Social Care Ireland Conference 2024

Serving our Communities – enhancing the professional knowledge of social care workers about the ways climate change disproportionately affects ethnic minorities and the socio-economically disadvantaged



Dr Gráinne Ketelaar Grainne.Ketelaar@atu.ie

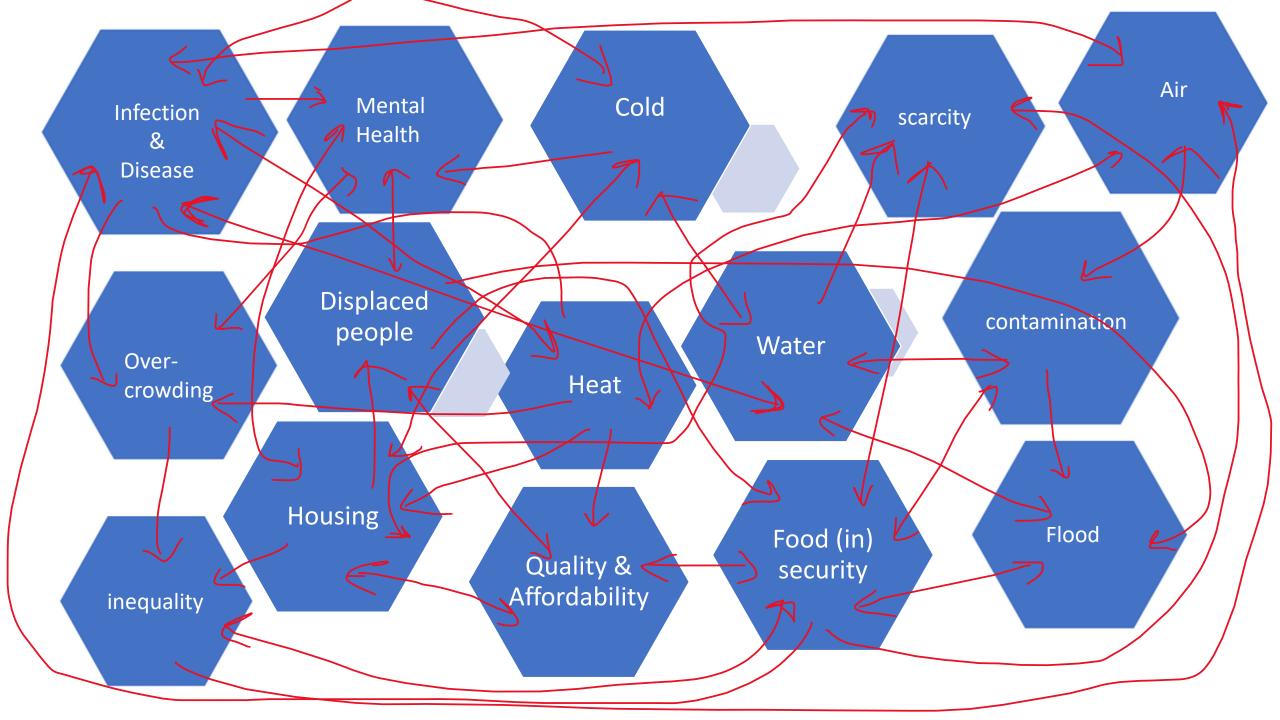


Beyond Registration:

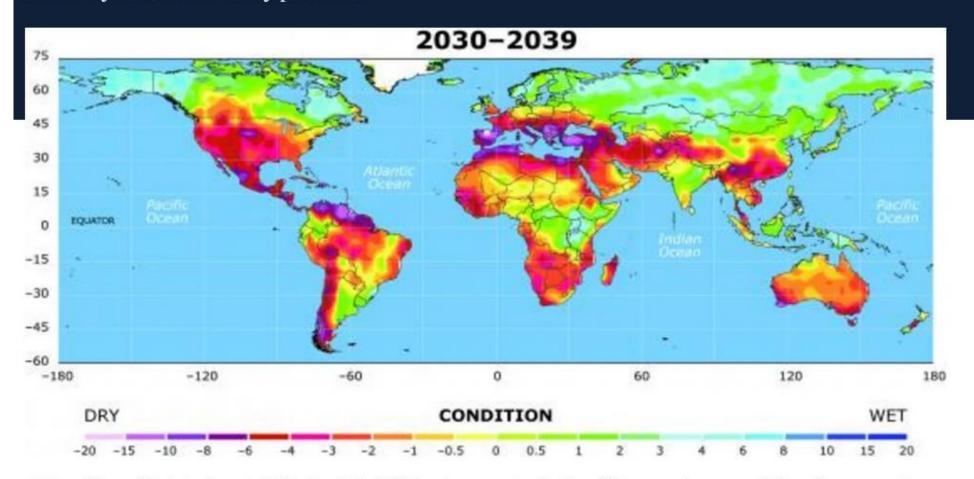
the challenges of equality, diversity and inclusion for social care workers and the communities they serve As social care workers with a role in advocating for and protecting the most vulnerable in our care; it is important that social care workers develop more than a headline scanning understanding of what kinds of impacts Ireland and western Europe may experience as a result of climate change in the short to medium term

Outcomes – 3 parts to this presentation

- 1. Sharing knowledge and information about emerging understanding of health risks arising from climate change
- 2. Improving knowledge about the specific ways in which those already experiencing inequality in Irish society may be more affected by climate change impacts in the coming decades
- 3. Improve knowledge of a range of promising actors, organisations, campaigns currently working to help Ireland respond and adapt to climate change risks



Increasingly dry conditions across much of the globe – including the U.S. – are likely over the next 30 years, a new study predicts.



https://www.nbc news.com/id/wb na39741525 This map illustrates the potential for drought by 2039, based on current projections of future greenhouse gas emissions. The map uses the Palmer Drought Severity Index, which assigns positive numbers when conditions are unusually wet, and negative numbers when conditions are unusually dry. A reading of -4 or below is considered extreme drought. Blue or green regions will likely be at lower risk, while those in the red and purple spectrum could face more unusually extreme drought. Courtesy Wiley Interdisciplinary Reviews, redrawn by UCAR

Displaced planet

- <u>According to the UN</u>, 84 million people were forcibly displaced in 2022 because of conflict, violence, and human rights violations.
- By the end of 2022, it was <u>estimated</u> that 339 million people would need humanitarian assistance this year.
- In other words, <u>one in 23 people</u> on the planet would need help in order to survive.

There could be 1.2 billion climate refugees by 2050. Here's what you need to know

Climate change | Article | January 17, 2024 | 🕓 8 min read

Extreme weather, rising temperatures and damaged ecosystems are forcing people to abandon their homes. A collective effort is needed to solve the issue of climate migration and help the "world's forgotten victims" of climate change.



Climate change will compound existing vulnerabilities

Certain social groups are particularly vulnerable to crises as things currently stand, for example:

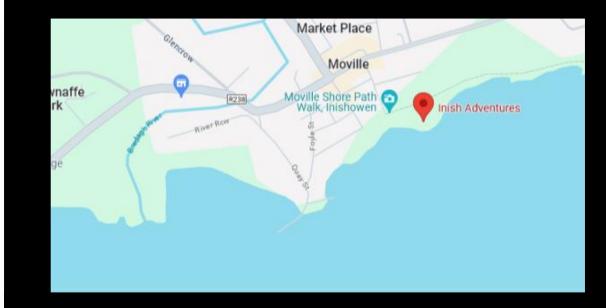
- female-headed households,
- children,
- persons with disabilities,
- ethnic minorities,
- renters,
- migrant workers,
- displaced persons,
- sexual and gender minorities,
- older people and
- other socially marginalized groups.

The World Bank recognises that "the root causes of their vulnerability lie in a combination of their geographical locations; their financial, socio-economic, cultural, and gender status; and their access to resources, services, decision-making power, and justice"

(https://www.worldbank.org/en/topic/social-dimensions-of-climate-change).

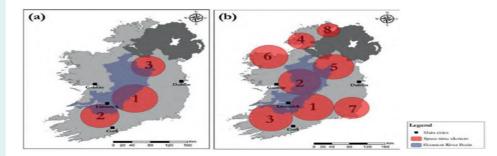
Water Contamination

- Raw sewage is flowing into seas and rivers in eight areas across Donegal, the EPA has warned.
- Burtonport, Coolatee, Falcarragh, Kerrykeel, Kilcar, Moville, Ramelton and Rathmullan were all found to have raw sewage released into the environment in mid-2022 because the public sewers are not connected to treatment plants.
- The EPA report on <u>Urban Waste Water Treatment in 2021</u>, released today, shows that waste water infrastructure treatment at many areas is still not as good as it needs to be.
- Irish Water has treatment plant works scheduled for each of the eight areas in Donegal, with completion dates ranging from 2023 to 2027.
- Waste water treatment in Ballintra, Bridgend, Buncrana, Burnfoot, Kilmacrennan and Milford should also be improved, as a priority, the EPA said, to prevent waste water discharges from harming rivers, lakes, estuaries and coastal waters.
- Moville was identified as one of 12 areas which does not meet the standards in the Urban Waste Water Treatment Directive, the report found. A new plant needed for Moville is not scheduled for completion until 2027.
- 118 large flood relief schemes across the country approx. 50 designated urgent (works to progress within next 5 years) – rest put on the long finger



Box 8.1 Waterborne infections and floods

A recent study by Boudou et al. (2021) investigated the impact of the 2015/2016 flood events in Ireland on the epidemiology of two waterborne infections: verotoxigenic E. coli (VTEC) and *Cryptosporidium*. Winter 2015/2016 is now synonymous with some of the most widespread and severe flooding ever recorded across Ireland. To assess the impacts of these events on incidence of waterborne infections, weekly spatially referenced disease data (July 2015 to June 2016) were analysed relative to weekly time series of cumulative antecedent rainfall, surface water discharge and groundwater levels, as well as high-resolution flood risk mapping. Models show a clear association between rainfall, surface water discharge, groundwater levels and infection incidence, with lagged associations from 16 to 20 weeks particularly strong, thus indicating a link between infection peaks (April 2016) and the flood event, which began approximately 18 weeks earlier.



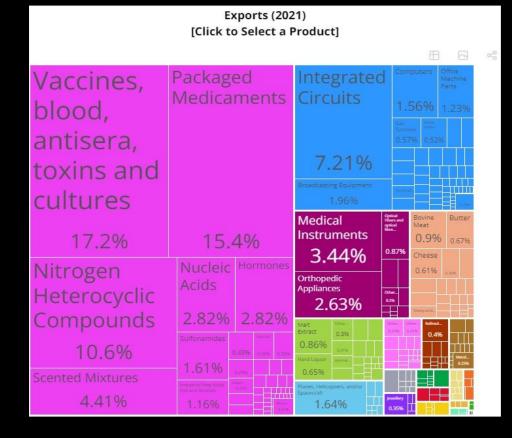
Box 8.1 Figure 1 Space-time clusters of infection from July 2015 to July 2016. (a) VTEC (83 cases) and (b) Cryptosporidium, with Shannon Basin indicated in blue (238 cases). Source: Boudou et al. (2021). Reproduction licensed under the Creative Commons Attribution CC BY 4.0 licence (https://creativecommons.org/licenses/by/4.0/).

Ireland facing 'total disaster' as 70,000 homes at risk of flooding by 2030 The impact of global warming is having a devastating effect on rising water levels

- Níall McNelis says his shop has been flooded six times in 21 years.
- He added: "The last time we got flooded it came up as far as my waist inside the shop.
- "The worst part of the flooding is not the flood itself.
- "It's the smell that it leaves behind.. the dirt... the raw sewage that can be pulled into the building from the street.
- "You can't get your insurance and you have to carry the costs of the flooding that happens each time.
- "On top of that as well I suppose, your mental health really does get damaged by it. I was a broken man last time.
- https://www.irishstar.com/news/irelandnews/homes-at-risk-flooded-2030-32179855

Ferdia McCrann from Met Eireann said that storm saw over 70mm of rain fall on the Inishowen Peninsula in less than eight hours.









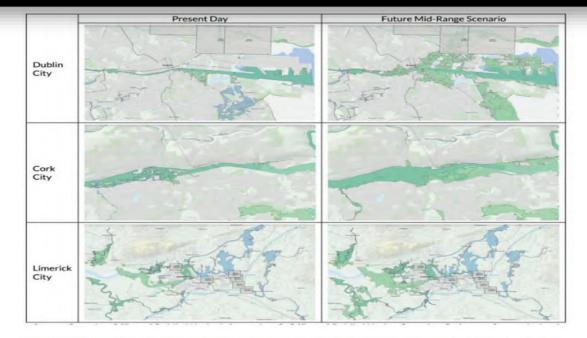


Figure 9.2 OPW's mid-range (medium probability) future scenarios showing the impacts of increased rainfall and sea level rise in Dublin, Cork and Limerick (projected for 2045–2050 in global business-as-usual emissions scenario and 2100 in global net zero emissions by 2050 scenario, includes information from Ordinance Survey Ireland). Source: Carroll (2022).



Figure 8.4 Letterkenny hospital after floods in 2013, when 40% of hospital services had to be taken out of clinical use. (Source: McGinley (2014), Photo Declan Doherty)

THE IRISH TIMES



Flooding in Midleton, Co Cork after Storm Babet taken on October 18th last year. Photograph: Guileen Coast Guard

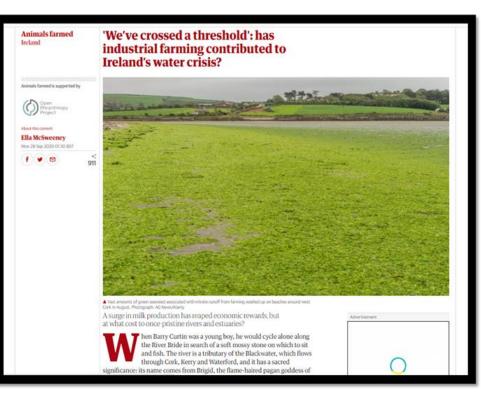
Olivia Kelleher Thu Feb 29 2024 - 21:44

G G X D :

A new study has indicated that the extreme rainfall in October of last year, which led to major flooding in Midleton and other parts of east <u>Cork</u>, was more than twice as likely to occur at current global temperatures in comparison with pre-industrial times, due to <u>climate change</u>.

We import 70% of our food – our business model relies on exporting what we do produce – ruining our land and water and air in the process

- Access has opened for Irish beef exports to China in April and over 1000 tonnes of Irish beef has landed in China in 2018. Sheepmeat export values are up 15% to €315m, buoyed by strong market returns.
- Pigmeat prices came under significant pressure through 2018 as African swine fever disrupted trade flows, particularly in the world's largest pig importer, China. As a result, the export value of Irish pigmeat declined 6% to €666m in 2018.
- Poultry exports rose 8% in 2018 to €316m, supported by rising global demand for white meat and improved volumes of Irish production. The Irish poultry industry is set to produce 100m birds for the first time in 2019.
- Exports of live animals were valued at €161m in 2018, a decline from €175m in 2018. This was driven by an increase in lower value calf export numbers and economic challenges in new export markets including Turkey



Food In(security)

- To be classed as intensive, a farm must have warehouses with more than 40,000 birds, 2,000 pigs or 750 breeding sows
- 340 Mega farms in Ireland (increase of 34% since 2018 – only 7 applications rejected - ever)
- <u>1.6 million</u> pigs, while over <u>70 million</u> chickens are produced annually, along with four million turkeys and eggs are laid by two million hens. <u>https://sentientmedia.org/new-irish-factory-farms/</u>
- 245 intensive factory farms in Northern Ireland
- https://www.belfasttelegraph.co.uk/news/northern-ireland/surgein-mega-farms-sparks-northern-ireland-animal-welfare-concerns-35945108.html#:~:text=The%20number%20of%20mega%20farms, %2D%20a%20rise%20of%2068%25.

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News + Northern Ireland + Environmen

Two Northern Ireland counties have almost 30 million chickens, cows and pigs "hidden from view" in factory farms

"Enough is enough. The spread of industrial farming must stop"

NEWS By Shauna Corr Environment Corresponder

Bookmark 🔲 📑 💓 🥝





Vegetables are losing their nutrients. **Can the decline be reversed?**

• Animal agriculture produces only 18% of global calories and 37% of protein yet takes up a whopping 78% of agricultural land or half of all the habitable land on earth

+ Add to myTT

Spain's supermarket thieves covet olive oil as prices surge

Thefts of 'liquid gold' surpass those of 'ibérico' ham, cured cheeses and alcohol in mos Smanish regions

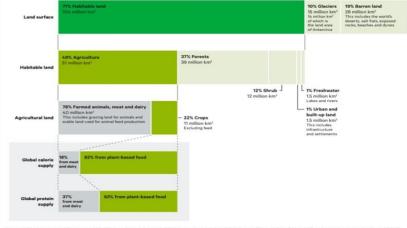


security measures.

By Eric Albert (London (United Kingdom) correspondent), Cécile Prudhomme, Cécile loutelet. (Berlin (Germany) correspondent), Sandrine Morel. (Madrid (Spain) corresponde nd Marina Rafenberg (Athens (Greece) c

Food system impacts on biodiversity loss Three levers for food system transformation in support of nature

Figure 2. Global land 'foodprint



, M. (2019), 'Land Use', Our World in Data, September 2019, https://ourworldindata.org/land-use (acce

https://www.ihrec.ie/discrimination-and-inequality-in-housing-in-ireland-set-out-in-new-research/

- **People with disabilities** are more than twice as likely to report discrimination relating to housing and over 1.6 times more likely to live in poor conditions, such as living in damp housing, lacking central heating or living in an area with neighbourhood problems. People with disabilities are also particularly over-represented in the homeless population: more than one in four homeless people have a disability.
- Lone parents are particularly disadvantaged. 60% of homeless families are headed by lone mothers. In addition, lone parents experience high levels of discrimination in accessing housing and live in poorer quality housing, including poor neighbourhood environments.
- **Children** have been particularly disadvantaged by the recent surge in homelessness and are now shown to make up 29 per cent of the homeless population.
- **Travellers** have a high risk of being homeless; while they represent less than 1% of the population they make up 9% of the homeless population. Travellers are also almost 10 times more likely to report discrimination in access to housing.
- **People on housing support payments** emerge as more likely to experience housing deprivation and over-crowding

• This article is more than 4 months old

Thousands of babies and toddlers falling sick from damp homes in Britain, NHS doctor warns

Exclusive: Nearly 31,000 children aged four or under admitted to hospital each year in England due to respiratory virus, with 80% developing acute bronchiolitis



Toddler with inhalation mask. Government data suggest more than 520,000 rented properties in England have hazards posing a serious and immediate risk to health and safety, a large proportion being cold, damp and mould. Photograph: Steve Debenport/Getty Images

Thousands of babies and toddlers are being admitted to hospital in England each year with lung conditions probably linked to damp and mould-ridden homes, a senior doctor has warned. https://www.irishexa miner.com/news/arid -30933107.html

- More than 600,000 people in Ireland live in poor housing conditions, say Engineers Ireland
- More than 600,000 people in Ireland live in poor housing conditions with leaks, damp or rot while almost two million housing units will require retrofitting, according to Engineers Ireland

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WED, 26 JUN, 2019 - 14:47 DAN BUCKLEY

<u>https://www.<mark>esri</mark>.ie/news/poor-housing-conditions-harm-childrens-</u> <u>health-and-development</u>

Longer exposure to poorer housing conditions significantly impacts on children's social and emotional development.

 Nine-year-olds who spent more of their childhood in homes that parents could not afford to keep warm, that parents considered too small, or in more disorderly neighbourhoods, faced more social and emotional difficulties than those growing up in better-quality housing.

•Similarly, nine-year-olds who grew up in more disorderly neighbourhoods or in homes that parents felt were not child-friendly had less positive interactions with others compared to their peers.

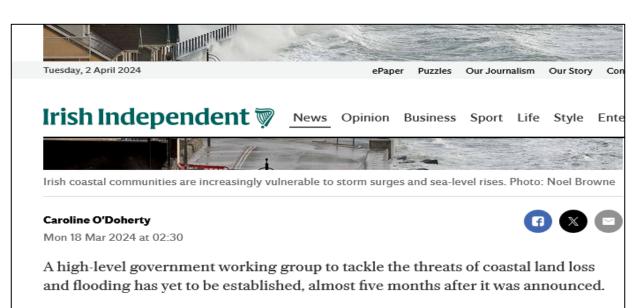
•Worse housing conditions can also harm children's health. Respiratory problems (such as episodes of wheezing) are more common for nine-year-olds who spent longer living in poor housing conditions, such as damp, as well as in homes not adequately heated.

•Children who grew up in inadequately heated homes were also more likely to have worse health, as reported by their parents, and experience more accidents or injuries requiring medical treatment.

€340m going to be invested in the expansion of Ireland's ports by 2030, which handle 98pc of the country's trade, with "no reference in the National Ports Policy to climate-change risks".



a low pressure system in the southern Irish Sea coincided with a spring tide, leading to an extreme water level of 2.9m above mean sea level and resulted in widespread flooding in Dublin and marked coastal erosion on the south and east coasts.



That is despite increasing warnings by scientists that Ireland is critically unprepared for the sea-level rise and storm surges that are coming with climate change.

A report published in recent weeks points to serious weaknesses in the Government's planning.

"Ireland is highly exposed to climate-change impacts on coastal environments, with all major cities and many regional population centres located by the sea," it warns. "The sea level around Ireland is projected to rise under all future scenarios and will continue to do so for hundreds to thousands of years.

"Discussions about what is valued about our coasts, together with the limited resources available for approaches that seek to protect against or accommodate climate-change impacts, will be challenging politically and for individuals and needs to be engaged with sooner rather than later."

It is expected that sea levels will rise globally by between half a metre and one metre in the lifetime of a child born today.

Overtopping at Lahinch Strand during Storm Hercules (January 2014) - (Photo credit: Aldert Otter) <u>https://www.epa.ie/our-services/monitoring-</u> assessment/climate-change/climate-ireland/impact-of-climate-change-on-ireland/climate-hazards/coastal-flooding/

- In 2020, the Journal published some information the climate modelling predictions around sea level rise, highlighting that "climate change could put more than 60,000 Irish homes at heightened risk of coastal flooding by 2050, according to a new survey of vulnerable coastal locations across the country.
- 88% of some 70,000 residential addresses mainly in Dublin, Louth and Clare will be at risk of coastal flooding by 2050.
- This modelling does not take into account any other risks of flooding as might arise from rainfall changes, or higher river waters; nor does it factor in flood wall defences

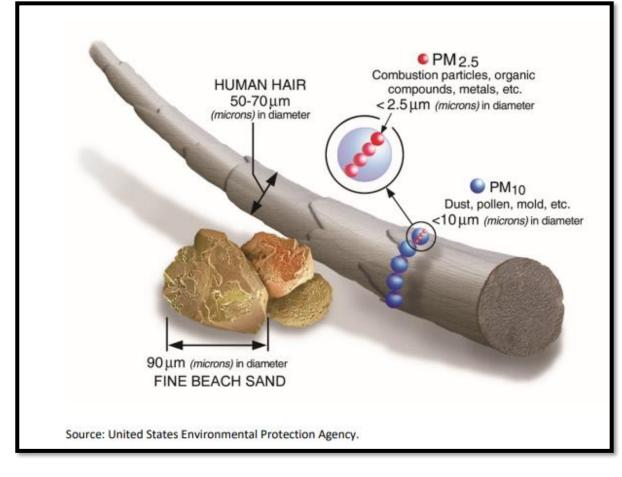
https://www.thejournal.ie/coastal-flooding-climate-change-ireland-5104324-May2020/?jrnl_lg=1

Air Pollution

Air pollution in Ireland linked to premature deaths at 'concerning' level in urban areas, report finds

By EHN Editors = Sep 25, 2023 = 🕮 2 min read

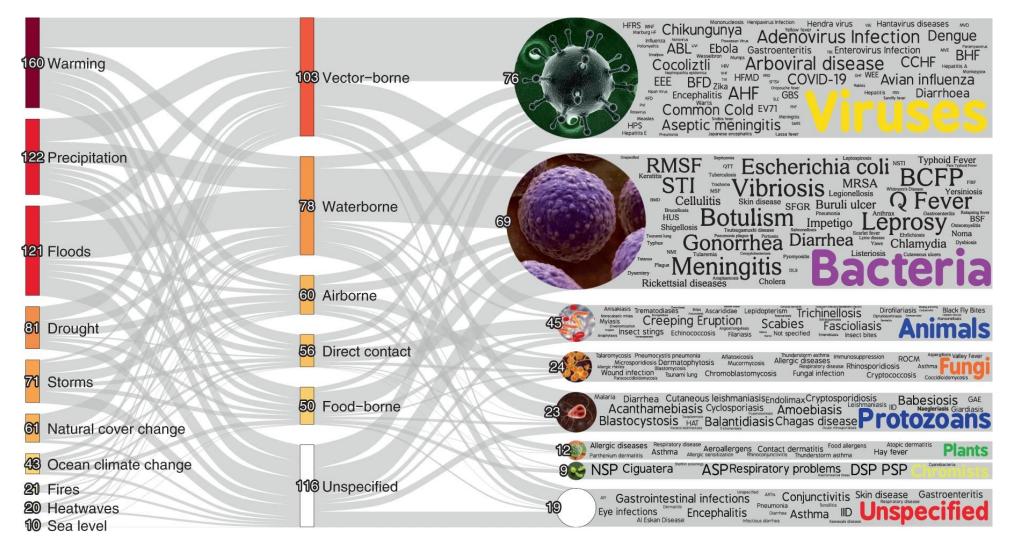
We estimate that approximately 1,700 premature deaths (680 from cardiovascular disease) in the ROI, and 900 (with 300 from cardiovascular disease) in NI are attributable to exposure to fine particulate air pollution. Although the estimated mortality burden of air pollution is highest in Belfast and Dublin, there are attributable deaths in all counties and LGDs across the island of Ireland. These mortality estimates are higher than those published by the European Environment Agency (EEA) or the Global Burden of Disease Study for ROI in 2019, and by either Public Health England (PHE) for NI in 2010 or the Global Burden of Disease for NI in 2019. This reflects our use of updated dose response functions based on growing research evidence that exposure to PM_{2.5} is more harmful than previously thought.



No mention of transport in Ireland's climate policy – and no mention of gender in Ireland's transport policy

Pathogenic diseases aggravated by climate hazards

https://www.nature.com/articles/s41558-022-01426-1/figures/3

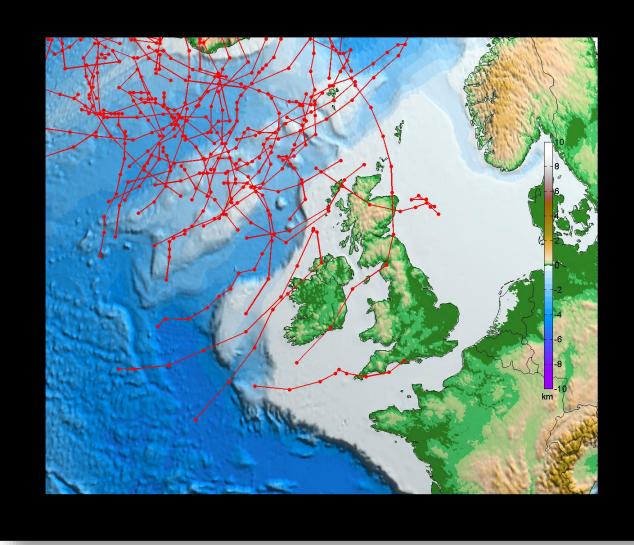


Mora, C., McKenzie, T., Gaw, I.M. *et al.* Over half of known human pathogenic diseases can be aggravated by climate change. *Nat. Clim. Chang.* **12**, 869–875 (2022). https://doi.org/10.1038/s41558-022-01426-1

A detailed nationwide assessment of flood risk was completed by the OPW in 2018. It identified the need for 118 large flood relief schemes across the country.

Currently, coastal flood risk is highest in low-lying areas along the east coast from Dundalk to Dublin and Wicklow to Wexford coast - south coast low lying areas of Waterford, Dungarvan, Youghal and Cork City.

On the west coast Galway city and the Shannon estuary are also at risk.



For the high emissions scenario (RCP 8.5): projected tracks of storms with a core of less than 940 hPa and with a lifetime of at least 12 hours (2041-2060) [IPCC, 2007]. https://www.epa.ie/our-services/monitoring--assessment/climate-change/climate-ireland/impact-of-climate-change-on-ireland/climate-hazards/coastalflooding/

https://ide.ie/

IRISH DOCTORS FOR THE ENVIRONMENT

A collective group of medical professionals in Ireland who are focused on promoting, improving, and sustaining the health of humans by striving to improve the health of the environment.

Working Groups

Read about our working groups and what issues we are working on here.

LEARN MORE -

Join IDE

Our Podcast

Tune in to our podcast, Climate Conversations with IDE!

LISTEN IN →

CLICK HERE! →

https://www.ted.com/talks/fergal_smith_turning the_tide_pro_surfer_to_regenerative_farmer

• Community Supported Agriculture (CSA), a cooperative where customers pay in advance to take part in the harvest every week. The CSA model, or cooperative agriculture, is a way of self-organizing food distribution, breaking off from long retail chains and putting sellers and buyers in more direct relation to each other.

"EAT food. Not too much. Mostly plants." (Michael Pollan)

- Irish not eating enough fruit and vegetables -- too narrow range
- Food waste is too high
- Import costs and vulnerability
- Only 250 fresh produce growers remain in the country
- 300 commercial growers
- of all the farms in Ireland, just 1% grow vegetables.

Time for Social Care to step up!

Many other organisations across youthwork, community Dev, Health and unions active in this space

- <u>https://planetaryhealthalliance.org/mission</u>
- <u>https://globalhealth.ie/</u>
- <u>https://noharm-europe.org/content/europe/who-we-are</u>
- <u>https://www.planetaryhealthalliance.org/clinicians-for-planetary-health</u>
- <u>https://www.plantbaseddoctorsireland.org/</u>
- <u>https://www.cwi.ie/wp-content/uploads/2023/09/climate-final.pdf</u>
- https://www.forsa.ie/climate-action-requires-social-dialogue/

https://www.epa.ie/who-we-are/conference-events/climate-change-and-human-health.php

• Climate Change and Human Health

- The EPA, as part of the National Dialogue on Climate Action will host a public lecture with guest speaker Professor Lea Berrang Ford, Head of the UKHSA Centre for Climate and Health Security and a Research Chair in Climate and Health at the Priestley International Centre for Climate.
- Event Date: April 23, 2024
- Event Time: 6:30 pm
- Speaker: Professor Lea Berrang Ford
- Location: The Banking Hall, College Green Hotel, Dublin 2. The event will also be live-streamed.



Lynne Kelleher

Sunday March 03 2024, 12.01am, The Sunday Times

Ireland's weather could take Arctic turn with up to 15C dip, scientists believe

Dutch study says Ireland will develop a 'Scandinavian climate' as meltwater dilutes Atlantic



Atlantic Meridional Overturning Circulation (Tipping element)

A system of ocean currents that brings warm water from the equator to the northern latitudes and takes back cold water. This helps moderate the climate of Europe and North America and its collapse could lead to colder and stormier weather in the two continents, especially the former

Domino effect

Collapse of the Atlantic Meridional Overturning Circulation (AMOC) will impact other tipping elements* and climate systems globally

Amazon rainforest (Tipping element)

AMOC collapse means more heat in tropics; Amazon could either stabilise or turn dry

West Antarctic ice sheet (Tipping element)

Heat would not get transferred northwards by AMOC, leading to rapid melting of ice sheet

Sahel/West African monsoon (Tipping element)

Impact on wind flow, Inter Tropical Convergence Zone (ITCZ) by AMOC collapse may hurt establishment of monsoon Indian summer monsoon

Impact on wind flow, ITCZ by AMOC collapse may hurt establishment of monsoon

> Circulation of warm surface water Circulation of cool surface water

Atlantic Meridional Overturning Circulation

Sources: "South Asian monscon response to weakening of Atlantic meridianal overturning circulation in a warming climate", Climate Dynamics; "Warning of a farthcoming collapse of the Atlantic meridianal overturning circulation", Nature Communications; "Impact of an AMOC weakening on the stability of the southern Amazon rainforest", The European Physical Journal Special Topics; Woods Hole Oceanographic Institution, US: National Oceanic and Atmospheric Administration (NOAA); expert comments.

Note: "Tipping elements are critical, large scale components) of the Earth system that are seeing changes with increase in global temperature. If these elements cross certain thresholds, the changes within them became irreversible