



Extreme Heat Event September 2023

Seattle, Washington

- Seattle, Washington: summer of 2021 – during the COVID pandemic
- “Heat Domes” (when the atmosphere traps hot ocean air like a cap) hit the city, causing triple digit temperatures, 30 degrees above average highs, for multiple days
- This area doesn’t normally see hot temperatures, therefore many places do not have air conditioning
- 159 deaths from June 26 - July 16, 2021
- During the same heat wave, British Columbia reported some 580 deaths and Oregon reported 116 deaths
- In a three-day period in that June, they had more heat-related events than the prior three years combined
- Saw many cardiac arrests – average age was 64
- Cooled patients by placing them in ice in body bags and used cooling catheters
- LTC facilities:
 - LTC facilities couldn’t use fans to cool, due to COVID and risk of spreading disease
 - Some LTC facilities did not have air conditioners, and some that did were set up only to cool main areas, not patient rooms
 - Staff were exhausted, having to deal with another disaster on top of COVID
 - Additionally, decisions had to be made to bring patients into common areas with air conditioning to cool them down, and risk COVID infection
 - One facility came close to having to shut down due to not being able to cool their patients
- Fans were sold out, and no one was able to fix broken air conditioners
- Impacts to virtual staff due to power outages
- Home health agencies were busy checking on patients and developing plans with families to keep loved ones cool and what to do if they had power outages
- Some hospitals experienced utility challenges – some nursing rooms and operating rooms lost power and CT scanners and other types of facility-based equipment overheated and stopped working for short periods of time; some operating rooms could not be operational due to cooling systems not keeping necessary temperatures
- Some portions of hospitals were evacuated due to air conditioning systems not able to keep up
- They also had seven drownings during that period, double their average
- Most deaths involved the elderly, however, two men in their 30’s also passed
- Many people were found alone in their overheated apartments, trailers, or cars
- Public Health and Emergency Management set up cooling centers
- Medical coordination and maintaining situational awareness was critical, as was dispelling rumors
- The National Weather Services was a critical partner

- No extreme heat, cold, storm, or flood on record in Washington has come close to killing as many people

Impacts:

- Vulnerable populations at higher risk
- Potential for loss of power – for facilities and homes
- Potential evacuation due to inability to keep facilities cool enough
- Elderly residents that live alone

Preparedness:

- Reinforce public health messaging, with specific emphasis on targeting LTC, home health, dialysis and Federally Qualified Health Centers (FQHCs)
- Provide steps and strategies for cooling people down
- Develop strategies for how to best reach out to vulnerable populations
- Assure facility temperature control – review HVAC system vulnerabilities, have back-up systems identified and/or contracts for additional cooling capabilities
- Plan for emergency department surges due to heat-related illness
- Develop strategies for supporting most vulnerable employees
- Review evacuation plans in case HVAC systems fail
- Review surge plans

Sources:

- [Extreme Heat Events: Lessons from Seattle's Record Breaking Summers](#)
- [2021 Heat Wave is Now the Deadliest Weather-Related Event in Washington History](#)
- [Extreme Heat Tip Sheet](#) – for healthcare providers

Resources:

- [Plans, Tools, and Templates: Extreme Heat](#) (ASPR TRACIE)
- [Extreme Heat Tip Sheet](#) – for healthcare providers
- [HEAT.gov](#)