



Disasters and Solid Waste Disposal

How could a disaster affect solid waste disposal?

Every year, disasters such as floods, fires, hurricanes and tornadoes cause waste disposal challenges in communities across the nation. These disasters result in the creation of large quantities of new debris (construction and demolition materials, vegetation, hazardous waste, refrigerators and other appliances and electronic devices). These materials must be separated from normal waste and managed differently to ensure they are disposed of safely. Mass feeding facilities and mass care centers used during some disaster responses may also result in the accumulation of large amounts of waste in a single location.



Some events do not produce new debris but cause a problem by disrupting the waste management system that normally stores, collects, and disposes of solid waste. For example, an ice storm could disrupt the collection and transportation of waste and an influenza pandemic could severely reduce the number of waste management workers able to come to work.

What type of public health risks would a waste management disruption create?

Disruption of solid waste management could lead to:

- Nuisances and disease from wild animals (rats, raccoons) and insects that are attracted to household waste
- Odor problems
- Exposure to hazardous materials such as asbestos
- Contamination of food and water supplies

Why is it important to make a plan to dispose of disaster debris?

Planning can help a community identify its debris collection, recycling, and disposal options and help it recover faster from the increased amount of solid waste that results from a disaster. While the recovery process may take a long time—perhaps even years—careful planning will prevent risks to the public's health, speed recovery, and avoid creation of excess waste. A plan also can save money by identifying cost-effective debris management options and sources of help, increasing control over debris management in your community, and improving administrative efficiency.

What can you do now to prepare for disaster debris?

- **Update the community's solid waste management plan:** Ensure that your community's solid waste management plan is up to date and reflects current practices and policies, especially those that apply in disasters.
- **Create a long-term debris management plan:** Include a detailed strategy for debris collection, temporary storage and staging areas, recycling, disposal, hazardous waste identification and handling, administration, and communication with the public.
- **Develop a communication strategy:** Prepare a communication strategy ahead of time. You will need to tell your community when, where, and how trash collection will resume, and give special instructions for reporting and sorting disaster debris.
- **Prepare for increased outreach, enforcement and staffing needs:** Staff will receive more phone calls and requests about waste removal. Find sources of temporary labor and, if your community is culturally diverse, consider using a multilingual phone bank.
- **Get equipment and supplies ahead of time:** Identify the types of equipment and supplies that your crews will need to carry out your plan. Make sure you can get these items quickly through mutual aid agreements or standing contracts, or consider stockpiling this equipment.
- **Choose collection and storage sites:** Convenient local sites allow collection crews to reduce travel time when transferring debris to processing or disposal facilities and result in faster street clearing.
- **Plan for FEMA and state reimbursement:** Discuss recordkeeping requirements with your state emergency planning agency.
- **Make mutual aid arrangements:** These allow communities to quickly access additional or specialized personnel or equipment on a short-term basis.

Online Resources for Planners

- FEMA Debris Management Guide: <http://www.fema.gov/government/grant/pa/demagde.shtm>
- EPA Planning for Disaster Debris
<http://www.epa.gov/garbage/disaster/disaster.htm>
- CDC Emergency and Terrorism Preparedness for Environmental Health Practitioners
<http://www.cdc.gov/nceh/ehs/ETP/>



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