

# Petrochemical Pollution and Our Health

Plastics are everywhere, and the industry that makes them is booming. Plastics are produced from fossil fuels. They are the biggest category of "petrochemicals."

Most petrochemical production facilities are located in Texas and Louisiana, but there are others in virtually every state, including a growing number in the Ohio River Valley.<sup>1,2</sup>

The ubiquity of plastics and other petrochemicals comes at a steep cost to our health, especially for those living near production and processing facilities.

## Health impacts of petrochemical pollution include:

### Higher risk of cancer

A study in Texas found that living closer to oil refineries was associated with higher rates of bladder, breast, colon, lung, lymphoma, and prostate cancers. Those living within 10 miles faced the greatest risk.<sup>3</sup>

Other studies have found that living near petrochemical facilities is also associated with an increased risk of bone, brain, liver, larynx, and pancreatic cancers, as well as other cancers of the blood.<sup>4,5</sup>

An analysis found that those living within 3.1 miles of petrochemical facilities had a 30 percent higher leukemia risk than those in communities with no petrochemical facilities. Another study found elevated leukemia incidence in children.<sup>6,7</sup>



### Adverse birth outcomes

Living closer to petrochemical facilities is linked with poor birth outcomes like preterm birth, low birth weight, miscarriage, stillbirth, and birth defects.<sup>8,9</sup>

### More asthma and respiratory illness

Studies show higher rates of asthma and respiratory illnesses among people living near petrochemical facilities.<sup>10</sup>

### Kidney disease

Living near petrochemical facilities is associated with an increased risk of chronic glomerulonephritis. This is a major cause of chronic kidney disease and can lead to end-stage renal failure.<sup>11</sup>

Why the production of plastics is a danger to our health



## Children are more vulnerable to pollution

The petrochemical industry creates extraordinary amounts of pollution. Some of the most harmful pollutants include benzene, ethylene oxide, formaldehyde, chloroprene, PFAS, vinyl chloride, and trichloroethylene.<sup>12</sup>

Several studies address the health implications for adults. But researchers suggest that infants and children may be especially vulnerable since they breathe more and drink more (for their size), live closer to the ground (where many pollutants concentrate), and have sensitive, rapidly developing organ systems.<sup>13</sup>

## Plastic production and environmental injustice

The building blocks of plastic are made at the expense of our health, and people of color are disproportionately impacted.

Petrochemical plants, incinerators, landfills, and other heavily polluting industries are commonly sited in communities that already are burdened by multiple pollution sources. This is in large part a result of racial discrimination in housing and financial services, as well as the designation of low-income Black and Latino neighborhoods as mixed residential-industrial zones.<sup>14</sup>

Many of the worst air pollution hotspots are found in southern states with weaker environmental oversight. In majority-Black census tracts, the estimated risk of cancer from toxic air emissions is more than twice the risk found in majority-white tracts.<sup>15</sup> And it is often these communities that are targeted for new petrochemical processing facilities.<sup>16</sup>



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Full list of sources: [momscleanairforce.org/sources-petrochemical-health](https://www.momscleanairforce.org/sources-petrochemical-health)



## Petrochemicals and climate change

The petrochemical industry is a vast, growing, and frequently overlooked contributor to climate change. Every step of the petrochemical “lifecycle”—from extracting the fossil fuel feedstocks, to manufacturing the plastics, to managing the waste—releases climate-heating gases.<sup>17</sup>

We are creating mountains of plastics. They do not decompose, and they keep emitting greenhouse gases long after we throw them in the trash, even after they become micro-plastics in landfills, agricultural soils, and oceans.<sup>18</sup> There is no good way to dispose of plastics.

## How can we protect our communities from petrochemical pollution?

Petrochemical companies make bad neighbors—for communities and for the planet. Federal and state pollution standards are both woefully inadequate and poorly enforced.<sup>19</sup> Regulators compile pollution data (usually based on industry’s self-reported models) but have a poor track record of informing those in harm’s way. Officials rarely step in to curtail the emissions, and they almost never shut down the polluters.<sup>20</sup>

We need EPA and other government agencies to rein in toxic pollution from the production of plastics and other petrochemicals. These facilities are sickening local neighborhoods and heating the planet with their emissions. Communities need the strongest possible standards and protections. We are asking the administration to clamp down immediately on construction and expansion of new plastics and petrochemical facilities.

We can use our voices to oppose new petrochemical facilities and to minimize health harms to vulnerable communities. To learn more about how you can speak out, visit [www.momscleanairforce.org/issues/toxic-chemicals/plastics](https://www.momscleanairforce.org/issues/toxic-chemicals/plastics).