Heat and Medications Information Sheet for Health Care Providers

What is the concern?

Extreme heat temperatures may adversely impact patients on specific medications.

This document is intended to alert healthcare providers to the impact that ambient heat may have on patients taking certain medications and to provide recommendations.

What do I need to be aware of?



Heat-related illness can affect everyone - no matter how long someone has lived in Arizona, their age, gender, gender identity, or health issues.



Heat-related illness is a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.



An individual's risk for heat-related illness is influenced by many factors including individual health, housing type, living conditions, and preexisting conditions (to name a few).

Health care providers are recommended to consult the Heat and Medications websites provided by the <u>Centers for Disease Control</u> and Prevent (CDC), the <u>Arizona Department of Health Service</u> (<u>ADHS</u>) and the <u>Pima County Health Department (PCHD</u>) for more information.











Some factors that might increase a patient's risk of developing a heat-related illness include:

- High levels of humidity
- Obesity
- Fever
- Dehydration
- Heart disease
- Mental illness
- Poor circulation
- Sunburn
- Alcohol use
- Certain prescription and non-prescription medications and polypharmacy

Source: CDC Extreme Heat and Your Health page

The following populations may be at an even higher risk for heat-related illness:

- Children
- Individuals 65+ years old
- Outdoor workers
- Pregnant people
- Individuals with disabilities
- Athletes
- Individuals without air conditioning
- Individuals who are living alone
- Residents of mobile homes
- Individuals with chronic health conditions
- Individuals with substance use disorder/opioid use disorder

Taking certain medications increases the risk of adverse health outcomes for patients.

When individuals are on these types of medications extra education and precautions are necessary. Some medications will interfere with thermoregulation or fluid balance while other medications can increase skin sensitivity to sun exposure.

Included is a consolidated list of medications that increase risks from extreme heat exposure. These include certain cardiovascular medications, antiseizure medications, antibiotics, and other classes of medications.

How can I help my patients stay safe during extreme heat?

- Ask patients:
 - How do they keep cool in the summertime?
 - Do they have reliable transportation?
 - Do they rely on walking, biking, or public transportation?
 - Do you have someone who can check in on you during periods of extreme heat?
- Provide recommendations on changes to fluid intake based on prescription medications.
- Assess the need to modify medications prescribed and/or their dosage to reduce heat risk.
- Understand what other factors (e.g., living conditions) patients may have that increase their risk of heat-related illness.
- Provide a list of symptoms patients can watch out for.
- Encourage patients to have a "buddy" plan to have a family member or friend check up on them.
- If possible, offer water while patients wait for their appointments.
- Provide information on area cooling centers, financial support to offset electric costs, and other social services, as needed.

What are other resources I can share with my patients?

- Arizona Poison Control information
 - List <u>1-800-222-1222</u>
- ADHS Heat website: <u>azdhs.gov/heat</u>.
- Financial support for utility bill payments
 - Arizona Department of Economic Security, Low Income Home Energy Assistance Program
 - Wildfireaz.org: Energy Assistance · Wildfire AZ
 - 2-1-1 Arizona: Rent and Utility Assistance 2-1-1 Arizona (21)arizona.org)
 - Check with your <u>County Public Health Department</u>
- <u>CommunityCares</u>
- 988: <u>988lifeline.org/</u>
- Opioid Assistance and Referral Line: 1-888-688-4222
- Dump the drugs. Safe disposal of medications: <u>https://www.azdhs.gov/gis/dump-the-drugs-az/</u>

This document was developed in collaboration with the ADHS, PCHD, SAPC, and the UArizona as part of the Arizona Heat Preparedness Network's Heat and Medications task force led by the SCORCH Center.



Was this information helpful? Use the QR code to share your <u>feedback</u> with us.

Consolidated List of Medications

Disclaimer: The list below is for reference purposes only. It is not in any particular order of risk or concern. Healthcare providers are encouraged to utilize their experience and knowledge to assess individual patient risks or concerns.

Category	Medications
Psychiatric Medications	
SSRIs	Citalopram (Celexa)
	Escitalopram (Lexapro)
	Fluoxetine (Prozac)
	Paroxetine (Paxil, Pexeva)
	Sertraline (Zoloft)
SNRIS	Desvenlafaxine (Pristiq)
	Duloxetine (Cymbalta)
	Levomilnacipran (Fetzima)
	Venlafaxine (Effexor XR)
DNRI	Bupropion (Wellbutrin)
TCAs	Amitriptyline
Anticholinergics	Oxybutynin (Ditropan XL)
	Diphenhydramine (Benadryl)
	Benztropine (Cogentin)
CNS Stimulants	Armodafinil (Nuvigil)
	Atomoxetine (Strattera)
	Dextroamphetamine (Adderall, Dexedrine)
	Amphetamine (Adderall)
	Lisdexamfetamine (Vyvanse)
	Methamphetamine (Desoxyn)
	Modafinil (Provigil)
	Methylphenidate
	Cocaine
Antipsychotics	Risperidone
	Olanzapine
	Quetiapine
	Haloperidol
Mood Stabilizer	Lithium

Category	Medications
Heart Medications	
Diuretics	Furosemide (Lasix)
	Hydrochlorothiazide
	Acetazolamide
ACE inhibitors	Lisinopril
	Captopril
	Enalapril
	Ramipril
ARBs	Candesartan (Atacand)
	Irbesartan (Avapro)
	Losartan (Cozaar)
	Olmesartan (Benicar)
	Telmisartan (Micardis)
	Valsartan (Diovan)
Beta Blockers	Atenolol
	Metoprolol
	Propranolol
Calcium Channel Blockers	Amlodipine
	Felodipine
	Nifedipine
ARNIs combination drug, including ARB	Sacubitril/Valsartan

Category	Medications
Other Medications	
Anti-seizure medications	Topiramate
	Oxcarbazepine
	Carbamazepine
Antihistamines with anticholinergic properties	Promethazine
	Doxylamine
	Diphenhydramine
Analgesics	Opioids
	Non-steroidal anti-inflammatory drugs (NSAIDS, such as ibuprofen, naproxen, aspirin)
	Acetaminophen
Antibiotics	Sulfonamides
	Doxycycline
Antiretrovirals	Indinavir
Thyroid replacement	Levothyroxine
Stimulants	Cocaine
	Amphetamine, Methylphenidate
Commonly Abused Substances	Cocaine, Methamphetamine
Hallucinogens	MDMA and alternatives
Alcohol	
Insulin	

Sources:

- CDC: <u>www.cdc.gov/heat-health/hcp/clinical-guidance/</u> heat-and-medications-guidance-for-clinicians
- NOAA: <u>https://www.weather.gov/wrn/240105-</u> extreme-weather-cvs-health

• SAMHSA:

https://store.samhsa.gov/sites/default/files/pep23 -01-01-001.pdf

• ADHS:

https://www.azdhs.gov/preparedness/epidemiolo gy-disease-control/extreme-weather/heatsafety/index.php#heat-illness

Pima County Health Department:
https://www.pima.gov/2042/Beat-the-Heat)









