

# FARM FLOOD HEALTH THREATS

## RISK FACTORS DURING WINTER RECOVERY



Water may not be safe to drink, cook, bathe or disinfect.



Transmission of disease can occur between humans and animals. Use caution when feeding and moving animals, livestock may be confused and disoriented.



Intense exposure to cold temperatures can cause hypothermia, frostbite, trench foot, and chilblains.



Microbial (e.g. mold) growth rapidly increases and spreads due to flooding waters.



Flooded storage of pesticides and petrochemicals (e.g. oil, hydraulic fluid, gasoline) can pose threats to human health.



A flood can cause both emotional and physical stress.

# RISK FACTORS\*

## HUMAN & ANIMAL

Floods can potentially increase the transmission of communicable diseases: Water-Borne (Hepatitis A); Bacterial (Tetanus) spores; Gastrointestinal distress (E. coli) and Fungal (Histoplasmosis) spores found in dust, dirt, raw sewage, animal droppings and animal carcass.



- Remove standing water
- Use only NIOSH approved N95 (or greater) respirators fitted to your face
- Use watertight, steel toe boots or waders, waterproof, cut resistant gloves
- Follow state guidance on carcass removal

[Zoonotic Disease](#)

## WELL WATER

Water may not be safe to drink, brush teeth, cook or clean with after a flood. Water can become contaminated with microorganisms such as bacteria, sewage, petroleum products, agricultural or industrial waste, chemicals and other substances that can cause serious illness.



- Sample and test the well water through a certified water testing lab
- Conduct well and pump inspection
- Perform emergency disinfection of wells that have been flooded (ex. shock chlorination)
- Follow health department drinking and bathing advisories

[EPA Well Disinfection](#)

## CHEMICALS

If a chemical, pesticide, fertilizer or hazardous waste spill occurs, chemicals might be released from barns, homes, and other sources into the environment. Chemical spills could release vapors or chemical fumes. Local and state authorities will provide further guidance.



- Wear appropriate clothing including cover-alls, liquid and chemical resistant boots or waders, gloves and safety glasses to control, contain and clean up
- Use only NIOSH approved respirators, such as chemical cartridge respirator for organic vapors with added pre-filter

[Respiratory Selection Guide](#)

## MOLD

Mold is part of the natural environment. Higher concentrations of mold and bacteria can be found after a flood. This causes the production of Microbial Volatile Organic Compounds (mVOCs), which emit chemical like odors and can become noxious respiratory and mucous membrane irritants.



- Wear safety goggles
- Use only NIOSH approved N95 (or greater) respirators fitted to your face
- Use water-proof, cut resistant gloves
- Properly ventilate area

## STRESS

After a natural disaster, you're dealing with the extra stress of current conditions, along with the daily stress of farm operations. Common reactions include powerlessness, hopelessness and fear. You may develop major depression, generalized anxiety, and post-traumatic stress disorder. Physical signs and symptoms of stress include: headache, back pain, muscle tension, nausea, and decreased appetite.



- Be pro-active, recognize potential signs of stress, anxiety, or depression
- Know your local resources, where you can go for help
- Adequate sleep (7-8 hours) is critical to the recovery process
- Prioritize doing one activity daily that brings you joy

[Mental Health](#)

## COLD STRESS

Extremely cold or wet weather is a dangerous situation that can cause occupational illness and injuries such as hypothermia. Early symptoms of hypothermia include; shivering, fatigue, loss of coordination, confusion and disorientation. Prolonged exposure can also lead to frostbite, trench foot, and chilblains.



- Wear appropriate dry clothing to protect the ears, face, hands and feet
- Move into warm locations during breaks; limit the amount of time outside
- Carry extra gear, clothes, and a thermos of hot liquid
- Include chemical hot packs in your first aid kit
- House generators outside in a well ventilated area

[Cold Stress](#)

## PREVENTION TIPS

## FACT SHEETS

\*This list of risk factors is not exhaustive. For example, other risks may include electric shock, drowning, falls and structural hazards.

For more information or additional resources, please visit [agrisafe.org/floods](https://agrisafe.org/floods) or scan this QR code:

