

FLOODING

Floods are one of the many examples of extreme weather events that are happening more often as a result of climate change. The air in homes damaged by flooding can be harmful to health immediately after flooding and until the home is fully dried out.



The picture reveals a number of ways in which flooding can cause changes to indoor air quality and be harmful to health. Circle each one you can spot. For each one you've found choose whether to write a reason for:

- a. why they might be caused by flooding or b. how they could be harmful to the indoor air.



1	a b		5	a b	
2	a b		6	a b	
3	a b		7	a b	
4	a b				

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ANSWER SHEET

<p>1</p>	<p>Mould and damp Exposure to mould can cause nose and throat irritation, coughing, asthma attacks and lower respiratory infections. Cold and damp homes are an ideal environment for mould to grow.</p>	<p>4</p>	<p>Cleaning Cleaning is very important during flood recovery to remove contaminants and mould. However, cleaning can re-suspend dust, contaminants and spores into the air so it's important to wear gloves, goggles and a dust mask while cleaning.</p>
<p>2</p>	<p>Damaged furniture Soft furnishings are very absorbent and are tricky to dry out and repair after a flood, so often have to be replaced. The reason for this is that they can be a trap for contaminants from flood water or encourage "invisible" mould growth, which can be released into the air later on.</p>	<p>5</p>	<p>Generator and pump Pumps used to pump out floodwater are sometimes powered by diesel generators, as the building electrics might be damaged. These generators might produce carbon monoxide gas and other dangerous pollutants, so it is important to have a carbon monoxide alarm in the space and make sure the space is ventilated.</p>
<p>3</p>	<p>Contaminated flood water Most floodwater is dirty and contains contaminants which can be harmful to health. When the flooding goes down, these contaminants will be left behind on surfaces, suspended in the air and might also have been absorbed into the building structure, for instance into the walls. Dirty water can be harmful to health. The level of water contamination will depend on what the water has passed through before it reaches the home, as well as what is inside the home. Contaminants that have been found in floodwater and moisture droplets in the air include food waste, building materials petrol, diesel, oil, plastics, fertilizer, pesticides, parts of vehicles, electrical items and power cables, paint, animal remains, excrement, Legionella, (a freshwater bacteria) and vegetation.</p>	<p>6</p>	<p>Building materials As well as absorbing contaminants from flood waters, decaying building materials can release hazardous gases such as methane.</p>
		<p>7</p>	<p>Repair work During recovery it might be necessary to carry out works to floor tiles, pipe insulation and paint. These may contain hazards such as asbestos and lead. There are specific health and safety measures for people handling these hazardous materials.</p>

About this worksheet: More information can be found in the RCPCH RCP 2020 publication *The Inside Story: Health effects of indoor air quality on children and young people*. Many of the Indoor Air Quality Working Party members were contributing authors to this publication and have produced these worksheets as a first step towards addressing this request from children and young people.