

ENVIRONMENTAL HEALTH IN ALL POLICIES CASE STUDY

# Recovering from floods in Iowa

In June 2008, Iowa experienced some of the most severe flooding in the state's history. The Iowa Department of Health's Division of Acute Disease Prevention, Emergency Response and Environmental Health (DOH) worked in partnership with a multitude of agencies and organizations to assist with the disaster response. DOH provided leadership in addressing concerns to important public health issues. Their involvement was crucial to a coordinated multi-sector response.

### Severe Flooding in Cedar Rapids, IA

A combination of excessive winter snowfall and heavy spring rains caused flood water to rise over 19 feet in Cedar Rapids, Iowa's second largest city. Over 6,000 homes and businesses were damaged, and roads and bridges were closed. The flooding caused several key environmental health hazards related to housing damages, private water wells, emergency shelters, rural communities and potential water contamination.

The state emergency operations center coordinated about twenty state agencies and other organizations at the main Incident Command System (ICS), and the DOH also set up an internal agency ICS, which included several liaisons to the larger response. Within the DOH ICS, the staff from the environmental health division was heavily engaged due to their extensive experience with disaster response.

#### **Public Health Response**

# **Community Needs Assessments**

The immediate response involved the DOH, social workers, and local public health nurses visiting homes in Cedar Rapids to assess the problem areas in the community and learn whether residents had the resources they required for cleanup. DOH provided resources and support to the local health department's team, and arranged technical assistance from another state with experience in community needs assessments. The most common concerns were minimizing exposure to floodwaters, advice on disposal of food, mold cleanup, access to medications, social services related to displacement and addressing mental health concerns due to stress. The DOH quickly became familiar with the resources and support available from partner agencies and local groups which led to a coordinated effort.

Turn for more »



# Water and Food Contamination in Rural Areas

DOH also worked in rural communities to provide education on housing issues, including what to do with contaminated water and food products. Residents especially had concerns about the safety of private well water. DOH, alongside other state and local public health agencies assessed the extent of contamination and conducted some well testing, determined that there was little evidence of water contamination and provided guidance to homeowners about the water conditions. In situations where homeowners requested well testing, DOH worked with the local emergency response agency and the state environmental and hygienic laboratory agencies to conduct tests.

### **Private Wells**

In Louisa County, flooding around a chemical production plant near the Mississippi River caused concern about contamination of the local aquifer. In particular, downstream "sand point" wells, which usually lack typical safety features and are hand-driven into the sandy river bottom, are often vulnerable to surface contamination. There were concerns from residents using these wells for drinking water, so the DOH set up a team comprised of local health department, state hygienic and natural resources agency staff to coordinate testing and communicate about risks with residents. The typical concerns about well contamination from surface water were unfounded, as the rising groundwater had prevented surface contamination of the wells.

### **Abandoned Livestock**

When flood water rose on farms, buildings were evacuated and many hogs were abandoned or released from Concentrated Animal Feeding Operations (CAFOs). Most of these animals eventually drowned and the carcasses were found in rural settings. DOH worked with FEMA, the state homeland security agency, local health departments and local elected officials to secure funds required for disposal.

### **Partnering for Success**

In the face of a tremendous disaster, the DOH was able to work alongside other agencies and partners in a well-coordinated and effective response to a wide range of issues. The success of these efforts can be attributed to the strong, longstanding relationships between state agencies that existed prior to the floods. Where a partnership didn't already exist, DOH worked to establish clear communication and roles early on.

## For more information, please contact:

Kenneth Sharp, MPA, RS
Director
Division of Acute Disease Prevention,
Emergency Response and Environmental
Health
Iowa Department of Public Health
Kenneth.Sharp@idph.iowa.gov
http://www.idph.state.ia.us/adper/

The development of this resource was supported by Cooperative Agreement Number EH11-1110 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

Health in All Policies is a collaborative approach that integrates and articulates health considerations into policymaking and programming across sectors, and at all levels, to improve the health of all communities and people.

FIND OUT MORE: www.astho.org/hiap

