



# Philadelphia Regional Center for Children's Environmental Health

A program of:



## Flood Preparation and Management Guide for Philadelphia

Don't be caught off guard during a rain event. Use this guide before, during and after a flood event to prepare yourself, your home and property. Stay safe!

Visit us at [prcceh.upenn.edu](http://prcceh.upenn.edu) or contact us at [prcceh@penmedicine.upenn.edu](mailto:prcceh@penmedicine.upenn.edu) for more resources

### Prepare a Go-Bag



**Important documents:** These include insurance cards, photo IDs, birth certificates, deeds and proof of address. Keep them in a waterproof bag or box that is also easy to carry.



**Map:** A local map showing your neighborhood's emergency evacuation routes.



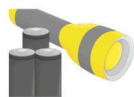
**First Aid Kit**



**Extra set of car and house keys**



**Battery-operated AM/FM radio and extra batteries.** You can also buy wind-up radios that do not require batteries.



**Flashlight and batteries**



**Cash**



**Bottled water and ready-to-eat foods such as granola bars.**



**Waterproof jacket, boots and mylar blanket**



**Family Emergency Plan:** Contact and meeting place info for your household. (View F1 Form)

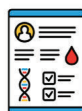


**Personal care items:** hand sanitizer, feminine products, toothbrush and toothpaste, toilet paper and wipes.

**Special care items,** including child care supplies, items for special needs, and pet supplies.



**Medications:** at least a 3-day supply of all prescribed and/or necessary medicines. Make a habit of refilling medications before they run out or expire.



**Medical information,** including copies of all prescriptions, and contact info for doctors and pharmacists. (View F2 Form)

# Get and Stay Informed



## USGS WaterAlert:

WaterAlert is a system offered by the US Geological Survey (USGS) that allows you to receive emails or texts about changing water conditions near you. **(Cards A3 & A3B)**

## Recovery and relief information



**ReadyPhila:** City of Philadelphia's notification system that provides you with emergency info.

## To sign up for emergency alerts either:

Text "ReadyPhila" to 888-777 or scan:



## Online news:

The Philadelphia Inquirer



AccuWeather



Weather Channel



## Tune into (channel):

NBC10 Philadelphia (28)

CBS Philadelphia (3)

ABC Philadelphia (6)

NOAA Weather Radio (162.475 MHz)

**Pennsylvania Emergency Management Agency (PEMA)** sometimes frees up funds through the Disaster Recovery Assistance Program.

**FEMA** coordinates the federal response to disasters that receive a Presidential disaster declaration.

# Stay Informed: USGS WaterAlert



1. Fill in your email, language, and read and accept the terms to create an account

2. Sign in with your account information

4. Click National Water Dashboard

1 Find a monitoring location.  
Use [National Water Dashboard](#).

5. Search for and select your part of Philadelphia County to zoom in (Ex: Eastwick)

A3

# Purchase Flood Insurance

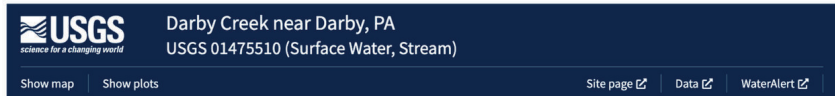
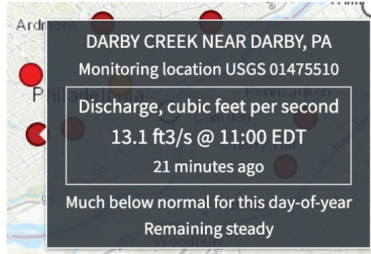
FloodSmart.gov  
or call (800) 427-2419



A4

# USGS WaterAlert Continued

6. Select your closest monitoring station (Ex: Darby Creek)



7. Click WaterAlert tab

**Create Alerts for This Location**

- Gage height, feet
- Discharge, cubic feet per second
- Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius
- Stream water level elevation above NAVD 1988, in feet  
Sampling method: Gage Height - NAVD88
- Temperature, water, degrees Celsius

8. Configure Settings and Create Alert



Help the city government help you!

Complete the Philadelphia Flooding Survey



Participate in storm drain marking



Volunteer for emergency response



A3B

## Flood Insurance Coverage Information

### Building coverage often protects:

- Electrical and plumbing systems
- Furnaces and water heaters
- Refrigerators, cooking stoves, and built-in appliances like dishwashers
- Permanently installed carpeting
- Permanently installed cabinets, paneling, and bookcases
- Window blinds
- Foundation walls, anchorage systems, and staircases.
- Detached garages
- Fuel tanks, well water tanks and pumps, and solar energy equipment

### Contents coverage often protects:

- Personal belongings such as clothing, furniture, and electronic equipment
- Curtains
- Washer and dryer
- Portable and window air conditioners
- Microwave oven
- Carpets not included in building coverage (e.g., carpet installed over wood floors)
- Valuable items such as original artwork (up to \$2,500)

A4B



# Lower Your Flood Insurance Premiums



Elevate utilities



Elevate home

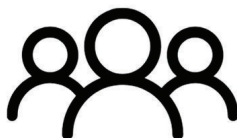


Fill in basements



Higher deductibles can lower premiums

Encourage your community to enroll in Community Rating System (CRS)



Install flood vents



Provide elevation certificate



**A5**

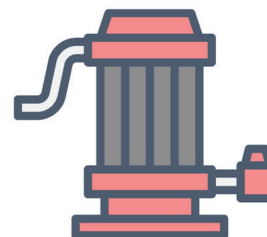
# Preparing the Inside of Your Home



Install drainage plugs and sewer back flow valves



Seal cracks in walls/foundation



Install sump pump(s)



Use flood proof building materials for flooring, walls, windows/doors



Elevate and protect utilities



Install flood vents

**A6**

# Lower Your Flood Insurance

Several mitigation measures can be used to lower the cost of flood insurance. The chart below compares options.



For more information on mitigation measures that can be used to lower the cost of flood insurance, visit [floodsmart.gov/how-can-i-pay-less](http://floodsmart.gov/how-can-i-pay-less)

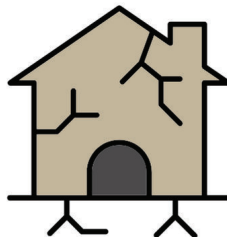
Mitigation Measure	Life Cycle Cost	Expected Useful Life	Design Complexity	Potential for Reducing Flood Damage
<b>Wet Floodproofing Measures</b>				
Flood Openings	Low	15–20 years	Low	High
Elevate building utilities	Low to Moderate	15–20 years	Low	Moderate
Floodproof building utilities	Low to Moderate	15–20 years	Moderate	Limited
Flood damage-resistant materials	Moderate	10–20 years	Moderate	Limited
<b>Dry Floodproofing Measures</b>				
Dry floodproofing system	High	15–30 years	High	Moderate
<b>Barrier Measures</b>				
Floodwall with or without gates	High	50 years	High	Moderate
Levee with and without gates	High	50–100 years	High	Moderate
<b>Interior Modification/Retrofit Measures</b>				
Basement infill	Moderate to High	30–50 years	High	High
Abandon lowest floor	Moderate to High	30–50 years	High	High
Elevate lowest interior floor	Moderate to High	30–50 years	High	High

A5B

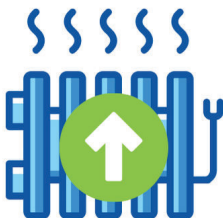
# Preparing the Inside of Your Home

## Check your home for cracks and gaps where water could come in.

Walk around your home and inspect windows, doors and openings for pipes and cables. Seal the gaps with caulk or flood protection seals.



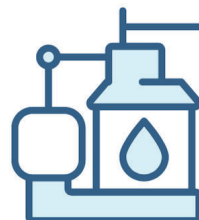
For more on how to prepare your home, download this PDF: *Protect Your Home from Flooding*



**Elevate utilities** like your furnace, water heater, electrical panels and any other valuable household items.

To learn about maintaining a sump pump, visit [fema.gov/node/356171](http://fema.gov/node/356171)

**Install a sump pump.** A sump pump will help pump groundwater away from your home by drawing in the groundwater and redirecting it through drainage pipes. Choose a sump pump with a battery operated back up. A sump pump should be installed by a certified plumber.



A6B

# Preparing the Outside of Your Home

**Use sandbags as a barrier to water entering your home.** Sandbags can be purchased pre-filled, or as bags that you fill yourself.



Visit “How to Sandbag” for more info on using sandbags



**Add pervious surfaces** (e.g., rain gardens) to decrease severity of flooding



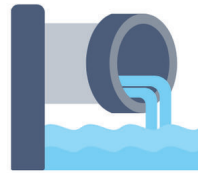
Sign up for Philadelphia’s Rain Check Program to figure out which stormwater management tool is best for you. [pwdraincheck.org](http://pwdraincheck.org)



**Install a rain barrel.** Participate in Philadelphia’s free rain barrel program.



Attend a workshop and you can have a free rain barrel installed on your property!



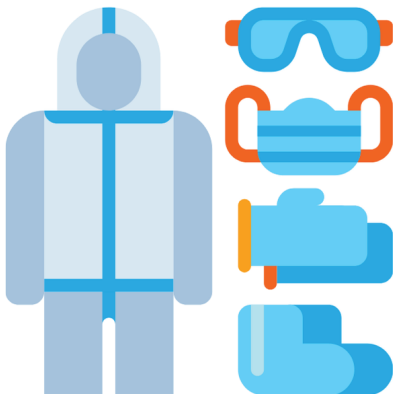
**Clean and maintain drainage systems.** Before a rainstorm, remove debris from nearby storm drains.



**Improve lot grading to make sure water drains away from home**

**A7**

# Take Precautions Before Reentering



**Get proper personal protective equipment before the flood starts**

- **Safety glasses or goggles:** Protect eyes from corrosive liquids and particles
- **N-95 Respirators:** Prevent breathing in contaminated air that contains chemicals and mold particles
- **Gloves:** Protect hands when handling contaminated surfaces or infectious materials
- **Gowns/Long sleeves/Long pants:** Cover the torso from the neck to the ankles and the arms to the wrists
- **Boots/work shoes:** Protects the feet

**B1**



# Protect Your Health, Home and Property



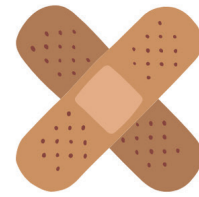
Maintain hygiene



Avoid floodwater



Move to higher ground



Protect and sanitize wounds



Turn off utilities



Use go-bag (A1)



Do not drive in flood water



Leave car if it stalls in a flooded area



Stay away from electric hazards



Document flood damage

**A8**

# Take Precautions Before Reentering



If home is damaged, do not enter until cleared by inspector



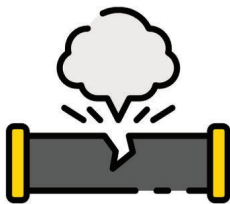
Prevent mold by airing out home and disinfecting



Verify safety of tap water from authorities before using/drinking



Have an electrician check electrical systems before turning them on.



Inspect for gas leaks, and if detected, leave the home immediately and call 911



Prevent carbon monoxide poisoning by using generators, stoves, and grills outside and away from doors/windows



Dispose of any food that may be unsafe

**B1A**



# After the Flood

## Assess and Report Damages



Contact your insurance provider and file claims (and submit any documentation of damages)

## Seek Assistance



Apply for financial assistance



# Family Emergency Plan

<p><b>Local Emergency Contact</b> Name: Phone number: Email: Address:</p>	<p><b>Important Numbers</b> Renter/Home Insurance #: Veterinarian/Kennel #: Drivers License #</p>	<p><b>Home Evacuation and Family Meeting Location:</b> Name and phone number of a neighbor willing to help you evacuate your home if you are unable to get out of the house on your own:</p> <p>A location that you will meet family members in case you get split up during an emergency. For instance, a corner store, park, church or rec center:</p> <p>Names of people you will share this plan with:</p>
<p><b>Use this space below for any information that would be helpful to you: location of medications in the home, social security numbers, or school telephone numbers.</b></p>		<p><b>Medical Information</b> Primary Physician Name: Primary Physician Phone: Health Insurance #: Pharmacy Name: Pharmacy Phone: Home Health Care Phone: Medic Alert ID: Medical Equipment Used: Mobility Devices: Personal Care items needed:</p>

**F1**

# Medical Information Form

Fill out for each family member

Name:  
Birthdate:  
Gender:  
Blood Type:  
Known Allergies (medicine, food or other):  
Mobility Devices:  
Medical Equipment Required:

Medicine Name	Strength	Dose	When to take it	Reason

**F2**