

THE IMPACTS OF STORMS

It is important to think more about storms, how they are formed, their potentially devastating impacts and whether you are resilient to them. Planning in advance is essential, especially if you live in areas that may be more vulnerable than others, for example, those located next to rivers or on the coast.



Image: The Flood Hub

Storm surge cc-by-sa/2.0 - © David Baird - geograph.org.uk/p/3833138

Image: The Flood Hub

Winter storms can bring some of the most severe and extreme weather events, including lower temperatures, gale-force winds and heavy rain, which can lead to flooding in some areas or sleet and snow if the temperature is cold enough.

Storms occur at mid-latitudes where cold polar air meets warmer tropical air and the point where these two meet is known as the jet stream. Rising air from the Atlantic is removed and replaced by the strong winds of the jet stream a lot quicker than the air at lower levels and this reduction in pressure produces the strong winds of winter storms. Storms tend to form in the winter months when the temperature between the air masses is at its greatest.

Case Study

From the 18th – 20th January 2021, **Storm Christoph** brought the wettest 3-day period of rainfall on record for Northwest England and North Wales, with over 100mm of rain falling across upland areas. Many people across Cheshire, Greater Manchester and Lancashire were severely affected:

- 400 homes were flooded.
- 26,000 homes were protected from the various Environment Agency flood defence assets.
- Firefighters and police evacuated 2,000 homes and businesses in south Manchester, with 3,000 properties said to be at risk.
- Houses on Walmer Street, Manchester fell into a giant sinkhole following heavy rainfall.
- Insurance losses from Storm Christoph are predicted to be between £80million and £120million.

If you've been affected by past storms, are you more resilient to the potential impacts now than you were before?

Even if you have never flooded before, excess rainfall from a storm could overwhelm drains and lead to flash flooding or surface water flooding. Therefore, it is still important to prepare, even if you don't live by a river or the coast.

Identifying a warning trigger, having a plan and installing property flood resilience can all help to increase your resilience to the effects of storms.