

# Batteries Carried by Airline Passengers

## Frequently Asked Questions

**Q. What kinds of batteries are allowed in carry-on baggage (in the aircraft cabin)?**

- A.** Passengers can carry most consumer batteries and personal battery-powered devices. Spare batteries must be protected from damage and short circuit. Battery-powered devices should be protected from accidental activation. Batteries allowed in carry-on baggage include:
- Dry cell alkaline batteries; typical AA, AAA, C, D, 9-volt, button sized cells, etc.
  - Dry cell rechargeable batteries such as Nickel Metal Hydride (NiMH) and Nickel Cadmium (NiCad). For rechargeable lithium ion batteries; see next sentence.
  - Lithium ion batteries (a.k.a.: rechargeable lithium, lithium polymer, LIPO, secondary lithium). Passengers may carry consumer-sized lithium ion batteries [no more than 8 grams of equivalent lithium content or 100 watt hours (wh) per battery]. This size covers AA, AAA, 9-volt, cell phone, PDA, camera, camcorder, Gameboy, and standard laptop computer batteries.
    - Passengers can also bring two (2) larger lithium ion batteries (more than 8 grams, up to 25 grams of equivalent lithium content per battery) in their carry-on. This size covers larger extended-life laptop batteries. Most consumer lithium ion batteries are below this size.
  - Lithium metal batteries (a.k.a.: non-rechargeable lithium, primary lithium). These batteries are often used with cameras and other small personal electronics. Consumer-sized batteries (up to 2 grams of lithium per battery) may be carried. This includes all the typical non-rechargeable batteries for personal film cameras and digital cameras (AA, AAA, 123, CR123A, CR1, CR2, CRV3, CR22, 2CR5, etc.) as well as the flat round lithium button cells.

**Q. What kinds of batteries are allowed in checked baggage?**

- A.** Except for spare (uninstalled) lithium batteries, all the batteries allowed in carry-on baggage are also allowed in checked baggage. The batteries must be protected from damage and short circuit or installed in a device. Battery-powered devices—particularly those with moving parts or those that could heat up—should be protected from accidental activation. Spare lithium batteries (both lithium metal and lithium ion/polymer) are prohibited in checked baggage.

**Q. Is there a limit to the number of batteries I can carry?**





- A.** There is no limit to the number of consumer-size batteries or battery-powered devices that a passenger can carry. **Only the larger lithium ion batteries are limited to two (2) batteries per passenger**; see “Lithium ion batteries” explanation above.

**Q. What does “protected from short circuit” mean?**

- A.** Protected from short circuit means that a battery’s terminals are protected from being touched by metal. When metal such as keys, coins, or other batteries come in contact with both terminals of a battery, it can create a “circuit” or path for electricity to flow through. This can cause extreme heat and sparks and even start a fire. To prevent short circuits, keep spare batteries in their original packaging, a battery case, or separate pouch or pocket. Make sure loose batteries can’t move around. Placing tape over the terminals of unpackaged batteries also helps to insulate them from short circuit.

**For a quick reference guide, see illustrated table on next page....**

# Batteries Allowed in Airline Baggage

Type of Battery There is no limit to the number of batteries or devices carried unless specified below.	Allowed in <u>carry-on</u> baggage?		Allowed in <u>checked</u> baggage?	
	In equipment	Spares	In equipment	Spares
<b>Dry alkaline batteries</b> 	YES	YES When protected from damage and short circuit	YES	YES When protected from damage and short circuit
<b>Dry rechargeable</b> – Nickel Metal Hydride (NiMH), Nickel Cadmium (NiCad), etc.  <p>For lithium, see below.</p>	YES	YES When protected from damage and short circuit	YES	YES When protected from damage and short circuit
<b>Lithium ion</b> (rechargeable lithium, lithium polymer, LIPO) as used in small consumer electronics, such as cell phones, cameras, PDAs, and most laptops. (8 grams or less equivalent lithium content per battery) 	YES	YES When protected from damage and short circuit	YES	<b>NO</b>
<b>Larger* Lithium ion</b> – <u>Limit two (2) batteries per passenger.</u> (*More than 8 grams but not more than 25 grams equivalent lithium content per battery)	YES	YES When protected from damage and short circuit	YES	<b>NO</b>
<b>Lithium metal</b> , as used in small consumer electronics such as cameras, LED flashlights, etc. (2 grams or less lithium per battery) 	YES	YES When protected from damage and short circuit	YES	<b>NO</b>

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