

# 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<br>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><br>  | YES                                 | YES<br>When protected from damage and short circuit | YES                                | YES<br>When protected from damage and short circuit |
| <b>Dry rechargeable</b> – Nickel Metal Hydride (NiMH), Nickel Cadmium (NiCad), etc.<br> <p>For lithium, see below.</p>   | YES                                 | YES<br>When protected from damage and short circuit | YES                                | YES<br>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)<br> | YES                                 | YES<br>When protected from damage and short circuit | YES                                | <b>NO</b>   |
| <b>Larger* Lithium ion</b> –<br><u>Limit two (2) batteries per passenger.</u><br>(*More than 8 grams but not more than 25 grams equivalent lithium content per battery)   | YES                                 | YES<br>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)<br>  | YES                                 | YES<br>When protected from damage and short circuit | YES                                | <b>NO</b>   |

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