



Extreme Heat and People Who Use Drugs

Information for Harm Reduction Organizations

Climate change has contributed to an increase in rising temperatures and extreme heat in the United States. The average temperature is projected to rise another 2.7°F by 2050.

Extreme heat is the leading weather-related cause of death in the United States.

Warmer temperatures and extreme heat pose additional health risks for people who use drugs.

This fact sheet describes the increased risk of heat-related illness for people who use drugs and how harm reduction organizations can help them. It includes tips to reduce harm from high temperatures.

The Impact of Rising Temperatures on People Who Use Drugs

Our cardiovascular system works harder to cool our body during hot weather. This can cause heat illness – hyperthermia.

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 cocaine. [Overamping](#) occurs when a person experiences adverse reactions from using one or more stimulant drugs – i.e., cocaine, crack, methamphetamine.

Increased Risk of Overamping in People Using Cocaine

- When temperatures are 75°F and above, there are more overamping cases, which result in accidental death.¹
- Heat illness from using cocaine can cause people to overdose with less cocaine in their system.
- 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.

Social Determinants of Health and Heat-Related Illness

Socioeconomic and other factors worsen heat-related health risks for people who use drugs. These factors include:

- Lack of stable housing and access to air-conditioning, showers, and other vital cooling mechanisms.
- Using drugs in housing without air-conditioning, parked cars, and even the outdoors during heat waves increases heat exposure and the risk of heat-related illness and mortality.
- People who don't speak English – or who are isolated in other ways – may not be able to understand heat warnings. They may also have less access to proper health and support services.

Substances and Increased Risk of Heat-Related Illness

Different types of drugs affect the body in different ways. This makes some drugs riskier to use in warmer temperatures than others.

Substance	Extreme Heat-Related Illness
Alcohol	Heatstroke: When combined with higher temperatures, alcohol may cause the 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, which lead to dehydration. Those who regularly take opioids have found that their efficacy is reduced in warmer weather. They may potentially take higher doses on warmer days. ²
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 and decrease the sense of discomfort associated with heat that would lead to heat-avoidant behaviors. Sunburn: Prescription stimulants – Adderall, [™] Ritalin [™] – may cause a person to become sunburnt more easily. Using drugs to the point of intoxication could cause an increased risk of sunburn if a person is outside/sleeping/nodding out more than anticipated and without sunscreen.
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.

How Organizations Who Serve People Who Use Drugs Can Help

- Distribute the following to participants and clients: cooling towels or bandanas, ice packs, water bottles, and information about local cooling centers and swimming pools.
- Before anticipated extreme weather events and heat waves, distribute extra doses of naloxone, supplies for safer drug use, and drug testing strips to participants and clients.
- Educate participants and clients about the ways in which different drugs can affect them when used in the heat, and how they can reduce their risk. See tips below.

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 local harm reduction agencies/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’re using MDMA, try to drink about 1-3 cups (6-18 ounces) of water per hour, or up to 4 cups (24 ounces) if you’re exerting yourself. Electrolyte powders and salty snacks can help prevent hydration-related illness.
- If you’re feeling 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: Stay connected to trusted friends, support groups, or harm reduction organizations that can provide aid and support during hot weather. If there are people 65 or older in your community, check in 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 be careful if you already suffer from edema – swelling in legs or ankles. 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. You should seek a cool area, water to drink, and rest. If your symptoms are severe, seek medical attention.

¹ 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.

² Puig, M. M., Warner, W., Tang, C. K., Laorden, M. L., & Turndorf, H. (1987). Effects of temperature on the interaction of morphine with opioid receptors. *British journal of anaesthesia*, 59(11), 1459–1464.