Skill guide · Medical Care

Medical Kits: What Actually Goes in Each One

This site's Tier 1-4 progression builds up a trauma kit, bulk medical supplies, a surgical kit, and a community cache, but always sorted by tier, never by *where the kit actually lives*. The Go-Bags & 72-Hour Kits guide's own health row just says "first aid kit" and points to First Aid Basics, which teaches technique, not contents. This guide fills that gap directly: what actually goes in a portable go-bag kit, a stationary home kit, a vehicle kit, and a Tier 4 community cache, and why each one is genuinely different from the others, not just a bigger or smaller version of the same list.

Which kit does which job

Kit	Built for	The one constraint that shapes it
Go-bag / IFAK	Trauma, in the first minutes, away from home	Weight and size; every item has to earn its place
Home medical kit	Everyday injuries and illness, sheltering in place	Space isn't scarce; depth and quantity matter more than portability
Vehicle kit	Roadside trauma, the most statistically likely injury most people will personally see	Extreme temperature swings degrade meds and adhesives faster than home storage
Community cache (Tier 4)	Coverage across a neighborhood, not one household	Access rules, training, and real legal limits on what can be stocked

The go-bag kit: a real IFAK, not a box of bandages

An Individual First Aid Kit (IFAK) is built around a narrow, specific job: stopping life-threatening bleeding in the first few minutes, before EMS arrives. That's a different design goal than a home first aid kit, and the contents reflect it.

Item	Why it's in this kit specifically
Commercial tourniquet (CAT or SOFT-T)	The core item; this site's own shopping list already calls for it, never an improvised substitute
Hemostatic gauze	Packs a wound a tourniquet can't reach (the neck, armpit, groin)
Compression bandage (Israeli bandage)	Holds pressure on a wound hands-free once it's packed
Chest seal	For a penetrating chest wound; not currently stocked anywhere else on this site, and it's a standard IFAK item
Nitrile gloves, 2+ pairs	Bleeding control means direct contact with someone else's blood
Trauma shears	Cutting clothing away from a wound fast, without a blade near skin
Permanent marker	Write the tourniquet application time directly on the tourniquet or the patient's skin; EMS needs that time, and it's the detail people forget to pack
Emergency blanket	Shock and blood loss both drop body temperature fast

This kit is small on purpose

Every item above earns its place because it treats the handful of injuries that actually kill people before help arrives: uncontrolled bleeding, an airway problem, or shock. It is not a substitute for the home kit below; a full, bulk range of bandages, ointments, and OTC medications belongs there instead, not crammed into this small trauma-focused kit. That's separate from the few days of each person's actual prescription medication that Go-Bags & 72-Hour Kits already calls for packing in the bag itself; that still belongs in the go-bag, just not inside this kit specifically. See First Aid Basics for how to actually use a tourniquet and pack a wound, and consider a real Stop the Bleed course; owning this kit isn't the same as knowing how to use it under pressure.

The home medical kit

This is the kit that has room to be complete. It absorbs everything this site's own Tier 1-3 Medical Care shopping list already calls for, consolidated into one list instead of a tier-by-tier drip feed, plus the baseline the American Heart Association and American Red Cross recommend for any home kit.

Category	Contents	Note
Wound care baseline	2 absorbent compress dressings (5x9 in), 25 assorted adhesive bandages, 10 yd adhesive cloth tape, 5 antibiotic ointment packets, 5 antiseptic wipe packets, gauze rolls and roller bandages, sterile gauze pads	The AHA/Red Cross first aid guidelines' own minimum-contents table
Beyond the baseline	2 packets aspirin, hydrocortisone ointment, an instant cold compress, a breathing barrier with a one-way valve, 2 pairs nonlatex gloves, tweezers, a non-mercury oral thermometer	Same source; rounds out the basics for burns, allergic skin reactions, and CPR
This site's Tier 1 additions	Digital thermometer, pulse oximeter, basic OTC medications (pain relievers, antihistamines, anti-diarrheal, antacids), a 14-day supply of every household prescription	Already on the shopping list; belongs in this kit specifically, not just "somewhere in the house"
This site's Tier 2 additions	Manual blood pressure cuff, stethoscope, otoscope, SAM splints, a sterilization method (pressure cooker or alcohol burner), bulk gloves/masks/gauze/tape	For when a hospital visit isn't realistic for anything short of a true emergency
This site's Tier 3 additions	Suture/staple kit, dental kit, a real medical library (Where There Is No Doctor and similar)	Get real training before using the suture kit; owning it isn't the same as knowing when and how

Store it as one kit, not scattered supplies

A first aid kit that's actually a shoebox in one closet plus a bottle of aspirin in another plus the thermometer in a junk drawer doesn't function as a kit under stress. Consolidate everything above into one container, in one known location, and make sure every adult in the household knows where it is.

The vehicle kit

The Vehicle Emergency Kit & Roadside Basics guide already covers the mechanical side of a vehicle kit; the medical side of it deserves its own note, because a parked car is a genuinely hostile storage environment that nothing else on this site addresses.

A parked car runs hotter than any medication label allows for

Interior temperatures in a parked car can exceed 140°F even on a mild, sunny day, in Utah's own summer heat often well before noon. Most medications are only tested and labeled stable at 68-77°F room temperature; degradation from heat exposure is a real chemical breakdown, not a cosmetic issue, and a pill or auto-injector that looks completely normal can already be compromised. Epinephrine auto-injectors, nitroglycerin, insulin, and albuterol inhalers are specifically heat-sensitive and are poor choices to leave in a vehicle kit long-term. Adhesive-backed items aren't exempt either: adhesive bandages and medical tape genuinely lose their stick with repeated heat cycling, the same failure mode that leaves a bandage that won't stay on when you actually need it. A tourniquet's nylon webbing and plastic buckle are about the only thing in this kit that's genuinely heat-indifferent; treat everything else, adhesives included, on a rotation schedule between the car and the house rather than leaving it parked for months.

Beyond that heat caveat, the vehicle kit's trauma contents should mirror the go-bag IFAK above: the CDC puts car crashes at roughly 2.1 million emergency room visits a year in the US, making a roadside accident one of the most statistically likely serious trauma events most people will ever personally witness, and the same tourniquet-and-hemostatic-gauze logic applies just as much there as anywhere else.

The community cache (Tier 4)

This site's Tier 4 Medical Care content describes a "Shared Medical Cache" in one general sentence: bulk trauma and medication stock, sized for the neighborhood, with access rules agreed in advance. Here's what that actually looks like in practice.

Real sizing logic exists for this, and it doesn't have to be invented from scratch. ANSI/ISEA Z308.1, the standard behind OSHA's workplace first aid kit requirement, defines kits at 10-, 25-, 50-, and 100-person scales, with a common industry benchmark of one kit per 25 people. That's a reasonable starting point for sizing a neighborhood cache: count the households you're actually planning to cover, and size against the nearest bracket rather than guessing.

Component	What it actually means
Community medical reserve	Bulk trauma and medication stock, sized using the ANSI benchmark above, not per-household guesswork
Trained-responder roster	Names, skills, and availability, kept current; the actual point is knowing who to call fast, not a binder nobody reads
Access rules	Decided in advance, in writing, before the cache is needed, not improvised during an emergency
Shared reference copies	Distributed across multiple households so losing one copy doesn't lose the only one

The real legal line on stockpiling antibiotics

Prescription antibiotics legally require a licensed provider's direction; buying them without any prescription from an unlicensed source is illegal, not a gray area. There is a legitimate path: some physicians write a standby prescription for exactly this purpose, and several US-based telemedicine services fill emergency-use antibiotic prescriptions through licensed physicians and pharmacies. A community cache that wants to include antibiotics should go through one of those legitimate channels, ideally with a household member's own doctor, not treat this as a workaround.

What about pets

Veterinary kits aren't covered here. Pet Evacuation & First Aid Basics already has a real, species-specific kit-building section, gauze, vet wrap, a properly sized muzzle, saline, plus genuinely different needs for reptiles and small mammals, and duplicating it here would just be a worse copy of a guide that already does the job.

Sources

- Stop the Bleed / American College of Surgeons, core IFAK contents including tourniquet, hemostatic gauze, chest seal, and the time-stamping marker: Stop the Bleed
- American Heart Association / American Red Cross, 2024 First Aid Guidelines, Table 2, minimum contents for a first aid kit: AHA/Red Cross
- ANSI Blog, ANSI/ISEA Z308.1-2021 workplace first aid kit classes and person-count sizing (10/25/50/100-person kits, the one-kit-per-25-people benchmark): ANSI
- People's Pharmacy and Health In Hand, heat degradation of medication, FDA-labeled stable storage range (68-77°F), and specific heat-sensitive drugs (epinephrine, nitroglycerin, insulin, albuterol): People's

Pharmacy; Health In Hand

- SafetyCulture Marketplace, heat's effect on adhesive bandages and first aid kits left in a hot car: SafetyCulture
- JASE Medical, the legal path for a standby emergency antibiotic prescription through a licensed physician: JASE Medical
- CDC, roughly 2.1 million annual emergency room visits from motor vehicle crash injuries in the US: CDC

SKILL GUIDE · MEDICAL CARE

Understanding START Triage

The decision logic behind sorting multiple injured people by severity, not a replacement for practicing it on simulated patients. This is a Stage 3 self-sufficiency skill from the Medical Care chapter and its addendum, and the decision tree itself is genuinely teachable in text, the same way a checklist is, even though becoming fast and automatic at it takes real practice.

This is for multiple casualties, not one injured person

START (Simple Triage And Rapid Treatment) exists to solve one specific problem: more injured people than you can treat at once, so you have to decide who gets help first. If you're dealing with a single injured person, don't triage them, just help them; see the first aid basics guide for that.

The four categories

Tag	Meaning	What it signals
Green (Minor)	Walking wounded	Can wait; treat everyone else first
Yellow (Delayed)	Serious but stable	Needs care, but survivable if it waits
Red (Immediate)	Life-threatening, treatable	Highest priority; treat or evacuate first
Black (Deceased/Expectant)	Not breathing, even after airway repositioning	Beyond what first aid can change

The decision sequence, in order

START is built to tag each person in about 30 seconds, by walking through the same five questions in the same order every time. Once you've assigned a tag, move to the next person; you're sorting quickly, not treating yet.

1. **Call for anyone who can walk to move to one spot.** Everyone who gets up and walks there on their own is tagged **Green**. Someone able to hear you, understand the instruction, and walk is very unlikely to die in the next hour; that's the entire logic behind checking this first, before anything else.

2. **For everyone who didn't get up, check breathing.** If they're not breathing, reposition the airway (tilt the head back, lift the chin) the same way you would before rescue breaths. Still not breathing after that? Tag **Black**. If breathing starts once the airway is open, tag **Red** immediately and move on; don't stay to treat yet.
3. **If they were already breathing on their own, check the rate.** Faster than about 30 breaths a minute (roughly one breath every two seconds) suggests shock or respiratory distress; tag **Red**. Slower than that, continue to the next check.
4. **Check perfusion: a radial pulse (at the wrist) or capillary refill.** Press a fingernail until it goes pale, then release; longer than about 2 seconds to return to normal color, or no radial pulse at all, means poor circulation; tag **Red**. A normal pulse and quick refill means continue.
5. **Check mental status: can they follow a simple command?** "Squeeze my hand" or "open your eyes" is enough. Can't follow it, or too altered to respond meaningfully? Tag **Red**. Can follow it? Tag **Yellow**.

Five questions, and every person ends up tagged Green, Yellow, Red, or Black by the time you're done with them. Move to the next person immediately after tagging; treatment happens in tag order once everyone's sorted, not as you go.

> **Why this specific order**
>
> Each question is placed to catch the deadliest, most reversible problems first: an unrepositioned airway or a rapid respiratory rate kills faster than almost anything else a bystander can actually fix in the field, so those come before circulation and mental status, which still matter but progress more slowly. The order isn't arbitrary; it's sorted by how fast each problem kills and how quickly it can be caught.

How to actually mark the tag on a person

Sorting someone into a category only helps the next responder if the tag is physically visible on them, not just decided in your head. Commercial triage tags (color-coded cardstock with a tear-off strip matching the category) are the real, purpose-built tool, and worth keeping in a CERT kit or car if you've taken the training. Without one, colored surveyor's tape or ribbon, tied around a wrist or ankle, works as a real substitute, keep a roll each of red, yellow, and green on hand for exactly this. As a last resort with literally nothing else available, writing the color directly on the person's forehead or a piece of exposed skin with a permanent marker communicates the same information; legible and visible matters more than which of these three methods you use.

Retriage: tags aren't permanent

A mass-casualty scene keeps changing after the first pass. Someone tagged Yellow can deteriorate to Red while you're working through everyone else; someone tagged Red who gets a few minutes of care can sometimes be safely reclassified. Re-check tags periodically rather than treating the first sort as final, especially for anyone tagged Yellow.

What this doesn't replace

Reading this sequence is not the same as being fast and automatic at it under real stress, with real people, in a chaotic scene. **CERT (Community Emergency Response Team) training** is free in nearly every Wasatch Front city, run through the local fire department, and includes hands-on practice running START on simulated patients, exactly the repetition that turns a five-step list into instinct. This guide is the "what" and "why"; CERT is where the "fast and correct under pressure" part actually gets built.

Where to find it: search "[your city] CERT training." Salt Lake City, South Salt Lake, West Valley City, American Fork, and most Wasatch Front cities run their own free programs.

Sources

- START triage algorithm, decision sequence and thresholds: EMS1; HHS Radiation Emergency Medical Management (REMM)
- CERT training availability and content, Wasatch Front cities: CERT-LA
- Physical tagging methods (commercial tags, colored tape/ribbon): CERT-LA; Wikipedia

SKILL GUIDE · MEDICAL CARE

Pregnancy, Childbirth & Newborn Care

The Medical Care chapter names midwifery in one line and means it: assisting childbirth is a real skill worth building through a class or an experienced mentor, not from a page. This guide isn't a substitute for that training. It's bounded, real guidance for the scenario this book plans around throughout, help genuinely isn't coming, and something is happening regardless.

What this guide is, and isn't

This covers prenatal planning, recognizing real labor, what actually helps if delivery happens before real care arrives, and immediate newborn care. It does not cover how to manage a complicated delivery, that's exactly the training this book already points to. The World Health Organization's own framing is the right one to start from: the large majority of births proceed normally without intervention, and an attendant's real job is hygiene, warmth, and watching for bleeding, not actively "delivering" a baby.

Prenatal planning

Pregnancy is the one medical scenario in this entire book with an actual known timeline, which makes advance planning genuinely more effective here than almost anywhere else.

- Know the due date and keep a physical copy of prenatal records (blood type, any complications, planned delivery location) with the household's other emergency documents.
- Identify, in advance, at least two realistic routes and destinations for reaching real obstetric care, and a backup plan for if travel isn't possible at all.
- Know your own or your household member's Rh factor; Rh-negative status matters for a real medical decision (RhoGAM) that only a provider can make, but knowing it in advance saves real time if care becomes available partway through an emergency.

WARNING

Pregnancy Symptoms That Are Always a Real Emergency

Heavy vaginal bleeding, a severe headache that doesn't resolve, sudden vision changes (blurring, spots, or flashing lights), and a noticeable, sustained decrease in fetal movement are not symptoms to wait out. The headache and vision changes specifically can signal preeclampsia, a real, dangerous

complication that a layperson genuinely cannot manage without medical care. Any of these means real care, not home management, is the priority, regardless of how far from help you actually are.

Recognizing real labor

True labor contractions are regular, get closer together over time, and keep getting stronger regardless of position or activity; Braxton Hicks (false labor) contractions are irregular and often ease up with rest or a position change. Once labor is confirmed, a water breaking, contractions 5 minutes apart lasting a minute each for a first birth, or any bleeding, get moving toward real care immediately rather than waiting to see how things progress.

If delivery happens before help arrives

Most births genuinely do proceed normally. The steps below are for the specific situation where labor has progressed too far to reach real care in time.

1. Wash your hands and forearms with soap and clean water for a full **3 minutes** before touching anything.
2. Let the mother find whatever position is most comfortable; don't force a specific position.
3. As the head emerges, support it gently, don't pull. The rest of the body typically follows within one more contraction.
4. Dry the baby immediately and place them skin-to-skin on the mother's chest, then cover both with a warm blanket. A newborn loses heat fast, real hypothermia risk within minutes, and skin-to-skin contact is the single most effective way to prevent it.
5. **If the baby isn't crying or breathing within the first few seconds after drying**, stimulate them: rub the back firmly but not roughly, or flick a fingertip against the sole of the foot, for 10-15 seconds. Most babies respond to this alone. If there's still no effective breathing after that, this is exactly the kind of emergency described below, get to real care by whatever means are actually available, this guide can't safely walk you through actual newborn resuscitation beyond this first step.
6. **Leave the umbilical cord intact if there's any realistic chance of reaching real care**, even delayed by hours; there's no urgency to cut it. If you must cut it because help genuinely isn't coming, tie it off tightly in two places roughly a hand's width apart with clean string or ribbon, then cut between the two ties with a clean (ideally sterilized) blade.
7. The placenta typically delivers on its own within about 30 minutes. Let it come on its own with gentle guidance only; never pull on the cord or placenta to speed this up, which risks a real hemorrhage.

WARNING

Postpartum Hemorrhage Is the Leading Cause of Maternal Death Worldwide, and Uterine Massage Is a Real Response

After the placenta delivers, firmly massage the mother's lower abdomen, over the uterus, in a circular motion. This encourages the uterus to contract, which is what actually controls bleeding after birth; a uterus that stays soft and doesn't contract is the single most common cause of dangerous postpartum bleeding. This is a real, evidence-backed action a layperson can take, not a folk remedy, and it's worth doing immediately and continuing while arranging evacuation to real care, not a substitute for it. Heavy bleeding that continues despite firm massage is a true emergency; get to real care by whatever means are actually available.

WARNING

What's Genuinely Beyond Home Management

A baby presenting anything other than head-first (breech), the umbilical cord emerging before the baby (cord prolapse), labor that stalls for hours without progress, seizure activity in the mother, or bleeding that doesn't respond to uterine massage are all real emergencies beyond what this guide, or any guide, can safely walk a layperson through. Treat any of these as a reason to reach real care by whatever means are actually available, not a problem to solve at home.

Immediate newborn care

- **Warmth first.** Dry the baby thoroughly and keep them skin-to-skin with the mother, covered, since a term newborn in an unheated space can become dangerously cold within minutes.
- **Cord care once cut:** keep the stump clean and dry. Don't apply anything to it, alcohol included; plain clean-and-dry care has real evidence behind it over antiseptics.
- Encourage breastfeeding within the first hour if the mother is able; it supports the mother's own uterine contraction (helping with the hemorrhage risk above) as well as feeding the baby.

WARNING

Real Newborn Danger Signs

Difficulty breathing, a bluish tint to the skin or lips, persistent lethargy or a baby who won't wake to feed, refusal to feed at all, fever, seizure activity, or redness, swelling, or discharge at the cord stump or eyes are all reasons to seek real care immediately, not signs to monitor overnight.

Sources

- WHO, essential newborn care principles (thermal care, skin-to-skin, cord care): WHO
- Emergency childbirth steps (handwashing, supporting the head, cord management, delivering the placenta): Water Safety Guy; Ohio State Health & Discovery
- Postpartum hemorrhage as the leading cause of maternal death, and uterine massage as first-line response: Cochrane; American Nurse
- Newborn cord care (clean, dry, no antiseptic) and danger signs: Healthy Newborn Care, NCBI Bookshelf
- Preeclampsia warning signs (severe headache, vision changes) during pregnancy: American College of Obstetricians and Gynecologists
- WHO newborn stimulation technique (back rub, foot flick) before resuscitation: WHO / Healthy Newborn Network

SKILL GUIDE · MEDICAL CARE

Isolating a Sick Household Member

The Medical Care chapter calls quarantine "the single most effective way to keep a stomach illness from taking down the whole household at once," in one sentence, with no actual how-to. This guide is that how-to: setting up the space, what "dedicated dishes and towels" means in practice, the cleaning routine, and when it's actually safe to stop.

Why this is worth taking seriously

Disease, not the disaster itself, is the leading cause of death in the weeks after most emergencies. In a household already under stress, without easy access to a doctor, a stomach illness that spreads to everyone at once is far more dangerous than the same illness in one person. Isolating the first sick person is cheap, fast, and the single best thing you can do to keep it that way.

Setting up the space

- **A separate bedroom and bathroom**, if your home has one to spare. This is the single biggest factor in whether isolation actually works.
- **If you have to share a bathroom**, clean high-touch surfaces, counters, faucet handles, light switches, and the doorknob, after every time the sick person uses it, not just at the end of the day.
- **Ventilation matters if you're sharing any space.** Open a window to increase air circulation rather than relying on a closed door alone.
- The sick person eats in their own room if at all possible, rather than at a shared table.

What "dedicated items" actually means

Item	Rule
Dishes, cups, utensils	Do not share. Wear gloves when collecting and washing them; wash with soap and hot water, or run through a dishwasher.
Towels and bedding	A separate set, used only by the sick person, until they've recovered.
Electronics	Phones, remotes, tablets, don't share, or wipe down before anyone else touches them.
Hand sanitizer	Not a substitute for soap and water here. Alcohol-based sanitizer doesn't reliably kill norovirus and similar stomach-illness viruses; wash hands with soap and water instead, every time.

Cleaning after a vomiting or diarrhea incident

Stomach-illness viruses like norovirus spread easily from contaminated surfaces, and ordinary cleaning products often aren't strong enough.

1. Wear gloves. Contain and remove any solid waste first.
2. Mix a bleach solution: **5–25 tablespoons of household bleach (5–9%) per gallon of water.** Use the stronger end of that range for a heavily soiled area.
3. Apply the bleach solution to the affected surface and let it sit for at least **5 minutes** before wiping.
4. Clean the same area again afterward with regular soap and hot water.
5. Wash any contaminated laundry separately, on the hottest setting the fabric allows, and take out the trash.
6. Wash your hands with soap and water when you're done, even if you wore gloves the whole time.

Keeping the sick person hydrated

Isolation prevents spread, but the sick person's own real risk with a stomach illness is dehydration, not the illness itself. If commercial oral rehydration solution (Pedialyte or similar) isn't on hand, mix a real one: **6 level teaspoons of sugar and ½ level teaspoon of salt, dissolved completely in 1 liter of clean water.** It should taste no saltier than tears; don't guess at the salt measurement or add more than called for, too much salt is its own real danger. Make it fresh daily and discard what's left after 24 hours. Offer small, frequent sips rather than a large amount at once, which is more likely to come right back up.

Watch for real dehydration, not just the illness itself

In an adult: excessive thirst, little or no urination, dark urine, or dizziness. In a child: no wet diaper for 8 hours or more, a dry mouth, crying without tears, a sunken look to the eyes or soft spot, or unusual sleepiness. Any of these, or the person becoming unusually lethargic or unresponsive, is a reason to get real medical care, not something to keep managing with fluids alone.

When it's safe to end isolation

As a general rule, keep isolation in place until the sick person has been free of fever and other symptoms for at least **24 hours without the help of fever-reducing medication**. For a stomach illness specifically (vomiting or diarrhea), wait at least **48 hours** after symptoms fully stop before treating the household as back to normal, since these viruses stay contagious for a short window even after someone feels better.

Contagious longer than you'd guess

Norovirus and similar viruses can still be present in stool for two weeks or more after someone feels fully recovered. The 48-hour window isn't a guarantee of zero risk, it's the point where the household's overall risk drops enough to resume normal shared routines; keep the extra hand-hygiene vigilance going a while longer, especially for whoever's preparing food.

Before you need it

Decide which room in your home would become the isolation space before you actually need one, the same way the manual's own Tier 2 checklist asks. Stock a small dedicated kit for it in advance: a spare set of towels and bedding, disposable gloves, and a full bottle of unscented bleach, so setting it up during an actual illness is a five-minute task, not a scramble. For handwashing technique and hygiene without running water, see Bathroom & Hygiene Without Running Water.

Sources

- CDC, caring for someone sick at home (isolation space, dedicated items, cleaning, ventilation): CDC
- CDC, norovirus prevention, disinfection concentration, and when to end isolation: CDC
- CDC, norovirus infection control guidelines (bleach solution strength and contact time): CDC

- WHO oral rehydration solution recipe (reduced-osmolarity formula): Dateline Health Africa
- Dehydration warning signs in adults and children: GoodRx; Nemours KidsHealth

SKILL GUIDE · MEDICAL CARE

Herbal Medicine & the Home Apothecary

The Medical Care chapter's Tier 3 Herbal Medicine item is explicit that this requires real study, correct identification, dosing, and drug interactions all matter, not a folk-remedy shortcut. This guide is that real study: which common herbal remedies have actual evidence behind them, which don't, the dangerous plants that get mistaken for them, and where to get real training.

WARNING

Read this before anything else on this page

Herbal medicine is not automatically safer than pharmaceutical medicine just because it's plant-based. Several plants below have real, documented toxic look-alikes that have killed people who misidentified them, and several common herbs have serious interactions with prescription medications. Positive identification of any wild plant before use is not optional, and anyone on prescription medication should check for interactions before adding an herbal remedy, ideally with a clinician or pharmacist who knows their history.

What actually has evidence behind it

Evidence quality varies a lot across common herbal remedies. Treat these honestly, not as a uniform list of "natural remedies that work."

Herb	Use	Evidence & cautions
Willow bark	Pain relief	Genuinely strong evidence, real human trials, working through the same mechanism as aspirin. Prepared as a decoction: simmer 1-2 teaspoons (2-4g) of dried bark in a cup of water for about 15 minutes, up to 2-3 cups a day. Same cautions apply: avoid in children with a viral illness (Reye's syndrome risk), avoid with bleeding disorders or blood thinners, avoid in pregnancy and with aspirin allergy.
Ginger	Nausea, especially pregnancy-related	Good evidence for pregnancy-related nausea (roughly 600-2,500mg/day); evidence for motion sickness specifically is weaker. Above about 4g/day it can interact with blood thinners.
Chamomile	Anxiety	Preliminary evidence for anxiety; no good evidence for insomnia despite its reputation as a sleep aid.
Yarrow	Traditionally used to stop bleeding	Only traditional/historical use and one supportive animal study, no human trials. Contraindicated in pregnancy (contains thujone) and can cross-react in people allergic to ragweed or other Asteraceae-family plants.
Plantain leaf (Plantago, not the banana relative)	Traditionally used for minor wound healing	Modest evidence from animal studies and small human studies; reasonable as a minor-wound supplement, not a substitute for real wound care.
Echinacea	Cold prevention/treatment	Genuinely disputed. A 2014 Cochrane review found no clear benefit for treating colds already underway.

St. John's Wort deserves its own warning

St. John's Wort is commonly used for mild depression, but it induces liver enzymes (CYP3A4) and a drug transporter (P-glycoprotein) that speed up the breakdown of many prescription drugs. Documented dangerous interactions include reduced effectiveness of hormonal birth control, immunosuppressants, and antiretroviral HIV medications, plus a risk of serotonin syndrome when combined with SSRIs. Don't add it to any existing medication regimen without checking first.

Dangerous look-alikes: the most important section on this page

Misidentification is the real danger in foraging for herbal remedies, not the remedies themselves. These pairings have caused real, documented poisonings and deaths.

Toxic plant	Gets mistaken for	Why it's dangerous
Poison hemlock	Wild carrot (Queen Anne's lace) or wild parsley	Contains coniine; as few as 6-8 leaves have been fatal in documented cases.
Water hemlock	Wild parsnip or other edible roots	Described by the USDA as the most violently toxic plant in North America; a small amount can be fatal.
Foxglove	Comfrey or borage (before flowering, the leaves look similar)	Contains cardiac glycosides; documented fatal poisonings exist from this exact mix-up.
Comfrey itself	Used historically as a healing herb	Contains pyrrolizidine alkaloids that damage the liver; the FDA banned oral comfrey supplements in 2001.
Pennyroyal essential oil	Confused with pennyroyal tea, a much weaker traditional preparation	The concentrated oil is liver-toxic with no antidote; documented deaths exist. This is a concentration problem, not just a plant-identity problem.
Kava	Used for anxiety	The FDA issued a hepatotoxicity advisory in 2002 after more than 100 documented cases of severe liver injury.

Turning a dried herb into an actual dose

Which preparation you use depends on which part of the plant you're working with, tough plant material and delicate plant material extract differently.

- **Infusion**, for leaves, flowers, and light stems (chamomile, yarrow, plantain): pour freshly boiled water over the herb and let it steep covered, 5-15 minutes for a beverage-strength tea, 20-30 minutes (or overnight) for a stronger, medicinal-strength one. This is what most people already think of as "making tea."
- **Decoction**, for tough material like bark, root, and seeds (willow bark): simmer the material directly in water for 20-45 minutes rather than just pouring hot water over it and waiting. Bark and root are too dense for a passive steep to pull much out.

If a remedy calls for both a tough and a delicate ingredient, decoct the tough part first, then turn off the heat and add the delicate part to steep in the still-hot liquid rather than boiling everything together the

whole time.

Growing, drying, and storing your own

1. Start with plants you can buy as identified nursery starts (yarrow, chamomile, calendula) rather than foraging for anything in the toxic-lookalike table above.
2. Harvest leaves and flowers in the morning after dew has dried but before the heat of the day, when essential oil content is typically highest.
3. Dry in a single layer out of direct sunlight with good airflow; a screen or hanging bundle in a warm, dry, dark space works without any special equipment.
4. Store fully dried herbs in airtight glass jars, labeled with the plant name and harvest date, out of direct light. Most dried herbs lose potency well before they become truly unsafe, so treat a year or two as a practical shelf life for potency, not a hard safety cutoff.

> **Homemade tinctures don't have a reliable dose**
>
> A folk-method tincture (plant material steeped in alcohol for weeks) has no measured weight-to-volume ratio the way a pharmaceutical tincture does, so "one dropper full" from one batch can be meaningfully stronger or weaker than the next. Treat homemade tinctures as imprecise, and start with a small test amount rather than assuming consistency batch to batch.

Getting real training

Books and this guide are a starting point, not a substitute for structured education, especially before treating anyone beyond minor, self-limited complaints. Real training paths include:

- The American Herbalists Guild, whose Registered Herbalist (RH) credential requires roughly 800 hours of education and 400 hours of supervised clinical practice.
- Accredited herbal medicine programs at institutions like Bastyr University and the Maryland University of Integrative Health.
- Structured but non-degree programs like the Chestnut School of Herbal Medicine and the Herbal Academy.

Sources

- Willow bark, ginger, chamomile, echinacea evidence review: NIH National Center for Complementary and Integrative Health (NCCIH) herb monographs; Cochrane review on echinacea for the common cold (2014)
- Comfrey ban and pyrrolizidine alkaloid toxicity: FDA public health advisory, July 2001
- Kava hepatotoxicity: FDA Consumer Advisory, March 2002
- Poison hemlock, water hemlock, and foxglove/comfrey poisoning cases: USDA-ARS Poisonous Plant Research; published case reports in clinical toxicology literature
- St. John's Wort drug interactions: NCCIH; FDA drug interaction advisories
- Herbalist training and credentialing: American Herbalists Guild; Bastyr University; Maryland University of Integrative Health
- Infusion vs. decoction preparation technique: Mountain Rose Herbs; The Public Herbarium
- White willow bark decoction preparation and dosing: The Good Old Way; Common Sense Home

SKILL GUIDE · MEDICAL CARE

Dental Emergencies & Basic Care

The Medical Care chapter's Tier 3 Suturing & Basic Dental item points to a dedicated reference and practice before you'd ever need this for real. This guide covers the actual technique: recognizing when a dental problem is a real medical emergency, pain management that works (and the one that doesn't), saving a knocked-out tooth, temporary filling material, and an honest look at DIY extraction as a genuine last resort.

WARNING

Read this before anything else on this page

A tooth infection can become a life-threatening emergency, not just a bad toothache. Facial or neck swelling, difficulty swallowing, difficulty opening your mouth, or any trouble breathing means get to real medical care immediately, regardless of what tier you're in or how far away it is. Everything else on this page assumes the problem is painful but not an airway emergency.

Recognizing a real emergency versus a manageable problem

An untreated dental abscess, an infection at a tooth's root, can spread into the floor of the mouth and neck, a condition called **Ludwig's angina**. It's rare, but it's the most common serious complication of a simple abscessed tooth (over 90% of cases start exactly that way), and it can progress from a bad toothache to airway obstruction and sepsis within hours, not days, even with antibiotics already started. Mortality with prompt treatment is around 8%; without it, it's substantially higher.

Sign	What it means
Swelling under the jaw or in the neck, not just the cheek	The infection may be spreading beyond the tooth itself
Difficulty swallowing or a change in your voice	Possible airway involvement, treat as an emergency
Trouble fully opening your mouth (trismus)	A sign of spreading infection, not just local pain
Fever, feeling generally ill, rapid heartbeat	Signs the infection may be systemic

Any of these means get to real medical care, a hospital emergency department, not just a dentist's office if one isn't reachable, regardless of tier. A tooth can be dealt with later; an airway can't.

Toothache pain management that actually works

- **Ibuprofen or acetaminophen**, taken as directed, is the real first line, an oral anti-inflammatory or analgesic actually gets into your bloodstream and reaches the source of the pain.
- **A warm salt water rinse** (half a teaspoon of salt in 8 oz of warm water, swished for 30 seconds) reduces swelling and cleans the area.
- **A cold compress** against the outside of the cheek reduces swelling and dulls pain.
- **Topical benzocaine gel** (an over-the-counter dental pain product) numbs the area directly for up to about 30 minutes at a time.
- **Clove oil** applied to the tooth with a cotton swab is a real, traditional remedy with genuine numbing properties (eugenol, its active compound, is itself a dental anesthetic ingredient), though it manages pain rather than treating the underlying cause.

WARNING

Never put aspirin directly on a tooth or gum

This is a real, common, and actively harmful myth. Aspirin only works once it's absorbed into your bloodstream, holding the tablet against a tooth or gum does nothing for the pain. What it does do is burn the tissue: aspirin is acidic, close to the acidity of stomach acid, and direct contact causes a real chemical burn, a white or gray patch that's painful in its own right and takes weeks to heal, on top of the toothache you already had. Swallow it as directed instead, or use one of the methods above.

A knocked-out tooth: the first 30 to 60 minutes actually matter

1. Pick the tooth up by the crown (the white, visible part), never the root.
2. If it's visibly dirty, rinse it briefly, no more than 10 seconds, under cold water or milk. Don't scrub it or wrap it in anything.
3. If you can, gently reinsert it into its socket and have the person bite down softly on gauze to hold it in place.
4. If reinsertion isn't possible, store it in milk (real dairy milk preserves the root's ligament cells far better than water or a dry container) or in the person's own saliva if milk isn't available.
5. Get to a dentist or emergency department as fast as possible. Reimplantation works best within the first 30 minutes, and the odds drop substantially, though real success is still possible up to about 60 minutes with correct handling and storage.

A lost filling or crown

An over-the-counter temporary filling kit (zinc oxide, calcium sulfate, or glass ionomer material, sold at any pharmacy) can plug the hole and seal the exposed area until real dental care is available. To actually use one: brush and rinse the mouth first so no food debris gets sealed into the cavity, dry the tooth as best you can, then mix the kit's material per its own package directions if it requires mixing. Roll a small amount into a ball, press it into the cavity with the applicator tool provided, and pack it in gradually rather than trying to fill the whole space in one push; don't overfill above the tooth's surface. Bite gently together to help seat it, then keep the area dry and avoid eating or drinking on that side for the time the package specifies, commonly 15 minutes to a few hours, while it sets. Orthodontic wax works as a stopgap if no kit is on hand: it won't restore the tooth, but it covers a sharp edge or exposed nerve enough to make eating and talking tolerable. Either is genuinely temporary, meant to bridge days, not a substitute for an actual filling.

DIY extraction: a genuine last resort, not a routine option

Pulling your own or a family member's tooth carries real, serious risks: incomplete removal leaving root fragments behind, uncontrolled bleeding, damage to the jaw or nerve, and introducing new infection into an already-compromised area, sometimes worse than the problem it was meant to solve. This is something to attempt only when every other option is genuinely exhausted, real medical or dental care isn't reachable in any realistic timeframe, and the tooth is causing real, worsening harm, not a routine Tier 3 skill to practice for its own sake.

The real reference for this, if it ever comes to it

Where There Is No Dentist (Hesperian Health Guides) is a legitimate, widely used, free reference specifically written for exactly this situation: real diagnostic and treatment guidance, illustrated for a reader with no dental training, including when and how extraction is actually done. It's already named in this chapter's own Medical Library item; read it before you need it, not during.

Prevention is still the highest-leverage move

The single best Tier 1 dental action is getting a real checkup and any needed work done now, while normal dental care is available, not stockpiling supplies for problems a checkup could prevent outright. Basic hygiene matters more, not less, when water is limited: brushing and rinsing still work with a cup of water rather than a running tap, covered in the Bathroom & Hygiene Without Running Water guide.

Sources

- Ludwig's angina, cause, progression, and mortality: Cleveland Clinic; StatPearls/NIH
- Toothache pain management, OTC options, and clove oil: Healthline; Colgate
- Aspirin-on-the-gum chemical burn risk: Carolina Smiles Family Dentistry; DentisX
- Knocked-out tooth first aid, reimplantation window, and milk storage: Cleveland Clinic; Mayo Clinic
- Temporary filling materials and orthodontic wax as a stopgap: NewMouth
- Temporary filling kit application technique (mixing, packing, setting time): Jackson Ave Dental; Sayva Dental
- *Where There Is No Dentist*, Hesperian Health Guides, free field-dentistry reference: Hesperian