

Snow & Ice Fact Sheet

We know that being on time is important to you, so we're working hard to keep you moving.


In very cold weather, snow and ice can build up on the tracks and block points, the equipment that allows trains to move between tracks. Ice can coat the electrified third rail and overhead power cables, preventing trains from drawing the power they need to run and leaving them stranded. Icicles on tunnels, bridges and other structures can also damage trains and overhead power cables. In very snowy weather where snow lies deeper than 30cm, trains can't run safely unless they have been fitted with snow ploughs.

Sometimes trains need to slow down to keep you safe.

We work all year round to make our infrastructure more resilient so we can run a safe and reliable service in winter. To help with this we have:

- Put over 100km of special heating strips on critical sections of the electrified third rail which powers trains in the south of England. This prevents ice forming and minimises the risk of stranded trains. This has reduced ice-related disruptive incidents by almost 80 per cent.
- Added protective covers to 4,000 points and 2,500 points motors to keep snow out and prevent damage by ice falling from trains.
- Fitted many points with heating strips to melt snow and ice.
- Put up fences on major routes to prevent snow blowing onto the tracks. You can find out more about our approach at www.networkrail.co.uk/vegetation





Did you know?

Our climate teams are doing detailed research into the resilience of our railway. This work helps us to understand where more investment is needed to improve resilience and prevent problems. To find out more visit: www.networkrail.co.uk/climate-change

Before winter

Before winter arrives, we do everything we can to minimise delays by preparing effectively. This includes:

- Cutting back overhanging trees that could be affected by high winds or snow.
- Pre-preparing contingency timetables with train companies.
- Using detailed expert weather forecasts to create localised action plans. These forecasts don't just cover the weather but tell us how conditions will impact the specific railway infrastructure. Our network of hundreds of monitoring stations then provides us with realtime weather data, enabling us to respond to conditions as they develop.

During winter

To help keep passengers moving we use special winter trains, complete with snowploughs, hot air blowers, steam jets, brushes, scrapers and anti-freeze to clear snow and ice from the tracks. We use technology, such as visual and thermal imaging from our helicopters and drones, to help us identify issues before they become a problem and respond as fast as possible.

When snow is forecast we work with train operators to fit snow plough attachments to the front of passenger trains.

Our winter timetables also allow empty passenger trains, known as ghost trains, to be run overnight to keep the tracks clear of snow and ice.

Thousands of our people also work around the clock in all weathers, monitoring, maintaining, and repairing the tracks so that we can run a safe and reliable service for passengers.