



Establishing a Heat Action Plan for Patients Providers

Included in the suite of patient-facing toolkit documents are disease-specific heat action plan templates that we encourage you to review together with patients. These plans will help keep patients safe in the heat. Below is guidance to help you prepare for those conversations.

First, assess if and how they access weather forecasts and whether they have a means to know the temperature inside their home.

- **Ask:** If you wanted to know how hot it will be outside, what would you do?

If the patient does not know where to look, you can suggest their phone weather app or weather.com.

- **Ask:** If you wanted to know the temperature inside your home, how would you? Do you have a thermostat or thermometer that can measure it?

If the patient does not have a thermometer/thermostat, consider providing one or suggest that they can be purchased for a few dollars at hardware stores or online.

Second, assess risks for excess heat exposure above forecast temperatures.

- **Ask:** Do you live in a building with many floors? If so, what floor do you live on?
- **Ask:** Do the windows in your home open?
- **Ask:** Do you have a job in which you work outdoors?

If a patient lives on an upper floor, has a unit without functional windows, or does outdoor work, these all increase the risk of heat exposure, and this should be considered when activating elements of a heat action plan (identified below).

Third, assess access to air conditioning and cool indoor spaces.

- **Ask:** Do you have air conditioning at home? If so, is it a window unit(s)? Are the units able to cool down your home (or rooms) when it is hot outside? Are the air conditioners in rooms where you sleep?
- **Ask:** Are you worried about how much air conditioning will cost if you use it?

If a patient states they have no access to air conditioning in their home, or if their air conditioning does not adequately cool the home (e.g., they have a single window unit that cools only a child's bedroom but not theirs), or they are worried about air conditioning costs, then:

- **Ask:** Is there somewhere that you can go that has air conditioning when it gets hot outside? For instance, a religious center (i.e., church/mosque/temple), a neighbor's home, a library, community center or elsewhere?

If they do not have anywhere they would go with air conditioning, consider providing them with a list of air conditioned locations that they may be able to access in your community. Many cities have cooling center maps available to identify the closest sites to a patient's home.

Fourth, consider increased risks from medications. See the sections on medication considerations in the disease-specific provider sheets (e.g., CKD, ESRD and Heat).

Based upon these responses, you can complete a heat action plan for your patient. See the disease-specific heat action plan templates for patients in the toolkit.

Fifth, for patients with COPD or asthma, assess their home environment for air quality risks. In guidance about whether to access a cooling center, consider whether a patient may be exposed to high levels of indoor air pollution in their home owing to outdoor air pollution intruding indoors.

Begin by assessing the AQI. Guidance is provided in "Patient Tip Sheet for Patients with COPD/Asthma".

If a patient's home has a forced air system (i.e., air gets blown into rooms through vents), this may increase the delivery of air pollution indoors, even with air filtration. If the AQI is over 50, closing windows may help prevent outdoor air pollution getting inside, but this may also increase heat exposure, especially if no air conditioning is available.

Since COVID-19, many patients may have indoor air filters.

- **Ask:** Do you use an air filter in your home? If so, what kind is it and where does it sit?

Portable indoor air purifiers have a wide range of capabilities in filtering out air pollutants. The patient should ensure they have an appropriately sized filter for their room.

Air purifiers typically come with either a MERV (minimum efficiency reporting value) rating or are HEPA certified. Ideally, patients will have an air filter with a MERV rating of at least 13, which should remove at least 60% of particulate matter 2.5 microns in diameter or smaller. HEPA filters should remove even more.