

Environmental Public Health Tracking Glossary

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A

Acute health effect: Physiological reaction that occurs rapidly, results from a short-term exposure, and lasts a short duration.

Age adjusted: A measure that has been statistically modified to minimize the effect of age differences on health event rates. For example, a county with a larger percentage of older adults may have a higher unadjusted death and/or hospitalization rates than a county with a younger population because older adults are more likely to die or be hospitalized due to their age.

Age group: The classification of individuals by age into non-overlapping categories.

Agency for Toxic Substances and Disease Registry (ATSDR): Federal public health agency of the U.S. Department of Health and Human Services that works to protect communities from harmful health effects related to exposure to natural and man-made hazardous substances. The Pennsylvania Department of Health (DOH) works most closely with ATSDR's Region 3 office based in Philadelphia. Region 3 includes D.C., Delaware, Maryland, Pennsylvania, Virginia, and West Virginia.

Air pollution: Contamination by any chemical, physical, or biological agent that changes the natural characteristics of the indoor or outdoor air. Principal air pollutants include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

Air quality: A measure of how clean or polluted the air is.

Air Quality Index (AQI): Scale (0-500) developed by the U.S. Environmental Protection Agency (EPA) that communicates how clean or polluted the air is. As AQI rises, public health risks increase.

Air toxins: Pollutants known or suspected to cause cancer or other severe health effects, such as birth defects.

Ambient air: Outdoor air in its natural state.

Anencephaly: A birth defect in which a baby is born without parts of the brain, skull, and scalp. It is a type of neural tube defect in which the neural tube does not close all the way, which results in a baby being born without both the front and thinking parts of the brain.

Antimicrobial pesticide: A substance intended for preventing or controlling a pest, regulating plant growth, and inhibiting nitrification that is most often used in agriculture.

Arsenic: A silver-gray or white metallic element naturally found in the Earth's crust and abundant in the environment. Acute and chronic health effects can occur when exposed to inorganic arsenic in drinking water or food. Long-term exposure to high levels of inorganic arsenic in drinking water may lead to poor health conditions such as skin disorders, an increased risk for diabetes, high blood pressure, and various forms of cancer.

Asthma: A long-term disease that affects the lungs, causing inflamed airways and trouble breathing. Exposure to air pollution may cause or exacerbate asthma symptoms, including wheezing, coughing, or shortness of breath.

Autism: Group of developmental disabilities that can cause challenges with behavior, communication, and social skills.

Autoimmune diseases: A group of conditions in which the body's immune system attacks its own healthy cells by mistake.

B

Biomonitoring: Measurement of chemicals or their breakdown products (metabolites) in the human body, particularly through sampling of blood, urine, hair, and other tissues.

Birth defect: Structural changes in a baby present at birth that affects how a baby's body looks and/or functions.

Bladder cancer: Cancer that forms in tissues of the bladder (the organ that stores urine).

Blood lead level (BLL): A measure of lead in the body, measured in micrograms of lead per deciliter of blood ($\mu\text{g}/\text{dL}$).

Breast cancer: A disease in which abnormal cells in the breast continue to grow.

Bronchitis: Occurs when the airways of the lungs swell and produce mucus.

C

Cancer: A disease in which abnormal cells in the body grow uncontrollably. It is often named for the part of the body where it starts, even if it spreads to other body parts later.

Cancer cluster: A greater-than-expected number of cancer cases that occurs within a group of people in a geographic area over a given time period.

Carbon monoxide (CO): A poisonous gas with no color or odor given off by burning fuel (e.g., gasoline, wood, propane, charcoal) and tobacco products. CO prevents red blood cells from carrying enough oxygen for cells and tissues to live.

Carbon monoxide poisoning: When carbon monoxide builds up in a person's bloodstream to the point where the body replaces oxygen in red blood cells with carbon monoxide. Carbon monoxide poisoning can be fatal.

Cardiovascular disease: Class of diseases that involves the heart or the blood vessels, including coronary heart disease, hypertension, stroke, and rheumatic heart disease.

Centers for Disease Control and Prevention (CDC): The leading public health agency in the United States under the Department of Health and Human Services that serves to ensure Americans' health, safety, and security.

Cerebrovascular disease: Conditions that affect the blood flow and vessels within the brain, also known as a stroke.

Childhood lead poisoning: Illness that results from children's exposure to lead. Lead poisoning can affect nearly every system in the body. It can cause learning disabilities, behavioral problems, and, at very high lead exposure levels, seizures, coma, and even death.

Chlorine: One of the most common manufactured chemicals that, when combined with other chemicals, such as dioxins, can pollute water and contaminate food. Chlorine is known for its use to kill harmful bacteria in drinking and swimming pool water.

Chronic health effect: A health condition that develops and persists over a long period of time.

Clean Air Act: A federal law enacted in 1970 that regulates air emissions which authorizes the EPA to mandate National Ambient Air Quality Standards (NAAQS) for ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide to protect public health and the environment.

Cleft lip and cleft palate: Birth defects that occur when a baby's lip or mouth do not form properly during pregnancy. A cleft lip develops if the tissue that makes up the lip does not fully join before birth. A cleft palate develops if the tissue that makes up the roof of the mouth does not fully join before birth.

Cohort effect: Variations in characteristics grounded in shared life experiences of a specific age group.

Community water system (CWS): A type of public water system (PWS) that serves at least 15 service pipes used by year-round residents or regularly serves at least 25 year-round residents. CWSs are regulated by the Pennsylvania Department of Environmental Protection (DEP) under the Safe Drinking Water Act.

Contaminant: A chemical or biological substance that is either present in an environment where it does not belong or present at levels that might cause harmful health effects.

Continuous emission monitoring system (CEMS): An instrument that continuously measures air emission levels from a stationary source.

Council of State and Territorial Epidemiologists (CSTE): An organization of member states and territories which work to advance public health policy and epidemiologic capacity.

Covered entity: Individuals, organizations, and agencies who electronically transmit health information in compliance with requirements to protect the privacy and security of such health information and provide individuals with certain rights regarding their personal health information.

Critical congenital heart defect (CCHD): Heart defects that occur before birth and cause blood to flow abnormally, potentially leading to disruptions of blood flow throughout the body.

Crude rate: A rate that is not age-adjusted, calculated by the total number of events within a time frame divided by the population within the time of the selected geography and multiplied by a constant, typically 100, 1,000, 10,000, or 100,000.

D

Developmental disability: A group of conditions due to a physical, learning, language, or behavioral impairment. These conditions begin during the developmental period, usually before a baby is born, and may impact day-to-day functioning, and usually last throughout a person's lifetime.

Discharge against medical advice: When a patient chooses to leave the hospital before their treating physician recommends discharge.

Disinfectant: A chemical used to kill germs, including viruses, bacteria, and other microorganisms.

Disinfection by-products: Chemical, organic, and inorganic substances formed during the water disinfection process.

Down syndrome (Trisomy 21): Genetic disorder involving abnormal cell division that results in a baby being born with an extra chromosome (i.e., a duplicate of chromosome 21).

Drinking water: Water that is intended for human consumption and other domestic uses.

Drinking water monitoring: Testing performed to detect and measure chemical and microbial contaminants in a drinking water supply.

Drinking water supply distribution system: A network of pipes used to carry treated water from the treatment plant to customers' plumbing systems.

Drinking water treatment technique: A process intended to reduce the level of a contaminant in drinking water.

E

Elevated blood lead level: A blood lead level that exceeds a reference level that is determined safe (or is assumed to cause minimal to no health effects) by the CDC. As of May 2021, CDC uses a reference level of 3.5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) for children.

Emergency department or emergency room: Department of a hospital that provides medical treatment to patients requiring immediate attention.

Environmental hazard: A chemical, physical, or biological factor or event in the environment with potential to adversely affect human health and the surrounding natural environment.

Environmental health: Branch of public health that examines the effects of the environment on human health with particular emphasis on environmental hazards that contribute to adverse health outcomes.

Environmental justice (EJ): The fair treatment and meaningful involvement of all groups of people regardless of race, national origin, color, or socioeconomic status when developing, implementing, and enforcing environmental laws, regulations, and policies. Fair treatment means that no group of people should endure a disproportionate share of negative environmental impacts.

Environmental monitoring: Tools and techniques used to observe trends over time and characterize the quality of the present environment, including air, soil, and water monitoring. For example, a continuous emission monitoring system (CEMS) is an instrument that continuously measures air emission levels from a stationary source.

Environmental public health indicator: Characteristics assessed through direct and indirect measures that provide information about a population's health status, their environment, and other factors to better understand the link between the environment and human health.

Environmental Public Health Tracking (EPHT): Congressionally mandated national effort to provide the country with standardized health, environmental, and hazard data from multiple information systems. CDC leads the EPHT Program, provides funding to approximately half of the states to implement state-based EPHT programs, and aggregates state-level data.

Environmental tobacco smoke: Tobacco smoke inhaled by someone who is near a smoker.

Environmental Protection Agency (EPA): An independent executive agency of the United States federal government responsible for the protection of human health and the environment. The EPA works to ensure that Americans have clean air, land, and water.

EPA health advisory (water): An EPA document that provides guidance and information on contaminants that can affect human health and that may occur in drinking water.

Epidemiology: The study of the pattern, frequency, and determinants of health conditions or events in a population used to control and mitigate health problems. To plan ways to prevent the spread of illness, epidemiologists answer *how* often a particular disease occurs, *what* conditions promote the spread of the disease, *who* contracts the disease, and *why* the disease afflicts some more than others.

Estimated exposure: An assessment or approximation of the contact an individual or group had with a particular substance.

Ethnicity: A term that represents a group based on their cultural and social affiliation, common history and origin, and sense of identification with the group. Hispanic ethnicity is the most measured ethnicity in public health, representing a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

Exposure: The condition of being subjected to something which may have an adverse health impact.

Exposure pathway: The physical route a substance takes from its source to point of contact with people.

F

Fertility: From a medical perspective, fertility refers to the ability to reproduce.

G

Gastroschisis: A birth defect in which a baby's intestines are outside of the body, exiting through a hole beside the belly button.

Geographic Information System (GIS): A system for capturing, storing, analyzing, and managing geographic data.

Gestational age: Measurement of the duration of pregnancy in terms of weeks from the first day of a woman's last menstrual cycle to the current date.

Greenhouse gas: Gases in Earth's atmosphere that trap heat and warm the earth. Carbon dioxide, methane, and nitrous oxide are the three most potent and prominent greenhouse gases.

Groundwater: The supply of fresh water found beneath the Earth's surface.

Groundwater contamination: When any physical, chemical, biological, or radiological substance or matter enters groundwater.

H

Haloacetic acid-5 (HAA5): A type of disinfection byproduct consisting of five regulated haloacetic acids (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) that form when chlorine compounds used to disinfect water react with other naturally occurring chemicals in the water. Consuming water with haloacetic acids at high levels over many years may increase peoples' risk of developing cancer, particularly bladder cancer. Rectal and colon cancer and adverse developmental and reproductive effects during pregnancy may also be associated with long-term exposure to haloacetic acids.

Haloacetic acid-9 (HAA9): A type of disinfection byproduct consisting of HAA5 plus bromochloroacetic, bromodichloroacetic, chlorodibromoacetic, and tribromoacetic acids. HAA9 forms when chlorine compounds used to disinfect water react with other naturally occurring chemicals in the water. Consuming water with haloacetic acids at high levels over many years may increase peoples' risk of developing cancer, particularly bladder cancer. Rectal and colon cancer and adverse developmental and reproductive effects during pregnancy may also be associated with long-term exposure to haloacetic acids.

Harmful algal blooms (HABs): Occur when certain kinds of microscopic organisms multiply and produce toxins in water. In Pennsylvania, and in some other parts of the world, the microscopic organisms that most commonly cause HABs are known as cyanobacteria. Under certain conditions, some cyanobacteria can produce toxins that can kill fish, mammals, and birds. Toxic HABs may also cause serious illness in humans. People and animals can encounter HABs by touching, ingesting, and inhaling cyanobacteria while swimming and boating, eating seafood caught in contaminated water, preparing food with contaminated water, or drinking contaminated water.

Hazardous Sites Cleanup Act (HSCA): Provides DEP with the funding and authority to conduct cleanup actions at sites where hazardous substances have been released. Most HSCA sites involve bankrupt facility owners, abandoned facilities, and inappropriate disposal of hazardous substances.

Hazardous waste site: A location where harmful substances have been released or discarded into the environment with the potential to adversely affect human health and/or the environment.

Health care providers: Individuals licensed to provide medical care and diagnoses.

Health clearing houses: A public or private entity that processes health information to interpret claim data between insurance providers and payers.

Health data: Data that provide information about the occurrence of certain diseases and health conditions.

Health insurance: An entitlement to payment or reimbursement for medical expenses in exchange for a premium cost.

Health Insurance Portability and Accountability Act (HIPAA): A law requiring protection of patient health information. Under the HIPAA Privacy Rule, all medical records and other individually identifiable health information used or disclosed by a covered entity in any form, whether electronically, on paper, or orally, are covered by HIPAA. Additionally, HIPAA allows protected health information to be shared with public health authorities who are lawfully authorized to collect or receive such information for the purpose of protecting public health.

Healthy homes: Homes that are free from housing-related hazards and deficiencies that cause diseases and injuries.

Heart attack: A medical condition that occurs when the blood supply to a part of the heart is interrupted; also known as acute myocardial infarction. Heart attacks are usually acute events caused by a blockage preventing blood from flowing to the heart, as a result of a build-up of fatty deposits on the inner walls of the blood vessels that supply the heart.

Heart disease: Also called cardiovascular disease, heart disease is a group of disorders that affects the heart or blood vessels. Although heart disease symptoms vary depending on cause, chest pain, fainting, severe shortness of breath, and pain or numbness in the arms and legs should be of concern.

Heavy metals: Metallic chemical elements that have a relatively high density and are toxic at low concentrations. Common heavy metals include mercury, lead, chromium, cadmium, and arsenic.

Herbicide: Chemicals used to control undesirable weeds and plants in agricultural, residential, and water environments. Exposure to herbicides may lead to elevated cancer risks and disruption of the body's reproductive, immune, endocrine, and nervous systems.

Hodgkin's lymphoma: Cancer that starts in the tissues and organs that produce, store, and carry white blood cells which fight infections, called the lymph system. Rates of Hodgkin's lymphoma are highest among teens and young adults (ages 15 to 39 years) as well as older adults (ages over 75 years).

Hospitalization/hospital admission: Condition of being placed or treated as a patient in a hospital.

Hospital discharge date: The date when a patient is officially allowed to leave the hospital after treatment per medical advice, which opens the hospital bed for a new patient in need of care.

Housing age: Date when a house was built. If your home was built before 1978, it is more likely to have lead-based paint (see lead poisoning below).

Hypoplastic left heart syndrome (HLHS): A birth defect that affects normal blood flow through the heart in which the left side of the heart cannot pump oxygen-rich blood to the body properly. Since a baby with this defect needs surgery or other procedures soon after birth, HLHS is considered a critical congenital heart defect (CCHD).

Hypospadias: A birth defect in which the opening of the urethra is not located at the tip of the penis.

I

Incidence: Number of new cases of an illness occurring within a specific population over a specific period.

Infant mortality: Death of an infant within the first year of life.

Infant mortality rate: The number of deaths of infants, one year of age or younger, per 1,000 live births.

Infertility: A condition of the male or female reproductive system defined by the failure to achieve pregnancy after one year of unprotected sex.

Inorganic contaminants: Mineral-based compounds such as metals, salts, and asbestos, which can be toxic even at low concentrations.

Integrated pest management: An environmentally sensitive approach to pest management that uses current and comprehensive information on the life cycles of pests and their interaction with the environment in combination with available pest control methods to manage pest damage by the most economical means, and with the least possible hazard.

International Classification of Diseases (ICD): Classification system used to code and categorize diseases or other medical conditions and their related causes or social circumstances. The system is designed to promote international comparability of health statistics. Currently, the US uses ICD-10-clinical modification (CM) for morbidity and ICD-10 for mortality.

L

Lead: A naturally occurring element from the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels and past use of lead-based paint in homes. No level of lead exposure is safe and exposure to high levels of lead may cause anemia, weakness, and kidney and brain damage. Very high lead exposure can cause death.

Lead poisoning: Elevated blood lead level, typically the result of long-term lead exposure. Some symptoms of lead exposure may include abdominal pain, constipation, headache, and weakness.

Leukemia: Cancer of the blood and bone marrow caused by an abnormal increase in white blood cells.

Low birth weight: When a baby is born weighing less than 5.5 pounds or 2,500 grams at birth.

Lower limb reduction defects: When part of or the entire leg (lower limb) of a fetus fails to form completely during pregnancy.

Lung cancer: Occurs when abnormal cells grow out of control in the tissues of the lung.

Lung disease: A disorder preventing proper functioning of the lungs, including asthma, emphysema, and chronic bronchitis.

Lymphoma: A type of cancer that occurs when abnormal cells grow out of control in the body's immune system, known as the lymphatic system.

M

Maximum contaminant level (MCL): The highest level of a contaminant allowed in public drinking water.

Memorandum of understanding (MOU): A legal document that defines an agreement between parties.

Mercury: Naturally occurring chemical element found in the earth's crust. Mercury exists in three forms: elemental (metallic) mercury, inorganic mercury compounds, and methylmercury and other organic compounds. Inorganic mercury is harmful to health. High exposure to inorganic mercury compounds can cause digestive system problems, neurological disturbances, memory problems, skin rash, and kidney abnormalities.

Metadata: Describe the content, quality, and context of a dataset.

Morbidity: State of being ill or having a disease or symptom of a disease.

Mortality: Death.

Multiple sclerosis: Disease in which the immune system attacks the central nervous system.

Myocardial infarction (heart attack): Occurs when the heart cannot get enough oxygen due to blocked blood vessels.

N

National Ambient Air Quality Standards (NAAQS): Limits on atmospheric concentrations of six common air pollutants that can harm public health and the environment mandated by the Clean Air Act: carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide. NAAQS are regulated by the EPA and measured through a monitoring network.

[National Environmental Public Health Tracking Network:](#) A web-based, secure network of standardized electronic health and environmental data developed by collaboration between the CDC, state health departments, and numerous universities.

National Oceanic and Atmospheric Administration (NOAA): A scientific agency that works to understand and predict changes in climate, weather, oceans, and coasts, preserve coastal and marine ecosystems, and spread such knowledge to the public.

National Priorities List (NPL): EPA's list of sites of national priority with known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.

Neonatal mortality: Death during the first 28 days of life.

Neurodegenerative disease: A disorder caused by deterioration of the nerve cells in the brain and nervous system.

Nitrate: A water-soluble molecule made of nitrogen and oxygen. Consuming too much nitrate in drinking water can affect how blood carries oxygen, turn skin to a bluish or gray color, and cause weakness, excess heart rate, and fatigue.

Nitrogen oxides: Poisonous and highly reactive gases that form when fuel is burned at high temperatures. Inhaling elevated levels of nitrogen oxides can damage the respiratory tract.

Non-Hodgkin's lymphoma (NHL): Overgrowth of cells in the lymphatic system, usually found in the lymph nodes. Unlike Hodgkin's lymphoma, the Reed-Sternberg cell is not present in non-Hodgkin's lymphoma. Although non-Hodgkin's lymphoma is often diagnosed at an advanced stage, it is more common than Hodgkin's lymphoma.

Non-transient, non-community water system (NTNCWS): Public water systems regulated by DEP that regularly serve at least 25 of the same people at least 6 months of the year, but not year-round. The population is considered non-transient because they are there for an extended period. Examples of a NTNCWS include schools, factories, industrial parks, office buildings, and hospitals.

O

Ozone: A toxic gas composed of three oxygen atoms found in two layers of the atmosphere: the stratosphere (upper atmosphere) and troposphere (lower atmosphere). Stratospheric ozone or "ozone layer" is formed naturally through the interaction of solar ultraviolet (UV) radiation with molecular oxygen. The "ozone layer" absorbs UV light, reducing human exposure to harmful UV radiation that causes skin cancer and cataracts. Tropospheric or ground-level ozone is formed primarily from photochemical reactions between two major classes of air pollutants: volatile organic compounds (VOCs) and nitrogen oxides. When inhaled, ozone reacts chemically with biological molecules in the respiratory tract, leading to adverse health effects.

P

Particulate matter (PM): Mixture of solid particles (including dust, dirt, soot, or smoke) and liquid droplets found in the air. Some are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks, or fires. Most particles form in the atmosphere from reactions of pollutants emitted from power plants, industries, and automobiles. Health effects of exposure to particulate matter include cardiovascular effects, such as heart attacks, and respiratory effects, such as asthma attacks.

PM10: Inhalable particles with diameters 10 micrometers and smaller. Common health effects of PM10 exposure include irritation of the eyes, nose, and throat.

PM2.5: Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. PM2.5 pose the greatest health risk because the fine particles can get deep into lungs and even the bloodstream.

Pathogen: An organism, such as bacteria, viruses, parasites, and fungi, that cause disease.

Per- and polyfluoroalkyl substances (PFAS): Persistent and pervasive man-made chemicals in the environment resistant to heat, water, and oil. PFAS are used to make cookware, carpets, clothing, fabrics for furniture, paper packaging for food, firefighting foams and in other industrial processes. Exposure to PFAS may lead to increased cholesterol levels, changes in liver enzymes, developmental delays in children, disruptions with the endocrine system, increased risk of high blood pressure, and increased risk of kidney or testicular cancer.

Perchloroethylene (PCE): A synthetic, carcinogenic chemical used in dry cleaning and metal degreasing. Also called tetrachloroethylene. Exposure to PCE vapors include irritation of the upper respiratory tract and eyes, kidney dysfunction, and neurological effects.

Perinatal mortality: Fetal deaths that occur at or over 28 weeks gestation plus the number of infant deaths in the first 6 days of life.

Pesticide poisoning: Illness or injury that results from inhaling, absorbing, or ingesting a pesticide.

Polychlorinated biphenyls (PCBs): Toxic, man-made chemicals consisting of carbon, hydrogen, and chlorine atoms. PCBs were used widely in electrical equipment like capacitors and transformers prior to 1979. In 1979, the Toxic Substances Control Act (TCSA) banned commercial manufacturing of PCBs. PCBs can be released into the environment from spills, leaks from electrical and other equipment, and improper disposal and storage.

Postneonatal mortality: Death between the first 28 to 364 days of life.

Poverty rate: The percentage of people (or families) in poverty.

Poverty threshold: The dollar amount the Census Bureau uses to determine poverty status. Thresholds are consistent throughout the US, vary by family size and age of family members, are updated annually for inflation.

Preterm birth: When a baby is born before 37 weeks of pregnancy.

Public health surveillance: The ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementing, and evaluating public health practice.

Public water system (PWS): A system that provides water to the public for human consumption, and which has a least 15 service pipes or regularly serves an average of at least 25 individuals for at least 60 days out of the year.

R

Radon: Naturally occurring radioactive gas that can cause lung cancer. Radon is colorless, odorless, and toxic.

Reproductive health: State of complete physical, mental, and social well-being in all matters relating to the reproductive system and sexual well-being during all stages of life.

Respiratory health: Relating to the health of the lungs and the other parts of the respiratory system that affect breathing.

Risk factor: Aspect of behavior or lifestyle, an environmental exposure, genetic characteristic, or other factor that increases a person's chance of developing disease or other adverse health outcome.

S

Safe Drinking Water Act (SDWA): Enacted in 1974, authorizes the EPA to set national standards for drinking water to protect the public against naturally occurring and man-made contaminants that may be found in drinking water.

Sanitary survey: A public health measure that includes on site review of a public water system as a component of the Safe Drinking Water Act to ensure the safety of the public drinking water supply.

Sex ratio: The proportion of males to females in a population.

Spina bifida: Birth defect in which a baby's spinal cord fails to develop properly. Spina bifida is a type of neural tube defect in which the neural tube does not close all the way and the backbone that protects the spinal cord doesn't properly form and close.

State Environmental Health Indicators Collaborative (SEHIC): Group of state-level environmental health practitioners within the Council of State and Territorial Epidemiologists (CSTE) developing indicators for use within environmental health surveillance and practice.

Surface water: A body of water above ground, such as lakes, ponds, rivers, and streams. Surface water is susceptible to contamination and pollution and should be treated before consumption to prevent waterborne illness.

Systemic lupus erythematosus (SLE): Inflammatory disease in which the immune system attacks its own tissues. SLE is the most common form of lupus that affects the joints, skin, brain, lungs, kidneys, and blood vessels.

T

Tetralogy of Fallot: Birth defect that affects normal blood flow through the heart. Tetralogy of Fallot is made up of four defects of the heart and its blood vessels: (1) a hole between the two lower chambers of the heart, (2) a narrowing of the pulmonary valve and main pulmonary artery, (3) an enlarged aortic valve that seems to open from both ventricles, and (4) a thicker muscular wall of the lower right chamber of the heart.

Thyroid cancer: Cancer that forms in the thyroid gland, a butterfly-shaped organ at the base of the throat that produces hormones that control heart rate, blood pressure, body temperature, and weight.

Total fertility rate (TFR): A measure of fertility and population growth measured by the expected number of births per 1,000 women according to current age-specific birth rates.

Total trihalomethanes (TTHM): A group of disinfection byproducts that form when chlorine compounds used to disinfect water react with naturally occurring chemicals in water. The EPA has classified TTHM as possibly carcinogenic to humans. Adverse liver, kidney, neurological, and reproductive outcomes may also occur as a result of high levels of exposure to TTHM. To balance the risk of waterborne illness from bacterial contamination in drinking water and the level of TTHM, EPA has set a maximum contaminant level of 0.08 micrograms per liter.

Toxin: A substance that is harmful to the body or environment.

Transient, non-community water system (TNCWS): A public water system that provides water to 25 or more people for at least 60 days per year, but neither to the same people or on a consistent basis, such as a gas station or campground where people do not remain for long periods of time.

Transposition of the great arteries (vessels): Birth defect of the heart in which the two main arteries carrying blood out of the heart – the main pulmonary artery and the aorta – are switched in position.

Trichloroethylene or trichloroethene (TCE): Volatile, colorless liquid mainly used as a degreaser for cleaning metal parts. It can pass through soil and accumulate in groundwater. Acute inhalation exposure to TCE may affect central nervous system functioning.

Turbidity: An optical measurement of water clarity. High turbidity indicates that the water is cloudy due to the presence of suspended particles, such as clay and silt, and can negatively affect aquatic and human health upon ingestion.

U

United States Geological Survey (USGS): The nation's largest water, earth, and biological science and civilian mapping agency. It collects, monitors, analyzes, and provides scientific understanding of natural resource conditions, issues, and problems.

Upper limb reduction defects: When part of or the entire arm (upper limb) of a fetus fails to form completely during pregnancy.

V

Very low birth weight: When a baby is born weighing less than 3 pounds, 4 ounces at birth.

Vital statistics: Data derived from certificates and reports of births, deaths, fetal deaths, induced termination of pregnancies, marriages, and related reports.

Volatile organic compounds (VOCs): Organic compounds with high vapor pressure and low water solubility, emitted as gases from certain solids or liquids. Many VOCs are human-made chemicals used and produced in manufacturing. When released, these chemicals can cause harm to the environment and human health. VOCs can affect outdoor and indoor air quality. Common sources of VOCs in household products include aerosol sprays, wood preservatives, disinfectants, and air fresheners.

W

Water distribution system: A network of carrying water from a treatment plant or wells to customers.