

Motor Liability Accidents & Adverse Weather Warnings



Bord Measúnaithe
Díobhála Pearsanta
Personal Injuries
Assessment Board

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About PIAB's Research Briefing Series:

The Personal Injuries Assessment Board's (PIAB's) Research Briefing Series aims to provide greater insight into emerging trends within the personal injuries landscape, focusing on special topics of interest to readers.

In this series, we provide a summary of research on specific factors influencing personal injuries accidents in Ireland, contributing to a growing evidence base underpinning personal injuries policy development. It is envisaged that the timely publication of research briefings will support greater awareness, informed decision-making and a deeper understanding of the evolving personal injuries landscape.

About PIAB

Under the Personal Injuries Resolution Board Act 2022, PIAB has an enhanced function to conduct and commission research on personal injuries.

PIAB, as Ireland's independent State Body for the resolution of personal injury claims, collects comprehensive data on Motor Liability (road traffic), Public Liability and Employers Liability (workplace) accidents, including the location and cause of accidents, in addition to health, demographic and other claim-related factors. PIAB's data can contribute to accident prevention and road safety policy, through the identification of factors associated with an increased risk of personal injury.

Report Summary

In 2019, 15,452 Motor Liability (road traffic) accidents occurring in Ireland were reported to PIAB. It is widely acknowledged, that adverse weather conditions contribute to the incidence and severity of Road Traffic Accidents (RTAs). This elevated risk is acknowledged in the Government's 'Be Winter Ready' initiative, which highlights a need to "to become better informed to be winter-ready" and provides practical steps to minimise the risk of RTAs in adverse weather conditions.

This report aimed to examine road traffic accidents in 2019 and to explore the impact of wider environmental conditions, specifically the presence of national or regional adverse weather warnings, using open-access data from Met Éireann – The Irish Meteorological Service, in addition to data collected through PIAB's claim application process. Open access data from Met Éireann on historical weather patterns is currently available up to the beginning of 2021. Accidents occurring in 2019 were selected for this analysis to limit any potential effects of the Covid-19 pandemic on the profile of accidents for subsequent years with available open-access data.

The findings show, **that adverse weather events increase the likelihood of road traffic accidents, with the greatest impact on days with snow/ice warnings in place.** In addition to a greater number of personal injury accidents and consequential claims, our research shows **that adverse weather leads to higher average compensation award values, suggesting that individuals sustain injuries of greater severity.** For example, on dates with snow/ ice warnings the daily rate of Motor Liability accidents increased by 11%, and average award values were 6% higher, when compared to dates with normal weather patterns.

As Ireland prepares for a rise in extreme weather events in the future, PIAB's data can inform road safety policy and promote public awareness of the far-reaching consequences of climate change on the frequency and severity of personal injury accidents in Ireland.

Average Award Values for Motor Liability Accidents in 2019

Book of Quantum Values



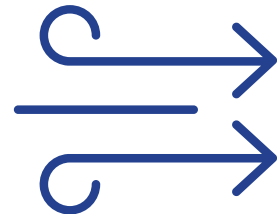
€20,954

Normal Weather Pattern



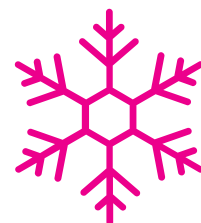
€21,024

National/Regional Rain Warning



€21,607

National/Regional Wind Warning

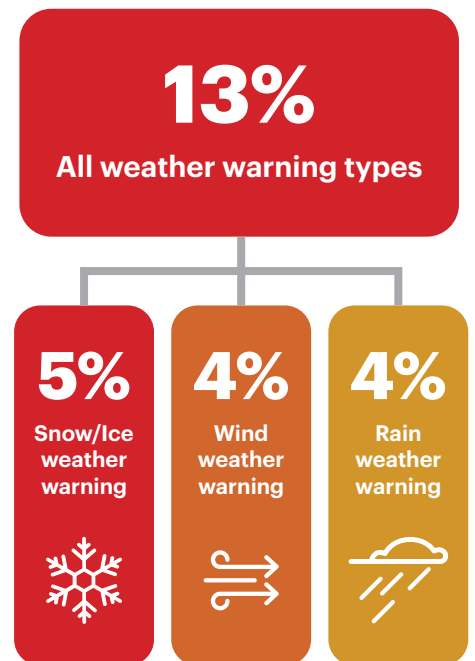
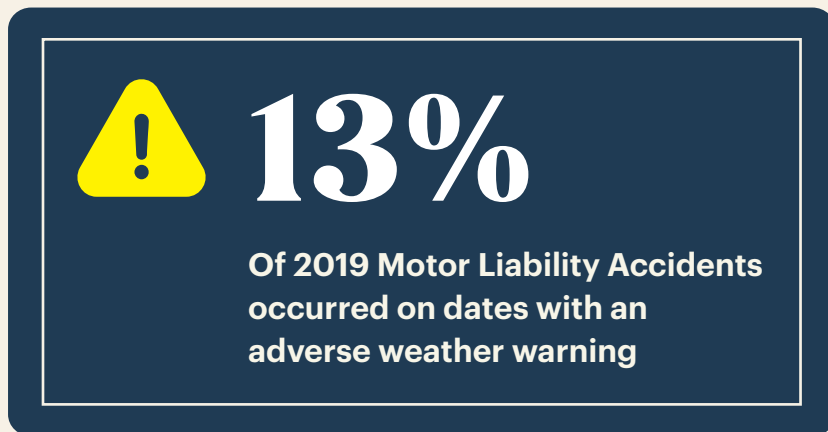
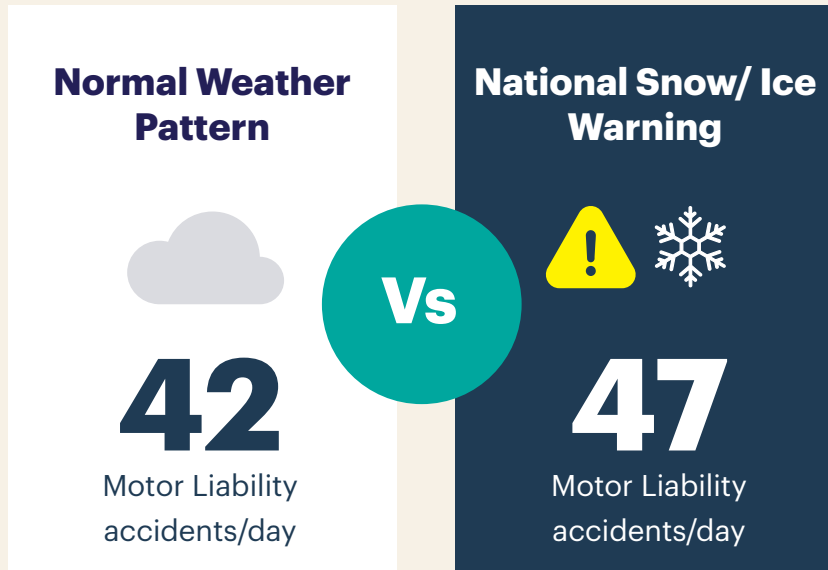


€22,163

National/Regional
Snow Ice Warning

Motor Liability Accidents

Of the total 15,452 Motor Liability Accidents occurring in 2019, 13% had an incident date and location corresponding to a National or Regional weather warning. Snow/ice accounted for the most frequent warning type (5%), closely followed by wind (4%) and rain (4%) weather warnings. Less than 1% of accidents occurred on dates with fog warnings in place (0.8%).



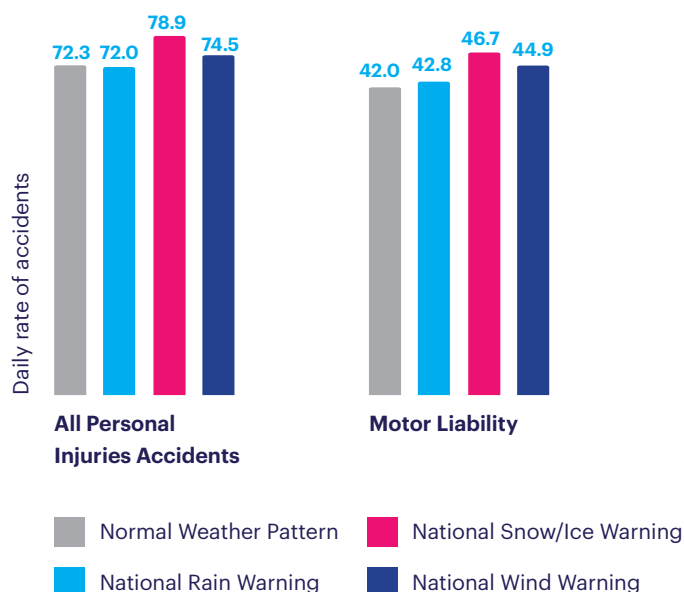
National Weather Warnings

Figure 1 shows the daily rate of personal injury incidents based on National Weather Warning status, overall and based on claim category. Weather patterns were defined as 'normal' if no warning was in place either at regional or national-level, corresponding to the date and location of an accident.

In 2019, an average of 72 personal injury accidents occurred per day with normal weather patterns. This daily incidence rate increased to 79 accidents per day on dates with national Snow/Ice warnings (+9%) and 74 incidents/day for national wind warning (+3%). For Motor Liability accidents, National Snow/Ice weather warnings resulted in an 11% increase in the daily rate of accidents. Similarly, National Wind Warnings were associated with a higher daily rate of Motor Liability accidents (+7%).

Figure 1

Daily Rate of Personal Injuries Accidents in 2019 based on National Weather Pattern



Regional Weather Warnings

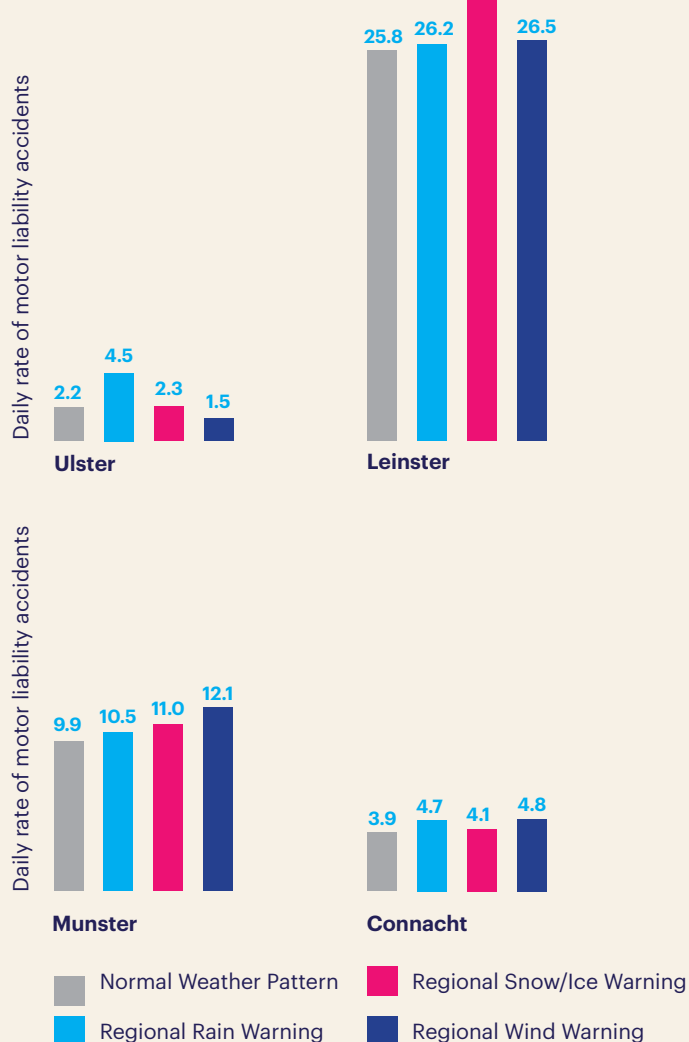
Figure 2 describes the daily rate of Motor Liability accidents, reported to PIAB, based on Regional Weather Warning status. This figure includes a total of 15,452 Motor Liability accidents that occurred in 2019, with complete data on location, based on regional weather pattern.

Leinster had the highest daily rate of Motor Liability accidents, ranging from 25.8 accidents/day on dates with normal weather patterns to 30.8 accidents/day in snow/ice weather warning conditions (+19%). In Connacht, the daily Motor Liability accident rate ranged from 3.9 accidents/day in normal weather conditions to 4.8 accidents/day when a wind warning was in place (+23%).

In Munster, the daily incidence rate ranged from 9.9 accidents/day in normal conditions to 12.1 accidents/per day when wind warnings were in place (+22%). A high degree of variability was noted for the daily Motor Liability incidence rate in Ulster, due to the small number of accidents reported for this region (total = 819). For all regions, snow/ice warnings and rain warnings were associated with higher daily incidence rates for Motor Liability accidents.

Figure 2

Daily Rate of Motor Liability Accidents in 2019 based on Regional Weather Pattern



Ulster: The daily rate of Motor Liability accidents **doubled** in rain weather warnings conditions



Connacht: increase in Motor Liability accidents in Wind Weather Warning conditions

+23%



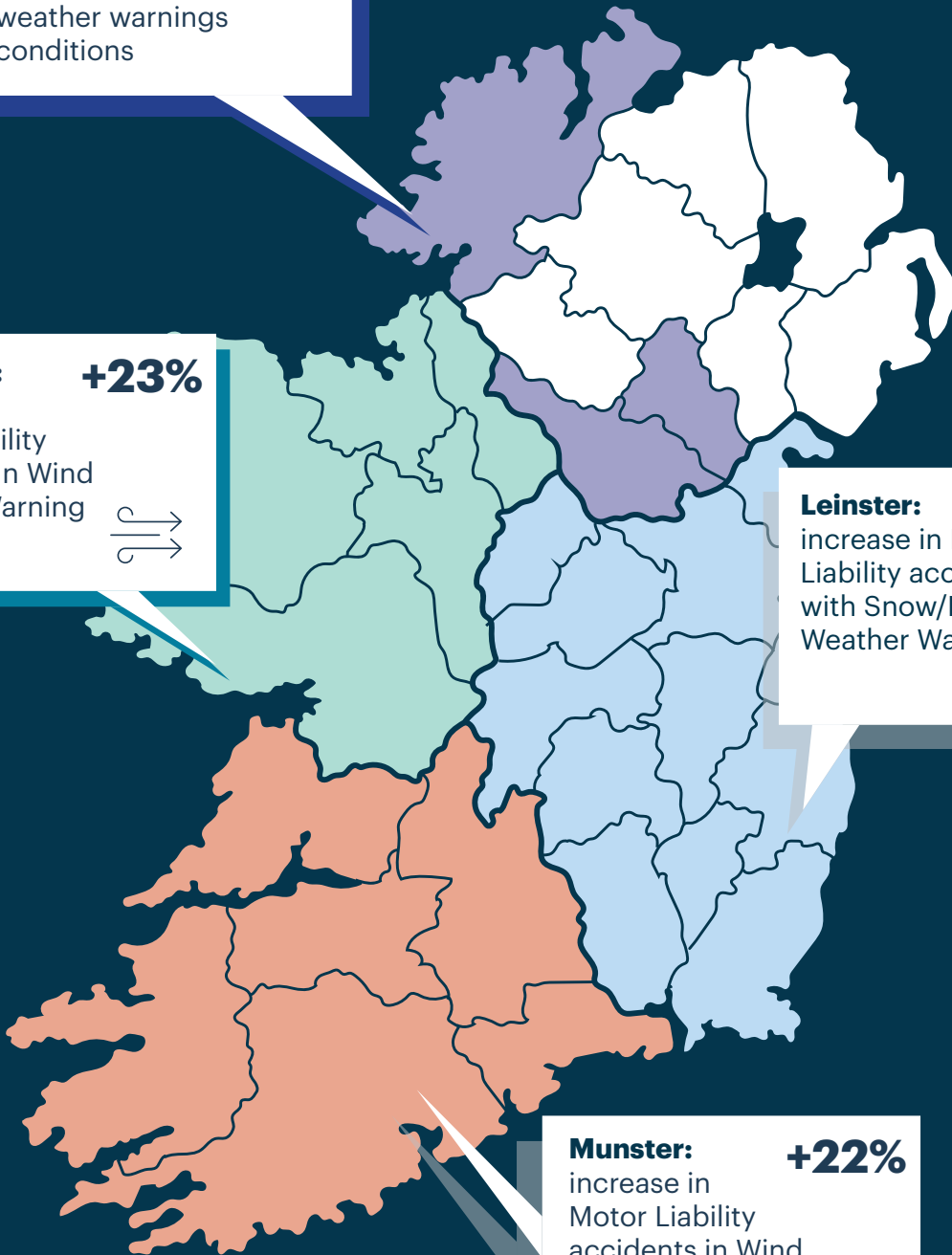
Leinster: increase in Motor Liability accidents with Snow/Ice Weather Warnings

+19%



Munster: increase in Motor Liability accidents in Wind Weather Warning Conditions

+22%



Adverse Weather & RTAs

This section highlights a sample of quotations extracted from claim applications submitted to PIAB, relating to road traffic accidents in 2019.



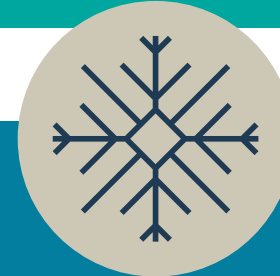
“A car travelling in the opposite direction **lost control in snowy conditions** and crashed into my car”



“The [Respondent’s] car **lost control on ice and skidded across the road** into the [Claimant’s] car”



“There was **black ice on the road**, causing the vehicle to skid and hit a wall. As a result the Claimant suffered personal injuries”



“The car in which I was a passenger **hit a patch of black ice** causing the car to spin out of control causing me injury”

Key Findings for Policy & Practice

The report’s findings demonstrate that adverse weather events increase the likelihood of road traffic accidents, with the greatest impact on dates with snow/ice warnings in place. In addition to a higher number of personal injury accidents and consequential claims, adverse weather leads to higher average award values, suggesting that individuals sustain injuries of greater severity. As Ireland prepares for a rise in extreme weather events in the future, PIAB’s data will play an important role in monitoring the impact of adverse weather conditions on personal injuries sustained by individuals as a result of accidents.

Harnessing PIAB’s data for the identification of personal injury risk factors remains a key priority for the organisation. The publication of up-to-date open-access data on historical weather patterns by Met Éireann – The Irish Meteorological Service will support PIAB and other researchers to continue to monitor the effects of adverse climate events on individuals and society. Additionally, recent changes to the PIAB claim application, including more comprehensive data on accident-related information, will further enhance the quality of personal injuries data collected and will support future research by PIAB aiming to identify risk factors of personal injury accidents. This research report, utilising information on over 15,000 Motor Liability accidents, highlights the potential of PIAB’s data to inform accident prevention and health & safety policy.

Preparing for Adverse Weather

Be Winter Ready advice for Motor Vehicle Users

Lights - Ensure all your indicators and headlamps are clean and working.

Liquids - Ensure the water reservoir is up to the maximum mark and correctly mixed with anti-freeze.

Oil - Check your dipstick and top up the oil if necessary.

Electrics - Check your dashboard before and after starting the engine.

Windscreen wipers - You should clean them regularly and replace them every 12 months.

Tyres - Check your tyre treads and pressure, including the spare.

Safety Assist - Check your vehicle's owner's manual and find out if it has any safety assist technology.

Be Winter Ready advice for Vulnerable Road Users

Pedestrians: Always use pedestrian crossings and footpaths where available. If no footpath is available, walk on the right-hand side of the road, facing traffic. Wear bright or high visibility clothing.

Cyclists: Take care in very windy or icy conditions. Wear a helmet. Ensure front and rear lights are working.

Motorcyclists: Wear protective equipment. Slow down and ease off the throttle. Ensure front and rear lights are working.



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