

Talk Lead By: \_\_\_\_\_

Date: \_\_\_\_\_

Site/Location: \_\_\_\_\_

Time: \_\_\_\_\_

Weather Report/Conditions:

\_\_\_\_\_ High: \_\_\_\_\_ °C Wind Speed: \_\_\_\_\_ km/hr  
 \_\_\_\_\_ Low: \_\_\_\_\_ °C Wind Gusts: \_\_\_\_\_ km/hr

## Lithium Battery Safety

Lithium batteries have become common in homes and workplaces everywhere. Generally speaking, lithium batteries are safe, high energy density power source. While these types of batteries have their place and are normally safe, they are not without their hazards! This is especially true when so many of these batteries are actually worn on a person’s body.

Common Hazards of Lithium Batteries <sup>1</sup>	Factors That Can Result in a Lithium Battery Failure <sup>2</sup>
<ul style="list-style-type: none"> <li>• A thermal runaway reaction resulting in the battery exploding or bursting into flame.</li> <li>• Venting of toxic vapours.</li> <li>• Release of corrosive materials.</li> <li>• Electric shock.</li> </ul>	<ul style="list-style-type: none"> <li>• Dropping, crushing, and puncturing a lithium battery.</li> <li>• Very high temperatures and exposure to external heat sources.</li> <li>• Charging a lithium-ion battery in freezing temperatures.</li> <li>• Failure to charge a device or battery as directed by the manufacturer (i.e., not cycling the power).</li> <li>• Age of the battery.</li> </ul>

### Important Points to Remember:

- You must always remove damaged, defective or failing batteries from service right away.
- When disposing of a lithium battery or device that contains a lithium battery, you should always do so in a way that is safe and appropriate; for example, it may need to be dropped off at the nearest electronics recycling facility in a timely manner as these are items you don’t want to stock pile or keep on site unnecessarily.
- Fires involving lithium batteries are different from other types of fires and require special means to suppress, control and eliminate them. Follow the manufacturer’s instructions regarding the proper method to extinguish a small battery fire, such as an ABC dry chemical fire extinguisher, a Class D fire extinguisher (for lithium-metal), dirt or sand.
- Ensure your farm team is trained on the hazards, proper use, handling, and storage of lithium-ion batteries. They will need to know the indicators of a battery issue and the appropriate method to extinguish a small battery fire safely.



**Additional Topics/Discussion:**

*Might include task/job details, hazards and hazard controls, worksite specific emergency response, etc.*

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**Attendance:**

Print Name	Position/Trade/Company	Sign Name
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Sources: 1. Government of Alberta. (2023 November). Lithium Batteries. Open.Alberta.ca. Accessed 2023 December 6 from <https://open.alberta.ca/dataset/e704cd80-547b-4d6f-8b92-557ef4f3abc4/resource/3cb8207c-f1ac-4a6b-bf00-2edc54e7e65a/download/jet-ohsorp-gs018-lithium-batteries-2023-11.pdf> . 2. Occupational Safety and Health Administration. (2019 June). Preventing Fire and/or Explosion Injury from Small and Wearable Lithium Battery Powered Devices. [www.osha.gov](http://www.osha.gov). Accessed 2023 December 6 from <https://www.osha.gov/sites/default/files/publications/shib011819.pdf>.