

## Flooded House Clean-up

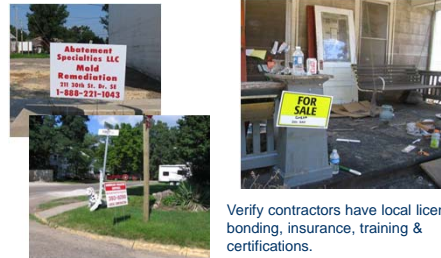


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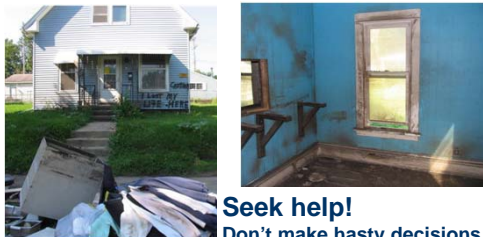
## Flood Sights



Verify contractors have local license, bonding, insurance, training & certifications.

## Flood Sights

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Seek help!  
Don't make hasty decisions.

## Delayed Cleaning/Restoration

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- Dry to prevent mold growth



## Hazards

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- Structural
- Electrical (telephone & cable)
- Mold
- Biological
- Lead Dust
- Asbestos
- Carbon Dioxide
- Cuts and Punctures




## Categories of Water

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- Clean Water – Category 1
  - Broken water pipes, rainwater, etc
- Gray Water – Category 2
  - Contains contamination & microorganisms
  - Toilets with urine, sump pump, dishwashers
- Black Water – Category 3
  - Contains pathogenic agents
  - Sewage, surface water flooding, pesticides




## Health Effects of Mold



Scientific evidence links mold and other factors related to damp conditions in buildings to:

- Asthma symptoms in those with the chronic disorder
- Coughing, wheezing, and upper respiratory symptoms in otherwise healthy individuals
- Hypersensitivity Pneumonitis in susceptible people
- Lower respiratory illness in children


Institute of Medicine of the National Academies 2004



## Health Effects of Mold

- World Health Organization: Sufficient epidemiological evidence is available in different countries and under different climatic conditions to show that the occupants of damp or moldy buildings are at increased risk of respiratory symptoms, respiratory infections and exacerbation of asthma. Some evidence suggest increased risks of allergic rhinitis and asthma.
- There is clinical evidence that exposure to mold and other dampness-related microbial agents increases the risks of rare conditions such as allergic alveolitis, chronic rhinosinusitis and allergic fungal sinusitis.
- Toxicological evidence supports these findings, showing the occurrence of diverse inflammatory and toxic responses after exposure to microorganisms isolated from damp buildings, including their spores, metabolites and components.

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## Respiratory Protection

- Respirators
  - Minimum
    - N-95 respirator or mask
    - HEPA filter – P-100
  - Proper fit
  - Labored breathing






## Eyes, Feet, Hands, etc.

- Goggles must prevent entry of dust and small particles






## Limited Benefit from Air Cleaners



- Filters remove only some spores & do not remove Volatile Organic Compounds
- Ozone units should not be used in an occupied space and are not effective!
- Hydroxyl and Ultraviolet units of limited benefit

