Endangering Generations
How the Trump Administration’s Assault on Science Is Harming Children’s Health
“There can be no keener revelation of a society’s soul than the way in which it treats its children.”
– Nelson Mandela

Children deserve access to clean water and air, safe food, and healthy and secure environments in which to live, learn, and play—conditions which the current presidential administration is putting at risk (CEHN 2015). Over the past decades, the federal government established protections to help ensure children’s health and safety. When policymakers discovered through science that certain practices or products were dangerous for children’s health and safety, they acted to ensure that standards reflect that new information, so that children have the best chances to live healthy and safe lives. The Trump administration, in contrast, puts kids in harm’s way. This administration has ignored its own scientists and advisors and made decisions that go against firmly grounded scientific evidence and the public interest. These actions and decisions will have ramifications for the next generation, and many of these policy moves will disproportionately harm young children. Environmental pollutants are particularly harmful to babies and children from before birth to age eight because their bodily systems are still developing (APHA 2017). They are not just little adults; they eat, drink, and breathe more relative to their body size, making their exposure to toxic substances more pronounced. Early life exposure can affect a child’s development, both physical and mental, throughout their lifespan.

The Trump administration has not only rolled back protections that will leave children more exposed to harms from toxic chemicals in the water, air, and products used in homes, but also actively hampered the production of new knowledge about how children are uniquely affected by chemical burdens. For example, the Environmental Protection Agency (EPA) under President Trump decided to terminate funding for 13 research centers, known as the Children’s Centers, that study associations between chemical exposures in early childhood and later adverse health outcomes (Hiar and Wittenberg 2019). Children of color and children from low-income households will bear the brunt of these impacts as the Trump administration undermines policies to lift children and families out of poverty, and in the most extreme case, actively separates children from their parents. The actions of this administration endanger the physical and mental health and security of our nation’s children, threatening their ability to reach their full potential.

Findings: Children Are Bearing the Burden of Trump Administration Decisions

EPA FAILURE TO TAKE STRONG ACTION TO REGULATE LEAD

The Trump administration is exacerbating the health harms caused by lead, a metal that is highly toxic when absorbed into the body. Lead is a highly potent neurotoxin that even at low doses can cause irreversible damage to the nervous system of children (WHO 2019). There is no safe level of lead exposure for children (CDC 2019c). Childhood lead exposure still occurs in the United States, primarily through lead-based paint and dust, and it disproportionately affects children of color and children from low-income households (CDC 2019b; Wheeler 2013).

While the administration has taken some steps to protect children, its policies are poorly enforced or contain loopholes that are sure to harm children. For instance, the EPA’s 2019 update to the lead and copper rule, which governs the testing and action procedures for lead in drinking water, has provided some needed science-based health protections, like requiring for the first time that childcare facilities and schools be tested for lead and strengthening the testing procedures to better represent the best scientific practices (Dennis 2019).

The actions of this administration endanger the health and security of our nation’s children, threatening their ability to reach their full potential.
However, the EPA neglected to require the replacement of 6 million water service lines made of lead. The EPA also failed to lower the level of lead in drinking water at which the agency is required to step in and provide enforcement—known as its lead action level, currently 15 parts per billion—to be more in line with public health research showing that no level of lead exposure is safe for children (CDC 2019a). And the new rule has reduced the percentage of lead water service lines that must be replaced in communities that have reached the lead action level, from 7 percent of water lines to 3 percent.

Most notably, the administration is failing to protect children from the dangers of lead-based paint exposure at home. In June 2019, the EPA set hazard standards for lead in paint, dust, and soil; however, it did not tighten the standard for lead-based paint conditions that likely put children in danger, such as lead-based paint with evidence of teeth marks, deterioration, or other damage (Neltner 2019; Neltner 2018). The EPA’s inspector general wrote a report in September 2019 that criticized the agency for its failure to enforce the lead-based paint renovation, repair, and painting rule, charging the EPA with not properly assessing the effectiveness of the program and failing to evaluate changes in blood lead levels in children that could have highlighted disparities in marginalized communities (Davidson et al. 2019). In 2018, the Department of Housing and Urban Development (HUD) was also criticized by its inspector general for failing to protect children from lead. The HUD inspector general and the Government Accountability Office, a nonpartisan agency that reports to Congress, called out HUD for its inadequate oversight of a lead paint inspection program designed to protect hundreds of thousands of children living in subsidized housing from lead exposure. The HUD inspector general concluded that the agency was failing to inspect tens of thousands of homes for lead paint—only 2,700 of the 7,000 public housing developments nationwide were inspected for lead in 2017 (Parker 2018).

The Government Accountability Office also concluded that HUD was failing to properly monitor and identify children who had elevated blood lead levels and had failed to ensure that lead mitigation grants were benefiting the most at-risk communities (GAO 2018).
Decades of scientific evidence show that exposure to the pesticide chlorpyrifos, even at low doses, can inhibit brain development in children.

A UCS analysis compared US census data on children under five with the amount of chlorpyrifos used in the farmland portion of each US county, finding that 1,969,325 children living in agricultural communities are likely facing an increased risk of harm to their brains and nervous systems because of the EPA’s failure to act to ban chlorpyrifos use. (See the appendix, online at www.ucsusa.org/resources/endangering-generations, for more details.)

EPA PERMITTING IQ-LOWERING PESTICIDE ON THE MARKET

Against the advice of its own scientists, the EPA under the Trump administration scrapped a ban on the pesticide chlorpyrifos, a chemical so harmful that the EPA banned its use in homes in 2000 because of the risks posed to children’s health (EPA 2019a). The Trump administration claimed that “the science addressing neurodevelopmental effects remains unresolved” and that a further review of the science was needed (EPA 2017). This move was at odds with the scientific community, and the courts have agreed. In 2018 and 2019, federal courts ordered the EPA to finalize its ban on chlorpyrifos (Reed 2018; Chase-Lubitz 2019). However, the EPA continued to refuse, falsely claiming that there were not enough data to demonstrate that the pesticide is unsafe (Beitsch and Green 2019).

Chlorpyrifos was derived from a class of chemicals used as nerve agents during World War II, and decades of scientific evidence now show that exposure to chlorpyrifos, even at low doses, can inhibit the normal development of children’s brains, beginning in the womb, and result in a higher risk of lowered IQ or autism (Lu 2018; Hertz-Picciotto et al. 2018; Hyland and Laribi 2017; Rauh 2018; Gunier et al. 2017; Lan et al. 2017). The Trump administration’s abdication of responsibility to protect the public’s health has led to heartbreaking challenges for the families that live near fields regularly sprayed with the pesticide. Raul Garcia, an activist from the Central Valley Region in California who works for a community group that advocates for pesticide safety, says parents feel helpless and afraid when pesticides like chlorpyrifos drift into their homes, sometimes fearing their children will be unable to breathe (Levin 2019). Faced with inaction by the Trump administration and the desire to protect children, community advocates across the country have called for bans of the pesticide, with successful bans in Hawaii and California, and New York is poised to take regulatory action soon (Alvarez Noli 2019; Dennis and Eilperin 2019; Earthjustice 2019).

EPA ALLOWING PFAS TO PERSIST

PFAS—per- and polyfluoroalkyl substances—are a class of synthetic chemicals used in a variety of products to repel water and grease, including firefighting foam, nonstick cookware, and food packaging. Despite evidence supporting the importance of regulating these persistent chemicals, the Trump administration has failed to require monitoring, testing, and cleanup of the chemicals in water and has actively delayed the release of a government study suggesting that PFAS are potentially more hazardous than previously known (Reed et al. 2018).

Because PFAS are highly mobile and persistent, they enter the environment as products break down in landfills and leach into the air, soil, and water and into our bodies as we eat, drink, and use consumer products. Exposure to PFAS is associated with ulcerative colitis, thyroid disease, hypertension in pregnant women, and testicular and kidney cancers (ATSDR 2018). Scientific evidence suggests children may be especially vulnerable to exposure to PFAS. For many children, exposure to PFAS begins almost immediately, first through placental transfer and through breast milk after birth (Mondal et al. 2014). Children’s bodies then continue to absorb PFAS by other means as they ingest PFAS-containing dust through mouthing behaviors and from spending a great deal of time on dusty floors (Mondal et al. 2014). In children, PFAS exposure is associated with elevated cholesterol levels, decreased response to vaccines, increased asthma risk, and damage to kidney function (Rappazzo, Coffman, and Hines 2017).

The EPA and the Department of Defense have failed to take strong enough action to protect affected communities from old and new sources of PFAS contamination. Because PFAS are not designated as a hazardous waste, the EPA is not required to prioritize and remediate PFAS-contaminated Superfund sites and force polluters to pay for cleanup. Likewise, the Department of Defense is stalling on cleaning up contaminated military sites. The long-awaited PFAS Action Plan issued by the EPA in February 2019 offered few concrete regulatory changes and was criticized by affected communities as being too little, too late (EPA 2019b; Dennis 2019a). As the Trump administration delays the institution of safeguards to protect the public from PFAS, communities
PFAS are a class of human-made chemicals used in manufacturing and in firefighting foam. Use of PFAS can contaminate surrounding water supplies, causing thyroid disease and cancer in humans. The effects of PFAS are especially damaging to the developing bodies of children. Above, a mother provides her child with bottled water in Horsham, Pennsylvania, which has been experiencing PFAS contamination from a nearby naval base.

Living near military and industrial sites bear the financial burden of paying for improved filtration of their drinking water and for the medical bills associated with health impacts.

Although the impacts of PFAS contamination are felt by all residents, children and women of reproductive age are more vulnerable to the effects of these toxic substances.

UCS calculated the enrollment at schools and childcare facilities located near PFAS contamination sites to estimate the number of children at serious risk of exposure. Our results showed that nearly 3 million children attend schools or childcare facilities and 3.6 million women of reproductive age live within five miles of a contamination site (see Table 1).

**TABLE 1. Children and Women of Reproductive Age in Proximity to PFAS Contamination Sites**

<table>
<thead>
<tr>
<th></th>
<th>Schools</th>
<th>Childcare Facilities</th>
<th>Women of Reproductive Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Schools</td>
<td># Children Enrolled</td>
<td># Facilities</td>
</tr>
<tr>
<td>1 Mile</td>
<td>408</td>
<td>146,246</td>
<td>462</td>
</tr>
<tr>
<td>3 Miles</td>
<td>2,515</td>
<td>948,210</td>
<td>2,715</td>
</tr>
<tr>
<td>5 Miles</td>
<td>5,962</td>
<td>2,377,628</td>
<td>6,236</td>
</tr>
</tbody>
</table>

This table summarizes results from a UCS proximity analysis of 73 non-military PFAS contamination sites. (See the appendix for more details.)

Sources: SSEHRI 2018; HIFLD 2017; NHGIS DATABASE 2019.
EPA FAILURE TO BAN ASBESTOS

The EPA disregarded the advice of more than a dozen of its own scientists and lawyers who recommended the agency ban the import of asbestos—a fibrous, cancer-causing mineral—into the country, as 60 other nations have done (Friedman 2019). Instead, the EPA issued a rule that not only failed to ban these imports but provides a regulated pathway for industry to continue to use asbestos-containing products in the United States (Desikan 2019b). The agency also decided not to look at legacy uses of asbestos in its risk assessments, meaning the EPA will no longer assess the threats that people face from exposure to asbestos in insulation, fireproofing, and flooring already in people’s homes, schools, cars, workplaces, and at some Superfund sites. In November 2019, the Ninth Circuit Court of Appeals ruled that this decision was unlawful, but the agency persists in refusing to ban the chemical and enforce its regulations to protect public—especially children’s—health (Safer Chemicals, Healthy Families vs. USEPA 2019).

Since the 1920s, studies have shown that asbestos exposure is deadly—causing mesothelioma, a rare, aggressive form of lung cancer—yet it was widely used in buildings from the 1950s to the 1970s and in thousands of consumer products (MAAC 2019). As school buildings built from 1946 to 1972 likely contain asbestos, millions of children and adults may still be exposed on an almost daily basis from disintegrating insulation and other sources (Office of Senator Edward J. Markey 2015). And because schools located in marginalized communities are far more likely to be in a state of disrepair, children from low-income communities and communities of color may experience increased exposure to asbestos while at school (Neal 2008). However, the EPA and states are not systematically monitoring or investigating asbestos hazards in schools (Canes Garduño et al. 2018).

The latest science reveals that about 40,000 people die every year as a result of asbestos exposure (McCarthy and Reilly 2019). Children are more likely to be exposed due to their higher levels of activity and faster breathing and because they spend more time closer to the floor, where asbestos fibers can accumulate. Early childhood exposure to asbestos greatly increases risk of mesothelioma because of the greater length of time it remains in the body (Canes Garduño et al. 2018).

REDUCED FEDERAL MEAT INSPECTIONS THAT THREATEN FOOD SAFETY

Young children are more susceptible than adults to health complications due to foodborne illnesses. In the United States, the foods most responsible for foodborne illness are chicken, beef, pork, and turkey (Dewey-Mattia et al. 2018). The Trump administration, however, has enacted two measures with great potential to stress the inspection process that ensures the safety of poultry and pork products (UCS 2019c; UCS 2019b). The US Department of Agriculture’s (USDA) Food Safety and Inspection Service is allowing some poultry and pork manufacturers to increase the conveyor line speeds at which workers inspect. At pork processing facilities specifically, pork producers will be able to reduce the number of federal inspectors on the production line and reduce the frequency of microbial testing (UCS 2019b). The new regulations for both industries worry public health experts, as the evidence suggests that the policies could lead to weakened oversight of food safety which can threaten the safety of children’s food (UFCW 2019).

The primary rationale for the new poultry decision is based on the results of a program looking at high line speeds that was only in the pilot stage at a small number of facilities (FSIS 2018). The Government Accountability Office takes issue with the pilot’s tentative results, stating that “faster line speeds allowed under the pilot projects raise concerns
than adults to be hospitalized if they get a *Salmonella* infection and are more likely to develop a severe life-threatening complication from an *E. coli* infection (CDC 2019d; HHS 2019). Additionally, common symptoms of foodborne illness, such as vomiting and diarrhea, can lead to a loss of body fluids, which is more likely to result in dangerous levels of dehydration in children because of their small body size (HHS 2019).

**DECREASED ENFORCEMENT OF THE SAFETY OF CHILDREN’S PRODUCTS**

The Consumer Product Safety Commission (CPSC) was created to implement standards and ensure the safety of products in our homes, schools, daycare facilities, and workplaces. In 2018, the Trump administration's then-appointed chair of the CPSC, Ann Buerkle, failed to listen to the agency’s own experts who recommended issuing a recall for a Britax jogging baby stroller shown to harm both children and their parents when its front wheel suddenly popped off (Frankel 2019a). From 2012 to 2018, more than 200 documented injuries related to a Britax jogging stroller came to the commission by way of its reporting mechanism, saferproducts.gov, leading staff scientists to pursue an investigation that lasted nearly a year (CPSC 2019).

Based on experiments and collected evidence, technical experts recommended initiating the recall process. However, Buerkle withheld information on the investigation and the recommended recall from the other four commissioners who, amid significant lobbying from the manufacturing company, initially decided against a recall of the stroller. Instead, the commissioners ordered the company to issue replacement parts and roll out a “robust educational campaign.”

About food safety and worker safety” (GAO 2013). One facility reported that inspectors were given approximately one second for every three poultry carcasses—insufficient time to inspect for food safety hazards such as fecal contamination. The USDA has thus far failed to demonstrate the safety of high line speeds through objective and statistical methodology, not having yet done rigorous monitoring to show the new system can be implemented without harm to public health (Sewell 2014).

At pork facilities, the potential harm caused by the changes in regulation is even greater. The new swine inspection system is based on a pilot program similar to the one carried out at poultry facilities and removes line speed limits (currently 18 hogs per minute), allows factories to replace Food Safety and Inspection Service inspectors with their own employees, and allows companies to test less often for the presence of potentially dangerous microbes such as *Salmonella*, *E. coli*, and *Campylobacter*, which are collectively responsible for an estimated 30,000 hospitalizations each year (FSIS 2019; CDC 2018). This policy action could also lead to subpar inspection and greater risks of food contamination (UFCW 2019). The USDA’s own review of the pilot program in 2013 shows that line inspectors not employed by the Food Safety and Inspection Service too often received inadequate training and too often failed to identify contaminated meat (Flynn 2013). Together, these changes will lead to more contaminated products making their way onto store shelves and into the homes of vulnerable children.

Because young children’s immune systems are still developing, they cannot fight off infections as well as adults (HHS 2019). Children under five are three times more likely

---

*The Trump administration is prioritizing industry over the health and safety of parents and children. Despite more than 200 reports of injuries sustained while using a Britax jogging stroller, the Consumer Product Safety Commission failed to take strong enough action to require the company to notify consumers of the defect and prevent future harm.*
premature death and requiring emergency room visits and other costly medical care. But children face particular risks from air pollution since their lungs are developing and they engage in more active, outdoor activities (ALA 2019). Children who are exposed to higher levels of air pollution can develop serious health problems that affect their lungs and brains, and children of color and children from low-income households are disproportionately harmed (Gauderman et al. 2000; Payne-Sturges et al. 2018; Milman 2018).

Several Trump administration decisions threaten to increase air pollution throughout the United States. The administration has weakened or may weaken several regulations designed to decrease pollution from sources such as coal-fired power plants (Clean Power Plan, Mercury and Air Toxics Standards), oil and natural gas facilities (New Source Performance Standards for methane and volatile organic compounds), vehicular traffic (Corporate Average Fuel Economy standards), industrial facilities that emit hazardous air pollutants (the EPA’s “once in, always in” policy for air toxics), and all sources of ground-level ozone pollution (National Ambient Air Quality Standards) (UCS 2019a). In 2017, under the Trump administration, recalls of children’s products dropped to their lowest level in more than a decade. Replacing recalls of products with educational campaigns or no actions at all lets companies off the hook and puts children at risk.

Unfortunately, the replacement parts also proved defective (Frankel 2019b). After more than a year of clear enforcement failures, the CPSC finally required Britax to recall the defective part, offer replacement parts for longer, and notify all customers of the issue in July 2019 (Frankel 2019c).

The stroller incident is part of a larger trend of decreased enforcement at the CPSC under President Trump. The number of product recalls has fallen and recalls of children’s products is the lowest it has been in more than a decade, dropping by 60 percent from 2016 to 2017 (see the figure above). The CPSC is also fining fewer companies for misconduct, down from 15 from 2015 to 2016 to just seven from 2017 to 2018 (CPSC, n.d.). It’s not just the number of recalls that has dropped; the CPSC is also fining fewer companies for misconduct.

WEAKENED AIR POLLUTION PROTECTIONS

The Trump administration’s numerous attempts to weaken or roll back the regulations that protect us from air pollution are especially harmful to children. Air pollution can cause serious harm to human health and the environment, triggering negative consequences such as asthma and even premature death and requiring emergency room visits and other costly medical care. But children face particular risks from air pollution since their lungs are developing and they engage in more active, outdoor activities (ALA 2019). Children who are exposed to higher levels of air pollution can develop serious health problems that affect their lungs and brains, and children of color and children from low-income households are disproportionately harmed (Gauderman et al. 2000; Payne-Sturges et al. 2018; Milman 2018).

Several Trump administration decisions threaten to increase air pollution throughout the United States. The administration has weakened or may weaken several regulations designed to decrease pollution from sources such as coal-fired power plants (Clean Power Plan, Mercury and Air Toxics Standards), oil and natural gas facilities (New Source Performance Standards for methane and volatile organic compounds), vehicular traffic (Corporate Average Fuel Economy standards), industrial facilities that emit hazardous air pollutants (the EPA’s “once in, always in” policy for air toxics), and all sources of ground-level ozone pollution (National Ambient Air Quality Standards) (UCS 2019a). Additionally, the ambient air pollution standard for particulate matter may not be strengthened by the Trump administration, despite growing scientific evidence showing that the current standard is inadequate to protect public

Recalls of Children’s Products, 2005–2019

In 2017, under the Trump administration, recalls of children’s products dropped to their lowest level in more than a decade. Replacing recalls of products with educational campaigns or no actions at all lets companies off the hook and puts children at risk.

SOURCE: CONSUMER PRODUCT SAFETY COMMISSION RECALLS DATABASE (CPSC 2020). SEE THE APPENDIX FOR MORE DETAILS ON PRODUCTS INCLUDED IN THIS LIST.
The Trump administration has also targeted the Risk Management Program, also called the Chemical Disaster Rule, by delaying its implementation and now partially rolling it back (Desikan 2019a). The rule protects nearby communities from explosions or fires from chemical facilities, disasters that spew out enormous quantities of air pollution which can disproportionately burden children with asthma attacks, respiratory problems, and even cancer (Moms Clean Air Force 2019).

The Trump administration is actively working to weaken or fully roll back multiple air pollution rules previously shown to have a direct benefit to children’s health. We examined data from prior regulatory impact analyses for five rules that were designed to reduce oil use and heat-trapping emissions from passenger vehicles; decrease mercury, nitrogen oxide, and heat-trapping emissions from power plants; and strengthen the ozone standard (Table 2). The implementation of these rules would benefit children, and their rollbacks or

<table>
<thead>
<tr>
<th>Regulation Being Rolled Back</th>
<th>Number of Asthma Attacks</th>
<th>Number of Children with Upper or Lower Respiratory Symptoms</th>
<th>Instances of Acute Bronchitis</th>
<th>School Absence Days</th>
<th>Current Status of the Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Power Plan</td>
<td>74,000–90,000</td>
<td>51,000–63,000</td>
<td>1,600–2,000</td>
<td>130,000–140,000</td>
<td>Fully repealed, replaced with the weak and highly constrained Affordable Clean Energy rule</td>
</tr>
<tr>
<td>Nitrogen Oxides State Implementation Plan</td>
<td>—</td>
<td>2,910–20,358</td>
<td>257–2,171</td>
<td>—</td>
<td>Partial rollback (less stringent pollution controls)</td>
</tr>
<tr>
<td>Mercury and Air Toxics Standards</td>
<td>130,000</td>
<td>140,000</td>
<td>6,300</td>
<td>—</td>
<td>Proposed revision of the scientific findings that underpin this rule</td>
</tr>
<tr>
<td>Ozone standard strengthened in 2015 (from 75 to 70 parts per billion)</td>
<td>390,000</td>
<td>13,000</td>
<td>404</td>
<td>280,000</td>
<td>Attempted to delay implementation for one year, then reversal of this delay. An update to the standard will be released in 2020.</td>
</tr>
</tbody>
</table>

When the EPA considers a new regulation, it carries out a regulatory impact analysis to determine, among other things, the health impacts on people, including vulnerable groups such as children. Five EPA regulatory impact analyses for regulations that affect air pollution were analyzed for their ability to protect children on an annual basis from a variety of health-related conditions. These regulations have previously been the targets for weakening or elimination by the Trump administration.

Note: Health estimates in the analysis are based on the regulation being fully implemented (that is, not partially implemented or in a transitioning phase). See the appendix for more details.

**TABLE 2. Adverse Health Effects in Children Prevented by Regulations**

**When the EPA considers a new regulation, it carries out a regulatory impact analysis to determine, among other things, the health impacts on people, including vulnerable groups such as children. Five EPA regulatory impact analyses for regulations that affect air pollution were analyzed for their ability to protect children on an annual basis from a variety of health-related conditions. These regulations have previously been the targets for weakening or elimination by the Trump administration.**

**Note:** Health estimates in the analysis are based on the regulation being fully implemented (that is, not partially implemented or in a transitioning phase). See the appendix for more details.

**SOURCES:** OAQPS 2011; OAQPS 2015B; OAQPS 2015A; OAR 1998; OTAQ 2012.
replacements threaten those gains. Table 2 shows the projected benefits to children’s health of rules now under attack, representing thousands of cases per year of asthma attacks, upper and lower respiratory symptoms, acute bronchitis, and school day absences.

All the health protections in Table 2 come from the reduction of two air pollutants: fine particulate matter and ground-level ozone. These pollutants are reduced not only by regulations targeting them specifically, but also by other regulations—such as the Mercury and Air Toxics Standards and the Clean Power Plan—where reductions of these pollutants are known to be co-benefits. However, the EPA is attempting to cease the consideration of co-benefits altogether, which would severely devalue the scientifically backed health benefits that occur as a direct result of these safeguards (McNamara 2018). And when the benefits of reducing these pollutants are taken out of the cost-benefits equations—benefits such as fewer asthma attacks and premature deaths—policymakers and the general public are misled on the undeniable harms these pollutants have on people, especially those vulnerable to the effects of air pollution, such as children.

In addition to the rules included in Table 2, we also analyzed the environmental impacts of two air pollution rules for which federal scientists have not directly quantified the health impacts on children but that will have serious impacts on children’s health. The rollback of the EPA’s “once in, always in” policy has the potential to result in an additional 35,000 tons per year of hazardous air pollutants (Declet-Barreto et al., forthcoming), while the rollback of the pollution standards for oil and gas facilities could result in an additional 230,000 tons of volatile organic compounds and 5,000 tons of hazardous air pollutants per year. Both of these could severely affect the health of children across the nation (OAR 2016).

There is also evidence to suggest that the air pollution analyses conducted under the Trump administration may not sufficiently follow the best available scientific methods, potentially misrepresenting the underlying science on which decisionmakers rely when setting policy (ICCT 2019; Gardner 2019). For instance, the EPA’s “watchdog,” the Office of the Inspector General, has faulted then-Administrator Scott Pruitt for directing the agency in 2017 to repeal a rule on air pollution requirements for new trucks with old engines known as “glider” trucks without assessing the impacts to children’s health (Gilbride et al. 2019).

**CLIMATE CHANGE WILL EXACERBATe THE EFFECTS OF EXTREME HEAT ON CHILDREN**

President Trump and his administration have dismissed climate science and avoided climate action despite overwhelming evidence of the devastating impacts of climate change that are beginning now and will severely worsen over time. He has taken steps to pull the United States out of the Paris Agreement, walking back much of the progress that has been made to reduce emissions and tackle this global crisis that will disproportionately affect today’s children and future generations (Volcovici 2019).

By failing to support policies that would lead to deep cuts in emissions, the Trump administration is undermining one of the most important ways to limit the effects of climate change and its impacts on vulnerable groups. The administration’s attacks on climate science, such as the suppression of climate-related research and communication, hamper federal agencies’ ability to enact programs that mitigate the impacts of climate change on marginalized communities. Children are particularly vulnerable to climate change risks. Extreme heat is associated with adverse birth outcomes including premature delivery, hypertension, and preeclampsia (Barreca and Schaller 2019; Poursafa, Keikha, and Kelishadi 2015). Further, a 2019 *Lancet* study co-authored by nearly 70 researchers found that, globally, the effects of climate change and a 4°C
global temperature rise will be most dramatically felt by those children who are also most susceptible to undernutrition, diarrheal diseases such as dengue fever, and malaria; and are most at risk of electrolyte imbalance, fever, asthma, and kidney disease related to extreme heat (Watts et al. 2019). Additionally, children are less likely to read their bodily cues and know when to rehydrate, and they are more likely to become dehydrated at a faster rate than adults (Dahl et al. 2019). Low-income communities, communities of color, and indigenous communities will be most susceptible to these risks and less able to cope with the impacts of climate change (Blatchford 2018; Fernandez Rysavy and Floyd 2016; US Climate Resilience Toolkit 2017; Dahl et al. 2018).

The Trump administration’s policies that ignore the science and fail to change the status quo will mean that children growing up today will experience the most dire consequences of climate change, despite bearing no responsibility for the problem.

**RESTRICTED ACCESS TO FOOD SECURITY PROGRAMS**

Despite the proven benefits to children of federal food programs, the Trump administration has attempted to drastically reduce the number of people enrolled (CBPP 2017). Through the Supplemental Nutrition Assistance Program (SNAP) (formerly known as food stamps) and the Supplemental Food Program for Women, Infants, and Children (WIC), the US government is credited with supporting the nutritional needs of millions of young children and families. Of the 44.2 million Americans receiving SNAP benefits, nearly half are children (44 percent or 19.5 million) (FNS 2019a). While the program is unable to serve all food-insecure children, it does positively affect the lives of those who participate. SNAP participation lifted 3.4 million people out of poverty in 2017, including 1.5 million children. SNAP participation is associated with fewer sick days and doctor visits, lower annual health costs, and reduced risk of low birth weight (Gregory and Deb 2015;
Participation in WIC has been correlated with improved fetal development, fewer premature births and lower incidence of low infant birth weight, and improved diets for children and pregnant and postpartum women (FNS 1993; Devaney, Bilheimer, and Schore 1992; Rose, Habicht, and Devaney 1998).

In August 2019, the Department of Homeland Security finalized a rule that would change the government’s “public charge” determinations for immigrants, making it harder to become a US citizen if a person is enrolled in public benefits, such as SNAP and Medicaid (USCIS 2019). This rule would deter immigrants and their families, including children, in need of seeking important benefits. Eight percent of SNAP participants were citizen children living in a household with noncitizen adults, who could be affected (FNS 2019a).

In August 2019, the USDA proposed a rule cutting “broad-based categorical eligibility,” which allows low-income people who qualify for one social assistance program to more easily qualify for another (FNS 2019c). This rule would make it harder for 3.1 million adults, seniors, and children to qualify for SNAP and potentially put school lunches out of reach for a million children (Table 3) (FNS 2019b).

These developments come as the Trump administration has already knocked down health-based requirements around sodium, whole grains, milk, and fruits and vegetables in the school lunch program (Reinhardt 2018; USDA 2020). Other routes by which the administration has harmed children’s health include a rule proposed by the USDA in October 2019 that would change how a household’s utility costs factor into SNAP benefit calculations, resulting in a net loss of $4.5 million in benefits to families over five years (Reinhardt 2019). And in December 2019, the USDA finalized a rule that would cause nearly 700,000 unemployed and underemployed adults to lose SNAP access (FNS 2019e). Among households with children, the cumulative impact of the USDA’s three rules would mean that an estimated 500,000 households would lose eligibility for SNAP benefits (Wheaton 2019).

These policy proposals are not all final as of January 2020, but their implementation would harm millions of people and result in a chilling effect that could contribute to a decline in SNAP participation and other public programs, such as WIC. These moves would mean less support for food-insecure families across the country and more children living in poverty.

**CHILDREN AND FAMILIES DETAINED AND SEPARATED AT THE US-MEXICO BORDER**

Perhaps the Trump administration’s most disturbing action is its draconian policies toward children and families seeking protection at the US-Mexico border. The Trump administration has attempted to roll back child welfare standards and protections for children in an attempt to discourage and block access to safety in the United States. The Trump administration’s inhumane policies have led to thousands of migrant children being held in detention at any given time, with an estimated 5,400 children having been forcibly separated from their parents and thousands more returned

<table>
<thead>
<tr>
<th>Table 3. Impacts of SNAP Changes on Children’s Access to Food</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of People Affected</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Change in USDA categorical eligibility</td>
</tr>
<tr>
<td>Change in USDA unemployed/underemployed designation</td>
</tr>
<tr>
<td>Change in USDA standard utility allowance</td>
</tr>
<tr>
<td>Change in public charge determination</td>
</tr>
</tbody>
</table>

Despite a body of evidence showing that SNAP participation is beneficial for the health of people and our economic system, several rules issued by the Trump administration will put food security out of reach for millions. The rule change for underemployed adults includes only those without dependents, so while no children will be directly affected, children will have family members who lose access.


Berkowitz, Seligman, and Rigdon 2017; Almond, Hoynes, and Schanzenbach 2011). Participation in WIC has been correlated with improved fetal development, fewer premature births and lower incidence of low infant birth weight, and improved diets for children and pregnant and postpartum women (FNS 1993; Devaney, Bilheimer, and Schore 1992; Rose, Habicht, and Devaney 1998).
to dangerous conditions in Mexico while attempting to access protection (Sherman, Mendoza, and Burke 2019). In a demonstration of the Trump administration’s disregard for children’s well-being, no clear records of family separation were kept, making it impossible to know with certainty how many have been separated.

Migrant children held with their parents or legal guardians in inappropriate family detention centers could be detained for an indefinite period of time if the administration succeeds in its efforts to roll back the current maximum limit of 20 days in unlicensed facilities (Chatterjee 2019). The inspector general of the Department of Homeland Security reported that 2,669 children were being held at border detention centers in the Rio Grande region with “dangerous overcrowding” (Costello 2019). Thirty-one percent of the children were held at the border for longer than 72 hours, in violation of the Trafficking Victims Protection and Reauthorization Act of 2008 as well as Customs and Border Protection’s own standards. There are myriad public health and civil right concerns at detention centers, including children being held in cramped cells, lacking access to independent doctors, and being unable to obtain a change of clothes; flu vaccinations; and soap, toothpaste, or water with which to shower or wash their hands (Joung 2019; Mukherjee 2019; Costello 2019; Shepherd 2019; McLaughlin 2019). These serious deficiencies in treatment are exacerbated at times of high arrivals: according to Customs and Border Protection’s own data, arrivals and apprehensions of unaccompanied children and families dramatically increased by 52 percent and 342 percent, respectively, in the 2019 fiscal year as compared with the year prior (Table 4).

In one study, researchers interviewed 435 mothers in 2018 who had a child between the ages of 4 and 17 being held at one US family detention center administered by the US Immigration and Customs Enforcement agency, and learned that 44 percent of the children had at least one emotional or behavioral concern (MacLean et al. 2019). Emotional problems were significantly more likely to be experienced by a child who had been forcibly separated from their mother (49 percent) than a child who had not experienced this separation (32 percent). Of the 150 children that the researchers were able to assess, 17 percent had a probable diagnosis of post-traumatic stress disorder. The researchers concluded that, at least in the short term, many children, especially young children from four to eight years of age, experienced heightened distress while under detainment and that deleterious mental health outcomes are associated with forcibly removing children from the security of their families.

According to the American Academy of Pediatrics, no amount of detention is safe for children (AAP 2017). In addition, the forced separation of children from their families is undeniably traumatic, with the scientific literature on attachment clearly showing that children need the consistent presence of a caregiver to grow up healthy, happy, and resilient (Vo and Willard 2019). Persistent toxic stress and adverse childhood experiences can cause profound and lifelong damage to the brains and bodies of children (AAP 2019). The science is clear that adverse events, like those experienced at child detention centers, have a profound negative impact on the emotional, psychological, and physical development of children.

### Table 4. Number of Children and Families Encountered or Apprehended at the Southern US Border, 2017–2019

<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaccompanied children</td>
<td>41,435</td>
<td>50,036</td>
<td>76,020</td>
</tr>
<tr>
<td>Families</td>
<td>75,622</td>
<td>107,212</td>
<td>473,682</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>117,057</strong></td>
<td><strong>157,248</strong></td>
<td><strong>549,702</strong></td>
</tr>
</tbody>
</table>

*The US Customs and Border Protection agency records the number of people, including children, who are encountered or apprehended at the US-Mexico border because they had an inadmissible status for entry into the United States. After they are taken into custody, many migrants and asylum-seekers traveling alone or in families are either quickly repatriated without access to a fair legal process, separated, and/or transferred to long-term detention as they attempt to make their legal case. Others are returned to Mexico under the administration’s “Remain in Mexico” policy, which leaves them stranded in dangerous parts of northern Mexico while they await a hearing in the United States. Children under the age of 18 arriving alone or who are separated are transferred to the custody of the Department of Health and Human Services’ Office of Refugee Resettlement for their removal proceedings. As the number of families and children who experience the Trump administration’s cruel immigration policies, and their resulting prolonged detention and insecurity, have increased, the psychological and physical costs borne by families and children is also increasing.*

Note: Fiscal years go from October to the following September of the year named.

The Trump Administration Is Failing the Next Generation

Children now and in the future will feel the effects of the Trump administration’s neglect of science. From weakening protections from toxic chemicals to keeping dangerous products on the market to cutting back science-backed food programs, the Trump administration is restricting the government’s use of science to understand threats to children and protect them from harm. These dangerous decisions go against the core values of our country, in ensuring life, liberty, and the pursuit of happiness for all. The federal government has the responsibility to safeguard the lives and health of children, but the current administration chooses to put our children in harm’s way, rolling back public safeguards and failing to act when the science shows that children are at risk. This has forced children themselves to take the lead on building political power and driving home the urgency of policy change on threats ranging from climate change and unsafe communities to contaminated drinking water.

Our nation’s children deserve to grow up in a safe, healthy, and secure environment. The future of our country depends on it. We need elected officials to use science to ensure children are prioritized and protected. Go to www.ucsusa.org/resources/endangering-generations to learn more about how you can be informed and engaged on these topics and the effects they have on children’s health and safety.

Genna Reed is the lead science and policy analyst in the Center for Science and Democracy at the Union of Concerned Scientists. Anita Desikan is the research analyst, and Casey Kalman is the research associate at the Center.

ACKNOWLEDGMENTS
This report was made possible with the support of the Arkay Foundation, the Bauman Foundation, the Nathan Cummings Foundation, the Doris Duke Charitable Foundation, the Bernard F. and Alva B. Gimbel Foundation, the John D. and Catherine T. MacArthur Foundation, the David and Lucile Packard Foundation, the Rauch Foundation, Wilburforce Foundation, and UCS members.

The authors would like to thank the following UCS staff members who reviewed, edited, and otherwise assisted in the report’s development and production: Juan-Decler Barreto, Lindsey Berger, Kate Cell, Dave Cooke, Cynthia DeRocco, Anthony Eyiring, Gretchen Goldman, Michael Halpern, Matt Heid,
REFERENCES


Endangering Generations
How the Trump Administration’s Assault on Science Is Harming Children’s Health

Our nation’s children deserve to grow up in a safe, healthy, and secure environment. The future of our country depends on it.

The federal government has traditionally worked hard to ensure that future generations enjoy an ever-improving quality of life. When policymakers have discovered through science that certain practices or products are dangerous for children’s health and safety, they have acted to ensure that standards reflect that new information, so that kids have the best chances to live healthy and safe lives. In the past three years, the Trump administration has backslid on that progress. By capitulating to industry demands, enacting rollbacks of crucial health and safety protections, refusing to enforce some current safeguards, and ignoring science, the Trump administration has put our children—and future generations—in harm’s way.

This report illustrates how the Trump administration’s decisions or inaction on key issues are affecting the ability for some children to have their basic needs met, failing to protect children from contaminants in their food, water, and the air they breathe, and putting generations in peril of the dramatic impacts of climate change. We need elected officials to use science to ensure children are prioritized and protected. Our country’s future depends on it.