



Safe Charging Is a **SUPERPOWER**

Charge into Fire Safety™

TOPIC: Safe charging for devices with lithium-ion batteries

AUDIENCE: Adults and high school students

LESSON OBJECTIVE: By the end of the lesson, participants will describe at least three safe charging practices and will commit to implementing at least one.

Materials:

- Fire Prevention Week 2026 video playlist and online resources available at [fpw.org](https://www.fpw.org)
- Computer, laptop, tablet, or smartphone
- Projector and screen or monitor
- [Kahoot online trivia game](#)



Step 1: Introduction (5 minutes)

- Welcome attendees and thank them for their time.
- Introduce yourself and your connection to the community.
- **Share:** "Lithium-ion battery fires are on the rise because there are so many devices with these batteries in use." Share a brief story about a fire or injury involving a device from your community or a recent news report. Local battery fire incident data can help reinforce the message, especially when paired with a real-world example.
- How many lithium-ion batteries or rechargeable items do you have with you? How many are in your bag, purse, mobility device, or vehicle?
- **Ask:** "What are some of the rechargeable items you have in your home?" Examples can include smartphones, wireless headphones, smartwatches, electric toothbrushes, laptop computers, tablets, gaming controllers, e-cigarettes, vapes, toys, e-scooters, and e-bikes.

Hook — Alternate Extension Activity: Bring a few lithium-ion battery devices to class. As the class begins their discussion, start using the various devices in a fun conversational way that draws attention to how many rechargeable lithium-ion battery devices we use every day. For example:

- Wireless earbuds: Remove them and say, "It always inspires me to listen to relaxing music right before a class!"
- Smartwatch: Tap it and say, "I'm glad I remembered to charge my watch; I want to make sure the steps that I'm getting in today are counted!"
- Portable power bank and the appropriate charging cord: Hold them up and say, "I don't see many outlets in this room. Good thing I brought my portable charging bank that is listed by a nationally recognized testing laboratory. I also brought the charging cord that came with my phone."
- Electric toothbrush: "Coffee breath! I hope you don't mind if I do a quick refresh."

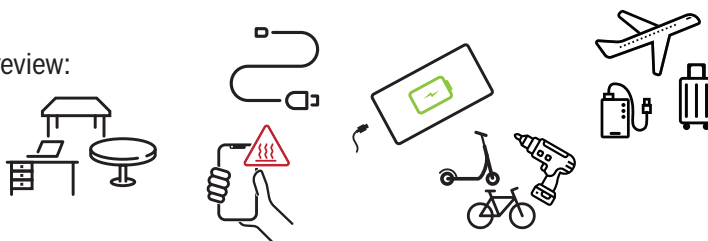
Step 2: Body of the Presentation (15–20 minutes)

- **Understanding Lithium-Ion Batteries:** Show the "The Power and Danger of Lithium-Ion Batteries" video (2:32)
- If unable to show the video explain:
 - Many devices used in our daily lives (e.g., the examples listed above) run on rechargeable lithium-ion batteries.
 - Smaller and more powerful batteries have replaced older versions of batteries, and they store a lot of energy in a small space.
 - If batteries are damaged or charged the wrong way, they can overheat, start a fire, or even explode.
 - The way you charge your rechargeable devices can make a difference in helping prevent home fires and injuries.

- **Ask:**
 - “Think about the rechargeable devices in your home. How many of the devices do you charge with the original cord that they came with?”
 - “Do you charge on a hard surface, like a table or countertop?”
 - “Do you unplug when the items are fully charged?”
 - “Have you ever dropped your phone or tablet or left a rechargeable device in a hot or freezing vehicle? Did you know this could damage your battery?”
- **Activity — Kahoot online trivia game:** Go to the “Charge into Fire Safety” Kahoot game. Select host live session. Ask participants to join the online game by entering the PIN or scanning the QR code on the screen. Trivia questions will appear. Participants will score higher if they respond quickly and accurately. Refer to the Activity Sheet — Kahoot Questions. Note: Questions and answers will be randomized for each game.

Step 3: Conclusion (5 minutes)

- Watch “Safe Charging Superpowers” video and review:
 - Charge on hard surfaces.
 - Watch for warning signs.
 - Unplug when fully charged.
 - Charge large devices outside.
 - Keep it in sight on a flight.
- Hand out the “Safe Charging Is a Superpower” and “Lithium-Ion Batteries in Your Home” tip sheets. Consider showing the “Boost Your Battery IQ” video.
- Encourage the audience to complete the “Family Power Check” activity to see how strong their family’s charging habits are and identify areas where they can improve.
- Thank participants for their time. Encourage them to share what they have learned with others.



TRIVIA QUESTIONS:

- Which charger and cord should you use for your phone or other rechargeable devices?
 - A. Original cord and charger that came with the device
 - B. Any cord that fits the device
 - C. Cord and charger approved by the manufacturer
 - D. A charger that is rated to be fastest**Answer: A and C** (Kahoot “multi-select”).
- Where is a safe place to put your device while it is charging?
 - A. On thick carpet
 - B. In a hot car
 - C. On a hard surface
 - D. Under a pillow**Answer: On a hard surface** (like a table or countertop). Why: This allows it to “breathe” when charging and not overheat.
- True or False: You should unplug your device when it is fully charged.
 Answer: True. Why: Leaving a device plugged in longer than needed can increase heat and stress on the battery.
- True or False: It is safe to charge your phone under your pillow while you sleep.
 Answer: False. Why: Batteries generate heat during charging. Soft surfaces like pillows trap this heat, causing devices to overheat and potentially start a fire.
- What is one warning sign of a battery problem or damage?
 - A. Gets very hot.
 - B. Starts to swell
 - C. Makes popping or hissing sounds
 - D. All of the above**Answer: All of the above.**
- Where should large devices like e-bikes and scooters be charged?
 - A. Inside in front of an exit
 - B. Outside whenever possible
 - C. Anywhere convenient
 - D. In a bedroom**Answer: Outside,** whenever possible and not blocking any exits. Why: These items have large batteries that store a lot of energy. If they fail, they cause fast-moving fires.
- Only buy lithium-ion battery products that are _____ by a nationally recognized testing laboratory.
 - A. Sold
 - B. Made in the U.S.A.
 - C. Listed
 - D. Produced and distributed**Answer: Listed** products have been tested for safety and meets important safety standards.
- True or False: Extreme temperatures (very hot or very cold) can damage a battery.
 Answer: True.