

Environmental Topics

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EPA Efforts to Reduce Exposure to Carcinogens and Prevent Cancer

Since its creation in 1970, the U.S. Environmental Protection Agency has focused on protecting public health and reducing impacts of toxins and toxic chemicals on communities across the country. Exposure to certain toxins in the environment (such as chemicals in tobacco smoke, chemicals used in commerce or radiation) can cause cancer. EPA's efforts to assess and reduce cancer risks are wide-ranging. The resources on this page highlight some key EPA programs and efforts that focus on cancer risk and prevention.

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Background

EPA's mission is to protect public health and the environment. One way we do that is by reducing risks people face from toxic exposures. Certain chemicals and radioactive materials can cause cancer when people are exposed to them. EPA conducts research to understand where these risks come from, develops and implements regulations to reduce these risks, and supports voluntary efforts to reduce exposure to carcinogens.

On February 2, 2022, President Biden reignited his 2016 Cancer Moonshot effort with renewed White House leadership. As part of this effort, the President convened his "Cancer Cabinet," which includes the leaders of more than 15 agencies, offices and departments, including former EPA Administrator Michael Regan. The Cancer Cabinet helps coordinate efforts across the federal government to advance the President's vision for "ending cancer as we know it." In June 2022, the Cancer Cabinet identified five priorities:

- 1. Close the screening gap.
- 2. Understand and address environmental exposure.
- 3. Decrease the impact of preventable cancers.
- 4. Bring cutting edge research through the pipeline to patients and communities.
- 5. Support patients and caregivers.

Highlighted Programs and Efforts

Addressing Pesticides and Toxic Chemicals

The Office of Chemical Safety and Pollution Prevention (OCSPP) evaluates new and existing pesticides and toxic chemicals for risks to human health, including cancer, and — when needed — puts measures in place to protect against these risks. OCSPP also works with the private sector, states, tribes and academia to eliminate, prevent or reduce pollution at its source.

- <u>**Risk Management for Existing Chemicals under Toxic Substances Control Act (TSCA)</u></u> TSCA gives EPA the authority to take action to address unreasonable risks to public health or the environment from chemicals currently being used. Examples of actions taken to address carcinogens include:</u>**
 - Final Rule to Prohibit Ongoing Uses of Chrysotile Asbestos In March 2024, EPA announced a final rule to prohibit on ongoing uses of chrysotile asbestos, the only known form of asbestos currently used in or imported to the United States. Exposure to asbestos is known to cause lung cancer, mesothelioma, ovarian cancer and laryngeal cancer, and it is linked to more than 40,000 deaths in the U.S. each year.
 - Final Rule to Prohibit Most Uses of Methylene Chloride In April 2024, EPA finalized a ban on most uses of methylene chloride, a dangerous chemical known to cause liver cancer, lung cancer, breast cancer, brain cancer, cancer of the blood, and cancer of the central nervous system, as well as neurotoxicity, liver harm and even death. The rulemaking also establishes landmark worker protections by setting strict exposure limits, monitoring requirements, and worker training and

notification requirements that will protect workers from cancer and other adverse health effects caused by methylene chloride exposure.

- **Final Rule to Prohibit Most Uses of Perchloroethylene** (PCE) In December 2024, EPA finalized to prohibit most uses of PCE a carcinogenic chemical and to establish a workplace chemical protection program to address unreasonable risks to human health for uses not prohibited.
- **Final Rule to Prohibit Some Uses of Carbon Tetrachloride (CTC)** In December 2024, EPA finalized a rule to ban some uses of CTC that have already ceased and establish robust workplace protections, including a Workplace Chemical Protection Program and prescriptive controls, for uses not prohibited to address the unreasonable risk to human health.
- Final Rule Regulating Trichloroethylene (TCE) In December 2024, EPA issued a final rule regulating TCE. The rule bans the manufacture (including import), processing, and distribution in commerce of TCE for all uses, with longer compliance timeframes and stringent worker protections for some processing and industrial and commercial uses until the prohibitions come into effect. The rule will protect consumers, workers, occupational non-users and bystanders from the harmful health effects of TCE.
- Regulation of Ethylene Oxide (EtO) Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Regular exposure to EtO over long periods of time can pose cancer risks. In 2023, EPA began working to mitigate these risks by reviewing and proposing updates to the registrations of EtO as a pesticide under FIFRA. The proposed set of new mitigation measures will decrease risk for workers who use EtO to sterilize products and for other people in communities near sterilization facilities under FIFRA. Learn about other efforts by EPA to address EtO.

Reducing Air Pollution

The Office of Air and Radiation (OAR) develops regulations under the Clean Air Act and other laws to limit pollutants that cause cancer and other adverse health effects. When we breathe in toxic chemicals – whether they come from industrial sources, vehicle exhaust, wildfires or woodstoves – these chemicals can often pose cancer risks. OAR has several programs that aimed at reducing exposure risks, including <u>National</u> <u>Emissions Standards for Hazardous Air</u>



<u>Pollutants, National Ambient Air Quality Standards, mobile source air pollution standards, radiation</u> <u>protection</u> and <u>ozone layer protection</u>. OAR also implements non-regulatory programs that aim to reduce emissions of and exposure to carcinogens, through its <u>Indoor Air</u> and <u>Radon</u> Programs and numerous sector-based voluntary programs. <u>Find more information about air topics</u>.

• <u>Clean School Bus Program</u> - With funding from the Infrastructure Investment and Jobs Act, EPA's Clean School Bus Program is providing \$5 billion (FY 2022-2026) to replace existing school buses with zero-emission and low-emission models.

- <u>Diesel Emissions Reduction Act (DERA) Funding</u> The Office of Transportation and Air Quality's DERA program has been transitioning diesel equipment to clean and electric equipment since 2008. This webpage has information on the health impacts of diesel emissions, grant recipient projects and other related information.
- <u>Smog, Soot, and Other Air Pollution from Transportation</u> The transportation sector contributes significantly to emissions of air toxics, which are compounds known or suspected to cause cancer or other serious health and environmental effects. Under the Clean Air Act, EPA develops tailpipe standards that reduce emissions of air toxics over time, either through direct regulations or as a cobenefit of reducing emissions of other pollutants.
- Final Rule to Strengthen Standards for Synthetic Organic Chemical Plants and Polymers and Resins Plants – In April 2024, EPA announced a set of final rules that will significantly reduce emissions of toxic air pollution from chemical plants, including the potent air toxics ethylene oxide (EtO) and chloroprene. The reductions dramatically reduce the number of people with elevated air toxics-related cancer risks in communities surrounding the plants that use those two chemicals, especially communities historically overburdened by air toxics pollution.
- National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel (II&S) Manufacturing Facilities – In March 2024, EPA announced a final rule to amend the 2003 NESHAP for II&S Manufacturing Facilities. The amendments will reduce nearly 64 tons per year of toxic metals and over 470 tons per year of fine particle pollution (also known as PM_{2.5}) and improve air quality and to public health for overburdened populations exposed to emissions from iron and steel facilities.
- Final Amendments to Strengthen Air Toxics Standards for Ethylene Oxide (EtO) Commercial Sterilizers – In March 2024, EPA announced final amendments to the NESHAP for Ethylene Oxide Commercial Sterilizers. The standards will reduce lifetime cancer risks for people living near commercial sterilization facilities and put in place the strongest measures in U.S. history to reduce emissions of EtO, one of the most potent cancer-causing chemicals. Through the installation of proven and achievable air pollution controls, commercial sterilizers will reduce emissions by more than 90%.
- <u>Air Toxics Screening Assessment (AirToxScreen)</u> OAR manages AirToxScreen, EPA's ongoing review of hazardous air pollutants, also known as "air toxics" in the United States. EPA developed AirToxScreen as a screening tool for state, local and tribal air agencies to help them identify pollutants, emission sources and places that may warrant further study to better understand possible risks to public health from air toxics.
- <u>Radiation Protection</u> EPA standards set protective limits on the radioactivity in soil, water and air that comes from human use of radioactive elements such as uranium. Radioactive elements emit ionizing radiation, which can damage living tissue and cause cancer.
- <u>Sun Safety</u> EPA works with the National Weather Service and the Centers for Disease Control and Prevention to promote sun safety and make the UV Index forecast available in the United States. The UV Index is a measure of the risk of overexposure to the sun's ultraviolet rays, which can increase your risk of developing skin cancer and cataracts. <u>EPA's UV Index app</u> provides tips on how to stay sun safe when outdoors. The National Council on Skin Cancer Prevention designated the Friday before

Memorial Day as <u>Don't Fry Day</u> to encourage sun safety awareness by reminding everyone to protect their skin while enjoying the outdoors.

• <u>Secondhand Smoke</u> - EPA released the landmark report on the health risks from secondhand smoke in 1993. The report was the catalyst for the transformational progress that followed. EPA continues to provide national leadership through research, outreach, and coordination with other government agencies.

Water Actions

The Office of Water works to reduce chemicals in water that cause cancer by implementing the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA). Through water quality-based and technology-based programs under the CWA, EPA works with Tribal and state partners to reduce discharges of carcinogens to water bodies. Under the SDWA, EPA establishes National Primary Drinking Water Regulations to reduce exposure to likely carcinogens by setting



enforceable standards as close as feasible to levels at which there is no cancer risk. EPA's Office of Water also works closely with states, tribes and drinking water systems by providing technical assistance and funding that work towards providing safe and clean drinking water.

- National Primary Drinking Water Regulations (NPDWR) NPDWRs are legally enforceable standards expressed as Maximum Contaminant Levels (MCLs), or treatment techniques that apply to public water systems. NPDWRs include testing and operational requirements for water systems to protect public health by limiting the levels of contaminants in drinking water. EPA sets non-enforceable MCL goals at zero for carcinogens and enforceable MCLs for carcinogens as close to the MCL goal as is feasible taking cost into account, such as acrylamide, benzene, benzo(a)pyrene, carbon tetrachloride, epichlorohydrin, ethylene dibromide, hexachlorobenzene, pentachlorophenol, tetrachloroethylene, trichloroethylene (TCE), uranium, vinyl chloride, and others.
- <u>Safe Drinking Water Health Advisories</u> Health advisory documents provide technical information on chemical and microbial contaminants, including known or suspected carcinogens, such as PFOA or PFOS, that are known or anticipated to occur in drinking water. EPA issues health advisories for contaminants that are not subject to an NPDWR. Health advisory values/levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations (e.g., 1 day, 10 days, a lifetime). Health advisories provide information to drinking water systems and officials responsible for protecting public health when emergency spills or other contamination situations occur. They help tribes, states, and local governments inform the public and determine whether local actions are needed to address public health impacts.

- Clean Water Acter Technology-Based Programs Many industrial facilities manufacture or use chemicals. EPA issues national regulatory standards for industrial wastewater which can contain carcinogens that will be discharged to water bodies (direct discharges) and to municipal sewage treatment plants (indirect discharges). EPA issues these Effluent Guidelines and Pretreatment Standards on an industry-by-industry basis. The standards for direct dischargers are incorporated into National Pollutant Discharge Elimination System (NPDES) permits issued by states and EPA regional offices.
- Clean Water Act Water Quality-Based Programs <u>Water Quality Standards (WQS)</u> are the foundation of water quality programs. WQS describe the desired condition of a water body and the means by which that condition will be protected or achieved. WQS are also used to <u>monitor and assess</u> the water body's condition and develop restoration targets if the water body is <u>impaired</u> by certain pollutants, including known or suspected carcinogens. EPA approves WQS which are set by state, territorial, authorized tribes, or federal law.

Land, Disposal and Emergency Response

The Office of Land and Emergency Management (OLEM) reduces and prevents exposure to carcinogens by working with states and tribes to manage and reduce wastes and to remediate and revitalize contaminated lands. Some of the most common carcinogens found at Superfund sites include: arsenic, benzene, perchloroethylene (PCE), and trichloroethylene (TCE). <u>Find more</u> <u>information about these and other</u> <u>frequently found hazardous substances</u> <u>on ATSDR's Substance Priority List</u> []. []



OLEM also develops guidelines, provides grants and technical assistance, and conducts community engagement, education, and outreach activities. This office supports redevelopment and reuse of potentially contaminated sites through the Brownfields program, responds to abandoned and active hazardous waste sites, performs site cleanups through the Superfund and Resource Conservation and Recovery Act (RCRA) programs, and encourages innovative technologies to address contaminated soil and groundwater. Examples of carcinogenic contaminants found at Brownfield sites include arsenic, asbestos, lead, petroleum, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons, and volatile organic compounds (VOCs). <u>Find more information about land, waste, and cleanup topics</u>.

• <u>EPA's Emergency Response and Removal Program</u> - EPA responds to oil spills; chemical, biological, radiological releases; and large-scale national emergencies. EPA also provides response assistance when state and local first responder capabilities have been exhausted or when additional support is requested. The Emergency Response and Removal Program considers health and ecological hazards

associated with the release of hazardous substances and oil to inform decisions, especially when more immediate action may be needed to protect communities and the environment.

- Regional Removal Management Levels for Chemical Contaminants Developed using risk assessment guidance and science policy from the EPA Superfund program, removal management levels for chemicals are based on carcinogenic and non-carcinogenic toxicity. Removal management levels help identify areas, contaminants and conditions where immediate action may be needed to protect human health and the environment; and are used to support decisions for EPA to undertake a removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- Superfund Program EPA's Superfund program is responsible for cleaning up some of the nation's most contaminated land and responding to environmental emergencies, oil spills and natural disasters. To protect public health and the environment, the Superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places.
 - **CERCLA/Superfund List of Hazardous Substances and Reportable Quantities** [2] A reportable quantity (RQ) is the amount of a listed hazardous substance (including carcinogens), at or above which, when released into the environment within a 24-hour period requires immediate notification to the National Response Center, State or Tribal Emergency Response Commission, and the Local or Tribal Emergency Planning Committee (local emergency responders), unless the release is a federally permitted release. Each reportable quantity identifies the quantity of a listed substance (including carcinogens) that, if released, requires notification, and sets forth their notification requirements. Find additional information about Hazardous Substance Designations and Release Notifications.
 - Regional Screening Levels for Chemical Contaminants at Superfund Sites Developed using risk assessment guidance from the EPA Superfund program for use at Superfund sites, these screening levels for chemicals are based on carcinogenic and non-carcinogenic toxicity. Screening levels are used to determine whether levels of contamination found at the site warrant further investigation or site cleanup, or whether no further investigation or action may be required.

Addressing Per- and Polyfluoroalkyl Substances (PFAS)

EPA is committed to providing meaningful, understandable, and actionable information on per- and polyfluoroalkyl substances — known as PFAS — to help address this urgent public health and environmental issue facing communities across the United States. PFAS can be found in surface water, groundwater, drinking water, soil and air — from remote rural areas to densely-populated urban centers. A growing body of scientific evidence shows that exposure at certain levels to specific PFAS can adversely impact human health. For two PFAS – perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) — EPA reviewed the weight of the evidence and determined that PFOA and PFOS are likely to be carcinogenic to humans.

Find more information about PFAS and learn how EPA developed the PFAS Strategic Roadmap.

- Final PFAS National Primary Drinking Water Regulation (NPDWR) In April 2024, EPA issued the first national, legally enforceable drinking water standard for six PFAS to protect communities. This final rule will reduce PFAS exposure for approximately 100 million people and prevent thousands of deaths and tens of thousands of illnesses. In addition to the final rule, EPA announced nearly <u>\$1 billion</u> in available funding through the Bipartisan Infrastructure Law to help states and territories implement PFAS testing and treatment at public water systems and to help owners of private wells address PFAS contamination.
- Designation of PFOA and PFOS as Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances – In April 2023, EPA issued a final rule to designate two PFAS (PFOA and PFOS), including their salts and structural isomers, as hazardous substances under CERCLA (also known as Superfund). This final action will address PFOA and PFOS contamination by enabling investigation and cleanup of these harmful chemicals and ensuring that leaks, spills, and other releases are reported.
- Initiation of Two Rulemaking Efforts Under the Resource Conservation and Recovery (RCRA) In February 2024, EPA proposed two rules to better enable regulators to address PFAS under the nation's hazardous waste law to protect families across the nation. The first proposes to modify the definition of hazardous waste as it applies to cleanups at permitted hazardous waste facilities; the second would amend RCRA regulations to add multiple PFAS compounds as hazardous constituents. These PFAS would be added to the list of substances identified for consideration in facility assessments and, where necessary, further investigation and cleanup through the corrective action process at hazardous waste treatment, storage and disposal facilities.
- Advanced Notice of Proposed Rulemaking (ANPRM) on Potential Future Designations of PFAS as <u>CERCLA Hazardous Substances</u> – EPA issued an ANPRM in September 2022 asking the public for input regarding potential future designations of additional PFAS under CERCLA.
- **PFAS Analytic Tools** In January 2023, EPA released a new interactive webpage, which brings together multiple sources of information on PFAS in one place. This tool helps the public, researchers and other stakeholders better understand potential PFAS sources in their communities.

Research

The Office of Research and Development (ORD) is the scientific research arm of EPA. ORD conducts research for EPA that provides the foundation for credible decision-making to safeguard human health and ecosystems from environmental pollutants. The research conducted by ORD includes identification of exposures to chemicals that are carcinogens, tracking environmental and health indicators related to cancer, and



providing science assessments related to cancer outcomes.

- <u>Guidelines for Carcinogen Risk Assessment</u> The Guidelines for Carcinogen Risk Assessment provide EPA staff with guidance for developing and using risk assessments. The guidelines also provide basic information to the public about the Agency's risk assessment methods. Find additional information in the <u>EPA Supplemental Guidance for Cancer and Early-Life Susceptibility</u>.
- Integrated Science Assessments (ISAs) for the National Ambient Air Quality Standards (NAAQS) Each ISA evaluates cancer evidence as part of the legally required, regular review of the public health air quality standards for six key air pollutants which are carcinogens (ozone, particulate matter, nitrogen dioxide, sulfur dioxide, lead, and carbon).
- <u>List of ORD Integrated Risk Information System (IRIS) Assessments</u> Each IRIS assessment evaluates available cancer evidence. The advanced search finds final IRIS assessments and can be filtered specifically for cancer evidence.
- **Provisional Peer Reviewed Toxicity Value (PPRTV) Assessments for CERCLA/Superfund** Each assessment supports EPA's mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern and evaluating cancer evidence as available.
- <u>Science Matters Newsletter</u> EPA's Science Matters newsletter delivers the latest from ORD. Many newsletters discuss cancer.
- <u>Eco-Health Relationship Browser</u> The Eco-Health Relationship Browser illustrates scientific evidence for linkages between human health and ecosystem services. There is a <u>filter for cancer</u> that allows users to see how cancer and environmental conditions may be interrelated.



Cancer

Cancer is the uncontrolled growth of abnormal cells in the body. Cancerous cells are also called malignant cells.

Organ System

Multiple

Demographics

Anyone can develop cancer, although the risk of being diagnosed with cancer increases with age. In 2007, there were 11.7 million Americans living with a history of cancer. About 78% of all cancers are diagnosed in persons 55 years of age or older.

Known Contributing Factors

Diet, Tobacco, Air/Water Pollution, Alcohol, Radiation, Medications, Genes

Trend In Incidence

Roughly 1.65 million new cancer cases were estimated to be diagnosed in the year 2015. Cancer is the second most common cause of death in the U.S. with more than 1,600 people a day dying from it.

References

Children's Health

The Office of Children's Health Protection (OCHP) leads implementation of the <u>EPA Policy on Children's</u> <u>Health</u> to prevent exposure to carcinogens and other toxins by compiling data and providing analysis on children's health used to inform Agency risk assessments and regulations. The office also uses partnerships and outreach to increase awareness and further <u>protect children from cancer risks</u>. Harmful environmental exposures during childhood, particularly at key life stages (in utero, infancy, childhood, adolescence), can impact health later in life and into the next generation. <u>Find more information about</u> <u>protecting children's environmental health</u>.

- <u>America's Children and the Environment (ACE) Health Indicator for Childhood Cancer</u> EPA compiles <u>national data on childhood cancer</u> in the America's Children and the Environment interactive online tool.
- <u>Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens</u> EPA has specific guidance to assess children's susceptibility to early life exposure to carcinogens.
- EPA also offers additional information and resources to help protect children's exposure to carcinogens, including:
 - Managing radon in schools and at home;
 - Protecting your family from asbestos;
 - Practicing sun safety; and
 - <u>Reducing second-hand smoke</u>.

More Cancer Indicators

<u>EPA's Report on the Environment</u> includes two indicators that show the rate of cancer (i.e., Cancer and Childhood Cancer) and indicators that are related to the cause of cancer (e.g., radon). EPA tracks this data to better understand trends in cancer across the United States.

Cancer Indicator: <u>Age-adjusted cancer incidence rates in the U.S., 1973-2017: All cancer sites</u> <u>for all ages, by sex, race, and age group.</u>



Due to differences in the data sets used to estimate cancer incidence, data from 1973-1998 (NCI, 2018, 2020) should not be directly compared with data from 1999-2017 (CDC and NCI, 2020).

Rates are age-adjusted to the 2000 U.S. standard population.

Information on the statistical significance of the trends in this exhibit is not presented here. For more information about uncertainty, variability, and statistical analysis, view the technical documentation for this indicator.

Data source: CDC and NCI, 2020; NCI, 2018, 2020

Childhood Cancer Indicator: <u>Age-adjusted cancer incidence rates in the U.S., 1973-2017: All</u> cancer sites for ages 0-19, by sex and race.



Due to differences in the data sets used to estimate cancer incidence, data from 1973-1998 (NCI, 2018b, 2020) should not be directly compared with data from 1999-2017 (CDC and NCI, 2020).

Rates are age-adjusted to the 2000 U.S. standard population.

Information on the statistical significance of the trends in this exhibit is not presented here. For more information about uncertainty, variability, and statistical analysis, view the technical documentation for this indicator.

Data

source: CDC and NCI. 2020: NCI. 2018b. 2020

In addition to tracking rates of cancer in the US, EPA also tracks data on exposure to carcinogens, such as radon.

U.S. Homes At or Above EPA's Radon Action Level: <u>Estimated number of homes at or above</u> <u>EPA's radon action level and estimated number of homes with operating mitigation systems</u> <u>in the U.S., 1990-2013</u>.



Information on the statistical significance of the trends in this exhibit is not currently available. For more information about uncertainty, variability, and statistical analysis, view the technical documentation for this indicator.

Data source: U.S. EPA, 1992a, 2014

Enforcement and Compliance Actions

The Office of Enforcement and Compliance Assurance (OECA) works with states, tribes, and EPA regions to enforce environmental laws to prevent and remedy increased exposure to carcinogens and other harmful substances caused by noncompliance with laws and regulations. The office takes action to stop exposures that present an imminent and substantial endangerment to human health and the environment. <u>Find</u> <u>more information about enforcement topics</u>.

- National Enforcement and Compliance Initiatives (NECIs) EPA focuses its enforcement and compliance assurance resources on the most serious environmental violations by developing and implementing national program priorities. NECIs focus on preventing exposure to potential cancercausing substances includes:
 - Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants; and
 - <u>Reducing Hazardous Air Emissions from Hazardous Waste Facilities</u>.
- Benzene Fenceline Monitoring Dashboard Under the Petroleum Refinery Sector Rule, refineries are required to continually monitor the concentration of benzene emissions, a human carcinogen, along their property boundary (i.e., fenceline) and report that data to EPA. If benzene concentrations exceed the action level set by EPA, refineries are required to identify the cause and take corrective action to reduce benzene emissions to below the action level. OECA's Benzene Fenceline Monitoring Dashboard provides easy access to refinery benzene monitoring data for EPA offices, states, other regulatory agencies, and members of the public.

Environmental Justice

The Office of Environmental Justice and External Civil Rights (OEJECR) provides tools such as <u>EJScreen</u> and information to inform the public and enable decision makers to reduce harm in overburdened communities and support restoration of environmental quality, including through reduced exposure to carcinogens. OEJECR also implements grant and technical assistance programs to provide funding and information at the state, local, territorial, and tribal levels to support communities disproportionately burdened by environmental harms. <u>Find more information about environmental justice</u>.

- **EJScreen** EJScreen is EPA's nationally consistent screening tool for environmental justice. This tool has numerous datasets and indices which provide community-scale information on environmental health burdens and vulnerabilities that can be used to support spatial analysis related to investigations into potential drivers of cancer in communities of color, indigenous communities, and low-income communities. Find more information on indices.
- Environmental Justice Grants and Technical Assistance OEJECR provides communities and community-driven collaborative partnerships with holistic community support systems of grants and expert technical assistance. These systems support communities in their efforts to restore communityscale environmental quality and health protection, including reducing exposure to carcinogens.

Environmental Impact Evaluations

The Office of Federal Activities (OFA) in EPA's Office of Policy reviews the Environmental Impact Statements (EISs) developed by other federal agencies conducted under the <u>National Environmental</u> <u>Policy Act (NEPA)</u> and provides comments on the adequacy and the acceptability of the impacts of the proposed action on the human environment, including public health, welfare, and environmental quality. Potential exposures to carcinogens are among the public health issues considered in EISs.

Environmental Economics

The <u>National Center of Environmental Economics (NCEE)</u> in EPA's Office of Policy leads EPA's work in evaluating the economic costs, benefits and impacts of proposed environmental regulations and policies on the national economy and society. In addition, NCEE conducts new research and develops improved methods for measuring the economic consequences of environmental changes. NCEE collaborates with other EPA offices to analyze relationships between environmental pollution and human health, including characterizing cancer risks for children and adults, and investigating the expected benefits of preventing risks from exposure to pollutants that may cause cancer.

Regional Projects and Geographic Initiatives

EPA's <u>regional offices and geographic programs</u> work with states, local governments, and tribes to implement and enforce national environmental laws to prevent environmental contamination and reduce exposure to carcinogens and other pollutants.

International and Tribal Initiatives

The <u>Office of International and Tribal Affairs (OITA)</u> works with nations, including tribes, to develop and implement policy and programs that protect environmental health domestically and around the world, including through reducing exposure to carcinogens.

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<u>Assistance</u>	<u>Ayuda</u>
<u>Arabic</u>	<u>Chinese (simplified)</u>
<u>Chinese (traditional)</u>	<u>Aide</u>
<u>Asistans</u>	<u>Korean</u>
<u>Assistência</u>	<u>Russian</u>



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