NEW YORK STATE | Department of Health

Extreme Heat and People Who Use Drugs

A Harm Reduction Resource for Local Health Departments

Background

1,220 people in the United States are killed by extreme heat per year.[1] Extreme heat-related illnesses can be fatal and they are preventable. While all communities are impacted by extreme heat, not everyone is equally at risk. People who use drugs are disproportionately impacted by heat-related illness, injury, and death. Knowing the signs and symptoms of heat illness, how to reduce risk, and when to intervene, can save lives.

Extreme Heat and Rising Temperatures

The impact of heat varies depending on time of exposure, personal characteristics, and personal circumstances. For example, how long a person has been exposed to heat, how much water they have ingested, and if they may have used any substances. With temperatures rising each year, it only takes a 5°F temperature increase to double a New Yorker's risk of heat-related illness. Higher temperatures and frequent heat waves pose major health risks to people who use drugs. This is due to the physiological effects different drugs can have on a person's body, especially when consumed in the heat.[2]

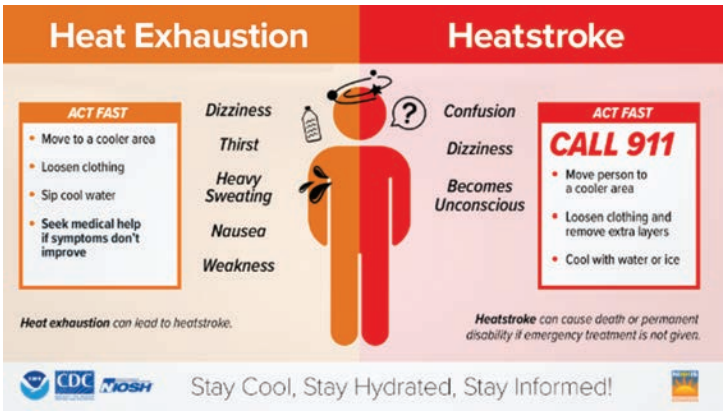
The Impact of Rising Temperatures on People Who Use Drugs

Higher temperatures and frequent heat waves pose these major risks to people who use drugs:

- Increased risk of heat-related illness.
- Increased risk of accidental overamping in people using stimulants. Overamping occurs when a person experiences adverse reactions from using one or more stimulant drugs, i.e., cocaine, crack, methamphetamine.
- Death and serious injury from extreme heat is a serious public health concern. This is especially true for some high-risk groups, like people who use cocaine.

Extreme Heat-Related Illnesses

Heatstroke and dehydration are the most common illnesses to present when ingesting commonly used substances. These include: alcohol, opioids, antidepressant or antipsychotic medications, stimulants, and MDMA (3,4-Methylenedioxymethamphetamine), commonly known as Ecstasy or Molly. Heatstroke is considered a medical emergency and requires fast action to prevent permanent damage or death. Know the symptoms of each extreme heat-related illness, and monitor for symptoms among people who are using alcohol and/or other drugs.



Illness	Symptoms	What to Do
Heatstroke THIS IS AN EMERGENCY – ACT FAST	• Hot, dry, red skin • Rapid pulse • High body temperature ≥ 105°F • Loss of alertness • Confusion • Unconsciousness or coma • Rapid and shallow breathing	• Call 911 immediately. • Cool the person quickly. • Bring to a cool place and use a cool bath or sponges, fans, or air-conditioning. **OR** • Wrap ice packs in cloth and place on neck, wrists, ankles, and armpits. **OR** • Remove clothing and wrap the person in cool, wet sheets.
Heat Exhaustion	• Heavy sweating • Fainting • Vomiting • Cold, pale, clammy skin • Dizziness • Headache • Nausea • Weakness	• Heat exhaustion can quickly lead to heatstroke. If symptoms worsen or don't improve, get medical help. • Move the person to a cool place if you're able to do it safely. • Loosen clothes and apply cool, wet cloths to the neck, face, and arms. • Have the person sip water slowly. Provide half a glass of water every 15 minutes – up to about 1 quart. Stop giving water if vomiting occurs.
Heat Cramps	• Muscle cramps in the abdominal area or extremities • Heavy sweating • Mild nausea	• Move the person to a cool place if you're able to do it safely. • Apply firm pressure to the cramping muscle. • Gently stretch the cramped muscle and hold it for 20 seconds followed by gentle massage. • Have the person drink some cool water.
Heat Rash	• Skin irritation that looks like a red cluster of pimples or small blisters	• Move the person to a cool place if you're able to do it safely. • Keep the affected area dry. • Have the person use talcum powder to increase comfort.

Substances and Increased Risk of Heat-Related Illness

Substance	Extreme Heat-Related Illness
Alcohol	**Heatstroke:** When it's hot outside, alcohol may cause a person's body to lose its ability to regulate its own temperature effectively. **Dehydration:** Alcohol is a diuretic, which promotes water loss through urine at a quicker rate than other liquids.
Opioids	**Sweating:** Opioids can cause excessive sweating – hyperhidrosis. **Dehydration:** Opioid withdrawal can cause sweating, runny nose, watery eyes, nausea, vomiting and diarrhea, leading to dehydration.
Antidepressant or Antipsychotic Medications	**Heatstroke:** Prescription medications, such as antidepressant and antipsychotic medications, can negatively impact the body's ability to regulate temperature and increase the risk of heatstroke.
Stimulants	**Dehydration:** Stimulants – cocaine, crack cocaine, methamphetamine, prescription amphetamines – increase core body temperature and the risk of overheating and dehydration. **Heatstroke:** Stimulants impair the ability of the cardiovascular system to cool the body. They also decrease the sense of discomfort associated with heat that would lead to heat-avoidant behaviors. There is an increase in overamping resulting in accidental death during temperatures 75°F and above. **Sunburn:** Prescription stimulants (i.e., Adderall,™ Ritalin™) may cause a person to become sunburnt more easily.

Substances and Increased Risk of Heat-Related Illness *(Continued)*

Substance	Extreme Heat-Related Illness
MDMA (3,4-Methylenedioxy-methamphetamine) /Ecstasy	**Heatstroke:** MDMA (3,4-Methylenedioxymethamphetamine) can decrease the sense of discomfort associated with heat that would lead to heat-avoidant behaviors. **Dehydration:** MDMA (3,4-Methylenedioxymethamphetamine), (also known as Ecstasy or Molly) increases core body temperature and can overheat the body even when used in normal temperatures.

Heat-Related Harm Reduction Tips to Share with People Who Use Drugs

- Access local cooling centers, swimming pools, and splash pads to stay cool.
- Seek shade and cool environments: Minimize heat exposure by staying in shaded areas or air-conditioned spaces, like libraries, or a local harm reduction agency/syringe service programs whenever possible.
- Hydration is key. Drink plenty of water, even if you don't feel thirsty. Sports drinks can help replace salts and minerals if you're sweating a lot.
- If you feel too hot, wear a wet scarf, bandana, or shirt to cool your body temperature.
- Eat light meals. Avoid hot and heavy meals – they will add heat to your body.
- Plan drug use accordingly: Consider the impact of hot weather on drug effects. Reduce your dose and your frequency, and use your drugs in safe, familiar places with people you trust.

- Avoid using in a parked car, even briefly. Temperatures in the car can become dangerous within a few minutes.
- Connect with support networks: Maintain connections with trusted friends, support groups, or harm reduction organizations that can aid and support during hot weather. If there are elderly people in your community, check up on them, too!
- Dehydration can cause cracked/dry lips. Use lip balm, drink water, and avoid sharing pipes.
- Wear sunscreen and a ventilated hat – e.g., straw or mesh – when in the sun, even if it is cloudy.
- Remember that extreme heat can intensify the effects of some drugs and increase the risk of overdose. Avoid using alone and stagger use when using with a friend.
- Extreme heat can cause swelling in your lower extremities. Be mindful when choosing an injection site and use caution if you already suffer from edema. Keep your legs elevated and try compression socks to improve circulation.
- Dehydration can make it difficult to inject intravenously. Consider other routes, like snorting, smoking, or consuming orally.
- Watch out for warning signs: Be vigilant and watch out for dizziness, nausea, rapid heartbeat, or confusion. These are warning signs for dehydration, heat exhaustion, and heatstroke. If you feel hot but stop sweating, your body is struggling to keep you cool. Clammy skin is another warning sign of heat-related illness. Seek a cool area, water to drink, and rest. If your symptoms are severe, you may want to seek medical assistance to prevent long-term damage or death.

What Local Health Departments Can Do

- Provide information about where people can access local cooling centers, swimming pools, and splash pads.
- Partner with local transportation agencies, libraries, or community centers to offer unhoused people access to air-conditioning during heat waves.
- Deliver health protection and harm reduction messaging to high-risk groups.
- Post extreme heat-related resources and posters to inform community members of extreme heat-related symptoms and illnesses.
- Collaborate with your local Syringe Service Program or Drug User Health Hub. Provide heat-related harm reduction education and supplies to people living in your county who use drugs.
- Local Health Departments should be aware of the community resources on the Home Energy Assistance Program (HEAP) Cooling Assistance Benefit.
- Distribute sunscreen, lip balm, hats, water, refillable water bottles, and cooling rags.
- Coordinate/promote innovative distribution methods, such as setting up Points of Distribution (POD) models, mobile units, and/or boots-on-the-ground street outreaches. Use these to distribute supplies to high-risk people in targeted neighborhoods (i.e., encampments) during extreme heat events.

- Include water, lip balm, and hygiene supplies in temperature-controlled or indoor harm reduction vending machines where applicable.
- Designate cold-water, bottle-refill stations for public use.
- Know the extreme-heat-related areas to determine priority needs and geographic areas with the highest burden.
- Develop an emergency action plan in the event of a heat-related emergency. Partner with Emergency Management and voluntary disaster response organizations to ensure emergency shelter response plans understand and address heat-related risks associated with people who use drugs.

[1]National Center for Environmental Health (NCEH), Agency for Toxic Substances and Disease Registry (ATSDR)

[2]NOAA National Centers for Environmental Information (2024). Annual 2023 Global Climate Report. Accessed January 17, 2024, from https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202313.

[3]Bohnert, A. S. B., Prescott, M. R., Vlahov, D., Tardiff, K., & Galea, S. (2010, March 2). *Ambient temperature and risk of death from accidental drug overdose in New York City, 1990-2006.* Addiction; Wiley-Blackwell.