

EARTHDAY.ORG is unwavering in our commitment to end plastics for the sake of human and planetary health, demanding a 60% reduction in the production of **ALL** plastics by 2040. Our theme, **Planet vs. Plastics**, calls to advocate for widespread awareness on the health risk of plastics, rapidly phase out all single use plastics, urgently push for a strong UN Treaty on Plastic Pollution.

60% Reduction of Plastic Production by 2040

Babies vs. Plastics

Governments and NGOs from around the world will gather in Ottawa to continue negotiating the terms of the United Nations Global Plastic Treaty this Earth Day, 2024. Plastics pose serious health risks to life on Earth. BABIES VS. PLASTICS, the first of five such reports, offers an over-view of some of the latest research studying the impacts of microplastics on the health of young babies and children. There is evidence that babies ingest more microplastics and microfibres than adults because of key evelopmental stages—specifically crawling, teething and their habit of tasting inanimate objects. One study suggests babies ingest/inhale 10 times the level of microplastics to that of adults.

Plastic Information

- Global plastics has reached an estimated 460 million metric tons in recent years Global plastic packaging industry
- It is estimated that 75 to 199 million tons of plastic are currently in our oceans
- One million plastic bottles are purchased every minute worldwide, while up to five trillion plastic bags are used a year
- An estimated 9.7 billion cigarette butts are littered in the U.S. every year, 4 billion of these in waterways.

- 8.3 BILLION Metric Tons (9.1 BILLION US Tons) of plastic has been produced since plastic was introduced in the 1950s.
- 79% of plastic that has ever been made still sits in landfills or the natural environment (with the exception of the small amount that has been incinerated or recycled).
- Americans purchase about 50 billion water bottles per year, averaging about 13 bottles per month for every person in the U.S.! That means by using a reusable water bottle, you could save an average of 156 plastic bottles annually.
- The world produces more than 26 million US tons of polystyrene (plastic foam) each year. Americans alone throw away around 25 billion Styrofoam coffee cups every year
- In 2017, packaging production constituted the highest-demanded use for plastic, with 146 million metric tons used.
- At least 14 million tons of plastic end up in our oceans every year. Many countries lack the infrastructure to prevent plastic pollution such as: sanitary landfills; incineration facilities; recycling capacity and circular economy infrastructure; proper management and disposal of waste systems
- When plastics end up in landfills, they aren't harmless. They break down into tiny toxic particles that contaminate the soil and waterways and enter the food chain when animals accidentally ingest them.
- Researchers in Germany indicate that terrestrial microplastic pollution is much higher than marine microplastic pollution—estimated at four to 23 times higher, depending on the environment. This could ultimately have adverse health effects on humans and animals.

Fact Sheet: The Plastic Threat to Human Health

The billions upon billions of items of plastic waste choking our oceans, lakes, and rivers and piling up on land is more than unsightly and harmful to plants and wildlife. Plastic Pollution is a very real and growing threat to human health.

The following facts shed light on how plastic is proving dangerous to human health. To learn more about the threat and impact of plastic pollution and get tips to reduce your plastic consumption, download our Plastic Pollution Primer and Toolkit today!

Bisphenol A also known as BPA, used to make billions of plastic beverage containers, dinnerware, protective linings of food cans and toys, is considered an endocrine disruptor, meaning it can both decrease or increase endocrine activity in humans and cause adverse health effects.

BPA is able to be absorbed by fat tissue, and is associated with increased risk of breast cancer. Additionally, the breast milk of most women in the developed world contains dozens of compounds including BPA that have been linked to negative health effects.

Some animal studies have indicated adverse effects of BPA on newborns and fetuses.

Importantly, the label BPA-free in a container of a bottle doesn't mean a product is free from other harmful chemical compounds that are slightly different but have a different name.

Growing literature links many Phthalates, which are a group of chemicals used to make plastics more flexible and harder to break, with a variety of adverse outcomes including weight gain and insulin resistance, decreased levels of sex hormones, and other consequences for the human reproductive system both for females and males.

When food is wrapped in plastic containing BPA, phthalates may leak into the food. Any migration is likely to be greater when in contact with fatty foods such as meats and cheeses than with other foods.

In general, it is not recommended to heat food in plastic containers with the codes 3 and 7. The USDA Food Safety and Inspection Service advises Americans not to reuse margarine tubs, take-out containers, whipped topping bowls, and other one-time use containers, which are more likely to melt and cause chemicals to leach into food.

Fact Sheet: Microplastics and Drinking Water

The billions upon billions of items of plastic waste choking our oceans, lakes, and rivers and piling up on land is more than unsightly and harmful to plants and wildlife. Plastic Pollution is a very real and growing threat to human health.

The following 10 facts shed light on how plastic is proving dangerous to human health. To learn more about the threat and impact of plastic pollution and get tips to reduce your plastic consumption, download our Plastic Pollution Primer and Toolkit today!

FACT SHEET: Microplastics and Drinking Water Updated Facts + Metrics

The billions upon billions of items of plastic waste choking our oceans, lakes, and rivers and piling up on land is more than unsightly and harmful to plants and wildlife. Plastic Pollution is a very real and growing threat to human health.

The following 10 facts shed light on how plastic is proving dangerous to human health. To learn more about the threat and impact of plastic pollution and get tips to reduce your plastic consumption, download our Plastic Pollution Primer and Toolkit today!

• Each year, the average American ingests more than 70,000 microplastics in their drinking water supply. These plastics originate from multiple sources, but

- are mostly linked to littering, stormwater runoff, and poor wastewater management in treatment facilities.
- The US passed the Microbead-Free Waters Act of 2015, which banned plastic microbeads in cosmetics and personal care products sold in the United States. Critically, there are no regulatory limits on the levels of microplastics in bottled water.
- The United States Environmental Protection Agency (EPA) proposed a National Strategy to Prevent Plastic Pollution on Earth Day 2023, addressing microplastic interventions to proactively prevent fibers from entering drinking water sources.
- A single fleece jacket sheds up to 250,000 microfibers during a single wash. In the transport from the washing machine into drinking water, "microfiber captures" are being developed by entrepreneurs to prevent fibers from clogging filters and jeopardizing urban water treatment infrastructure.
- Microfibers from synthetic fibers have been shown to make up the majority of human material found along the world's shorelines, accounting for up to as much as 85%.
- Microplastics can also come from car tires. Plastic dust is created by the friction between the wheels and the road and is blown into waterways and inhaled by humans. Car tires shed 20 grams of plastic dust every 100 kilometers.
- Biologically-active slow sand filters, which are utilized in some water treatment plants for decontamination purposes, have shown a 99.9% efficiency in removing microplastics from drinking water.
- According to a 2020 study conducted by PEW Trusts, annual flows of plastic into the ocean could be reduced by 80% by 2040 through the application of existing approaches to reduce our consumption of single-use plastics and the adoption of eco-friendly alternatives.

https://www.earthday.org/campaign/end-plastic-pollution/#plastictracker

Autism Awareness

Did you know that one in 44 children and one in 45 adults have autism? World Autism Month focuses on sharing stories and providing opportunities to increase understanding and acceptance of people with autism.

Autism looks different for everyone, and each person with autism has a distinct set of strengths and challenges. Some autistic people can speak, while others are nonverbal or minimally verbal and communicate in other ways. Some have intellectual disabilities, while some do not. Some require significant support in their daily lives, while others need less support and, in some cases, live entirely independently.

On average, autism is diagnosed around age 5 in the U.S., with signs appearing by age 2 or 3.

Many people with autism experience other medical, behavioral or mental health issues that affect their quality of life.



Among the most common co-occurring conditions are:

- attention-deficit/hyperactivity disorder (ADHD)
- anxiety and depression
- gastrointestinal (GI) disorders
- seizures and sleep disorders

Anybody can be autistic, regardless of sex, age, race or ethnicity. However, <u>research from the CDC</u> says that boys get diagnosed with autism four times more often than girls.

Today, misconceptions of autism and the frequency in which people are excluded, threaten access to the vital information, resources and support autistic people and their families need. This World Autism Month and beyond, join Autism Speaks to fearlessly stand for a world where autistic people are recognized and have the opportunities they deserve.

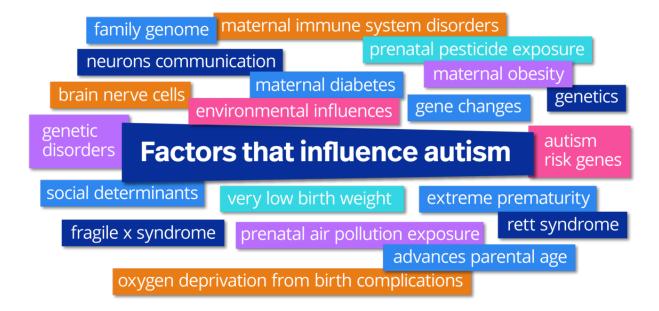
Autism is a lifelong condition, and an autistic person's needs, strengths and challenges may change over time. As they transition through life stages, they may need different types of support and accommodations. Early intervention and therapies can make a big difference in a person's skills and outcomes later in life.

There are many causes of autism.

Research suggests that autism spectrum disorder (ASD) develops from a combination of:

- Genetic influences and
- Environmental influences, including social determinants

These factors appear to increase the risk of autism and shape the type of autism that a child will develop. However, it's important to keep in mind that increased risk is not the same as a *cause*. For example, some gene changes associated with autism can also be found in people who don't have the disorder. Similarly, not everyone exposed to an environmental risk factor for autism will develop the disorder. In fact, most will not.



Autism Prevalence



Source: Centers for Disease Control and Prevention (2023)

- 1 in 36 children in the U.S. have autism, up from the previous rate of 1 in 44.
- 1 in 45 adults in the U.S. have autism
- In the U.S., about 4 in 100 boys and 1 in 100 girls have autism.
- Boys are nearly 4 times more likely to be diagnosed with autism than girls.
- Autism prevalence is lower among white children than other racial and ethnic groups:
 - \circ White -2.4%
 - o Black − 2.9%
 - Hispanic 3.2%
 - Asian or Pacific Islander 3.3%

https://www.autismspeaks.org/what-causes-autism

National Arab American Heritage Month

National Arab American Heritage Month recognizes the culture of Arab Americans. It hopes to raise awareness about the diversity of Arab American communities. By fostering a culture of understanding, this allows all Americans, including Arab Americans, to live together with a sense of belonging and acceptance.

Jewish Heritage Month – May

Celebrated each May in both the United States and Canada, Jewish Heritage Month acknowledges the achievements of all Jewish Americans and Canadians. This monthly observance hopes to bring understanding and awareness about the diverse heritage of the community.

National Minority Health Month

Is geared to:

- Builds awareness about the disproportionate burden of premature death and illness in people from racial and ethnic minority groups.
- Encourages action through health education, early detection and control of disease complications.

We have to reduce health disparities among racial and ethnic minority and other diverse populations.

Many factors contribute to health disparities, including genetics, access to care, poor quality of care, community features (e.g., inadequate access to healthy foods, poverty, limited personal support systems and violence), environmental conditions (e.g., poor air quality), language barriers and health behaviors.

Heart disease and cancer are the leading causes of death across race, ethnicity, and gender. African Americans were 30 percent more likely than whites to die prematurely from heart disease in 2010, and African American men are twice as likely as whites to die prematurely from stroke (HHS, 2016b,d).

The US Food & Drug Theme for 2024. Be the Source for Better Health: Improving Health Outcomes Through Our Cultures, Communities, and Connections, highlights the important role of diverse communities, organizations, and individuals in organizations in achieving the OMHHE (Office of Minority Health and Health Equity) mission.

Minority Health and Health Equity Resources

Minority Health and Health Equity Resources

Alzheimer's Disease Asthma Clinical Trial Diversity

Colorectal Cancer Diabetes Heart Disease

Hepatitis B Human Immunodeficiency Virus (HIV)

Hypertension Immunization Lupus

Rural Health Sickle Cell Disease Stroke

Clinical Trials Consumer Health Health Topic(s)

Cancer Screening Heart Health Nutrition

Vaccinations Tobacco Cancer

Breast Cancer Skin Cancer Prostate Cancer

Lung Cancer Heart Disease

Kidney Disease Obesity

https://www.fda.gov/consumers/minority-health-and-health-equity/minority-health-and-health-equity-resources

Our Biggest Health Challenges

Thanks to decades of research, Americans are living longer. Yet Chronic diseases still affect large swaths of the population and are unevenly distributed creating health disparities. These chronic illness are common and costly, and many are preventable. NIH Researchers — Basic, Translation, clinical and community based — are tackling these challenges head on.

Heart Disease and Stroke

Heart disease and stroke still the leading causes of death for both U.S. men and women. NIH-funded scientists currently are looking to the power of precision medicine to better understand and manage these disorders.

Cancer

Cancer is one of our nation's most feared diseases, with more than 1.6 million new cases diagnosed each year. But thanks to NIH research, this number is now falling.

Opioid Addiction

NIH-supported research has led to effective strategies that can be implemented right now to save lives and to prevent and treat opioid addiction.

Infectious Diseases

NIH scientists are working to better understand how microbes develop resistance to antibiotics, finding new diagnostics that can more quickly detect resistance, and finding new antibiotic drugs and vaccines to prevent and treat bacterial infections.

Diabetes

Diabetes affects 30 million American adults and children. NIH-funded technological advances offer much promise.

https://www.nih.gov/about-nih/what-we-do/nih-turning-discovery-into-health/our-biggest-health-

<u>challenges#:~:text=Heart%20disease%20and%20stroke%20still,both%20U.S.%20men%20and%20women.</u>

https://www.nimhd.nih.gov/programs/edu-training/nmhm/

Stress Awareness Month

Three Types of Stress

Stress does not merely afflict your mind; it can also affect you on a cellular level. In fact, long-term stress can lead to a wide range of illnesses—from headaches to stomach disorders to depression—and can even increase the risk of serious conditions like stroke and heart disease. Understanding the mind/stress/health connection can help you better manage stress and improve your health and well-being.

ACUTE STRESS

Acute stress is usually brief. It is the most common and frequent. Acute stress is most often caused by reactive thinking. Negative thoughts predominate situations or events that have recently occurred or are upcoming.

EPISODIC ACUTE STRESS

People who frequently experience acute stress, or whose lives present with frequent triggers of stress, have episodic acute stress. The individuals who frequently suffer acute stress often live a life of chaos and crisis.

CHRONIC STRESS

Chronic stress is the most harmful type of stress. If chronic stress is left untreated over a long period of time, it can significantly damage your physical health and deteriorate your mental health.

N

Ways to Help Manage Stress

Exercise

Even 20-30 minutes a day of walking is a great stress reliever and a good way to get your mind off your daily worries. Exercise has many healthy benefits.

Relaxation

Learn to incorporate some relaxation techniques into your daily life. Meditation, journaling, yoga and breathing exercises are just a few ways to help relax.

Have Fun

Spending quality time with family and friends, or simply watching your favorite sit-com can often be just the distraction you need.

Visit Your Doctor

Your family doctor is in the best position to get your started on the path to a stress-free lifestyle. Make an appointment today.

Eat Well

The gut and brain are constantly sending signals to each other, so by keeping your microbiota (the bacteria in your gut) healthy, your brain feels less stressed.

Sleep & Rest

To relieve stress before bed, try some relaxation techniques and disconnect from technology as much as possible an hour before bedtime.

https://www.chcw.org/april-is-stress-awareness-month/

Mental health can positively or negatively impact your physical health and risk factors for heart disease and stroke, according to "Psychological Health, Well-Being,

and the Mind-Heart-Body Connection," a scientific statement in the American Heart Association journal Circulation.

Stress may contribute to poor health behaviors linked to increased risk for heart disease and stroke, such as:

- Smoking
- Overeating
- Lack of physical activity
- Unhealthy diet
- Being overweight
- Not taking medications as prescribed

Move More Month

Why is Walking the Most Popular Form of Exercise?

Research has shown that walking at a lively pace at least 150 minutes a week can help you:

- Think better, feel better and sleep better.
- Reduce your risk of serious diseases like heart disease, stroke, diabetes and several types of cancer
- Improve your blood pressure, blood sugar and blood cholesterol levels.
- Increase your energy and stamina.
- Improve your mental and emotional well-being and and reduce risk of depression.
- Improve memory and reduce your risk of dementia.
- Boost bone strength and reduce your risk of osteoporosis.
- Prevent weight gain.