

Charge Up Safety!

Call2Recycle® Collection Site Safety Training



What you will learn

In this lesson, you will learn what you can do to safely prepare batteries and cellphones for shipment. This lesson includes:

Part 1

- What batteries are acceptable
- How to safely collect and handle batteries
- What to do with damaged batteries
- How to safely store used batteries

Part 2

- What containers are acceptable for shipping batteries
- How to prepare a collection box for shipment
- How to avoid potential safety incidents during transport

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Part 1: Battery preparation and handling



Batteries power the modern world, whether it's your cellphone, tablet, power tool or digital camera.



When batteries lose their charge or ability to recharge,
it's time to recycle them.

What happens to a recycled battery?

The recycled materials that come from batteries are used to manufacture new products such as:



**NEW
BATTERIES**



SUNSCREEN



**STAINLESS
STEEL POTS
& PANS**



GOLF CLUBS



SILVERWARE



**ASPHALTS
FOR ROADS**

Plus, the batteries are kept out of landfills!

Where does a used battery go?

The recycling process begins when used batteries are dropped off at a Call2Recycle collection site. From there, the battery is shipped using ground transportation to a sorting facility.



Safety is important during every step of the journey.

Why you should care about battery safety

1. As more products using batteries (e.g. toys, tools, electronics) are sold, more batteries are **flooding the market**.
2. Battery chemistries can be **hard to identify** making it difficult to know which are hazardous and require special preparation for shipping.
3. As the **power** of batteries increases and their size shrinks, the chances for severe fire incidents goes up.
4. Sales of **counterfeit batteries**, which are more likely to cause safety incidents, are increasing.

Call2Recycle accepts rechargeable batteries each weighing less than 11lbs (5kgs)

Accepted Rechargeable Batteries



Nickel Cadmium (Ni-Cd)



Lithium Ion (Li-Ion)



Nickel Metal Hydride (Ni-MH)



Small Sealed Lead Acid (SSLA/Pb)



Nickel Zinc (Ni-Zn)

Call2Recycle accepts primary batteries each weighing less than 11lbs (5kgs)*

Accepted Primary (Single-Use) Batteries



**Alkaline: AA, AAA, 6V,
9V, C, D, button cells**



Lithium Primary

** Select collection sites have opted into Call2Recycle's fee-based program for primary batteries; check to see if your collection site is one of them.*

Call2Recycle will NOT accept these batteries:

- Batteries weighing more the 11lbs (5kgs)
- Wet cell batteries (composed of a liquid), such as car or boat batteries
- Lithium Ion rechargeable batteries over 300 watt hours
- Lithium primary batteries with over 25 grams of lithium content
- Any batteries that do not fit in a Call2Recycle collection box

Battery terminals must be protected

Here's why.



Batteries may hold a residual charge even when they appear dead. When this battery comes into contact with other batteries or metal, a spark or heat can occur.

Unprotected battery terminals are dangerous.

Sparks and heat can cause smoke, fires and explosions resulting in property damage or physical injury.



You must prepare batteries for shipment according to U.S. DOT guidelines*

Bagging is the quickest and easiest way to protect battery terminals.

- Boxes include self-sealing clear plastic bags
- Drop one battery in the bag
- Peel away the adhesive protective film
- Fold the flap over making contact between the adhesive strip and the bag



Gloves are recommended in high-volume environments.

*U.S. DOT has specific terminal protection requirements that minimally must be adhered to when shipping the following batteries: Nickel Cadmium, Nickel Metal Hydride, Nickel Zinc, Alkaline, Carbon Zinc - all over 9V; and Lithium Ion, Small Sealed Lead Acid, Lithium and Button Cell regardless of size or voltage. **To further the safe collection and transport of batteries, Call2Recycle recommends that all batteries, despite the type, be bagged or taped.**

When you run out of Call2Recycle bags, you can use these:



BEST OPTION
Clear bags provided by
Call2Recycle



Clear Ziploc® bags



Clear produce bags
(should be tied to seal)

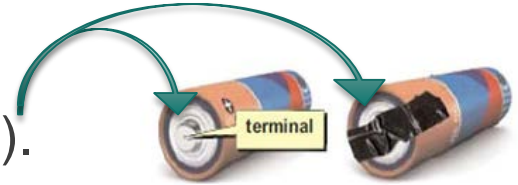


Clear newspaper bags
(should be tied to seal)

When clear plastic bags are not available, you can tape each battery.

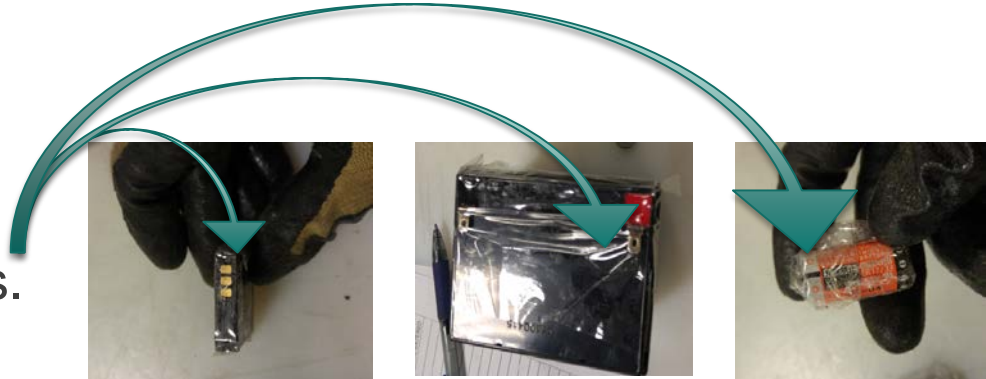
AA, AAA, C & D batteries

Tape the positive (+) terminal (the one with the bump).



Other battery types

Tape the charging terminals.



You can use these types of tape (clear preferred):



Clear packing tape



Duct tape



**Non-conductive
electrical tape**

Only tape the terminals, DO NOT cover the entire battery or the chemistry type on battery label.

For button batteries, you can make a 'ravioli'

1. Lay down a piece of CLEAR packing tape, sticky side up.
2. Place the button batteries on the tape *with space between* each battery.
3. Cover with a second layer of CLEAR tape.

CLEAR packing tape
helps the sorter
identify the battery
type quickly.



Do NOT use any of the following to protect battery terminals



Colored bags



Grocery bags



Paper bags



Paraffin or other dipping products



Painter's tape



Masking tape



Scotch tape

Lithium-based rechargeable and primary batteries are the most popular battery today

They are found in cellphones and other electronics.

They come in many shapes and sizes, are hard to identify and are very hazardous.



Always bag or
tape **each** one!



Watch for Lithium Ion or Lithium batteries that show signs of damage such as swelling, smoking, leaking or overheating.



Do NOT place damaged Lithium Ion or Lithium primary batteries in a collection box. Immediately put them in an absorbent, non-flammable material (sand or cat litter) in a cool, dry area.

The U.S. DOT requires special packaging for defective, damaged or recalled (DDR) lithium ion and lithium primary batteries. **Contact Call2Recycle Customer Service at 877.723.1297 for assistance.**

What you need to know about cellphones

Call2Recycle accepts:

- All cellphones, with or without batteries.
- All cellphones should be bagged before shipment.



We do NOT accept cellphone accessories, such as chargers.

Cellphones are refurbished and resold, depending on the condition. We recycle phones that cannot be refurbished. The proceeds help fund the cellphone collection program and public education to raise recycling awareness.

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Part 2: Box preparation and handling



What you need to know about collection boxes

Call2Recycle accepts batteries returned in:

- Call2Recycle boxes
- Those pre-approved by Call2Recycle

Boxes must be stored in a cool, dry place and should be supervised at all times.

Write the date you began collecting batteries in the Accumulation area on the box.



How you prepare a box for shipping

- 1** Visually inspect and remove all non-battery items except cellphones.



Check that there are only batteries or cellphones in the box!

No paper! No plastic! No metal!



No paper



No extra items,
such as light
bulbs or other
recyclables



No metals, such
as screws or
paper clips



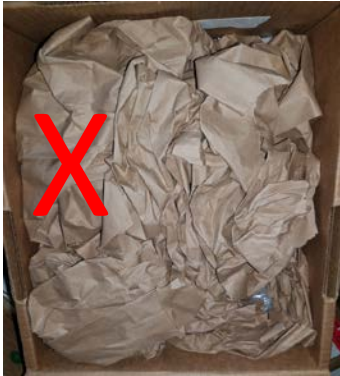
No extra
Call2Recycle
plastic bags

Remove and examine all batteries found in containers and bags



Prepare the box

- 2** Do **NOT** add any padding (paper, wood, pellets, etc.)



- 3** Seal the box
- Release the header tabs & side flaps
 - Remove backing from inside adhesive strips
 - Fold down while inserting side flaps
 - Cross tape the outside in a tic-tac-toe design (shown below).



Prepare the box for shipment

4

Complete the red return shipper's label.



5

- **Do NOT** add warning labels.
- **Do NOT** cover the text on the back of the box. The U.S. DOT requires the text to be visible.



Which box has been properly prepared for shipment?

Answer on next slide.

1



3



2



4



1



Batteries are properly bagged. The positive terminals are protected; bagging is consistent.

7 things for you to remember

1. Bag or tape **each** battery according to U.S. DOT requirements. When in doubt, bag or tape!
2. Collection sites that ship batteries that are not properly prepared may face suspension/termination.
3. Batteries considered damaged, defective or recalled must be shipped in separate U.S. DOT-approved packaging. Do not include in a regular shipment.
4. Call2Recycle accepts Call2Recycle boxes or those pre-approved by Call2Recycle.
5. Boxes should contain **only** batteries and cellphones, nothing else.
6. Check that the preprinted instructions and text on the back of the box are visible prior to shipment.
7. Boxes should be shipped when they are full (up to 66lbs./30kgs) or within one year of the first battery being collected.

Charge Up Safety!

Thank you for your commitment to protecting the environment through safe battery recycling.

