Checklist 1. Who will be most vulnerable to climate risks?

|  |  |  |
| --- | --- | --- |
| **Description** | **Is this relevant to my organisation?** | **If yes, which teams / locations / activities does this involve?** |
| Frontline, low paid workers |  |  |
| Vulnerable socioeconomic groups (the elderly, those living with disabilities etc) |  |  |
| Emergency service workers who respond to crises and perilous incidents |  |  |
| Outdoors, offshore and workers at height |  |  |
| Workers who are already exposed to environmental / workplace challenges (such as poor thermal comfort, poor air quality, inadequate PPE) |  |  |
| Those working with hazardous materials / processes |  |  |
| High stress, time-pressured roles (such as health, social care workers or construction workers) where fatigue or poor weather could contribute to safety lapses or accidents |  |  |
| People who work with vulnerable population groups – carers, and teachers for example, whose diligence at protecting their charges could inadvertently put themselves at risk |  |  |
| Those working in poor quality buildings / poorly maintained workplaces which may struggle with maintaining thermal comfort and standing up to storm events |  |  |
| Lone workers |  |  |
| Those who work in or travel to/ through remote areas with poor digital connectivity and patchy mobile phone signal. |  |  |
| Hybrid workers whose precise location may not be known can be missed when it comes to accounting for staff after an incidence of extreme weather. |  |  |
| Workers in rapidly emerging industries (offshore renewables, hydrogen) where safety regulations may need to be updated in response to sector growth |  |  |
| Staff working with people with mental health problems or addictions because of the difficulties that their clients may have in assessing risks and looking after themselves and those around them |  |  |
| Workplaces reliant on long and complicated supply chains, Just in Time Delivery (JITD) or single source suppliers |  |  |
| Workplaces with a poor H&S record indicating that climate risks may be inadequately managed.  |  |  |
| Workers who travel who are vulnerable to extreme weather events directly, but also from fatigue and safety lapses linked to extreme weather events causing delays and extended shifts. |  |  |
| Public facing staff who are at risk of aggression and harassment where extremes of weather result in delays, cancellations, and other service disruption.  |  |  |

Checklist 2. Who may need support to increase their (climate) resilience?

|  |  |  |
| --- | --- | --- |
| **Description** | **Is this relevant to my organisation?** | **If yes, which teams / locations / activities does this involve?** |
| Low paid workers who may not have the resources to buy their own PPE or take other actions to protect themselves |  |  |
| People in insecure employment or others who may be afraid of raising H&S concerns for fear of losing shifts or their job |  |  |
| People who are responsible for many other people  |  |  |
| Workers who are marginalised or battling with other social justice problems and may not have the time, energy, or resources to respond to another challenge |  |  |
| Home or hybrid workers living in rented accommodation who may not be able to make significant improvements to increase their home’s resilience |  |  |
| Workers for whom English isn’t their first language or workers with literacy or numeracy challenges who may need tailored guidance. |  |  |

Checklist 3. Where is likely to be most at risk?

This could be part of an individual building, a link in the supply chain, a whole site or a property portfolio.

|  |  |  |
| --- | --- | --- |
| **Description** | **Is this relevant to my organisation?** | **If yes, which teams / locations / activities does this involve?** |
| Sites or activities that are already experiencing weather related disruption or damages |  |  |
| Sites or activities which rely on a 24/7 electricity and WiFi supply, and / or are in areas which have already proven vulnerable to supply interruption during extreme weather events like storms (which can indicate weakness in local infrastructure) |  |  |
| Basement premises are most susceptible to flooding |  |  |
| Single story premises with no safe access to loft or roof space can also be more vulnerable to flash flooding events, particularly if safe egress from the building is lost.  |  |  |
| Conversions of old buildings into flats / smaller office units, heavily glazed buildings, newbuilds and lightweight industrial and retail buildings are most vulnerable to overheating |  |  |
| Flat roofed buildings can be severely impacted by heavy rain events with pooling water causing leaks, and potentially ceiling collapse  |  |  |
| Flat roofed properties with drainage that is ducted internally are vulnerable to flooding from guttering and downpipe failures / backing up. Look to see if drainpipes are external or ducted via internal conduits  |  |  |
| Top floor premises and attic conversions are most vulnerable to overheating, extremes of cold and wind damage |  |  |
| Sites on the floodplains (or close by) and near to waterbodies can be vulnerable to flooding from these sources |  |  |
| Locations close to the coast, firths and estuaries will be most at risk from sea level rise and storm surges |  |  |
| Anywhere can be at risk from surface water flooding (which happens when cloudbursts overwhelm drainage systems), but some locations are especially vulnerable:* In heavily built-up areas without greenspaces to absorb runoff,
* Close to blocked or poorly maintained watercourses,
* At the bottom of a hill, or
* At the confluence of several streets can be especially at risk because in these instances roads can act as watercourses.
* See the flood maps produced by the Scottish Environment Protection agency (SEPA) <https://www.sepa.org.uk/environment/water/flooding/flood-maps/>
 |  |  |
| Poorly maintained buildings are less able to withstand extreme wind and rainfall and more likely to suffer structural damage (with implications for those inside and in the immediate environs outside). |  |  |
| Buildings of a lightweight construction (for example prefabs, single masonry skin buildings and metal industrial or commercial units) are more susceptible to wind damage and can suffer from uncomfortable internal temperatures in both hot and cold weather conditions.  |  |  |
| Ornate or historic buildings can be vulnerable to freeze thaw erosion and wind damage putting those nearby at risk of falling masonry |  |  |
| Climate hazards do not have to occur nearby to have a serious impact. Extreme weather events occurring hundreds of miles away could have an impact if supply chains, supporting infrastructure or travel is affected |  |  |

Checklist 4. What is business critical / safety critical and must be protected at all costs?

|  |  |  |
| --- | --- | --- |
| **Description** | **Is this relevant to my organisation?** | **If yes, which teams / locations / activities does this involve?** |
| Staff welfare facilities |  |  |
| Telecoms and essential services (gas, water, drainage, electricity) |  |  |
| Servers and other essential IT equipment |  |  |
| Areas occupied by vulnerable groups – schools, nurseries, care homes, hospitals for example |  |  |
| Pharmacies and other stores of perishable, essential and / or expensive materials |  |  |
| Transport routes and services including road, rail, buses, ferries and air travel |  |  |
| Any area or room designated as an emergency refuge or essential for emergency / continuity operations |  |  |
| Hazardous materials |  |  |
| Safe egress routes from sites / buildings including disabled access routes |  |  |

Checklist 5. When to consider climate risks and undertake resilience action

|  |  |  |
| --- | --- | --- |
| **Description** | **Is this relevant to my organisation?** | **If yes, when, and where?** |
| When relocating or refurbishing premises |  |  |
| After an incident or near miss in your organisation, or in a similar organisation (i.e., same sector, a nearby building) has raised awareness of vulnerabilities - note that this does not necessarily need to be a weather-related incident.  |  |  |
| When having to make changes to meet other legal requirements (for example achieving net zero or complying with access standards). Scheduling works together will minimise disruption and allow benefits to be maximised |  |  |
| When in industrial negotiations with employers: * relating to changes to T&C such as shift patterns, contractual terms regarding designated places of work, provision of respite facilities.
* using pay settlement negotiations to push for better PPE provision.

it is important to consider how the climate might change and make sure that what is agreed is future proofed to accommodate the impacts |  |  |
| When updating risk registers, emergency plans, and organisational policies (i.e., remote working policies, solo working policies or work method statements) |  |  |
| When new processes / protocols / ownership / management is being put into place. |  |  |
| New staff inductions are ideal times to raise the issues of climate risks, near miss reporting and resilience and foster a working culture where employees feel empowered to identify and report potential safety concerns |  |  |
| Training new and existing staff is an ideal opportunity to raise their awareness of local implications of climate change, and what they can do to help protect themselves and their colleagues or clients |  |  |
| When ordering plant, vehicles, PPE, telecoms or when divesting, is a good point in time to consider – will these decisions increase risk in the future? |  |  |

**Repeating / reviewing a risk assessment**

Adaptation is an ongoing process. Adaptation is going to be something that Scotland’s workplaces will learn by doing and iterative learning will be needed after extreme weather events and near misses. Risk assessments will need to be regularly repeated to reflect workplace changes and as climate change impacts progress.

After every significant near miss or weather incident, it is important to create a no-blame space where stakeholders can consider important questions honestly. Using a standardised checklist to normalise risk assessment after incidents or near misses, and where the identity of contributors is protected, can be one way to do this:

Checklist 6. For after a near miss / climate related impact

|  |  |
| --- | --- |
| **Incident location:** |  |
| **Incident date:** |  |
| **Weather conditions:**  |  |
| **Question** | **Answer** |
| What happened? |  |
| Where is organisational resilience or vulnerability dependent on the actions of, or systems controlled by external bodies? |  |
| What did the event reveal about cascading risks (i.e., an impact in one area which causes serious knock-on impacts elsewhere or to other systems)? |  |
| What were the financial consequences of this event / impact? Were these recorded / attributed? Was insurance available?  |  |
| Is there an issue with critical activities being sited in a vulnerable location (e.g., servers in a basement)? |  |
| Are there other factors which might compound risks (e.g., buildings without openable windows)? |  |
| Where are there pinch points or bottlenecks in essential systems, stock storage and supply chains? |  |
| Where there any mitigating or extenuating circumstances that made the incident better or worse than it otherwise might have been? |  |
| What could have happened (in a reasonable worst case)? |  |
| What needs to change to protect workers and other people in the future? |  |

Checklist 8: General questions for a climate change site walkaround

|  |  |
| --- | --- |
|  | **Question** |
| 1 | Have you noticed any changes to the frequency and / or severity of extreme weather events or weather-related disruption? |
| 2 | What do you do now to cope with rainfall / flooding / extreme heat / extreme cold / snow and ice / high winds / storms / droughts? |
| 3 | Will existing risk management / health and safety protections be enough to cope with the changes projected? If not, how could resilience be reinforced? |
| 4 | What happens if staff can’t get to site? |
| 5 | What happens if staff can’t travel safely? |
| 6 | How long could the site function without delivery of key supplies? |
| 7 | Who are your key suppliers upstream and downstream (think about essential supplies and services), have they ever been affected by weather related disruption? |
| 8 | Thinking about clients and those who use your services, how might they be affected by climate impacts? What would that mean for demand and your ability to meet their needs? |
| 9 | Are there any weather-related thresholds that mean that activities are suspended i.e., wind speeds and working at height? |
| 10 | What back-up systems do you have in place to cope with interruption to essential infrastructure i.e., energy, fuel, catering, telecoms, internet, and water supplies? |
| 11 | Do you have emergency / business continuity / evacuation plans in place for serious incidents? If so, how would these be used in an extreme weather event? |
| 12 | How regularly are inspections carried out? |
| 13 | Are any staff first-aid trained? Where are first aid supplies stored? |
| 14 | Is weather data used for planning activities (i.e., heating, gritting)? If so, where do weather warnings come from and how are they conveyed to staff? |
| 15 | Are staff broadly happy with the facilities and buildings or are there known issues with thermal comfort and other factors which could be exacerbated by weather? |
| 16 | Are there any weather conditions which would warrant buildings being closed and work suspended? |
| 17 | How has the workplace coped with extremes in the past (think about recent events which might trigger memories i.e., Beast from the East, Storm Angus etc, heatwave of 2018)? |
| 18 | Has the site previously experienced any incidents resulting in injuries, disruption, or damage because of extreme weather, flooding or fire? |

While the suggestions above are general questions that you should ask local staff on a walkaround, the checklist below provides ideas for more specific questions and things to look out for to understand more about how a workplace could be affected by specific climate hazards:

Checklist 9. Questions by climate risk for a site identification walk around

|  |  |  |
| --- | --- | --- |
| **Climate hazard** | **Questions to ask** | **What to look out for** |
| Rainfall / flooding | * Where does water gather onsite?
* Has any part of the site flooded before?
* What is kept in basements?
* How do the drains cope in heavy rains?
* Where is the nearest water course / water body (this could include the shore)?
* Is there evidence of damp or water penetration within the building today?
* Are staff provided with protective raingear / wet weather clothing?
* Does heavy rain or flooding interrupt activities / or affect workload?
* Is there an emergency plan for if flooding occurred onsite?
* What would people do if flooding happened?
* Are culverts, guttering and drains regularly maintained and cleared of obstructions?
 | * Puddles
* Blocked drains and culverts
* Broken drainpipes and guttering
* Plants growing in guttering
* Cracks to mortar or damaged render
* Green water stains on buildings
* Flat roofs
* Cracked windows, swollen woodwork
* Damp patches and mould
* A site that is on low ground compared to its surroundings
* Sites at the bottom of a hill or a confluence of streets
* Heavily built-up areas without greenspace to absorb run-off
* Downpipes that are ducted internally
* Essential materials, facilities, or supporting infrastructure located in low lying parts of the site
 |
| Extreme heat and extreme cold | * Which rooms overheat today?
* Which rooms are hard to heat today?
* What resilience measures are in place today to keep the workplace at a comfortable temperature?
* Can staff adjust temperature settings in the building?
* Do the windows open?
* If staff wear uniforms or PPE how does this fare in hot or cold weather? Are there different options?
* Do staff ignore PPE requirements in extreme heat?
* Are any activities already uncomfortable in hot or cold weather?
* Are any materials or fuels used which struggle to perform in high or low temperature conditions or which must be stored at specific temperatures?
* Do staff breaks coincide with the hottest / coldest point of the day?
* Are there any temperatures above or below which work is suspended?
* Are staff encouraged to wear layers?
* How do clients and other stakeholders fare in temperature extremes?
* Do temperatures affect the workload?
* What facilities are provided to help staff cope in temperature extremes?
 | * South facing buildings
* Lots of glazing
* Lightweight and poorly insulated metal retail or light industrial buildings
* Attic premises and workplaces in converted buildings
* Newbuild premises
* No shutters or blinds
* Staff using their own electric fans - can indicate overheating and fan heaters can indicate underheating
* Buildings with large cargo doors / vehicular access are hard to keep at a comfortable ambient temperature
* Old heating systems
* Water fountains
* Vending machines
* Ability to make hot drinks and hot food
* Safe storage for food in hot weather
* Cool rooms
* Drying rooms
 |
| Snow and ice | * Who clears snow and grits pavements?
* How are slips, trips and falls reported?
* Where do most slips, trips and falls occur on this site?
* What systems are in place for gritting and snow clearance?
* Where is cleared snow piled?
* What about rapid thaw?
* Could snow piles thawing result in flood impacts on your building or neighbouring buildings?
* What about neighbouring properties, could a thaw from their site flood you?
* How do we keep car parks and buildings open?
* What happens if staff can’t get to site?
 | * Sites which don’t have space for storing cleared snow
* Sites where pedestrian access is steep or via external stairs
* Polished stone flags and other outdoor surfaces which become very slippery when wet or icy
* Site topography
* Tall infrastructure which could result in ice throw
 |
| High winds / storms | * What is the prevailing wind direction? How exposed is the site to prevailing winds or other directions?
* Is the site reliant on microwave links for internet / other data?
* Are there stockpiles of loose materials which could cause dust nuisance in high winds?
* Are rooflines, chimneys, guttering and rainwater goods regularly maintained?
* Are rooflines, chimneys, and other features on neighbouring properties in good condition?
* How do storms impact workloads?
* What systems are in place to keep staff safe in very high winds?
* Are there any activities which must be suspended in high winds / stormy conditions?
* Is the workplace in an exposed location or close to trees or structures which could be vulnerable to high winds?
 | * Chimney pots, aerials, satellite dishes, loose slates, and tiles
* Items stored on roofs
* Items stored outside (i.e., under tarpaulins)
* Tall infrastructure including overhead cables
* Scaffolding and cranes
* COVID awnings / gazebos
* Advertising hoardings
* Cladding
* Large expanses of glazing
* Look at neighbouring properties too because objects can be blown some distance
* Trees within topple distance of buildings, carparks, and access
 |
| Drought | * How would activities cope with a drop in water pressure?
* Are any activities water intensive?
* Have water supply or water quality issues been a problem in the past?
* Is the site reliant on boreholes for its water supply?
* Is the site reliant on a private water supply?
* Do grounds and landscaping require water intensive maintenance?
 | * Landscaping / gardens
* Drought resistant planting
* Water butts
* Rainwater recycling
* Greywater recycling
* Water efficient / water conservation equipment
* Water storage
 |
| Subsidence and landslides | * Is the site close to mine workings?
* Is there evidence of ground movement, landslips, or mud slides nearby?
* Is the workplace built on clay soil or reclaimed land?
* Do buildings have cracks?
* Is the workplace near slopes or embankments?
* Is slope stability monitored or assessed in any way?
 | * Distance from workplace to slopes and embankments
* Proximity of slopes and embankments to key access routes
* Evidence of subsidence
* Evidence of erosion and ground movement on slopes
 |

How to score climate change risks

Detailed guidance on recording and scoring the results of climate change risk assessments can be found at:

<https://www.adaptationscotland.org.uk/how-adapt/tools-and-resources/climate-change-risk-assessment-guidance-tools>

There are also examples of different risk assessment templates and screening tools suitable for a range of different project types, workplace settings and scales of operation which you can use.

Example risk assessment output

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Risks assessed** | **Consequences** | **Likelihood score** | **Impact score** | **How is this risk managed today?**  | **Further adaptation action needed** |
| Primary 1 classroom | Overheating during summer and early autumn term | Pupils’ concentration suffers – especially in the afternoons, children can be disruptive Negative health outcomes have arisen.  | 5 | 2 | Staff use their own electric fans and prop open fire doors to help keep youngsters cool | Insulated blinds, deciduous shrubs / trees could be planted to the south of the large windows to provide seasonal shading, when replacing windows fit triple glazed units which can be opened and secured in an open position |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Suggestions of potential actions which can be taken to reduce the risk or vulnerability of a workplace to specific climate hazards are given in the following tables:

**Table 3 Adaptation actions for different climate hazards in indoor workplaces**

|  |
| --- |
| **Workplace setting - indoor** |
| **Rainfall / flooding** | **Extreme heat and extreme cold** | **Snow and ice** | **High winds / storms** | **Drought** | **Subsidence and landslides** |
| Install PLP (property level protection) i.e., Flood doors, air brick covers, non-return valvesStore sandbagsSign up for flood alertsCreate a flood plan and emergency kit (see Checklist 11 for help on this)Create a flood evacuation plan with a designated refuge on high groundMove critical assets, activities, and vulnerable people away from lower elevations before problems ariseCapture weather data in accident & downtime reportingWhen looking at new sites / premises check out their vulnerability to flooding: <https://www.sepa.org.uk/environment/water/flooding/flood-maps/>  | Windows that openOther means of natural ventilationBlinds to reduce glareGreen shading to reduce overheating and greenspaces for coolingEffective low carbon heating systemsAgreed minimum or maximum temperature thresholds when it is not safe for some activities to continuePassive solar design to plan out activities (i.e., north facing rooms for ‘hot’ activities)Chilled storage for food, welfare facilities where workers can make hot or cold refreshmentsWorkers able to control workplace temperatures‘Open door’ policies in customer service centres and retail environments could expose staff to high levels of air pollution in hot weather, if an air quality warning is in place such policies may need to be temporarily suspendedLow level curb side planting can reduce the build-up of harmful air pollution in buildings nearby and will also benefit pedestrians (especially children) | The right to work from homeCommunity resilience hubs / touch down spaces for workers to minimise commuting in extreme conditionsDigital alternatives for working and learningRenewable energy generation and battery storage to back up grid powerBack up data links Regular inspections of adjacent trees and rooflines. When planting close to buildings avoid shallow rooted trees such as firs and pines as these are most susceptible to toppling in high winds.Undertaking regular maintenance of outside spaces including tree surgery if neededInvestment in snow clearing equipment and peripherals and staff trainingWeather warning system to convey climate risks to staff to advise them if they need to leave early to avoid disruption or if the site needs to close earlySet up time codes to record disruption from extreme weather events | Rainwater recyclingGreywater recyclingWater efficient appliancesDrought resistant planting | GIS and LIDAR monitoring of slopesRegular inspections of buildings for cracks and evidence of subsidenceRegular inspections of slopes and earthworks |

**Table 4 Adaptation actions for different climate hazards in outdoor workplaces**

|  |
| --- |
| **Workplace setting – outdoor** |
| **Rainfall / flooding** | **Extreme heat and extreme cold** | **Snow and ice** | **High winds / storms** | **Drought** | **Subsidence and landslides** |
| Systems to check in with outdoor workers to assess if they are safe during or in the aftermath of, extreme eventsWorkers encouraged to sign up for flood alerts and weather warningsAppropriate PPE (including footwear) to protect workers from wet conditionsProvide emergency response kit including communications equipment (phone or radio) | Alternative PPE / Uniform for hot and cold conditions Health and safety guidance on keeping safe in hot and cold weatherFlexible working to avoid the most uncomfortable temperaturesProvision of welfare facilities including hot and cold drinks, sunscreen, cool rooms, shelter, and shade Agreed minimum or maximum temperature thresholds for activities to be carried out safely, and suspended if exceededSome seasonal activities may need to be rescheduled to accommodate changes to the climate. For example, hedge trimming and tree surgery may need to occur earlier in the spring to avoid bird nesting, as many species are breeding earlier in the year in response to warming.  | Prohibit solo working in extreme conditionsWeather warning system to convey climate risks to staff working remotelySet up time codes to record disruption from extreme weather events and to allow staff time to prepare their homes if neededEmergency plans including options to safely extract workersFeedback system for outdoor workers to report risksIncreased use of weather-related contract terms and provision of downtime within schedules Risk assessment of outdoor activities including clear guidance on when activities need to be suspendedAssessment of outdoor workplaces to assess risks of tree throw, falling masonry and falling ice.Hedge trimming and tree surgery / inspections may need to become more frequent to reduce storm damage hazards.  | Provide refillable water bottlesAllow more time for watering / landscaping activities during periods of low pressureWater conservation measures | Include risks of landslides and ground movement in risk assessments and work statementsToolbox talks to raise awareness of risks from landslides and warning signs  |

**Table 5 Adaptation actions for different climate hazards in offshore workplaces**

|  |
| --- |
| **Workplace setting – offshore** |
| **Rainfall / flooding** | **Extreme heat and extreme cold** | **Snow and ice** | **High winds / storms** |
| Systems for water quality information to be conveyed to inshore divers after extreme rainAgreed thresholds for suspending diving activities after extreme rain or when water courses are in spateCapture weather data in accident & downtime reporting | Flexible working to avoid the most uncomfortable temperaturesProvision of refuge facilities in offshore renewable installations Provision of welfare facilities on offshore renewable installationsFinancial compensation for the rest days lost by workers unable to get back to shore at the end of a rotationAlternative PPE / Uniform for hot and cold conditions  | Prohibit solo working in extreme conditionsOver the side activities may be suspended more frequently, useful to provide timecodes for workers to register downtimeEmergency plans including options to safely extract workers for all offshore workplacesFeedback system for offshore workers to report risksNo blame site culture needed in emerging industries to allow workers to report near misses and areas where H&S protections are insufficientBuild more downtime into schedulesStandardise training and H&S standards across the offshore sector to maximise worker protectionInclude emergency refuge facilities in all offshore installations (including offshore renewables)Use of vessels with directional positioning systems rather than boosters |

**Table 6 Adaptation actions for different climate hazards in home and hybrid work settings**

|  |
| --- |
| **Workplace setting – home and hybrid working** |
| **Rainfall / flooding** | **Extreme heat and extreme cold** | **Snow and ice** | **High winds / storms** | **Drought** | **Subsidence and landslides** |
| Systems to check in with home workers and hybrid workers to assess if they are safe during or in the aftermath of, extreme eventsWorkers encouraged to sign up for flood alerts and weather warningsPromote the Scottish Flood Forum to learn about flood protection measures workers can take at home | ‘Winter fuel payment’ for home workers Advice, grants and loans for energy efficiency and home resilience measures to make homes used as workplaces better able to respond to climate changeLegal advice and support for workers who rent to help access support to improve the resilience and energy efficiency of their homesHealth and safety guidance on keeping safe in hot and cold weatherFlexible working to avoid the most uncomfortable temperaturesHome workplace risk assessments | Prohibit solo working in extreme conditionsCommunity resilience hubs / touch down spaces for workers to provide safe refuges in extreme conditionsBack up digital systems / the cloud when networks go downWeather warning system to convey climate risks to staff working remotelySet up time codes to record disruption from extreme weather events and to allow staff time to prepare their homes if neededEmergency plans including options to safely extract workersFeedback system for remote workers to report risksCapture weather data in accident & downtime reporting | Publicising or offering grants or loans to home workers for water conservation measures such as water efficient appliances and aerated taps | Systems to check in with remote workers to assess if they are safe during or in the aftermath of extreme eventsGuidance for homeowners and renters on how to spot and remedy subsidence  |

**Table 7 Adaptation actions for different climate hazards in travelling work settings**

|  |
| --- |
| **Workplace setting – travelling for work** |
| **Rainfall / flooding** | **Extreme heat and extreme cold** | **Snow and ice** | **High winds / storms** | **Drought** | **Subsidence and landslides** |
| Appropriate PPE (including footwear) to protect workers from wet conditionsProvide emergency travel kit including communications equipment (phone or radio)Thresholds for suspending travelWorkers should sign up for flood alerts and weather warningsAdvanced driver training | Agreed minimum or maximum temperature thresholds when it is not safe for some activities to continueChanging shift patterns and travel schedules to avoid the worst temperaturesChilled storage for food, welfare facilities where travelling workers can make hot or cold refreshmentsAllowance for refreshments in extreme conditions to avoid hypothermia or heatstrokeLonger rest breaksAlternative PPE / Uniform for hot and cold conditions Health and safety guidance on keeping safe in hot and cold weather | Prohibit solo working in extreme conditionsCommunity resilience hubs / touch down spaces for workers to minimise commuting in extreme conditionsDigital alternatives to travelWeather warning system to convey climate risks to staff who are travellingSet up time codes to record disruption from extreme weather eventsBuild more downtime into travel schedulesCapture weather data in accident & downtime reportingAlternative travel plans including options to safely extract workersThreshold triggers for suspending travel | Provide refillable water bottles | Systems to check in with traveling staff and remote workers to assess if they are safe during or in the aftermath of extreme events |

Checklist 11. Creating a weather emergency and flooding plan for your workplace

The following checklist has been designed for responding to flood risk, but it could be useful for a variety of extreme weather events such as windstorms and extreme wintry conditions. It is important to revisit this checklist regularly to make sure the information remains up to date.

|  |  |
| --- | --- |
| **Actions you can take today** | Tick once complete |
| **Are you signed up to receive floodline warnings?**If not you can sign up by calling Floodline on 0345 988 1188 or visiting their website <https://www.floodlinescotland.org.uk/> It's possible to register up to five contact numbers and multiple address to one Floodline account, keeping important people in your workplace informed and ready to take action. |  |
| **Check if your workplace is at risk**Flooding can affect more than just your workplace; it may impact on colleagues and deliveries that need to travel through areas of flooding to reach you. Use [SEPA's Flood Maps](http://map.sepa.org.uk/floodmap/map.htm) to find out if your workplace is in an area at risk of flooding caused by rivers, the sea or surface water.**Create a flood / weather emergency plan which should include:**1. A staff contact list, including:
* those who should be notified of a flood,
* those working offsite or working from home who should be called to check that they are safe, and
* a list of staff with mobility challenges, who may require assistance in the event of an evacuation.
 |  |
| 1. Details of essential services, including:
* description or map showing key locations and service shut off points,
* account number / policy number and contact details for utility and insurance providers,
* the location of key files, equipment, servers etc which should be moved to a higher floor in the event of a flood warning. Better still consider whether these items can be located on an upper floor, higher shelf etc permanently to reduce the impact of a flood.
* a copy of your flood insurance policy number and other important documents,
* These documents should be stored online and printed out and stored in a physical emergency kit (alongside torches, bottled water, a first aid kit, local maps, phone chargers and PPE) which can be grabbed in a hurry.
 |  |
| 1. A checklist of procedures for staff to carry out in the event of a flood (should this be possible in a way which does not compromise their safety), including:
* Instructions for how to turn off services (electricity, water, security alarm, gas etc)
* Details of any available materials to help protect the workplace such as sandbags, removable guards for doors and windows, make sure to include instructions on how to use these and where they are stored,
* Which (if any) business critical files and equipment need to be moved to a higher floor / safe location, (if safe to do so),
* Where the emergency kit is stored and who is tasked with this kit in the event of a flood,
* Evacuation procedure and muster point for staff (this may be a similar process to that used for fire drills, but the muster point will need to be on high ground),
* If any workplace vehicles should be moved this should be noted in the plan, with details of who should move them and where to park them (look for a parking location sited on higher ground),
* Your local authority may set up a flood hub to organise the recovery after a flood. This is the first place to go for support and flood safety advice. You can also call Floodline, 24 hours a day, to get information and advice after a flood,
* Don’t return to your premises until emergency services say it is safe to do so. Flood water is dangerous. It is fast flowing and can be full of debris and mud, and sometimes raw sewage. Floodwaters should be avoided but if anyone must go near the water before it has fully receded, they should wear appropriate PPE such as waterproof boots, waterproof clothing, and rubber gloves.
* Before you clear up after a flood - take photos of all the damage. Don’t move or throw away damaged items without asking your insurer first. It may take a few days before loss adjusters arrive to assess the damage to your property and you can start making an insurance claim.
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