Guidance and Checklist for Facility Repair and Re-Entry After Wildfires

For administrators

This sheet is an overview on wildfires and wildfire smoke providing background on how wildfires impact health and how providers can help patients prepare.

Wildfires pose serious hazards that can extensively damage healthcare facilities and make them unsafe to occupy without proper repairs and remediation. Even if flames do not directly burn clinic buildings, wildfire smoke and ash often contain toxic chemical residues that can permeate structures, coat surfaces, contaminate indoor air, and damage HVAC systems. The intense heat from nearby flames can also damage building materials and make structures unsound.

Fires frequently cause breakage of water pipes, fire sprinkler activations, and water valve malfunctions that can flood buildings. This promotes mold growth and can contaminate drinking water systems. Broken sewer lines may also create highly unsanitary conditions. The power outages that often occur during wildfires can spoil refrigerated medications and food and disrupt access to computer systems and electronic medical records.

Furthermore, the destruction of vegetation and topsoil in wildfire burn areas increases the risk of localized flooding around healthcare facilities and may increase the risk of landslides. Drinking water sources can also become polluted from the toxic runoff.

After a wildfire, do not enter your facility until a thorough professional safety inspection is completed. Even if no fire directly impacted the building, a careful assessment of structural integrity and testing for hazardous residues is essential before the clinic can be safely reoccupied. Expert inspections and remediation help identify any hidden structural damage as well as properly remove toxic wildfire ash and chemical traces deposited both inside and outside the building. Trying to reopen without these critical steps risks the health and safety of your staff and patients.

Key points of inspection for building structural integrity after fire damage:

- Roof
- Load bearing beams and walls
- Stucco, siding, and concrete
- Foundation cracks
- Structural metals
- Windows
- Interior walls and framing
- Damage to utilities (water, gas, electrical)

Note: As of 2024, no best practice guidance exists for fire structural damage. FEMA recommends using the ***post- earthquake safety evaluation of buildings*** *document in the interim (ATC-20-1).*

Awareness for smoke, ash, and chemical of buildings after fires

- Ash and other fire generated particulate matter can infiltrate a building during fires, even when windows and doors have been closed, through ventilation systems, gaps in window and door frames, or other openings in the building's exterior. Have the facility professionally assessed and cleaned as needed.
  - Fires may result in chemical exposure indoors from heated plastics, melted/damaged containers, (e.g., hazardous waste) that contain toxic substances (e.g., lead, mercury, cleaning products), and other sources. Building materials containing asbestos, fiberglass, and other irritants or toxins may be exposed by fire damage. Once the building has received structural safety clearance (if needed), use appropriate protection when entering the building.
  - Ash and other particulate matter can continue to settle after a fire has been extinguished. Take this into consideration when planning re-opening for clinical operations.

Awareness for water damage

- Fires can activate building sprinkler systems and damage water pipes and valves and result in flooding within buildings.
- Water release in buildings can contribute to mold growth, damage medical equipment, and mobilize chemical hazards (e.g., in waste containers, medications).
- Drywall and insulation that has been soaked by water from fire hoses may need to be replaced because of mold growth and wet insulation loses its effectiveness.

Post-wildfire checklists

General inspection checklist

Done	Task	Assigned to
✓	Await official guidance regarding reentry into evacuated areas, do not return until clearance is given.	
✓	Call the clinic's pre-identified assessment team(s) to inspect the building. The results of this inspection will determine what steps to take for building restoration.	
✓	Contact the clinic's pre-identified restoration team to prioritize and begin work.	
✓	Work with the assessment and restoration teams to identify if some sections of the clinic may be able to open before others. This will help with planning a staged re-opening.	
✓	Removal of hazardous material should be coordinated with local authorities.	
✓	Be mindful of potential flash flood risk which is dramatically increased post-wildfire, pay attention to emergency alerts and weather reports before attempting reentry.	
✓	Ensure staff are wearing N95 or higher-rated PPE, are appropriately hydrated while in the impacted area, and are aware of potential emotional impacts of returning.	

Exterior inspection checklist

Done	Task	Assigned to
✓	When evacuation zones are reopened, inspect the clinic from the outside to look for any residual smoke, embers, or fires. ☐ Contact a tree removal company for management of debris.	
✓	Look for heavily damaged trees that could fall and harm people or structures. ☐ Contact an arborist to assess trees or tree removal company for management of debris.	
✓	Look for downed or damaged power and communications lines. ☐ Contact your utility company immediately if any are observed.	
✓	Check for the smell of natural gas. If any is detected, then: ☐ Evacuate the area. ☐ Contact 911 or the gas company per local standards. ☐ Shut off the gas supply if safe to do so.	

Interior and systems inspection checklist

Done	Task	Assigned to
✓	Aside from direct physical impacts to water systems, wildfires can cause contamination of water supply locally and within geographic areas.	
✓	Assess both the functionality and safety of: ☐ Water system (this may require local water authority testing) ☐ Sewage system ☐ Exam room equipment ☐ Medical gas and suction systems ☐ Furniture ☐ Computer systems ☐ Refrigeration systems ☐ Pharmacy equipment	
✓	If the clinic has water damage, conduct mold inspection and remediation as needed. Minimize spore dispersion during cleaning and remediation using containment.	
✓	If the clinic uses paper documentation, check for damage to patient and pharmacy records.	
✓	Remove any porous materials, such as carpets, which have been wet for over 48 hours, or if they look or smell moldy.	
✓	Launder all linens.	
✓	Discard damaged or contaminated medications and medical supplies.	

Interior and systems inspection checklist (continued)

Done	Task	Assigned to
✓	Flush, clean, and disinfect ice machines and other equipment.	
✓	Have professionals test the facility for combustion by-products. This process is to determine what areas were impacted and to help guide remediation experts.	
✓	Inspect and clean HVAC ductwork. Replace filter as needed.	
✓	Obtain all necessary certifications for re-entry in accordance with local regulations.	
✓	Adapted from guidance from the CDC, FEMA and AIHA.	

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Notes: