>
<td>10.8%</td>
<td>10.1%</td>
<td>12.2%</td>
</tr>
<tr>
<td>0-17</td>
<td>15.6%</td>
<td>20.2%</td>
<td>10.8%</td>
<td>11.8%</td>
<td>9.8%</td>
<td>12.7%</td>
</tr>
<tr>
<td>18-64</td>
<td>15.4%</td>
<td>20.7%</td>
<td>14.7%</td>
<td>10.8%</td>
<td>10.4%</td>
<td>12.2%</td>
</tr>
<tr>
<td>65+</td>
<td>14.1%</td>
<td>23.7%</td>
<td>5.7%</td>
<td>6.8%</td>
<td>8.5%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Total # in fenceline</td>
<td>69,790</td>
<td>21,610</td>
<td>750</td>
<td>2,679</td>
<td>113,755</td>
<td>216,438</td>
</tr>
<tr>
<td>Likelihood of living in fenceline, compared to whites in poverty</td>
<td>1.5</td>
<td>2.0</td>
<td>1.3</td>
<td>1.1</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Likelihood of living in fenceline, compared to same race not in poverty</td>
<td>1.3</td>
<td>1.5</td>
<td>1.4</td>
<td>1.6</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Likelihood of living in fenceline, compared to whites not in poverty</td>
<td>2.3</td>
<td>3.1</td>
<td>2.0</td>
<td>1.6</td>
<td>1.5</td>
<td>---</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Black</th>
<th>Latino</th>
<th>American Indian/Alaskan Native</th>
<th>Asian/Pacific Islander/Native Hawaiian</th>
<th>White Not Hispanic</th>
<th>All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Grades</td>
<td>13.5%</td>
<td>15.5%</td>
<td>8.2%</td>
<td>7.0%</td>
<td>6.9%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Pre-K - 2</td>
<td>13.4%</td>
<td>18.0%</td>
<td>8.2%</td>
<td>6.2%</td>
<td>7.8%</td>
<td>9.6%</td>
</tr>
<tr>
<td>3-7</td>
<td>13.3%</td>
<td>16.7%</td>
<td>8.6%</td>
<td>6.2%</td>
<td>7.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>8-12</td>
<td>13.9%</td>
<td>11.5%</td>
<td>7.9%</td>
<td>8.5%</td>
<td>6.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Total # in fenceline</td>
<td>37,575</td>
<td>11,276</td>
<td>190</td>
<td>2,298</td>
<td>87,022</td>
<td>146,658</td>
</tr>
<tr>
<td>Likelihood of attending schools in fenceline, compared to white students</td>
<td>2.0</td>
<td>2.3</td>
<td>1.2</td>
<td>1 times less likely</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

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