

## Medications & Extreme Heat: What Clinicians Need to Know

Arizona continues to experience record-breaking heat seasons, placing many behavioral health patients at significantly higher risk of heat-related illness, medication toxicity, and impaired thermoregulation. Understanding how psychotropic and common physical-health medications interact with elevated temperatures is essential for safe care planning. This newsletter summarizes the latest clinical guidance on medication/heat interactions and offers practical mitigation strategies for outpatient and community-based settings.

## Behavioral Health Medications Most Impacted by Heat

Extreme heat can worsen medication side effects, impair thermoregulation, and increase dehydration risk, particularly in behavioral health populations, psychotropics significantly increase heat vulnerability.

- 1. Antipsychotic Medications (Typical & Atypical: haloperidol, chlorpromazine, risperidone, olanzapine, quetiapine):** impaired sweating and heat dissipation; altered central thermoregulation; blunted perception of overheating. Patients with schizophrenia have shown highest mortality risk during extreme heat events.
- 2. Antidepressants (SSRIs, SNRIs, TCAs: sertraline, fluoxetine, venlafaxine, amitriptyline):** SSRIs/SNRIs may reduce sweating and impair cooling. TCAs and SNRIs can cause dehydration, hypotension, and decreased thermoregulation. This may cause increased risk of serotonin toxicity in dehydrated patients.
- 3. Stimulants for ADHD (methylphenidate, amphetamine salts):** Interfere with central thermoregulation and increase metabolic heat production during physical activity.
- 4. Mood Stabilizers: Lithium** toxicity risk rises with dehydration and sodium loss. Narrow therapeutic index makes heat effects more dangerous. **Carbamazepine & Valproic Acid:** Reduced drug clearance during dehydration. Electrolyte imbalances may worsen cardiac and neurologic side effects.
- 5. Benzodiazepines & Sedatives (lorazepam, clonazepam, zolpidem):** sedation impairs awareness and or response to overheating. There is elevated risk for individuals living alone or without AC.

## Physical-Health Medications Impacted by Heat

Although behavioral health meds are critical to address first, many commonly prescribed physical-health medications significantly increase patient vulnerability during Arizona's heat season.

- 1. Antihypertensives (beta-blockers, ACE inhibitors, ARBs, calcium channel blockers):** Reduced thirst sensation, hypotension during heat exposure, impaired vasodilation which can lead to reduced heat dissipation.
- 2. Diuretics (furosemide, hydrochlorothiazide, spironolactone):** Dehydration and electrolyte imbalance can cause increased risk of heat exhaustion and syncope.
- 3. NSAIDs (ibuprofen, naproxen):** Reduced renal blood flow during dehydration can increase risk of acute kidney injury in extreme heat.

**4. Anticholinergic Medications (oxybutynin, diphenhydramine, benztropine):** Markedly impaired sweating can increase risk for heat stroke.

**5. Other medication classes listed by Arizona & CDC**

- **Anticonvulsants**
- **Antibiotics** with photosensitivity (e.g., doxycycline).
- **Anticoagulants** (risk worsened with dehydration).

**Mitigation Strategies for Providers & Patients**

**A. Provider Actions**

- Review medication regimens before heat season, identify high-risk combinations (e.g., diuretic + SSRI + beta-blocker).
- Discuss heat-illness signs at each visit, consider dose adjustments and extra monitoring during heat advisories, plan hydration and safety checks.
- Ask about AC access, transportation, and social support for check-ins during heat waves.

**B. Patient & Caregiver Education**

- Hydrate proactively (unless medically restricted), avoid peak heat (10am–6pm), use cooling centers when needed.
- Recognize emergencies: confusion, no sweating, temperature >103°F, chest pain, syncope, in an emergency call 911.
- Never leave medications in vehicles, store indoors and away from direct sun.

**C. Medication Storage**

- Many medications degrade at hot temperatures, counsel on cool, dry indoor storage and use of insulated carriers during travel.

**When to Seek Urgent or Emergency Care**



Advise immediate evaluation or ED referral for hot/dry skin with no sweating, confusion/altered mental status, chest pain, severe dizziness/syncope, or suspected toxicity from lithium, anticonvulsants, or antipsychotics.

Arizona's extreme heat amplifies risks for patients on many behavioral health and physical health medications. Psychotropics, including antipsychotics, antidepressants, stimulants, and mood stabilizers, significantly impair thermoregulation and increase the likelihood of severe heat illness. Providers play a key role in anticipating medication-related heat risks, educating patients, adjusting regimens when necessary, and ensuring safe storage and hydration strategies. Proactive, informed care can prevent hospitalizations and save lives during Arizona's increasingly intense heat seasons.

**References:**

1. CDC. Heat and Medications – Guidance for Clinicians (2025). <https://www.cdc.gov/heat-health/hcp/clinical-guidance/heat-and-medications-guidance-for-clinicians.html>
2. Arizona Department of Health Services. Heat & Medications – Info for Health Care Providers. <https://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/extreme-weather/heat/heat-medications-Info-for-health-care-providers.pdf>
3. AHCCCS. Heat-Related Resource Guide When Taking Psychiatric Medications (2024). <https://www.azahcccs.gov/AHCCCS/Downloads/HeatRelatedResourceGuide2024.pdf>
4. CMAJ. Psychotropic prescriptions in the context of extreme heat (2025). <https://www.cmaj.ca/content/197/29/E915>
5. HEAT.gov (NIHHIS) summary link to CDC guidance. <https://heat.gov/tools-resources/heat-and-medications-guidance-for-clinicians/>

**PREFERRED DRUG LIST UPDATES CAN BE FOUND HERE:**

	
ACC-RBHA, DD, ALTCS and DCS CHP	Behavioral Health (Non-Title 19/21)

**\*\* Drugs that are not on the formulary will require a PA (prior authorization) request to be submitted\*\***

**Reminder** for quicker determinations of a Prior Authorization use the ePA link for Our Providers: Please click [here to initiate an electronic prior authorization \(ePA\)](#) request.

***This newsletter is brought to you by the Mercy Care Pharmacy Team. For questions, please email Fanny A Musto ([MustoF@mercycaresaz.org](mailto:MustoF@mercycaresaz.org)), Jasmine Phillips ([PhillipsJ6@aetna.com](mailto:PhillipsJ6@aetna.com))***