



An Extended Guide · No. 1646

Safe Placement and Weather Protection

Keep it outside, dry,
and running safely

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! Read this first — carbon monoxide is the real danger

A running generator's exhaust contains carbon monoxide — an invisible, odorless gas that can kill in minutes. Never run a generator indoors, in a garage, in a shed, or on a porch, not even with the door open and a fan going. Run it outside only, well away from the house — the safety agencies say at least 20 feet — with the exhaust pointed away from every window, door, and vent. Put battery-backup carbon-monoxide alarms on each floor and outside the bedrooms. If an alarm sounds, or anyone feels dizzy, sick, or sleepy, get everyone into fresh air first and ask questions later. And here is the heart of this whole guide — weather protection never means moving the generator indoors, into a garage, or onto a porch: the outdoor rule wins every time, rain or snow.

Keeping it outside, dry, and running safely

A generator faces a puzzle every time the weather turns: carbon monoxide safety says keep it outside and far from the house, while common sense says keep it out of the rain and snow. The good news is you can do both — and this guide shows you how.

I'm Bill. For 30-plus years I've helped folks around Portage County get their homes and their gear working, and this is one of the questions I hear most once the first storm rolls in: where do I put it so it doesn't get soaked? The honest answer is never the one that feels easiest in the moment — but it's simpler than you'd think, and it keeps everyone safe.

We'll walk through the right kind of cover, a dry and level spot, keeping both the machine and yourself dry, securing things against the wind, and handling rain, snow, and heat — all without ever breaking the one rule that matters most.

★ The rule underneath every page here

Weather protection never means bringing the generator indoors. If you'd like a hand finding a spot at your own home that stays safe and dry in any weather, that's exactly the kind of visit I enjoy. Call or text me at (330) 200-8042.

The whole guide, on one page

If you remember only these things, your setup will stay safe through almost anything the weather brings.

- ❑ Keep the generator outside, always — never move it into a garage, shed, carport, or onto a porch to escape rain or snow. That's a carbon monoxide danger, covered in our 20-foot-rule guide.
- ❑ Use a cover made for running a generator under — open-sided, so rain stays off while air still moves freely. Never a sealed box or a tarp draped over the top.
- ❑ Set it on a dry, level surface, raised up off wet ground and out of any puddle.
- ❑ Keep the generator and your hands dry. Use GFCI protection when it's damp, and never touch it while it, or you, are wet.
- ❑ It still belongs at least 20 feet from the house, with the exhaust pointed toward open space and away from every window, door, and vent.
- ❑ Secure the cover so wind can't lift it or wrap it around the machine, and keep the exhaust clear of snow.

✓ Pace it off in daylight

Pick and prepare your spot on a calm, dry day — not in the dark during a storm. Five quiet minutes now saves a bad decision later.

The two rules that seem to fight — and don't

It feels like a contradiction the first time you face it: one rule says get the generator away from the house and out in the open, another says keep it dry. Here's why they actually agree.

The first rule comes from carbon monoxide safety, and it never bends: a running generator gives off an invisible, deadly exhaust, so it belongs outdoors only, well away from the house — the safety agencies say at least 20 feet — with the exhaust pointed away from every window, door, and vent. Our 20-foot-rule guide covers exactly why, and it's the most important guide in this whole category.

The second rule is just good sense: water and a running engine full of electricity don't mix, so you want to keep rain and snow off it. The mistake people make is solving the second rule by breaking the first — dragging the generator under a roof, into the garage, or onto the porch to get it out of the weather.

The whole trick of this guide is satisfying both at once: keep it outside and far away for carbon monoxide safety, and keep it dry with the right kind of open cover and a well-chosen spot. You never have to trade one for the other.

! When the two ever seem to conflict, CO wins

If you're ever tempted to move the generator closer or under cover to beat the weather, stop. The carbon monoxide rule always wins. There is always a way to keep it dry that doesn't involve bringing it in — and the rest of this guide is that way.

Never bring it in to escape the weather

This is the single most dangerous thing people do in bad weather, so it gets its own page. Every 'just until the rain stops' idea below has taken lives.

The garage, even with the door open

An open garage door does not turn a garage into the outdoors. Carbon monoxide still pools and builds inside, then drifts into the attached house through every gap — often while people sleep. A storm is exactly when the house is sealed up tight against the weather, which makes it worse, not better.

Sheds, carports, and covered porches

A shed traps exhaust just like a garage. A carport or covered porch blocks enough airflow to let carbon monoxide build, and both sit right against the house so it drifts straight in. None of these count as outdoors, no matter how hard it's raining.

! If it has a roof and walls, it isn't outdoors

That's the simplest test there is, and rain, snow, and cold never change it. The answer to bad weather is a proper open cover in a safe outdoor spot — never a wall and a roof.

The right kind of cover — open, not sealed

You can absolutely keep rain and snow off a running generator. The secret is a cover that sheds water while air still moves freely all the way around it.

Look for a cover, canopy, or tent made specifically for running a generator underneath — sometimes called a running cover. It's built like an open-sided umbrella on legs: it keeps the rain off the top while leaving the sides open so exhaust and heat escape and fresh air reaches the engine. The exhaust side stays open to the outdoors.

What you must never do is seal the generator up. A tarp tucked down tight around it, a storage tote or box over it, a doghouse-style enclosure, or a snug cover with no airflow all trap the exhaust right around the machine. That defeats the entire outdoor rule even though the generator is technically outside — and it can let carbon monoxide build to deadly levels in the open air.

! If it can't breathe on every side, it's not a cover

A safe running cover is closer to an open tent than a box. If you have to wonder whether air moves freely all the way around it, treat the answer as no and open it up.

A dry, level spot — up out of the wet

Where the generator actually sits matters as much as what's over it. You want firm, level ground that stays dry even as the storm wears on.

Set it on a firm, level surface — concrete, pavers, or hard-packed ground — and raise it up off wet ground and out of any low spot that turns into a puddle. A rigid mat, a couple of paving stones, or a purpose-made stand can lift it clear of standing water and keep it steady.

Level matters for the engine, too. A generator relies on gravity to keep its oil where it belongs, so one tilted on soft or sloping ground can run its oil unevenly. And a machine that vibrates on soft footing can slowly walk itself toward an edge or a puddle over a long run.

✓ Think about where the water goes

On a rainy day, watch your yard for a minute before you commit to a spot. Water runs downhill and pools in the low places — put the generator on the high, well-drained ground, not where the runoff collects.

Keeping it — and you — dry

A generator and water are never friends, but the real danger isn't the machine getting damp — it's you touching electricity while anything is wet.

Never touch the generator, its switches, or its outlets with wet hands, and never operate it while you're standing in water or on soaked ground. Keep a dry place to stand, and keep your hands dry when you approach it.

Use GFCI protection, especially in damp weather — it's designed to cut power fast if electricity starts going somewhere it shouldn't, which matters most exactly when things are wet. Many generators have it built in, and a portable GFCI adapter can add it to ones that don't. Our grounding-and-GFCI guide goes deeper on how that protection works and how to ground the unit correctly.

! Never run it in standing water

If water is rising or pooling around the generator, or you'd have to stand in water to reach it, shut it down from a dry spot if you can do so safely, and stay clear. No amount of backup power is worth a shock. When in doubt, wet and electrical means hands off.

Securing the cover against the wind

The same storm that brings the rain usually brings wind, and a cover that blows loose can turn from help into hazard in a single gust.

Choose a running cover with a way to anchor it — stakes, weighted feet, or tie-downs — and secure it so a gust can't lift it off or, worse, wrap it around the running machine and choke off its airflow. A cover pressed tight against a hot engine or exhaust is both a fire risk and a carbon monoxide risk.

A low windbreak set a few feet away — not touching the generator and not enclosing it — can cut a biting wind without trapping exhaust. Keep anything like that well clear of the machine, with open air all around.

! A loose cover is worse than none

If the wind is strong enough that you can't keep an open cover safely anchored and clear of the engine, you're better off shutting the generator down until it passes than letting a flapping cover smother it. Keep an eye on it during a blow.

Keep the exhaust clear and aimed at open space

Weather can quietly block or redirect the exhaust, so this deserves a fresh look every time you set up, not just the first time.

Point the exhaust toward open yard and away from the house — away from every window, door, and vent, including the fresh-air intake for your furnace or air conditioner, and mind the neighbor's windows too. The 20-foot distance from our 20-foot-rule guide still applies in every kind of weather; rain and snow don't shorten it.

Then keep the exhaust physically clear. Drifting snow can pile up against the outlet, fallen leaves can block it, and a cover set too low or too close can bounce exhaust back around the machine. Check it when you set up and again through a long storm — a buried or blocked exhaust is dangerous.

✓ **Snow keeps falling after you walk away**

In a snowstorm, the exhaust and air intake can be clear when you start it and buried an hour later. Plan to brush them clear every so often through the storm, not just once at the start.

Heat, sun, and giving it room to breathe

Bad weather isn't only cold and wet. A hot, sunny stretch brings its own two things to watch — keeping the generator cool, and what's underneath it.

A generator works harder to stay cool in high heat, so give it a little more room than usual and keep its own vents and air intakes clear. A bit of shade helps — but only from an open-sided structure that doesn't block airflow. Never box it in for shade any more than you would for rain; the outdoor and airflow rules don't change with the season.

The bigger heat risk is underneath. A generator's muffler and exhaust run genuinely hot, and setting one on dry grass, mulch, or fallen leaves in a hot, dry spell is a real fire risk. Choose bare ground, gravel, or pavement, especially during a drought or a burn ban — look down before you set it, not just around.

! Shade is fine; an enclosure never is

It's tempting to tuck a generator into a shady nook on a scorching day, but the same rule holds as in a downpour: open air on every side, well away from the house. Sun is a reason for room and airflow, never for walls.

Pick and prep the spot before the storm

The worst time to figure out a safe, dry spot is at night, in the rain, with the power already out. Settle it now, calmly, in daylight.

Walk your yard on a good day and find the spot that checks every box: outdoors, at least 20 feet from every wall, firm and level, well-drained, with room to aim the exhaust at open space and anchor a cover. Make sure you can reach it safely in bad weather without crossing ice or a steep, slick slope in the dark.

- Firm, level, and well-drained — high ground, never a low spot that puddles.
- At least 20 feet from the house, exhaust aimed at open yard.
- Room to anchor an open, running-rated cover with air on every side.
- A safe, lit path you can walk in rain or snow — you may be out there at 2 a.m.
- Bare ground, gravel, or pavement underneath, not dry grass or mulch.

★ I'm glad to walk your yard with you

Finding a spot that stays safe and dry in every season is one of my favorite parts of a visit. If you'd like company pacing it off and marking it, call or text me at (330) 200-8042.

Two kinds of homes, two sets of needs

Keeping a generator safe and dry looks a little different depending on your lot — a tight in-town yard and open country each bring their own weather puzzles.

If you live in town or the suburbs

A small lot often means little dry, level space to work with and nowhere obvious for water to drain — which is exactly when the temptation to duck under the porch or into the garage is strongest. Resist it. There is almost always a safe outdoor spot; it just takes a little more thought to find.

- Hardscape helps — a patio, driveway, or walkway is usually firmer, flatter, and better-drained than a patch of lawn.
- On a tight lot, measure the 20 feet in more than one direction; the only dry, safe spot may be a side yard, not the back.
- Watch where roof runoff and downspouts send water, and keep the generator well clear of it.
- Point the exhaust away from the neighbor's windows as carefully as your own — close homes share air.

If you are out in the country on a well

Out in the country you usually have room to find a distant, well-drained spot — but rural weather is often harsher and outages run longer, so the generator faces more hours of wind, deep snow, and exposure, sometimes a long walk from the house.

- Use the space to put real distance between the generator and the house, on high, well-drained ground.
- Open, exposed land means wind — anchor the cover well and plan a windbreak that doesn't enclose the machine.
- Deep snow can bury the exhaust and your path both; keep a shovel handy and clear the outlet through the storm.
- A long, dark walk in bad weather calls for a lit, cleared path and boots — don't let distance tempt you to move it closer to shelter.

★ Every yard is a little different

Tell me about yours — a snug in-town lot or open acreage — and I'll help you find a spot that stays safe and dry through whatever the sky does. Call (330) 200-8042.

Running it through the rain

Ordinary rain doesn't have to mean losing power, as long as the generator stays properly protected and you stay dry.

Under a proper open running cover, on dry, firm, raised ground, a generator can keep running through a normal rain. Check on it now and then rather than leaving it for hours, and keep an eye on the ground underneath for water starting to pool as the storm goes on.

In heavy or wind-driven rain, or if water begins pooling near the unit or its cords, it's time to power down from a dry spot, let things dry out, and reassess. A soaked generator is a hazard to deal with carefully, not an inconvenience to push through.

! Powering down is always allowed

There's no prize for keeping the lights on through a genuine soaking. If the rain gets ahead of your cover, or water is creeping toward the unit, shutting it off and waiting is the right call, every time.

Snow and deep-cold placement

Snow changes the placement conversation in a few specific ways, even though the core rules don't budge an inch.

Clear a firm patch down to the ground, or set the generator on a rigid platform above the snowpack, so it doesn't sink or tip in loose snow. Then keep snow cleared from the exhaust and the air intake all through the outage, not just at the start — a storm can bury both while the machine runs.

Never move it into the garage or any enclosed space just to warm it up — the outdoor rule holds in the cold exactly as it does in every other season. For the engine side of winter — starting in the cold, battery care, cold-weather oil, and fuel — our winter-placement-and-snow guide goes into real depth; this page is about where it sits and keeping it clear.

✓ A windbreak beats a shelter

If cold wind is the problem, a low windbreak a few feet away — not touching or enclosing the unit — helps far more than trying to tuck the generator somewhere sheltered but unsafe.

Wet-weather mistakes that bite

A short list of avoidable slip-ups covers most of the trouble I hear about once the weather turns.

- **Ducking into the garage or under the porch** to escape the rain — the most dangerous shortcut there is, and the reason this guide exists.
- **Draping a tarp or dropping a box over it** to keep the rain off, not realizing a sealed cover traps deadly exhaust.
- **Setting it in a low spot** that's dry when you start and a puddle an hour into the storm.
- **Touching it or plugging in with wet hands**, or while standing on soaked ground.
- **Letting a loose cover flap** until a gust wraps it around the hot engine.
- **Forgetting the exhaust** as snow drifts up against it during a long storm.

! Almost all of these happen in a hurry

Nearly every wet-weather mistake happens under pressure — in the dark, in the rain, wanting it handled fast. Deciding your spot and your cover calmly, in advance, removes most of the risk before it ever starts.

Building your wet-weather plan

A few minutes of planning now means no one has to think hard in the moment it actually matters.

- ❑ A pre-picked outdoor spot, at least 20 feet from the house, firm, level, and well-drained.
- ❑ A running-rated, open-sided cover that anchors against wind, kept with the generator.
- ❑ A rigid mat or pavers to raise it off wet ground, and a dry place to stand.
- ❑ GFCI protection sorted out, and everyone knows: if it's wet, don't touch it.
- ❑ A lit, cleared path to the spot, plus a shovel or broom for snow on the exhaust.
- ❑ A simple rule the whole household knows — weather never means bringing it inside.

✓ Walk it through once, calmly

Show whoever's home where the generator goes, how the cover anchors, and where to stand — on an ordinary day, not during a real storm. Five calm minutes now beats a scramble later.

Sounds reasonable, still wrong

A few weather 'solutions' sound sensible right up until you know why they're dangerous. Here's the honest version of each.

Sounds reasonable	The truth
'I'll just pull it into the garage till the rain stops.'	An open garage still traps carbon monoxide. Never indoors — use an open cover outside instead.
'A tarp over it will keep it dry.'	A draped or tucked tarp seals in deadly exhaust. Only an open, running-rated cover is safe.
'A little standing water won't hurt anything.'	Water and a running generator are a shock hazard. Never run it in or near standing water.
'The porch has a roof, so it's basically outside.'	A covered porch blocks airflow and sits against the house. It is not outdoors.
'It's freezing — I'll warm it up in the shed first.'	A shed traps exhaust like a garage. Keep it outside and use a windbreak, never an enclosure.

! When a shortcut and the rule disagree, trust the rule

Every line on the left sounds fine in the moment, which is exactly why they're dangerous. If something you've heard doesn't match this guide, trust the rule, not the rumor.

Questions worth asking

A few plain questions clear up most of the confusion I hear about weather and placement.

Q: Can I ever run it under a roof if it's really pouring?

Only if 'under a roof' means a genuinely open-sided cover made for running a generator, out in a safe spot. A garage, shed, carport, or enclosed porch is never safe, no matter how hard it's raining.

Q: Is a generator tent the same as a safe cover?

Only if it's specifically rated for use while the generator runs, with real airflow on every side. A tent or tarp that seals up tight is not safe, however well it keeps the rain out.

Q: How do I keep it dry and still 20 feet away?

With the right open cover on a dry, raised spot in the yard. The distance and the dryness aren't in conflict — our 20-foot-rule guide covers the distance, and this guide covers the cover.

Q: What if snow is coming down faster than I can keep up with?

Clear the exhaust and intake when you can do it safely, and if you can't keep them clear, power down from a dry spot and wait rather than risk a blocked exhaust.

★ There's no silly question here

Weather and safety together can feel like a lot to juggle. I'd genuinely rather you call and ask than guess. Reach me at (330) 200-8042 any time you want to talk through your setup.

Common Questions

The questions I hear most from folks working through this guide, answered plainly.

Q: Will an open cover really keep enough rain off?

Yes — a proper running cover is built to shed rain from above while leaving the sides open. Combined with a raised, well-drained spot, it keeps the machine dry without ever trapping exhaust.

Q: Is it safe to leave it running in the rain overnight?

Under a secure open cover on high, dry ground, ordinary rain is manageable, but check on it periodically and don't rely on it unattended for hours. Heavy rain, wind, or pooling water is a reason to shut it down.

Q: Can I touch it with rubber gloves if my hands are dry?

Keep it simple: dry hands, dry footing, GFCI protection, and never touch it in standing water. Don't lean on gloves as a workaround for a wet, unsafe situation — our grounding-and-GFCI guide explains why.

Q: Does keeping it dry change the 20-foot rule at all?

Not one bit. The distance and exhaust direction come from carbon monoxide safety and never bend for weather. You keep it dry within those rules, never by breaking them.

! Read it again when the seasons change

This guide is worth a fresh look each fall before storm season and each spring — any time the weather you'll face, or where you'll put the generator, changes.

Bringing it all together

Safe placement in any weather comes down to one idea: keep it outside and far away for carbon monoxide safety, and keep it dry the right way — with an open cover, a raised spot, and dry hands.

The distance-and-direction rule itself lives in our 20-foot-rule guide, and it's the foundation everything here is built on — nothing about rain, snow, or heat ever changes it. If you haven't read that one yet, it's the most important guide in this category.

For the engine side of winter — cold starts, fuel, and battery care — our winter-placement-and-snow guide goes deeper, and for grounding the unit and using GFCI protection safely, our grounding-and-GFCI guide picks up there. This guide's job is simply to keep the machine safe and dry in the spot you've chosen.

★ Let's set up your safe, dry spot together

On a visit I'll help you pace off a spot that stays safe and dry in any season, pick the right cover, and make sure everyone knows the plan. Call or text me at (330) 200-8042.

If you remember only one thing

Out of everything in this guide, one idea holds it all together.

Keep it outside. Weather is never a reason to bring a generator into the garage, the shed, the carport, or onto the porch. You keep the rain and snow off with an open, running-rated cover and a dry, raised spot in the yard — never with a wall and a roof, and never with a sealed box or a draped tarp.

! Say it back to yourself

Outside, always. At least 20 feet away, exhaust pointed at open air. An open cover, never a sealed one. Dry hands, dry footing, and hands off if it's wet. That's the whole guide in five lines.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made keeping a generator safe and dry in any weather feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't do the licensed electrical or gas work myself — for that I'll help you line up a trustworthy local pro.

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Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

Cover It the Right Way

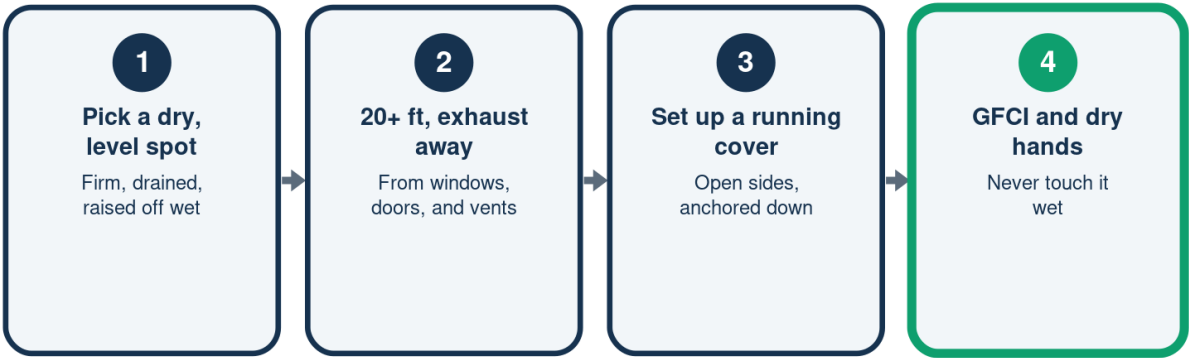
Keeping rain off without trapping exhaust

	Safe?	Why
Open running cover	Yes	Rain off, air moves
Tarp draped over it	No	Traps the exhaust
In the garage	No	Never -- indoors
Sealed box or tote	No	No airflow at all

A safe cover breathes on every side -- rain off the top, air all around.

Before the Storm

Set it up dry and safe, in daylight



Set it up dry and safe before the storm -- not in the dark, mid-outage.

Wet-Weather Do's and Don'ts

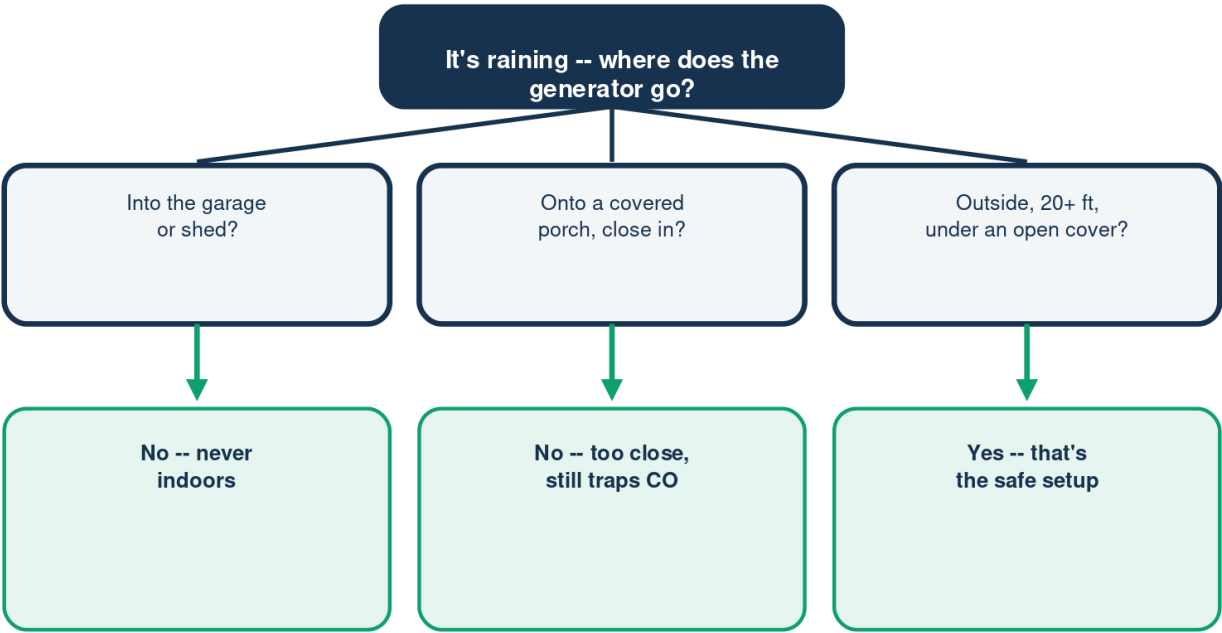
Water and electricity call for care

	Do	Don't
Your hands	Keep them dry	Touch it wet
The ground	Dry, raised spot	Standing water
The cover	Open-sided cover	Sealed box or tarp
When damp	Use GFCI power	Skip protection

Wet and electrical never mix -- if it's wet, don't touch it.

It's Raining -- Where Does It Go?

Let the outdoor rule decide, not the weather



Weather never changes the rule -- keep it outside, and dry it with an open cover.

Illustration - a schematic, not to scale. Your setup may differ.



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A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



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