

FLOODING FROM SEWERS

Localised flash flooding from blocked or **overloaded drainage** systems can occur at times of heavy rainfall. This type of flooding is unpredictable and often occurs in unexpected locations depending on the location and intensity of rainfall. Such drainage systems include open drainage ditches & culverts and buried drains and **sewers**. Where flooding occurs from **foul sewers** the floodwater will be contaminated with sewage. In some cases, contaminated floodwater can flow back through foul sewers causing flooding inside buildings.

More than **10,000 homes** are currently at high risk (10% annual chance) of sewer flooding and government statistics put the value of assets under risk from sewer flooding at £270m.

The **water companies** are responsible for the foul sewerage system and the surface water sewerage system if it has been adopted. They do not have responsibility for any other watercourses or land drainage systems.

If floodwater has been **contaminated** a filthy layer of silt is usually left behind when the water recedes. Contamination can add to the cost of cleaning and disinfecting buildings that have been flooded and pose risks to health. Protective clothing should be worn whilst cleaning after the flood and other hygiene precautions should be taken.

Advice on **health** and safety precautions to be taken when restoring flooded buildings can be found on the Environment Agency's website: www.environment-agency.gov.uk or by calling their Floodline on 0845 988 1188

General flooding can create blockages in drains and sewers that can lead to the backflow of sewage into properties through low level drain gulleys, toilets, and washing machine/dishwasher outlets. Backflow through drains is particularly likely where floodwater is prevented from entering the property using temporary barriers and where the flooding depth outside is above the internal level of the drain entry points.

This flooding can often be effectively controlled by installing **non-return valves** within the private sewer of a property upstream of the public sewerage system. Further details are provided by the CIRIA publication 'Low-cost options for prevention of flooding from sewers'. Anti-flooding devices require careful installation and must be regularly maintained. Maintenance depends on the type of device fitted, but is normally required every six months.

Some properties have **Private sewage systems** and flooding of these systems can also create a back-up of sewage into the property. Damaged septic tanks, cesspools, or small package sewage systems should be inspected by a qualified engineer before the drainage system is used after a flood.