



# Summer heat waves and the medications that increase your risk

*By Camille Gagnon, Pharmacist, Assistant Director of the Canadian Medication Appropriateness and Deprescribing Network*

For many Canadians, summer is synonymous with having fun in the sun. Unfortunately, over the past several years, extreme heat waves have become increasingly common. This not only makes summer less enjoyable but can affect your health. Heat and humidity can cause heat stroke, dehydration, dizziness and fainting, hospitalizations, and even death.

As you get older, it becomes harder for the body to adjust to changes in temperature. That's why older adults are at greater risk during periods of extreme heat. Certain medical conditions more common in older adults, such as diabetes or Parkinson's disease, can also make it harder for the body to adapt to heat.

## Did you know? Some medications can increase your risk of heat stroke

Certain commonly used medications can make you more sensitive to the effects of heat. These medications can increase your risk of heat stroke and other heat illnesses. The more medications you take, the greater your risk.



## Medications that can increase your risk

Below are several examples of medications that can impair your body's ability to adapt to heat. Many of them are commonly used medications. Some are available with a prescription and others are available off the shelf in your pharmacy. Are you taking any of these medications?



**Some medications impair the body's ability to produce sweat, which is essential for cooling off when it's hot out. For example:**

- Beta blockers (e.g. metoprolol or bisoprolol), which are medications used for certain heart conditions and for treating high blood pressure.
- Decongestants such as pseudoephedrine, an active ingredient in cold medications that is available off the shelf.
- Anticholinergic medications, which include some off-the-shelf allergy medications (e.g. diphenhydramine or Benadryl®), off-the-shelf sleeping pills (e.g. Nytol®), medications used to treat urinary incontinence (e.g. oxybutynine), and some antidepressants (e.g. amitriptyline or nortriptyline).



[Click here to learn more about anticholinergic medications.](#)



**Some medications can make you dehydrated. For example:**

- Diuretics (e.g. hydrochlorothiazide or furosemide), laxatives (e.g. Senokot®) or some diabetes medications (e.g. Invokana® or Jardiance®), which increase the elimination of fluids through urine or stool.
- Some antidepressants (e.g. fluoxetine or venlafaxine) cause excessive sweating, which can lead to dehydration.





**Some medications can increase your body temperature. For example:**

- Antipsychotic medications, such as olanzapine or quetiapine.
- Stimulant medications for attention disorders, such as Ritalin® or Adderall®.



**Some medications can make you drowsy, reduce your ability to concentrate, and slow your reaction time. This can impair your ability to adopt safe behaviours in period of extreme heat, such as drinking water or staying cool. For example:**

- Anti-anxiety medications or medications for insomnia such as benzodiazepines (e.g. lorazepam or oxazepam).
- Some nerve pain medications (e.g. pregabalin, gabapentin).
- Opioid medications (e.g. morphine, codeine).



**Some medications can become toxic to the body and kidneys if you become dehydrated from the heat:**

- Anti-inflammatory medications (e.g. ibuprofen or Advil®, naproxen or Aleve®).
- Blood thinners, which are used to prevent blood clots.
- High blood pressure medications.
- Various medications used to treat diabetes, including metformin.
- Lithium, for bipolar disorder.



# What can you do to prevent heat stroke and protect your health this summer?

If you take medications, especially any of those identified in this article, it's particularly important to take action and prepare for the heat this summer. Here are 3 things you can do:

- 1. Protect yourself from extreme heat and stay hydrated, as per your health care professional's recommendations.** [Visit this Government of Canada webpage](#) to find out how to stay cool and hydrated during periods of extreme heat, and what to do in case of heat stroke.
- 2. Complete a thorough review of all your medications with your doctor, pharmacist or nurse.** Make an appointment specifically for a medication review. Together with your health care professional, you can identify the medications that increase your risk of heat illnesses, including heat stroke and dehydration. You may then decide to put in place an action plan to reduce your risk. Don't forget that medications that you can buy off the shelf can cause harmful effects too.
- 3. Do not hesitate to ask your health care professional the following question:** *"Do I still need this medication?"* — the answer might surprise you! Even if it is not possible to stop a given medication, reducing the dose could decrease your risk of harm. For example, gradually reducing the dose of your sleeping pill could help you stay more alert, for a safer and healthier summer. If a medication is stopped or reduced, ensure that a follow-up plan is put in place with your health care provider.

**Discover more resources on using medications safely:**  
[DeprescribingNetwork.ca](http://DeprescribingNetwork.ca)

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