



Flooding Communications Toolkit

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This pack is prepared for internal use for communication colleagues across government, partner organisations and voluntary sectors.

1. INTRODUCTION

Floods can happen almost anywhere and at anytime.

Public Health England has a part to play in flooding response, notably in assisting affected communities and helping spread public health advice and key messages.

Because flooding can affect anywhere and because every instance is different it is difficult to formulate off-the-shelf messages and press releases.

As such when floods occur it is vital that public health advice is disseminated specifically to mitigate the potential for risks to health. Public Health England, local authorities and NHS trusts all have parts to play in minimising those risks.

This toolkit provides pre-prepared material for you to share with your social media teams, as well as some press statements.

2. ABOUT THE TOOLKIT

This toolkit is intended to support any communications activity you choose to undertake during the course of a flood in relation to public health advice. During an incident it's possible Public Health England will issue its own advice and guidance through social media and press releases, drafts attached, and when appropriate by attending multi-agency press conferences etc.

It is not intended to replace any activity you may have in mind but to be used or adapted as you see fit.

3. WHO DOES WHAT?

Met Office

The Met Office is the UK's weather forecaster

Environment Agency

The EA is responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.

DEFRA

In a flood DCLG will be the lead government department and have a key role in co-ordination of all responses to the incident.

Local authorities

The lead in all recovery aspects of a flood. Alongside the police/emergency services they may also be the lead during the response phase.

Where materials are earmarked for public use local authorities may wish to consider if the material is appropriate to be translated depending on their understanding of local language requirements and the make-up of local communities.

Public Health England

PHE exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. During flooding, PHE shares public health advice with those who are affected and supports other agencies in the response.

Food Standards Agency

Offers health advice in relation to food affected by floodwater.

4. Key Public Health Messages

Long term before flooding happens;

- 1) Find out your own risk of flooding before a flood happens. Floods can happen anywhere and it is important to remember you don't need to live by water to be at risk of flooding. Visit <https://flood-warning-information.service.gov.uk/long-term-flood-risk/> or call Floodline on 0345 988 1188.
- 2) If you are in an at-risk area sign up for flood warning messages from the Environment Agency's Floodline: 0345 988 1188
- 3) Make a personal Flood Plan for what you will do if there is a flood. It could be used if you're required to leave the house quickly for other risks.
- 4) Think what you would take if you needed to evacuate and consider where everything could be kept.

In a flood;

- 1) Avoid walking or driving in or near floodwater, and don't let children play in floodwater.
- 2) Move your family, pets and floodkit to a high place with means of escape.
- 3) Wash hands as often as you can.

After a flood

- 1) If using portable indoor heating appliances to dry out indoor spaces ensure good ventilation. Do not use fuel-powered appliances indoors as the exhaust gases contain carbon monoxide which can kill. Sometimes people use products that give off CO because power may be off, such as BBQs, gas heaters etc – remember there is still a risk.
- 2) If you must go into flood water, take care as there may be sharp objects you cannot see.
- 3) Flooding is stressful; contact family and friends for support, healthcare professionals are aware mental health can suffer after flooding, so contact your GP or the National Flood Forum, experts in helping people in these situations, if you feel you need support or assistance.
- 4) If you notice a change in drinking water quality, such as a change in the colour, taste or smell of your tap water, phone your water company.

5. PRESS RELEASES

The following section contains press releases which may be issued by Public Health England during flooding incidents. Regional communications teams will be able to provide updates/more information on PHE planned communications activities.

- 1) An initial press release to explain flooding situation and immediate health advice**
- 2) A second release further detail on the situation repeating health advice**
- 3) A press release/news story that could be issued as floods recede and to minimise health risks during clean up operations**
- 4) A press release flagging the Carbon Monoxide dangers involved in drying properties that have been flooded**
- 5) A press release flagging there are also threats to mental health following a flood**

1) Flood alerts and warnings remain in place in XX

In NAME PLACES the risk of flooding from XX and XX (INSERT GROUNDWATER, RIVERS, SURFACE WATER OR THE SEA remains high.

Flood warnings and flood alerts remain in place across XX, especially in XX where the risk of flooding from XX and XX remains high. Elsewhere, clean-up work is underway.

Public Health England (PHE) is providing information to local partners in areas affected by flooding, on the potential health impacts before, during and after a flood as well as advice and support on the response and recovery.

XX from the Extreme Events team at Public Health England, said:

“As the risk from flooding remains in some parts of the country, we advise the public to follow the warnings and alerts from the Environment Agency and take action if flooding has been forecast in your area.

“If you have been flooded, remember that accidents happen in fast flowing floodwater so avoid walking or driving in or near floodwater. Take care if you must go into flood water as there could be hidden dangers like sharp objects, raised manhole covers and pollution. Also wash your hands regularly and do not eat food that has touched flood water.

“When cleaning up after a flood, ensure good ventilation if using portable indoor appliances to dry out rooms. The exhaust fumes from such generators can contain carbon monoxide which can kill in a confined space such as a home. Never use outdoor generators indoors even in the event of a power cut. Also, remember not to turn on gas or electrics until they have been checked by a qualified technician, and check with your local water company if you notice a change in your water.

“If your home has been damaged by floodwater, consider staying with friends or family, or ask your local authority to help you find alternative accommodation. Only consider returning to your home when essential repairs and cleaning have been completed.

“Feeling tired, anxious and having difficulty sleeping is normal after you or your community have been flooded. If you can, consider those around you. Neighbours, family and friends may also have been badly affected and need help. If you're able to, think what you can do to assist them and ensure they get the support they need.

Contact friends and family for support as it can take a long time for life to return to normal, and if necessary call NHS 111 or visit your GP for medical advice.”

Notes to Editors

For more information about [flooding](#) visit PHE's dedicated webpages.

More advice on how to clean up your home safely is available in a [leaflet](#) produced by PHE.

Get answers to [frequently asked health questions about flooding](#)

More advice what to do before, during and after a flood is available in a [leaflet](#) produced by PHE in collaboration with the Environment Agency.

Read [PHE's advice](#) on the psychological impacts of flooding.

2) Severe flood warnings in XX

Areas XX are at risk of flooding this week, due to (rising river levels IF APPROPRIATE) and risk of flooding from groundwater (IF APPROPRIATE).

Flood warnings and flood alerts remain in place across XX, with XX at high risk of flooding. Elsewhere, extensive clean-up work is underway. Flooding is expected to affect people's properties, communities, transport, infrastructure and day-to-day, such as school and work lives.

Public Health England (PHE) is providing information to local partners in areas affected by flooding, on the potential health impacts before, during and after a flood as well as advice and support on the response and recovery.

INSERT QUOTE FROM THE MET OFFICE

If a flood has been forecast pack a "flood kit" in case you need to leave your home and follow the advice of the emergency services.

Remember:

- phone numbers, insurance documents, bank cards and money
- medicines and medical devices, hearing aid batteries, glasses and contact lenses
- clothing, toothbrush and personal items. If you have a baby, pack nappies, clothing and baby food

XX, of Extreme Events at PHE, said:

"If flooding has been forecast where you live, listen to local radio or check the Environment Agency and Met Office websites for updates and news. Take action if flooding has been forecast in your area. Phone Floodline on 0345 988 1188 or 0845 988 1188 or your Local Authority if you have questions.

"If you have been flooded, or live near a river in flood remember that accidents happen in fast flowing floodwater so avoid walking or driving in or anywhere near floodwater. In coastal areas and on paths near the sea keep well away from the edge as large waves and strong winds can easily sweep you off your feet. Water sports in swollen or fast flowing flooded rivers or in stormy sea conditions can be extremely dangerous and should be avoided.

"if your home has been damaged by floodwater, consider staying with friends or family, or ask your local authority to help you find alternative accommodation. Only consider returning to your home when essential repairs and cleaning have been completed. Do not let children play in floodwater and take care if you or your family must go into flood water as there could be hidden dangers like sharp objects, raised manhole covers and pollution. Wash your hands regularly. If water is not available use hand sanitising gel or wet wipes.

"It's important when cleaning up after a flood to never use outdoor petrol or diesel generators indoors even in the event of a power cut. The exhaust fumes contain carbon monoxide which can kill in a confined space such as a home. Carbon monoxide poisoning can be fatal. Also, after being flooded, remember not to turn on gas or electrics until they have been checked by a qualified technician. Avoid eating food that has touched flood water or fresh food that has been in the fridge. Clean all work surfaces before and after preparing food.

"If you can, consider those around you. Neighbours, family and friends may also have been badly affected and need help. If you're able think what you can do to assist them and ensure they get the support they need.

“People may feel tired, anxious or have difficulty sleeping, if they are affected by flooding. Contact friends and family for support as it can take a long time for life to return to normal, and if necessary call NHS 111 or visit your GP for mental health support or medical advice.”

Notes to Editors

For more information about [flooding](#) visit PHE’s dedicated webpages.

More advice on how to clean up your home safely is available in a [leaflet](#) produced by PHE.

Get answers to [frequently asked health questions about flooding](#)

More advice what to do before, during and after a flood is available in a [leaflet](#) produced by PHE in collaboration with the Environment Agency.

Read [PHE’s advice](#) on the psychological impacts of flooding.

3) Cleaning up safely following flooding

Public Health England (PHE) has produced guidance for the public on how to clean up their homes safely if they have been flooded.

The [guidance](#) offers key advice for cleaning up after the floods, including:

- wear rubber boots, waterproof gloves and an apron for cleaning
- wash your hands thoroughly after each clean-up session and keep cuts or sores clean by using waterproof plasters to prevent infection transmission
- do not turn on gas or electrics if they may have been exposed to floodwater, to protect against electric shock, get them checked by qualified technicians

When you are drying out your property:

- ensure good ventilation
- never use petrol or diesel generators indoors, as their fumes contain carbon monoxide
- heating, dehumidifiers and good ventilation can help dry out your home

XX of the Extreme Events team at PHE said:

“Research has shown that the infection risk following flooding is low and health risks associated are likely to be minimal. However, the public can reduce risks to themselves and their families by following public health advice and taking sensible precautions including good hand and food hygiene.

“One of the key things to avoid, is using petrol or diesel generators to dry out your home as the exhaust fumes contain carbon monoxide which can kill..

“If you can, consider those around you. Neighbours, family and friends may also have been badly affected and need help. If you’re able to, why not think what you can do to assist them? It’s important they get the support they need, including if their home is damaged, from their insurer.”

Notes to Editors

For more information about [flooding](#) visit PHE’s dedicated webpages.

More advice on how to clean up your home safely is available in a [leaflet](#) produced by PHE.

Get answers to [frequently asked health questions about flooding](#)

More advice what to do before, during and after a flood is available in a [leaflet](#) produced by PHE in collaboration with the Environment Agency.

Read [PHE’s advice](#) on the psychological impacts of flooding.

4) Flood clean-up advice issued by PHE

Public Health England is advising residents affected by flooding in XX to follow simple guidelines to ensure that they remain safe.

Carbon monoxide poisoning is one of the most significant risks to health after a flood, and PHE warns to never use petrol or diesel generators indoors when pumping out water or drying homes because of the risk of carbon monoxide poisoning.

XX of the XX said: “Many of these generators are not designed to be used indoors and can quickly fill a room with deadly carbon monoxide (CO) gas, which is difficult to detect because you can’t see, smell or taste it.

“People should not use petrol or diesel generators, or other similar fuel-driven equipment, indoors because the CO in exhaust gases can quickly build up to levels that are deadly.

“At high levels, CO poisoning can cause sudden collapse, loss of consciousness and death. Other symptoms include headaches, drowsiness, dizziness, chest pains, nausea and vomiting. If a person is suffering any symptoms, they should immediately go outside and call NHS 111 for advice.

“If you can, consider those around you. Neighbours, family and friends may also have been badly affected and need help. If you’re able think what you can do to assist them and ensure they get the support they need, including if their home is damaged, from their insurer.”

This same caution applies to using any other fossil fuel and wood burning appliances. Have this equipment checked by an appropriately-registered engineer before turning it on. When your central heating source is considered safe, keep the thermostat between 20-22°C for steady drying. People should also never use a barbeque inside, whether to cook food or heat a home because of the risk of CO poisoning.

If a person’s home has been damaged by floodwater, they should only consider returning when essential repairs and cleaning have been completed. They should consider staying with friends or family, or asking the local authority to help find alternative accommodation.

In general, PHE urges people to follow all advice from emergency services and not to take unnecessary risks.

Notes to Editors

Advice on cleaning up homes and businesses includes:

- Where possible, residents should wear rubber boots, waterproof gloves and an apron to clean up
- Residents should ensure that they wash their hands regularly and do not eat food that may have been touched by floodwater

- If cleaning causes a lot of water to splash from scrubbing, hosing or pressure-washing, wear a standard face mask, such as those sold by DIY stores. Goggles offer added protection and they can be reused after thorough washing
- Remember to wash your hands thoroughly after each clean-up session. Keep open cuts or sores clean and use waterproof plasters to prevent them being exposed to floodwater
- Take care with electrics and gas: Do not turn on gas or electrics if they may have got wet. Only turn them on when they have been checked by a qualified technician
- Wash clothes used for cleaning on a separate cycle from your other clothes
- Clean all hard surfaces (e.g. walls, floors) with hot water and detergent
- Clean and disinfect work surfaces, plates, pans, cutlery, chopping boards etc. before using them with food. If you have a working dishwasher, this is a more efficient way to clean and sanitise smaller items. Discard wooden chopping boards and wooden spoons if contaminated by floodwater
- Wash soft items (e.g., clothing, bedding and children's toys) on a 60°C cycle with detergent. If you suspect problems with your drainage system, it is recommended that a launderette be used for washing large quantities of clothes and linens until your waste-water system has been checked
- If you have gas or oil central heating and it has been checked by an engineer, turn it on. Keep the thermostat between 20-22°C for steady drying
- If you have air bricks to any under floor spaces, ensure that these are unblocked to give cross ventilation to these areas. As floorboards and walls continue to dry out, any loose material and dust resulting from this should be vacuumed up on a regular basis
- When you can, remove dirty water and silt from the property including the space under the ground floor if you have wooden floors. This space may need pumping out
- Mould should disappear as your home dries out but, if it persists, contact a specialist cleaner
- Place rubbish in hard bins or in rubbish bags
- Dispose of dead rodents and pests in a plastic bag, wearing rubber gloves
- Contact your insurer, follow its advice and take photographs before disposing of items (to help with any claim)

For more information about [flooding](#) visit PHE's dedicated webpages.

More advice on how to clean up your home safely is available in a [leaflet](#) produced by PHE.

Get answers to [frequently asked health questions about flooding](#)

More advice what to do before, during and after a flood is available in a [leaflet](#) produced by PHE in collaboration with the Environment Agency.

Read [PHE's advice](#) on the psychological impacts of flooding.

5) Residents impacted by floods can be susceptible to mental health issues

Public Health England is advising residents affected by flooding in XX to think about their mental health and wellbeing as they work to recover from the floods.

XX from XX said: “We want people to focus on both their physical and mental health as they work to restore their properties and their communities.

“It’s normal to feel upset, anxious, tired and have difficulty sleeping when our lives are significantly disrupted through events like flooding. For most people, feeling temporarily distressed does not interfere with their abilities to cope with the process of recovery.

“Our mental health can be the last thing we think about during disasters when there are urgent matters that need attention, however a small minority of people are at risk of going on to develop mental health problems if their feelings aren’t addressed.

“It’s more important than ever for people to continue to take care of their basic health needs, like eating right, trying to get enough sleep and avoiding drugs and alcohol. These will help people recover their mental health more quickly and successfully.”

“People should ask themselves how they are feeling and reach out if they need help. If they are feeling stressed and overwhelmed by their situation, they should talk to friends, family, neighbours or a community agency. And, if these feelings persist, contact their GP or NHS 111 for advice.

“It’s also vital to talk to children to see how they are coping. They are experiencing the same emotions, but are probably more confused by the situation. Talk to them about what is happening and reassure them that they are safe.”

Notes to Editors

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More advice on how to clean up your home safely is available in a [leaflet](#) produced by PHE.

Get answers to [frequently asked health questions about flooding](#)

More advice what to do before, during and after a flood is available in a [leaflet](#) produced by PHE in collaboration with the Environment Agency.

Read [PHE’s advice](#) on the psychological impacts of flooding.

Flooding Tweets

During floods the Met Office and EA will generate appropriate hashtags for use on Twitter. So that PHE can capitalize on their activity and link closely to their outputs warnings we should use the same hashtags wherever possible. Also, when considering any comms activity around flooding you may find the National Flood Emergency Framework useful,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388997/pb14238-nfef-201412.pdf it contains guides on social media as well.

Before

Flood alerts have been sounded – keep up to date with weather forecasts @MetOffice and advice from the @EnvAgency

Take regular medicines? Keep them close at hand in case you have to leave quickly See [@PHE_uk](#) advice here [#flooding](https://t.co/tHCDqjB1Xx)

During floods always follow emergency services advice

Always keep children out of the water [#flooding](#) - water can be fast flowing & conceal hidden dangers such as sharp objects

During an event

Affected by [#flooding](#)? Avoid walking or driving in flood water. Check out [@PHE_uk](#) advice <https://t.co/tHCDqjB1Xx>

Affected by [#flooding](#)? Avoid contact with flood water & wash hands regularly. See [@PHE_uk](#) advice <https://t.co/tHCDqjB1Xx>

Keep open cuts or sores clean and use waterproof plasters to prevent them being exposed to floodwater <https://t.co/tHCDqjB1Xx>

Always keep children out of the water [#flooding](#) - water can be fast flowing & conceal hidden dangers such as sharp objects

After an event

Make sure there is good ventilation if you are using portable indoor heating appliances to dry out indoor spaces <https://t.co/tHCDqjB1Xx>

Do not use petrol or diesel generators indoors: the exhaust gases contain carbon monoxide which can kill <https://t.co/tHCDqjB1Xx>

Affected by [#flooding](#)? Avoid contact with flood water & wash hands regularly. See [@PHE_uk](#) advice <https://t.co/tHCDqjB1Xx>

If it's safe to do so pls check on vulnerable & elderly neighbours
[#flooding](#) See [@PHE_uk](#) advice at <https://t.co/tHCDgjB1Xx>

Are you affected by [#flooding](#) ? Check out [@PHE_uk](#) advice here
<https://t.co/tHCDgjB1Xx>

If you have to go into the water, wear waterproof gloves & rubber boots and remember be careful of potentially concealed hazards [#flooding](#)

Always wash your hands after being in floodwater or handling items that have been in the water <https://t.co/tHCDgjB1Xx>

Keep open cuts or sores clean and use waterproof plasters to prevent them being exposed to floodwater <https://t.co/tHCDgjB1Xx>

Always keep children out of the water [#flooding](#) - water can be fast flowing & conceal hidden dangers such as sharp objects

Remember do not eat any food that has been in contact with floodwater
<https://t.co/tHCDgjB1Xx>

Wash hands after touching flood water - If no hot water, wash hands in cold water or use wet wipes or sanitising gel t.co/tHCDgjB1Xx

Feeling tired and anxious is normal after you have been flooded. If possible contact friends and family for support <https://t.co/tHCDgjB1Xx>

For advice on how to clean up safely after a flood please see here for more information <http://tinyurl.com/glutyem> [#flooding](#)

6. Frequently Asked Questions

I think floods may be coming soon to my local area – what should I do?

If available for your neighbourhood, sign up for free flood warning messages from the Environment Agency to receive phone, text or email messages about when flooding is expected. Listen out for flood warnings on radio and television and follow any advice from the emergency services. You can also phone the Environment Agency Floodline on 0345 988 1188 or 0845 988 1188. You should know what the levels of flood warning mean:

- Flood Alert: Flooding is possible. Be prepared
- Flood Warning: Flooding is expected. Immediate action required
- Severe Flood Warning: Severe flooding.

Danger to life Make a personal [Flood Plan](#) for what you will do if there is a flood. Advice on how to make a plan and a self-complete template is available from the Environment Agency.

Pack a “flood kit” in case you need to leave your home. Be sure to include medicines and medical devices, hearing aid batteries, glasses and contact lenses, phone numbers, insurance documents, bank cards and money, clothing, toothbrush and personal items. If you have a baby, pack nappies, clothing and baby food.

What is the most dangerous thing about a flood?

The effects of flooding on health are extensive and significant, ranging from death from drowning and injuries from accident, to infectious diseases and mental health problems (short and long term).

Accidents happen in fast flowing floodwater. Avoid walking or driving in or near floodwater. Driving in floodwater significantly increases risk of drowning. Do not let children play in floodwater. There could be hidden dangers like sharp objects, raised manhole covers and pollution. Walking or even driving through floodwater is risky – six inches of fast flowing water can knock you over and two feet of water will float your car.

The other main health hazard in floods come from the stress and strain of the event and cleanup. Take time to look after your and your family's mental health and wellbeing. Do not overexert yourself and be careful not to hurt yourself when preparing your home and moving important things to a higher place.

Know how to turn off your gas, electricity and water before floodwater enters your home and do not touch sources of electricity if you are standing in water. Ensure good ventilation if using portable indoor heating appliances to dry out indoor spaces. Do not use petrol or diesel generators or other similar fuel-driven equipment indoors: the exhaust gases contain carbon monoxide, which can kill.

What's the best health advice – isn't there a risk from bugs in the water?

Infection problems arising from floods in this country are rare. Usually any harmful bugs in floodwater become very diluted and present a low risk, but there are a few precautions to be aware of when dealing with flooding which should prevent unnecessary additional health problems:

- Wherever possible, try to avoid coming into direct contact with floodwater. If you have to go into the water, wear waterproof gloves and rubber boots and remember to be careful of potentially concealed hazards;
- Wash your hands – this is the most important way to get rid of harmful bugs. Use warm, clean water and soap, then rinse and dry your hands after going to the toilet, before eating or preparing food, after being in contact with floodwater, sewage or with items that have been in the water. Use cold water to wash if warm is not available. If there is no clean water, use disposable soapy, wet wipes or sanitising gel to carefully clean all parts of your hands and dry them;
- Keep open cuts or sores clean and use waterproof plasters to prevent them being exposed to floodwater;
- Keep children out of the water;
- Do not eat any food that has been in contact with floodwater or sewage.

What if I start to feel unwell?

If you feel unwell this does not necessarily mean that you are suffering from any infection. If you are concerned, then call 111. A textphone service is also available if you are deaf or hard of hearing. The textphone number is 18001 111. Alternatively, you may wish to visit your family doctor. Avoid contact with floodwater and wash your hands regularly. Swallowing floodwater or mud can cause diarrhoea, fever or abdominal pain. Mention the flood if you see your GP with abdominal complaints that started within 10 days of being exposed to floodwater or sewage contamination. Remember that flooding is stressful. It is normal to feel anxious, upset and experience difficulty sleeping. Take care of yourself and your family and check on

elderly and vulnerable friends and neighbours. Contact friends and family for support as it can take a long time for life to return to normal.

Do many people fall ill after floods?

Throughout floods, PHE keeps a close watch on the health of communities affected by flooding to track any changes in the rates of reported infectious disease. It examines data collected from GPs, hospital laboratories, NHS Direct calls, and local health protection teams. Following previous events PHE found no evidence of increased outbreaks of illness due to the floods. This was in line with previous experience from floods in developed countries, including the UK.

How do I check if my local health services are affected (eg GPs, outpatient appointments)?

If you can, use the usual local telephone numbers for your health services. Dial 111 if you have non-urgent health concerns. A textphone service is also available if you are deaf or hard of hearing. The textphone number is 18001 111. Make sure your family take their medicines and attend scheduled medical appointments.

Should I take any precautions regarding my children?

Do not allow children to play in floodwater areas. Do wash children's hands frequently – particularly after playing outdoors and always before meals. Do seek medical advice, as under normal circumstances, if infants are unwell with diarrhoea, fever or abdominal pain. Do wash floodwater-contaminated toys with hot water and detergent before allowing them to be used. For soft toys, put them in a hot (60°C) machine wash, along with any other affected fabric items. Wash clothes that have come into contact with floodwater on a separate cycle from other clothes.

Is food safe to eat?

The Food Standards Agency advises people not to eat any food that has been touched, or covered, by floodwater or sewage. Do not eat any produce grown on an allotment or garden that has been flooded. If you have a catering business and have been affected by flooding, ask for advice from the environmental health service at your local authority.

How do I prepare food safely?

Clean and disinfect work surfaces, plates, pans, cutlery, plastic/ceramic chopping boards etc before using them with food. If you have a working dishwasher and mains water supply, this is a more efficient way to clean and sanitise smaller items. Discard wooden chopping boards and wooden spoons if contaminated by floodwater. Thoroughly clean the inside of your fridge and food cupboards if they have been touched by floodwater. If your fridge has not been working and has been left unopened, food will be safe for four hours. If your fridge has not been working for more than four hours, it is advisable to throw away the food inside. If your freezer has not been working throw away any food that has started to get soft, including food that is intended to be eaten from frozen (eg ice cream). Depending upon how full the freezer is, produce can remain frozen and safe for 24 hours or more if the freezer door is left unopened. PHE advises the maxim "when in doubt throw it out".

What do I do with flood-damaged food?

Put flood-damaged food in black plastic refuse sacks, double bagged if possible, seal and put out when your next refuse collection is due. Remember to check with insurers before disposal because food may be insured. Do not be tempted to try to salvage damaged food including damaged tins as their contents may be contaminated.

How should I clean up my home safely?

PHE in partnership with the Environment Agency has published public [guidance](#) for flooding.

What should I do if my domestic property is flooded?

During flooding, sewage systems may become inundated by floodwater. Consequently floodwater is likely to be contaminated by disease causing bacteria and viruses, however infection problems arising from floods in this country are rare especially during cooler weather. Wherever possible, try to avoid direct contact with floodwater but if you have to, there are a few precautions and good hygiene practices which should prevent unnecessary additional health problems.

- Washing your hands is the most important way to get rid of harmful micro-organisms after contact with floodwater, or with items that have been in the water. Use warm, clean water and soap, then rinse and dry your hands. Use cold water to wash if warm is not available. If there is no clean water, use disposable soapy, wet wipes or sanitising gel to carefully clean all parts of your hands and dry them. Always clean your hands after going to the toilet and before eating or preparing food;
- Wear protective clothing such as waterproof gloves, and rubber boots if you have to go into the water. Consider wearing goggles while washing areas of your property. Remember to be careful of potentially concealed hazards under the water; Waterproof gloves are recommended when cleaning material where flooding has occurred;
- Keep open cuts or sores clean and use waterproof plasters as well as protective clothing during clean-up to prevent exposure to floodwater;
- Do not eat any food that has been touched or covered by floodwater or sewage. The Food Standards Agency advises people not to eat any produce grown on an allotment or garden that has been flooded;
- Keep children away from floodwater – do not allow children to play in floodwater. Children should wash their hands frequently – particularly after playing outdoors and always before meals. Seek medical advice, as under normal circumstances, if infants are unwell with diarrhoea, fever or abdominal pain;
- If you feel unwell this does not necessarily mean that you are suffering from any infection. If you are concerned, then call 111. Swallowing floodwater has the potential to cause diarrhoea, fever or abdominal pain. Mention the flood if you see your GP within 10 days of flooding;
- Once floodwater recedes, clean your home safely by washing all surfaces with hot soapy water and household cleaning agent, and wear protective clothing. Any solid wastes can be removed using clean absorbent material, such as paper towels, which should be disposed of through normal domestic refuse disposal;
- Clean and disinfect work surfaces, plates, pans, cutlery, chopping boards etc before using them with food. If you have a working dishwasher, this is a more efficient way to clean and sanitise smaller items. Discard wooden chopping boards and wooden spoons if contaminated by floodwater;

- Thoroughly clean all other hard surfaces, including walls, hard-surfaced floors and furniture with ordinary household detergent or bleach, until they look clean. Allow to dry thoroughly – this will also help to destroy germs left behind;
- Other soft furnishings that have been contaminated and cannot be put in a washing machine will have to be cleaned professionally or, if this is not possible, may have to be disposed of;
- Do not mix detergents with chlorine based bleaches as this may release hazardous fumes;
- Remember to take regular breaks in the fresh air;
- Remove and discard all soft furnishings and fittings that are damaged beyond repair or mouldy;
- Remove dirty water and silt from the property including the space under the ground floor if you have wooden floors. This space may need pumping out;
- If you need to store water, try not to use the same containers used to empty floodwater and mud from your home;
- Heating, dehumidifiers and good ventilation can help dry out your home. You may notice mould growing on damp walls. This will stop growing as your home dries out. Heating, dehumidifiers and good ventilation can help dry out your home. If dehumidifiers are powered by generators, make sure generators are outside at a safe distance from building air intakes. Small areas of mould can be removed easily with proprietary mould removal solutions available in hardware stores. If the mould persists or is extensive it may be advisable to contact a specialist cleaner. If you choose to contact a specialist cleaner to help remediate an extensive mould problem, it is important that they have experience in the field of fungal remediation, and follow current guidance;
- Clothing and bedding: Wash floodwater-contaminated toys with hot water and detergent before allowing them to be used. For soft toys, put them in a hot (60°C) machine wash, along with any other affected fabric items. Wash clothes used for cleaning on a separate cycle from your other clothes. If you suspect problems with your drainage system, it is recommended that a launderette be used for washing large quantities of clothes and linens until your waste-water system has been checked;

It is recommended that you only fully reoccupy your home once the above cleaning has been carried out. Stay with friends or family, or ask your local authority to help you find alternative accommodation if your home has been damaged by floodwater. Only return to your home when essential repairs and cleaning have been completed. If you have gas or oil central heating and it has been checked by an engineer, turn it on. Keep the thermostat between 20-22°C for steady drying. If you are drying your property naturally, keep doors and windows open as much as possible. If using dehumidifiers, close external doors and windows. If dehumidifiers are powered by generators, make sure generators are outside at a safe distance from building air intakes. If you have air bricks to any under floor spaces, ensure that these are unblocked to give cross ventilation to these areas. As floorboards and walls continue to dry out, any loose material and dust resulting from this should be vacuumed up on a regular basis.

You may notice mould growing on damp walls. This will stop growing as your home dries out. Heating, dehumidifiers and good ventilation can help dry out your home. If dehumidifiers are powered by generators, make sure generators are outside at a safe distance from building air intakes. Small areas of mould can be removed easily with proprietary mould removal solutions available in hardware stores. If the mould persists or is extensive it may be advisable to contact a specialist cleaner. If you choose to contact a specialist cleaner to help remediate an extensive mould problem, it is important that they have experience in the field of fungal remediation, and follow current guidance. Rats can move into homes due to flooding of their nests, but they

are generally wary of humans. If normal waste collection services are disrupted for any reason, the build-up of waste may attract rats and other pests. Store your rubbish in hard bins or if this is not possible, try to keep rubbish bags in a place away from your home. If you handle rubbish bags that you think rats may have contaminated with urine or droppings, wash your hands thoroughly with soap and water. Avoid approaching or cornering rats. If you are bitten by a rat then seek medical advice, and be sure to mention the exposure to rats. If you have to pick up a dead rat, wear gloves and dispose of the rats in a plastic bag. Wash your hands thoroughly with soap and water afterwards.

What are the chemical hazards involved in floods and cleaning up?

Remember that petrol or diesel generators and other fuel driven outdoor equipment (including fuel-driven DIY equipment) should never be brought indoors or to other enclosed spaces. The exhaust gases contain carbon monoxide (CO) which can quickly build up to poisonous levels without good ventilation. CO is produced when fossil fuels such as gas, petrol, diesel, coal, coke and oil and other fuels such as wood and charcoal, burn without enough air. Incorrectly installed, poorly maintained or poorly ventilated cooking and heating devices are the main sources. Exposure to high indoor levels can be fatal, while exposure to lower levels can result in symptoms that resemble flu, viral infections or food poisoning.

Headache, tiredness, difficulty in thinking clearly and feeling sick are the most common symptoms. Drowsiness, dizziness, shortness of breath and chest pains may also be experienced. Prolonged exposure to low levels of CO over a long period of time can cause serious harm to health, often leading to lasting neurological damage in victims. It is important to have all cooking and heating appliances which use fossil fuels (and wood) installed and serviced regularly by a suitably qualified, reputable and registered engineer and that they are operated according to the manufacturers' instructions. Do not turn on appliances which use fossil fuels (and wood) if they may have got wet until checked by a qualified engineer. Rooms in which these appliances are used must be adequately ventilated. Chimneys and flues should be kept clear and swept from top to bottom at least once a year by a qualified sweep.

Older car batteries may leak acid, so it is advisable to use rubber gloves when handling them. Car batteries are normally disposed of at civic amenity sites.

Be aware of potential chemical hazards during floods. Floodwater may have displaced containers of hazardous chemicals such as cleaning products, garden pesticides and domestic heating oil from their normal storage places. Wear rubber gloves to handle any of this packaging.

Oil films may be seen floating on the floodwaters both inside buildings and surrounding areas. It is recommended that these films should not be disturbed and exposure to them should be avoided as skin exposure may cause a variety of skin conditions. Any remaining oil contamination in accessible areas can be removed by using a detergent solution and washing the surface down after initial cleaning has been carried out. Inaccessible areas such as under floorboards may present an odour problem but is not necessarily a health hazard. Further advice should be sought from environmental health staff if the odour persists or if you are particularly concerned about it for other reasons.

Petrol films may also be seen floating on the floodwater both inside buildings and surrounding areas. It is recommended that these films should not be disturbed and exposure to them should be avoided as skin exposure may cause a variety of skin conditions and the vapour may be irritating to eyes and lungs. Floodwaters should be

allowed to subside and on contact with the ground the petrol allowed to evaporate. As is normal practice people are reminded not to smoke or have fire sources such as matches in the vicinity of petrol films.

Avoid enclosed areas that may be chemically contaminated, such as garages and cellars where concentrations of fumes may build up once the floodwaters have receded. Before entering, ensure such confined areas have good ventilation, with doors and windows open, and do not allow children and animals to enter. Gas systems: Do not turn on gas systems if they may have been wet. Only turn them on when they have been checked by a qualified gas engineer.

Who is responsible for the safety of my mains water supply?

People whose water comes through a mains supply should follow the advice of their local water company regarding the safety of their water supply. In most flooding circumstances, the mains water supply remains safe. Water companies have a duty to take all necessary steps to protect public health. For example, should a water treatment works become flooded, alternative supplies will be made available, such as by bottled water or bowser, but in the meantime consumers may be advised to boil water before drinking or temporarily stop using water for domestic purposes.

My mains water tastes funny – what should I do?

If you notice a change in water quality, such as the water becoming discoloured or a change in taste or smell, or if you are unsure, ring your local water company. Whilst waiting for an answer, and if water is urgently required, boil all water intended for drinking, or use bottled water.

How do I use tap water that may be contaminated?

The quality of tap water is the responsibility of your local water company, supervised by the Drinking Water Inspectorate. The mains water supply and distribution network is not normally affected by flooding, so it is safe to use the water in the usual way. If for any reason it is not safe to drink, the water company will inform you. If there is evidence that the tap water may be contaminated, the water company will issue advice to boil the water. Bring the water to the boil and then allow it to cool before drinking. Do not store large quantities of boiled water in open containers, such as bins, as they may become contaminated over time. Boil water and allow it to cool before using it to wash food that won't be cooked, such as fruit or salad. It is safe to use unboiled tap water in the preparation of food which is to be cooked. It is also safe to use unboiled tap water for cooking if it will be boiled during the cooking process.

I've been advised to boil my mains water – what do I need to know?

There are three kinds of water notices for different circumstances:

Boil tap water before use;

Do not drink your tap water;

Do not use your tap water.

If you have been advised to boil your water before use, this will be for drinking and food preparation. All water for these purposes should be brought to a boil and then allowed to cool before using. Remember that boiling water can carry a risk of scalding accidents. It is advisable to use a kettle rather than pots and pans. If you must use open containers such as pots and pans, then special care should be taken when young children or vulnerable people are involved. Keep panhandles turned inwards when boiling water in pans so that children cannot reach them. Once boiled

water begins to cool it is vulnerable to recontamination from hands and kitchen utensils so it is important that boiled water is used as soon as possible. Water from a bowser should be safe to drink but it requires boiling before use because the containers used to transfer water from bowser to home may not be clean. Water from the hot tap is not suitable for drinking, whether in flood circumstances or not.

What if my water comes from a private supply?

If your water is a private supply such as a well or spring, then check that it has not been affected by the floodwater. If a private well or spring has been covered by floodwater, proceed with caution and ring your local authority for advice. While waiting for an answer or if in doubt, assume the water is unsafe to drink and source an alternative supply. Boiling water kills pathogenic bacteria, viruses and parasites but does not remove harmful chemicals, which is why sourcing an alternative supply is recommended.

How do I clean bowls and buckets for water containers which have been in the floodwater?

Use an appropriately diluted bleach solution or sterilising tablets, following manufacturers' instructions, to clean containers. Use water storage tanks and other types of containers with caution. This applies particularly to pans and utensils used in cooking or food preparation. Ensure the water taps are cleaned with hot water and detergent before using them for the first time after a flood. Allow the taps to run for a few minutes when you start using the mains water again, as this should clear the pipes.

How should I use the bowser and bottled water supplied to replace mains water?

Only bowser water which has been boiled and left to cool or bottled water should be used for drinking (note below regarding bottle-fed infants), brushing teeth, washing food and making ice. If there is no gas or electricity available to householders to boil water, bottled water should be used in all circumstances.

How do I flush the toilet with no mains water?

With restrictions in drinking water supply there may be insufficient water for flushing toilets. It is therefore important that all water used for washing, bathing, and from cooking (ie water from boiled vegetables) or washing up is saved in buckets to be used for flushing. It is not necessary to flush the toilet after urination. Other sources of water, for example, from garden water butts can also be used for flushing.

What if the toilet can't be flushed at all because of blockage?

The following options may be available to householders whose toilets cannot be used:

- It may be possible and practicable to use the facilities of unaffected family, friends, neighbours, public toilets, rest centres, local shops, supermarkets and hotels. Chemical toilets ("portaloos") may be provided in your area;
- Portable bag in bag products (eg "Brief relief", "wag bag") designed for solid and urine waste may be provided in your area. Remember to wash your hands after using these bag products. Once used according to manufacturers' instructions, the waste bag should be placed inside another bag, such as a bin liner, and disposed of in the usual way.

How will I know if my septic tank system has been affected?

Septic tank systems typically comprise a concrete, plastic or fibre glass tank. In a functioning system, the solids in the wastewater settle in a primary tank, the wastewater is then discharged through pipes into soil in a designated area on your property, often called a soakaway or drainage field.

Failed systems are not easy to identify, however some simple indications may include:

- A pungent odour around the tank and land application area;
- Blocked fixtures and wastewater overflowing from the relief point;
- High sludge levels within the primary tank;
- Sewage flowing up through the toilet and sinks;
- While a flood is in progress homeowners are advised to eliminate all non-essential water use and flush toilets as little as possible. Continue to do this until the ground is no longer flooded. The Waterwise website has quick tips on reducing water use in the home;
- Although this is unlikely to be sustainable in the long term, it may be necessary to arrange to have your septic tank emptied and the contents removed by a contractor on a regular basis until the ground is no longer flooded;
- Before having your tank emptied get advice from your drainage contractor as in some circumstances emptying the tank can cause mud or silt to be drawn into the tank or, in extreme cases, result in it lifting out of the ground if your septic tank system becomes covered with water;
- If the area where your septic tank and/or drainage field is located becomes covered with water if possible do not use the system at all and avoid contact with any standing water that may contain sewage. Continue to do this until the septic tank and/or drainage field is no longer covered in water and make arrangement to have your tank emptied if the situation allows;
- Consider hiring temporary portable services;
- If you see pollution please report it to the Environment Agency incident hotline 0800 80 70 60 (Freephone, 24 hour service) so that a team can investigate and take appropriate action.

If I don't have mains water how should I bottle feed my baby?

If your drinking water supply is either interrupted or contaminated by the flooding and you need to prepare formula feed for a baby, it is important to be careful with the water you use. Here are some tips from the Food Standards Agency on preparing formula safely.

- Ideally use water from a bowser (a water tank provided by water companies), or bottled water, brought to a 'rolling' boil and left covered to cool for no more than half an hour, then follow the manufacturer's instructions on making up the feed. The use of unboiled bowser water should be avoided. The prepared feed should then be used immediately;
- Use cooled boiled water or bottled water for cooling the feed once it has been made up. Ready-to-use liquid formula could be used instead;
- If there is no electricity or gas to allow boiling and you don't have ready-to-use liquid formula available, bottled water (table, spring or mineral water) can be used without boiling to prepare baby feeds, but the prepared feed should then be used immediately;
- Any bottled water supplied by your water company will comply with all drinking water standards and will be safe to use in preparing baby feed. If you buy your own bottled water, be aware that some natural mineral water may have a high sodium content. Look at the label for sodium, which may be shortened to 'Na' on the label,

and check its level is not higher than 200mg a litre. If it is, then try to use a different brand of bottled water. If no other water is available, then use this water for as short a time as possible. It is important to keep babies hydrated.

How do I bathe my child without mains water?

If the water company has advised that the domestic supply is unsafe for drinking, then it is also inadvisable to use this for bathing infants as they may ingest some during bathing. In this situation, bottled water is a safe alternative or you can use baby wipes for hand cleansing and washing infants.

Can I use water for my contact lenses?

Avoid putting contact lenses into water, even if boiled or otherwise treated as this can lead to eye infections.

7. Programmes and Resources

The Environment Agency has lots of useful information on flooding.

Flood maps

<https://flood-warning-information.service.gov.uk/long-term-flood-risk>

Flood warnings

<https://flood-warning-information.service.gov.uk/>

The Met Office is the official UK weather forecaster

<http://www.metoffice.gov.uk/public/weather/flood-warnings/ea#?tab=floodWarnings>

Central Government links

<https://www.gov.uk/prepare-for-flooding>

PHE/EA leaflet on flooding

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/401980/flood_leaflet_2015_final.pdf

PHE leaflet on cleaning your home safely after a flood

<https://www.gov.uk/government/publications/floods-how-to-clean-up-your-home-safely>

Flooding - Essential information for frontline responders

<https://www.gov.uk/government/publications/recovering-from-flooding-information-for-frontline-responders>

National Flood Emergency Framework

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388997/pb14238-nfef-201412.pdf contains lots of useful guidance and advice for comms messages during floods.

PHE Comms Contact list

National contacts

Centre for Radiation, Chemical and Environmental Hazards

01235 825406

National Infections Service (Colindale)

0208 327 7452/6690

Regional contacts by PHE Centre

North of England

North East 0300 303 8596 option 3 (inc out of hours)

North West 0344 225 0562 – option 5 (inc out of hours)

Yorkshire and the Humber 0113 855 7208 or 0113 855 7362 (out of hours 07977 554 609)

Midlands and east of England

Bedfordshire, Hertfordshire and Milton 01223 722484 or 01223 722485 (inc out of hours)

Lincolnshire, Leicestershire, Northamptonshire, Nottinghamshire and Derbyshire 0115 844 1399 (inc out of hours)

Norfolk, Suffolk, Cambridgeshire and Essex 01223 722484 or 01223 722485 (inc out of hours)

West Midlands 0121 232 9223/4 (out of hours 07834 311 393)

South of England

Avon, Gloucestershire and Wiltshire 0117 9689 161 (inc out of hours)

Devon, Cornwall and Somerset 0117 9689 161 (inc out of hours)

Hampshire, Isle of Wight and Dorset 01403 214 556 or 01403 214 557 (out of hours 07789 295 811)

Kent, Surrey and Sussex 01403 214 556 or 01403 214 557 (out of hours 07789 295 811)
Thames Valley 01403 214 556 or 01403 214 557 (out of hours 07789 295 811)

London

Integrated region and centre 020 7811 7243 or 020 7811 7242 (out of hours 0208 200 4400)