

# Cold Weather and People Who Use Drugs

## What Clinicians Need to Know



Department  
of Health

While the health of all New Yorkers is impacted by cold weather and low temperatures, not everyone is equally at risk. Cold weather and lower temperatures pose additional health risks for people who use drugs (PWUD) particularly those who are marginally housed.

This guide provides information to clinicians on the prevention and treatment of cold-weather-related illnesses and injuries. Since people who use drugs may not be familiar with all the symptoms of cold weather induced injuries/illness and its effects, clinicians should discuss these symptoms and tips for prevention with patients who are at risk.

### The Impact of Lower Temperatures on People Who Use Drugs

Cold weather poses the following major risks to people who use drugs (PWUD):

- **Hypothermia:** Being in cold weather for a long time can cause hypothermia. People who are unhoused and use drugs out in the elements are especially at risk when nodding off. Hypothermia causes slow breathing and heart rate which is very risky when you are using a substance that has similar side effects. If an overdose happens while that person is also experiencing hypothermia, that individual is at a higher risk of fatality<sup>1</sup>.
- **Frostbite:** Frostbite occurs when the skin and underlying tissues freeze due to extreme cold. The longer the individual remains in freezing temperatures, the worse the effects of frostbite can become. Prolonged frostbite can lead to permanent skin and tissue damage, gangrene, and in severe cases, amputation.
- **Lack of running water:** Public fountains are usually turned off during the winter and frozen pipes can affect public restrooms. This can lead to a lack of access to running water, which is so important for hydration and proper cleaning before and after intravenous use.
- **Intravenous use:** When it's cold, the body will naturally constrict blood vessels close to the skin to preserve heat. Warming up the injection site and encouraging veins to pop out are important steps when preparing to shoot up. This, and needing to take clothing off to get to the injection site, puts intravenous users at a disadvantage when they need to use it outside in cold weather. Trying to shoot into veins that are constricted causes repeat injection attempts and increases the likelihood of infections, abscesses, and missed shots.
- **Altered Temperature Perception:** Stimulants may also affect the brain's temperature-regulating centers, potentially making individuals less aware of or sensitive to changes in body temperature, including feeling less cold. This can be especially dangerous in cold environments, as it may delay or prevent someone from taking necessary steps to warm up.<sup>2</sup>

<sup>1</sup>Smollin C (2024). Poisoning or overdose-related hypothermia. Papadakis M.A., & McPhee S.J., & Rabow M.W., & McQuaid K.R., & Gandhi M(Eds.), *Current Medical Diagnosis & Treatment 2024*. McGraw-Hill Education.

<sup>2</sup>Docherty JR, Alsufyani HA. Cardiovascular and temperature adverse actions of stimulants. *Br J Pharmacol*. 2021; 178: 2551–2568.

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## The Impact of Lower Temperatures on People Who Use Drugs (continued)

- Seasonal respiratory illness:** During the winter, cases of respiratory illnesses increase. This is a challenge for people who smoke their drugs as smoking can prolong or worsen any respiratory illness. Additionally, PWUD may find shelter with other people in cramped, poorly ventilated accommodations, resulting in an increased risk of respiratory virus transmission.
- Major winter storms disruptions:** May result in changes in drug supply, limited access to social support services and public transportation, negatively affecting access to sterile syringes, medications for opioid use disorder (MOUD), supplies for safer use, and naloxone.

## Substances and Increased Risk of Cold-Related Illness

Different types of drugs affect the body in different ways. This makes some drugs riskier to use in low temperatures than others. Cold weather risks for PWUD are primarily due to:

- (1) The way drugs can affect the body's ability to maintain body temperature, and
- (2) Impaired judgment and decision-making abilities, potentially leading to at-risk behavior.

Certain substances are also associated with an increased risk of cardiovascular conditions (such as MDMA (3, 4-Methylenedioxymethamphetamine), medetomidine, xylazine\*, K2/Spice, stimulants, antidepressants) and respiratory depression (opioids and xylazine), which can be exacerbated by the cold.

- \* For many substances, particularly veterinary sedatives (which have had a growing presence in the U.S. drug supply), most studies available are limited to these drugs' effects on animals.
- \* Hypothermia and frostbite are primary risks that often require medical attention and thus are specifically highlighted in the table below. Injuries like chilblains can occur in non-freezing temperatures and typically resolve on their own; prolonged exposure to cold and wet conditions may result in trench foot, which also requires medical treatment.

## Types of Cold Weather Illness, Injuries, and their Symptoms

Hypothermia <sup>1,2</sup>	Chilblains <sup>3-5</sup>	Trench foot <sup>3,4</sup>	Frostbite <sup>1,6</sup>
<ul style="list-style-type: none"><li>Defined as a body temperature below 95°F</li><li>Shivering</li><li>Exhaustion</li><li>Confusion</li><li>Memory loss</li><li>Slurred speech</li><li>Drowsiness</li><li>Fumbling hands</li></ul>	<ul style="list-style-type: none"><li>Body parts most affected: cheeks, ears, fingers, toes</li><li>Redness, itching, possible inflammation, blistering and ulceration of affected areas</li><li>Can occur in non-freezing temperature</li></ul>	<ul style="list-style-type: none"><li>Numbness in the feet</li><li>Reddening of the skin around the foot</li><li>Cramping in the leg</li><li>Swelling, tingling pain in the foot</li><li>Bleeding under the skin</li><li>Gangrene, in severe cases</li></ul>	<ul style="list-style-type: none"><li>Body parts most affected: nose, ears, toes, cheeks, chin, fingers</li><li>Loss of sensation/numbing and discoloration (white, grayish yellow) in affected body parts</li><li>Skin may feel firm or waxy</li></ul>

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## Patient Education Tips to Share with People Who Use Drugs:

- Watch out for warning signs of how your body responds to the cold. Shivering is usually the first indicator that your body is quickly losing heat, and this should be taken as a sign to promptly seek warmth, regardless of whether you 'feel' cold or not. Other signs of the onset of hypothermia include memory loss, exhaustion, slurred speech, drowsiness, confusion, and numbing of hands.
- Exposure to rain or sweat, or being wet, can increase your risk of developing hypothermia as well as injuries such as ulcers, trench foot, or frostbite. Try to stay dry and avoid wearing wet or damp socks or gloves.
- Some resources to direct patients to may include: [CDC's prevention guide for the extreme cold](#) and [NYSDOH's Cold Weather Tips](#).
- Low temperatures and heating up the pipe can cause glass and Pyrex pipes and stems to break easily due to sudden temperature changes. Replace broken smoking supplies whenever possible. If you use a broken pipe or stem, use a rubber mouthpiece to prevent cuts. Avoid sharing smoking supplies to prevent the spread of viruses such as Hepatitis and HIV.
- Low temperatures can cause dehydration and chapped lips. Drink water to stay hydrated and apply lip balm or Vaseline regularly to avoid cutting your lip if smoking.
- Dry, cold air can lead to dry nasal passages, increasing the risk of nosebleeds, cuts, and possible infection. If you are snorting substances, remember to alternate between nostrils and wash your nasal passages with saline to reduce risk of infection. Try to crush the substance into as fine a powder as possible without any large lumps to reduce the risk of abrasion and cuts. Applying Vaseline, lotion, or lip balm to the outside of your nose can help reduce irritation and redness. Use a sterile straw (or a Post-it Note©) and avoid sharing snorting tools. If snorting with a friend, mark your straw clearly with a sticker, marker, or use a different colored straw to avoid sharing.
- Discuss safety planning and provide naloxone. Talk with patients to plan drug use accordingly: Consider the impact of cold weather on drug effects. Try to use your drugs in safe, familiar places with people you trust. If using with a group of people, stagger your use to ensure that there is at least one person who remains alert and can respond in the event of an accidental overdose or overamping (stimulant overdose). Try not to use alone; if so, try to make sure there is someone available to come check on you.
- Clinicians should inform patients about the availability of syringe service programs or drug user health hub services, warming centers, and/or shelters.

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## Other Considerations:

- New York is a Code Blue State. This means that no one should be denied access to shelter when temperatures drop to below 32°F. Have resources in your nearest shelter (warming center, shelter, drop-in center etc.) available to be when the temperatures begin to fall.
- Mental health and emotional support are key components of care for people who use drugs. Information regarding the New York State Office of Mental Health's [988 Suicide & Crisis Lifeline](#) may be shared with patients. This free, confidential platform allows individuals who struggle with mental health, substance use, or any form of emotional distress to connect with trained professionals through call, text, or online chat.

## References:

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