

WEATHER-SPECIFIC EMERGENCIES

FLOODS, FIRE, EXTREME HEAT & HAIL – PRACTICAL THINKING FOR SA CONDITIONS



FLOODS

Heavy rain, burst dams, blocked drains and poor planning cause destruction.

BEFORE

- ✓ Know flood-prone areas & escape routes
- ✓ Keep gutters, drains & rivers clear
- ✓ Prepare a go-bag & waterproof document pouch
- ✓ Listen to SA Weather Service alerts

DURING

- ✓ Move to higher ground immediately
- ✓ Never drive through flood water (even if shallow)
- ✓ Switch off electricity at the mains
- ✓ Keep radio & phone charged

AFTER

- ✓ Return only when authorities say it's safe
- ✓ Watch for downed power lines
- ✓ Boil or purify all water
- ✓ Check for structural damage and gas leaks

SA CONTEXT

Heaviest rain often in KZN & Eastern Cape. Informal settlements and poor drainage increase risk.



FIRE / WILDFIRES

Hot, dry, windy conditions turn small fires into fast-moving disasters.

BEFORE

- ✓ Clear grass & debris around homes
- ✓ Keep 10m "fire-safe zone"
- ✓ Have a hose, water & beaters ready
- ✓ Sign up for local fire alerts

DURING

- ✓ Leave early if warned
- ✓ Close windows, doors & vents
- ✓ Leave lights on for visibility
- ✓ Follow evacuation routes – don't get trapped

AFTER

- ✓ Watch for flare-ups
- ✓ Check on neighbours
- ✓ Report fires & hazards
- ✓ Document damage for insurance

SA CONTEXT

Peak fire season in Western & Northern Cape, but risk is countrywide. Strong berg winds worsen fires. Fynbos burns hot & fast.



EXTREME HEAT

Heatwaves strain the body, infrastructure and essential services.

BEFORE

- ✓ Hydrate daily – don't wait
- ✓ Know signs of heat stress
- ✓ Keep shades, fans & cool cloths ready
- ✓ Check on elderly & young children

DURING

- ✓ Drink water regularly
- ✓ Avoid midday sun (11am – 4pm)
- ✓ Wear lights, loose clothing & a hat
- ✓ Use shade, fans or ventilation

AFTER

- ✓ Rest and rehydrate
- ✓ Seek help for heat exhaustion
- ✓ Check food is still safe
- ✓ Save water – system may be strained

SA CONTEXT

Heatwaves are increasing. High risk in inland & low-lying areas. Load shedding makes it worse – plan for no power.



HAIL / SEVERE STORMS

Strong thunderstorms bring hail, high winds, lightning and flash floods.

BEFORE

- ✓ Secure roofs, gutters & loose items
- ✓ Park vehicles under cover
- ✓ Keep blankets or car covers for hail protection
- ✓ Monitor weather updates

DURING

- ✓ Stay indoors away from windows
- ✓ Do not stand under trees or poles
- ✓ Unplug sensitive electronics
- ✓ Avoid open fields & water

AFTER

- ✓ Check for roof, window & vehicle damage
- ✓ Clear hail from drains slowly
- ✓ Take photos for insurance
- ✓ Watch for downed lines & flooding

SA CONTEXT

Hail common in summer in Gauteng, Free State, North West & Mpumalanga. Lightning is a major danger.

UNIVERSAL STEPS THAT SAVE LIVES



Stay informed (SA Weather Service, alerts, radio)



Have a plan & escape routes



Keep a go-bag ready



Keep power banks & torches charged



Look out for neighbours – community saves lives

SOUTH AFRICAN REALITY



Expect infrastructure failure – water, power, roads & communication.



Know your local risks and plan for isolation.



Build community networks & share resources.



Be self-reliant – help may be delayed.



PREPARE TODAY. PROTECT TOMORROW. TOGETHER, SOUTH AFRICA IS STRONGER.

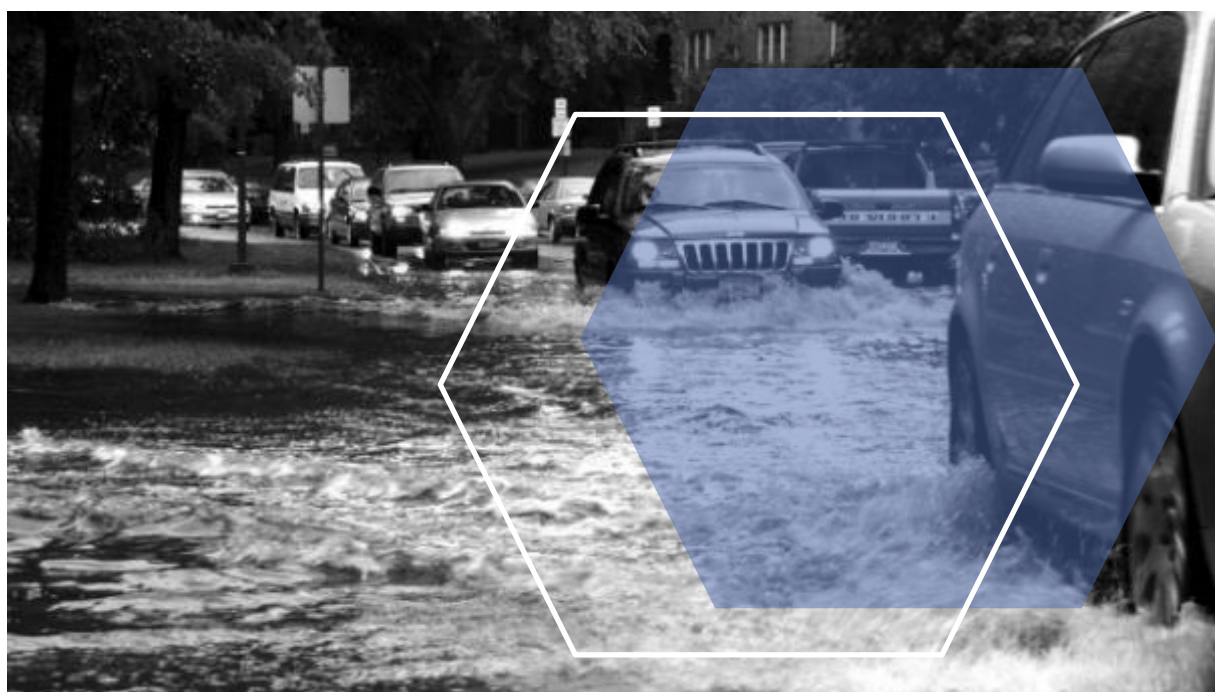
BE AWARE. BE READY. LOOK OUT FOR EACH OTHER.

18 WEATHER-SPECIFIC EMERGENCIES

In the introduction to this guide, I noted that South Africa is not regularly exposed to the kinds of natural disasters that affect other parts of the world. That is true. But it would be a mistake to conclude that South Africa is therefore safe from weather-related emergencies. We have our own set of weather threats that are just as dangerous, just as destructive and just as capable of catching an unprepared family completely off guard.

The Knysna fires of 2017 destroyed more than 1 000 homes and killed seven people. The KwaZulu-Natal floods of 2022 killed more than 400 people and displaced tens of thousands. Flash floods in Johannesburg regularly kill motorists who underestimate the depth and power of flooded roads. Extreme heat events across the Northern Cape and Free State push vulnerable people to the edge of survival. Severe hailstorms cause billions of rands of damage to vehicles, crops and property every year. These are not distant possibilities. They are recurring South African realities.

18.1 FLASH FLOODS AND FLOODING



Flooding is the most common weather-related disaster in South Africa. It can occur with very little warning, particularly in low-lying areas, near rivers and streams, and on roads that cross drainage channels. The danger is not always obvious — a road that looks passable may have fast-moving water beneath its surface with the force to sweep a vehicle away in seconds.

18.1.1 BEFORE A FLOOD

- **Know whether your home or area is in a flood-prone zone.** Visit the South African Weather Service at www.weathersa.co.za for flood risk information relevant to your area.
- **Keep your stormwater drains and gutters clear of leaves and debris.** Blocked drains dramatically increase the risk of localised flooding.
- **Store emergency supplies and important documents above ground level** — never in a basement or on the floor in a flood-prone area.
- **Know your evacuation route to higher ground** and discuss it with your family before you ever need it.
- **Monitor weather forecasts during the rainy season**, particularly if you live near a river, stream or low-lying area.

18.1.2 DURING A FLOOD

- **Never attempt to drive through floodwater.** The most common cause of flood-related death in South Africa is motorists driving into flooded roads. If you cannot see the road surface clearly, turn around. No destination is worth your life.
- **If your vehicle becomes trapped in rising water**, get out immediately and move to higher ground.
- **If you are at home and water is rising**, move to the highest floor of your building.
- **Avoid walking through floodwater** — it may be deeper than it appears, moves faster than it looks and is almost certainly contaminated with sewage, chemicals and debris.
- **Stay away from rivers**, streams and drainage channels during and after heavy rain.

18.1.3 AFTER A FLOOD

- **Do not return home** until authorities confirm it is safe to do so.
- **Treat all floodwater as contaminated.** Wash hands thoroughly after any contact with floodwater.
- **Check your home carefully** for structural damage before re-entering.
- **Document all damage thoroughly** with photographs for insurance purposes before cleaning up.

18.2 VELD FIRES AND WILD FIRES

Veld fires are a particular danger for South Africans living on the urban edge, in rural areas, on smallholdings and in coastal fynbos regions. They spread with terrifying speed — particularly in dry conditions, in areas with long unmanaged grass and in strong winds. A fire that is kilometres away can reach your home within minutes under the right conditions.



18.2.1 BEFORE A VELD FIRE

- **Create and maintain a firebreak around your property** — a cleared strip of ground that removes the fuel a fire needs to cross onto your property.
- **Keep grass short and remove dead vegetation** from around your home, outbuildings and fences.
- **Clear gutters and roofs of dry leaves and debris** — these are highly flammable and can ignite from airborne embers.
- **Store firewood, gas bottles and fuel containers away** from your home and outbuildings.
- **Know your evacuation route and be prepared to leave early** — do not wait until the fire is upon you.

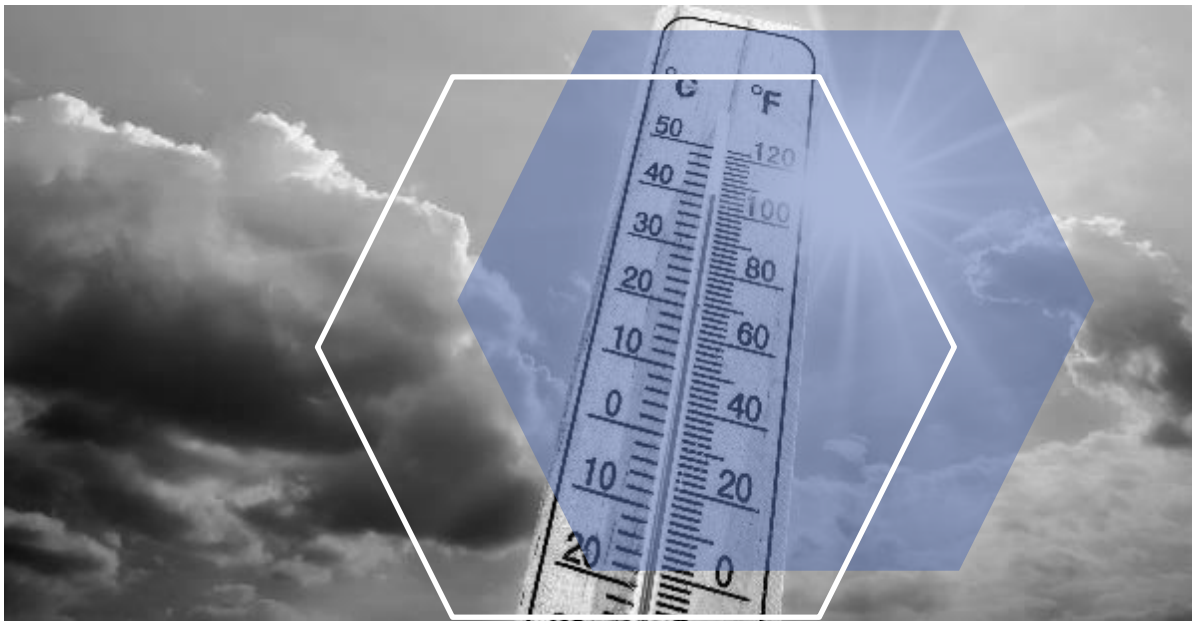
18.2.2 DURING A VELD FIRE

- If you smell smoke or see fire in your area, do not wait to see how it develops. Begin preparing to **evacuate immediately**.
- **Close all windows, doors and vents** to reduce the amount of smoke and embers entering your home.

- **If evacuation becomes necessary, leave early.** More people die trying to defend their homes at the last minute than die from fires they evacuated from in good time.
- **If caught in a vehicle by a fast-moving fire,** park off the road, turn off the engine, switch on hazard lights, get down below window level and cover yourself with a wool blanket.

18.3 EXTREME HEAT

South Africa's interior regularly experiences extreme heat events that can be genuinely life-threatening for vulnerable individuals. Heatstroke, severe dehydration and heat exhaustion can kill within hours if not treated promptly.



- **Stay indoors during the hottest part of the day** — typically between 11am and 3pm.
- **Drink water consistently throughout the day** — do not wait until you feel thirsty.
- **Never leave children, elderly people or animals in a parked vehicle** — temperatures inside can reach lethal levels within ten minutes.
- **Check on elderly neighbours and family members** during extreme heat events.

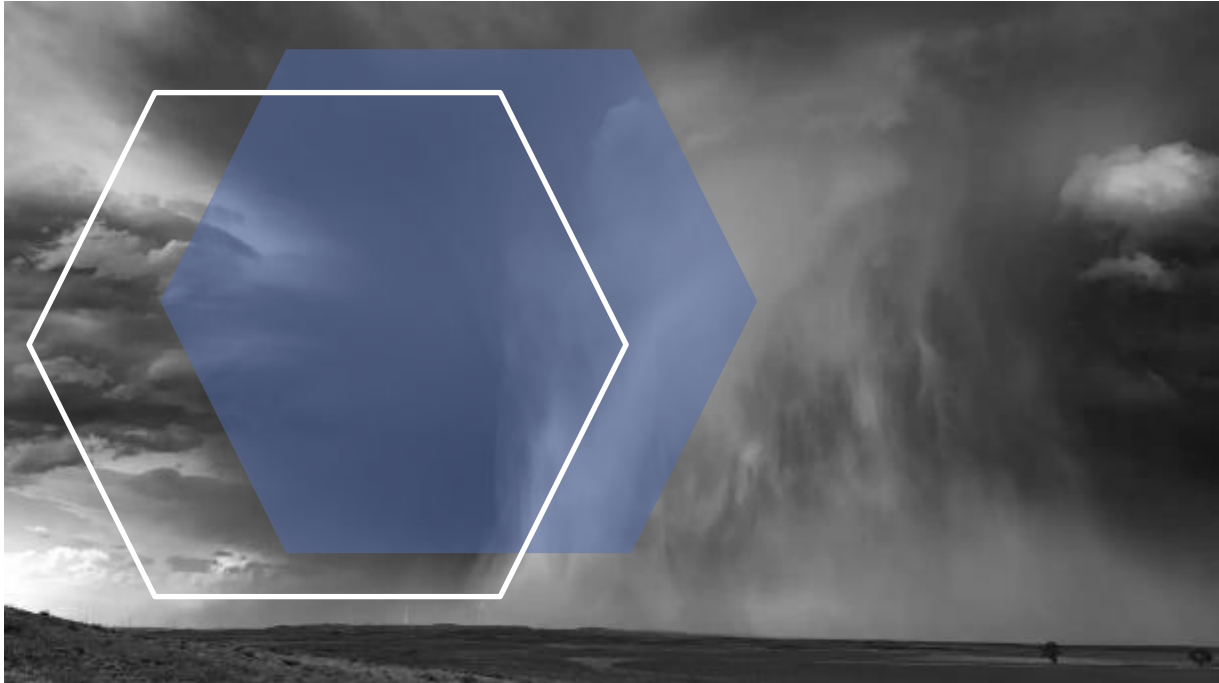
18.3.1 HEAT EXHAUSTION

Heavy sweating, pale and clammy skin, weakness, dizziness, nausea and a fast weak pulse. Move the person to a cool shaded area, apply cool wet cloths to the skin and give water in small sips. If symptoms do not improve within 30 minutes seek medical attention.

18.3.2 HEATSTROKE

A medical emergency. Body temperature above 40°C, hot and dry skin with no sweating, confusion and possible loss of consciousness. Call for emergency medical assistance immediately and cool the person as rapidly as possible.

18.4 SEVERE HAILSTORMS



South Africa — particularly Gauteng and the highveld — experiences some of the most severe hailstorms in the world. Hailstones the size of golf balls or larger can shatter windows, destroy vehicles, damage roofs and injure people caught in the open.

- **Monitor weather forecasts** during summer thunderstorm season and subscribe to South African Weather Service alerts.
- **Park vehicles in a garage** or under solid cover whenever severe thunderstorms are forecast.
- **Move indoors immediately** and stay away from windows during a hailstorm.
- **If caught in a vehicle with no shelter**, pull over and stop. Angle the vehicle so the front faces the storm. Cover yourself with a blanket and lean away from windows.

18.5 SUMMARY

- **Flash floods** — never drive through floodwater, know your evacuation route to higher ground
- **Veld fires** — maintain firebreaks, leave early and never wait until a fire is upon you
- **Extreme heat** — hydrate consistently, protect the vulnerable and know the difference between heat exhaustion and heatstroke
- **Severe hailstorms** — monitor forecasts, park vehicles under cover and stay away from windows
- **Know your local risks** — visit www.weathersa.co.za and understand the specific weather threats relevant to your area