



Health Advisory

July 22, 2024

Heat and Wildfire Effects in Pregnant Mothers

Fresno County continues to experience extreme heat and [wildfires](#) this summer which worsen our air quality and increase the adverse effects of heat and wildfire exposure in pregnancy. Recent health research studies have also shown that wildfire exposure and hot days are associated with a number of adverse outcomes including preterm birth, with increased susceptibility on communities of color and those who are exposed to both hazards at the same time.

Heat exposure can lead to health harms for pregnant women, including hypertensive disorders and other [pregnancy complications](#).

Heat exposure in any trimester has been associated with adverse pregnancy outcomes including preterm births, stillbirths, and low birthweight infants, and may increase the risk of certain birth defects when exposure is in the first trimester.

The risk for adverse pregnancy outcomes increases with elevating temperatures and longer heat exposure.

Hot and dry weather can also increase the risk of wildfires, and wildfire smoke pollutants are known to be associated with adverse birth outcomes.

Breathing polluted air can be particularly unsafe for pregnant people with asthma. Asthma can contribute to pregnancy complications and adverse pregnancy outcomes such as preterm birth, low birth weight infants, and perinatal mortality. The likelihood of these events is even higher for pregnant people with asthma who are exposed to poor air quality.

Categories of Health Alert Messages:

Health Alert: Conveys the highest level of importance; warrants immediate action or attention

Health Advisory: Provides important information for a specific incident or situation; may not require immediate action

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action

Health Information: Provides general health information which is not considered to be of emergent nature

Promotion, preservation and protection of the community's health

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Patient Management: The U.S. Centers for Disease Control and Prevention recommends taking the following steps to help your pregnant patient stay safe in extreme heat with a [Heat Action Plan](#).

1. **Assess risk factors**, like Hypertension or Asthma, that may increase risks of heat related complications.
2. **Use CHILLED-OUT questionnaire** to assess risk:
 - **Cooling:** Does your patient have a working air conditioning?
 - **Housing:** Does your patient have stable housing?
 - **Isolation and Linkage:** Does your patient have a neighbor, friend, or family member who can check on them during hot days?
 - **Learning:** Does your patient check with daily weather forecast to know hottest times of day or access the [HeatRisk](#) tool?
Electricity: If heat leads to a power outage, does your patient have a plan to store medications and keep cool?
 - **Drugs:** Does your patient take medications that increase risk from heat exposure?
 - **Outside:** How much time does your patient spend outdoors on hot days for work, sports, recreation?
3. **Review signs of heat related illness** and pregnancy warning signs with your patient.
4. **Advise your patients on how to stay cool outdoors.**
 - Wear light, loose-fitting clothing that covers arms and legs, a hat with a brim that shades the face, ears, and back of the neck, and sunglasses.
 - Apply broad spectrum [sunscreen](#) that filters out UVA and UVB rays. The sunscreen should have an SPF of 30 or higher.
5. **Remind patients to try to schedule their activities during the coolest time** of the day or evening.
6. **Talk to your patients about how to stay cool indoors.**
 - Use an air conditioner if they have one or find a [location](#) that does. Even a few hours in a cool location can lower the risk for health problems from heat.
 - Use fans, but only if indoor temperatures are less than 90°F. In temperatures above 90°F, a fan can increase body temperature.
7. **Direct your patients to information about Fresno County public resources**, such as [cooling centers, pools and splash pads](#). Call 2-1-1.
8. **Refer patients who need assistance with home energy costs** ([LIHEAP](#)) or work accommodations ([Pregnant Workers Fairness Act](#)).
9. **Educate patients on how to stay hydrated and** spot the signs and symptoms of dehydration and heat illness, including preterm contractions.
10. **Educate your patient on air quality** (Air Quality Index) since heat worsens air quality.

For more detailed guidance, refer to the [CDC's Clinical Overview of Heat and Pregnancy](#).

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References

- CDC Heat and Pregnant Women: <https://www.cdc.gov/heat-health/hcp/heat-and-pregnant-women.html>
- Ha S, Abatzoglou JT, Adebisi A, Ghimire S, Martinez V, Wang M, Basu R. **Impacts of heat and wildfire on preterm birth**. Environ Res. 2024 Jul 1;252(Pt 4):119094. doi: 10.1016/j.envres.2024.119094. Epub 2024 May 7. PMID: 38723988: <https://pubmed.ncbi.nlm.nih.gov/38723988/>
- Black Wellness and Prosperity Center: <https://www.blackwpc.org/excessive-heat-pregnancy>
- FCDPH Extreme Heat Webpage: www.fcdph.org/extremeheat
- Pregnant Workers Fairness Act: <https://www.eeoc.gov/wysk/what-you-should-know-about-pregnant-workers-fairness-act>
- CDC Heat Action Plan: <https://www.cdc.gov/heat-health/media/pdfs/tips-for-pregnant-woman-508.pdf>
- CDPH Safe Pregnancies in Extreme Heat: <https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Health-Topics/Safe-Pregnancies-in-Extreme-Heat.aspx>
- CDPH Heat Risk Grid: <https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/Heat-Risk-Grid.pdf>