

# Hiking Backpacks

## How to choose which backpack suits you

The most important thing when selecting a backpack is to make sure it fits your posture and that it is not going to cause you any postural defects.

Your goal is to find a backpack that fits you:

**Trip length**—are you going out for an overnigher or for a week or more? For most of our treks, we recommend at least a 65 litre backpack.

**Personal style of hiking**—are you more into comfort or weight savings? Is your gear old and bulky or weight- and space-efficient?

**Body type**—your torso length, not your height, matters most.

## Backpacks by Trip Length and Capacity

The following is a general guide for which pack sizes (measured in litres) typically work well for trekking during warm-weather hikes of varying lengths. Colder-weather trips usually require a larger pack, while ultralight hikers may choose to go smaller than the recommendations here.

Length of trip	Pack capacity (litres)
Weekend (1–3 nights)	35–50
Multiday (3–5 nights)	50–80
Extended (5+ nights)	65+

## Backpack Fit

One of the keys to a comfortable backpack is to get a pack that is the right size (e.g., small, medium, large) for you. **Your torso length—not your height—is the key measurement;** hip size can also be helpful.

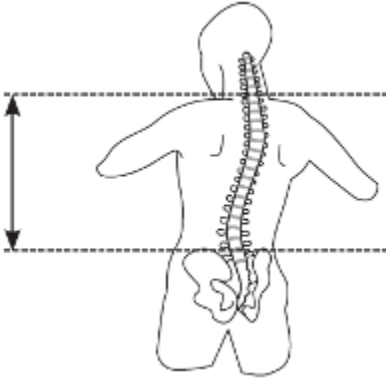
The right fit is one that offers:

A size appropriate for your **torso length** (not your overall height).

A comfortably snug grip on your hips.

If you're unable to work with a fit specialist in a store, you can enlist a friend and follow the directions provided below:

## Find Your Torso Length



To do so, you'll need a friend and a flexible tape measure.

- Have your friend locate the bony bump at the base of your neck, where the slope of your shoulder meets your neck. This is your 7th cervical (or C7) vertebra. Tilt your head forward to locate it more easily. This is the top of your torso length.
- Place your hands on top of your hip bones (also known as your *iliac crest*), with fingers pointing forward, thumbs in back. This is the "shelf" on which your pack will rest. The middle of an imaginary line drawn between your thumbs is the bottom of your torso length.
- Using the tape measure, your friend should measure the distance between the C7 and the imaginary line between your thumbs. Be sure you stand up straight when being measured. You now should have your torso length.

Use your torso length measurement to find your best pack size. Generally, manufacturers size their pack frames something like this:

**Extra Small:** Fits torsos up to 15 ½"

**Small:** Fits torsos 16" to 17½"

**Medium/Regular:** Fits torsos 18" to 19½"

**Large/Tall:** Fits torsos 20" and up

## Determine Your Hip Size

While less important than torso length, your hip measurement is useful to know. It's especially helpful if you are considering a pack that offers interchangeable hipbelts.

Take your tape measure and wrap it around the top of your hips. The correct measurement is along the "latitude line" that radiates out from your belly button to your sides and the high points of your hip bones. This is slightly higher than your waist, so your hipbelt measurement may differ from your pants waist size.

A properly positioned hipbelt will straddle your hips about an inch above and below that latitude line, wrapping around the 2 pointy pelvic bones on the front of your body.

## Torso Length

Some packs are available in **multiple sizes**, from extra small to large, which fit a range of torso lengths. These ranges vary by manufacturer and by gender. Check the product specs tab for size details of a specific pack.

Other packs may feature an **adjustable suspension**, which can be modified to fit your torso, especially if you're in between sizes. The drawback: An adjustable harness adds a little weight to a pack.

## Waist Size

The majority of a backpack's weight, **80% or more, should be supported by your hips.**

Backpack hipbelts usually accommodate a wide range of hip sizes, from the mid-20 inches to the mid-40 inches.

People with narrow waists sometimes find they cannot make a standard hipbelt tight enough and need a smaller size. Some packs offer interchangeable hipbelts, making it possible to swap out one size for another.

## Women-Specific Backpacks

These are engineered specifically to conform to the female frame. Torso dimensions are generally shorter and narrower than men's packs. And hipbelts and shoulder straps are contoured with the female form in mind.

## Youth-Specific Backpacks

These typically offer smaller capacities and include an adjustable suspension to accommodate a child's growth. Women's backpacks, with their smaller frame sizes, often work well for young backpackers of either gender. So do small versions of some men's packs.



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# Additional Backpack Fit Adjustments

**Load lifter straps** are stitched into the top of the shoulder straps, and they connect to the top of the pack frame. Ideally, they will form a 45° angle between your shoulder straps and the pack. Kept snug (but not too tight), they prevent the upper portion of a pack from pulling away from your body, which would cause the pack to sag on your lumbar region.

**Sternum strap:** This mid-chest strap allows you to connect your shoulder straps, which can boost your stability. It can be useful to do so when traveling on uneven cross-country terrain where an awkward move could cause your pack to shift abruptly and throw you off-balance.

## Backpack Frame Type

**Internal-frame backpacks:** The majority of packs sold today are body-hugging internal frame packs that are designed to keep a hiker stable on uneven, off-trail terrain. They may incorporate a variety of load-support technologies that all function to transfer the load to the hips.

**External-frame backpacks:** An external-frame pack may be an appropriate choice if you're carrying a heavy, irregular load. Toting an inflatable kayak to the lake or heading out to the backcountry with surveying tools? An external frame pack will serve you best. External frame packs also offer good ventilation and lots of gear organization options.

**Frameless backpacks:** Ultralight devotees who like to hike fast and light might choose a frameless pack or a climbing pack where the frame is removable for weight savings.

## Backpack Features

### Main compartment access:

- **Top-loading openings** are pretty standard. Items not needed until the end of the day go deep inside.
- Some packs also offer a **zippered front panel** that folds open exposing the full interior of the pack, or a **side zipper**, which also makes it easier to reach items deeper in your pack.

**Sleeping bag compartment:** This is a zippered stash spot near the bottom of a pack. It's a useful feature if you don't want to use a stuff sack for your sleeping bag. Alternately, this space can hold other gear that you'd like to reach easily.

**Top lid:** Many packs offer a zippered top lid where most backpackers store quick-access items: sunscreen, insect repellent, camera, snacks, map. Some lids detach from the main pack and convert into a hipbelt pack for day trips.

### Typical Pockets:

- Elasticized side pockets: They lie flat when empty, but stretch out to hold a water bottle, tent poles or other loose objects.
- Hipbelt pockets: These accommodate small items you want to reach quickly—a smartphone, snacks, packets of energy gel, etc.
- Shovel pockets: These are basically flaps stitched onto the front of a backpack with a buckle closure at the top. Originally intended to hold a snow shovel, they now pop up on many 3-season packs, serving as stash spots for a map, jacket or other loose, lightweight items.
- Front pocket(s): Sometimes added to the exterior of a shovel pocket, these can hold smaller, less bulky items.

**Ventilation:** This can be a drawback of internal-frame designs. Much of the pack rides on your back, cutting airflow and accelerating sweaty-back syndrome. Designers have addressed this in a variety of ways—**ventilation "chimneys"** built into back panels, for example.

A few packs have engineered a **suspended mesh back panel**, sometimes called "tension-mesh suspension." This is a trampoline-like design where the frame-supported backpack rides along a few inches away from your back, which instead rests against the highly breathable mesh.

**Padding:** If you're using a lightweight pack with a fairly minimalistic hipbelt and lumbar pad, you can encounter sore spots on your hips and lower back. If this is the case for you, consider using a cushier hipbelt.

**Attachment points:** If you frequently travel with an ice axe or trekking poles, look for tool loops that allow you to attach them to the exterior of the pack. Rare is the pack that does not offer at least a pair of tool loops.

## Backpack Accessories

**Raincover:** Pack fabric interiors are usually treated with a waterproof coating. Yet packs have seams and zippers where water can seep through, and the fabric's exterior absorbs some water weight during a downpour.

The solution is a raincover, which could be a plastic garbage bag (cheap but clumsy) to a more customized packcover. If you expect rain on your trip, this is a good item to carry. An alternative: bundling gear internally in waterproof "dry" stuff sacks. Lightweight dry sacks can be a better option in windy conditions; strong gusts have the potential to abruptly peel a cover right off a pack.

**Hydration reservoir:** Nearly all packs offer an internal sleeve into which you can slip a hydration reservoir (almost always sold separately) plus 1 or 2 "hose portals" through which you can slip the sip tube.

# How to Pack a Backpack

Packing a backpack is pretty simple, but there are some tips to make the process easier and to get you better results.

Ideally, a well-loaded pack will feel balanced when resting on your hips and nothing should be shifting or swaying inside. As you walk, the pack should feel stable and predictable, one with your upper body.

If possible, first pack your backpack at home. You can spread out your gear on a clean floor, visually confirm you've got everything, and feel less rushed as you load up.

Use the equipment checklist to ensure you've got everything you need.

## Backpack Access

Most backpacks feature a **top-loading** opening to reach the main compartment. Some packs also offer a **zippered front panel** that folds open, exposing the full interior of the pack, or a side zipper, which also makes it easier to reach items deeper in your pack.

Your pack might also feature a **sleeping bag compartment**, a zippered stash spot near the bottom of the bag. It's a useful feature if you don't want to use a stuff sack for your sleeping bag. Alternately, this space can hold other gear that you'd like to reach easily.

## Packing the Bottom of Your Backpack

The bottom of the pack is where you should stash items you won't need until you make camp at night. Most hikers shove their sleeping bag into the bottom of the pack. This is also where you might keep long underwear being used as sleepwear, and a sleeping pad (if it rolls up into a tiny shape).

Any other needed-only-at-night items can go down low except a headlamp or flashlight. Always have your light source in a readily accessible space.

## Packing the Core of Your Backpack

Heavier items should be centered in your pack—not too high, not too low. The goal is to create a predictable, comfortable center of gravity. Heavy items too low cause a pack to feel saggy. Too high and the load might feel tippy.

Your heaviest items should be placed on top of your sleeping bag and close to your spine. Usually these items will be your **food , water, first aid**. Wrap softer, lower-weight items around the weightier items to prevent heavier pieces from shifting. Your rain jacket can help stabilize the core and fill empty spaces.

**Hydration reservoir:** Most newer packs include a hydration reservoir sleeve. This is a slot that holds a reservoir close to your back and parallel to your spine. It's easier to insert the reservoir while the pack is still mostly empty.

## Packing the Top and Periphery of your Backpack

**Top lid:** Many packs offer a zippered top lid. You can stash frequently used items and keep them within easy reach. This might include, compass, GPS, sunscreen, sunglasses, headlamp, bug

*spray*, *first-aid kit*, snacks, rain gear, *packcover*, toilet paper and sanitation trowel. You can also place these in external pockets, if you have them. Some packs even offer small pockets on the hipbelt.

**Sleeping pad:** You may need an extra set of straps to attach it to a lash point on the top of the pack or near your waistline on the outside of the pack. Another option: put it beneath your top pocket (lid) and the top opening of the pack, then tighten the lid to the pack. The pad may be vulnerable to slipping out either side, so secure the pad to the pack with an extra strap or two. (Note: It's fine to carry tent poles and a sleeping pad inside a pack if you have the space.)

**Trekking poles:** Same deal; just put the grips in the pocket and the tips pointing upward.

**Other tools:** Some packs offer a series of external stitched loops called a daisy chain. Use it to clip or tie small items on your pack.

**Note:** Minimize the amount of gear you attach to your pack's exterior. External items can potentially get snagged on brush in areas of dense vegetation. Too much external gear could also jeopardize your stability.

## Additional Packing Tips

**Fill up all empty spaces.** For example, put utensils, a cup or a small item of clothing inside your eating bowl.

**Stuff sacks:** Some may prefer the low-chaos/easy-organization of stuff sacks, while others simply prefer to pack soft items loosely in the pack to use up all available room. Experiment with your own gear and decide which method most appeals to you.

**Compression straps:** Tighten all compression straps to limit load-shifting.

**Rain cover:** Carry a *pack rain cover* and keep it easily accessible. Though some backpacks are made with waterproof fabric, they have seams and zippers that are vulnerable to seepage during a downpour. A pack cover is worth its weight when rain becomes persistent.

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