



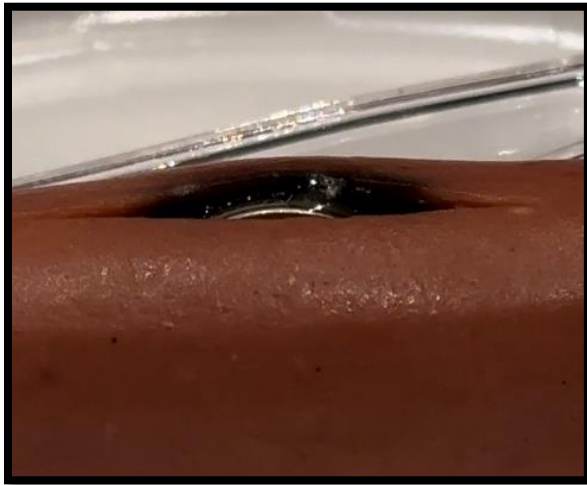
Lithium-Ion Batteries; Not Just a Fire Consideration

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Last month, the IAFC Safety Stand down was geared towards educating the fire service on the hazards of lithium-ion batteries, as it pertained to firefighter health and safety. Another factor of lithium-ion battery safety is the health effects this can have on our younger population, children, and the treatment we provide to the patients we encounter as emergency medical providers.

Button batteries are the most common threat to our younger patients. These provide power for items we do not normally have battery concerns of, such as car remotes, hearing aids, and remote controls to name a few. When these batteries are ingested, the secretions and fluids in the airway and esophagus act the same as the cellulite fluid inside the battery to conduct electricity, causing thermal burns.

Click here or scan the QR code for a [Short Video from Childrens Hospital of Philadelphia](#)



Classroom study using a hotdog, with the battery inserted in a slit. Note the burning after just 2 hours.

A "button" battery.

Actions EMS providers should take for these incidents is straight forward. First and foremost, follow protocols for accidental ingestion of foreign objects. This includes contacting Poison Control for guidance immediately. Available via EMRC consult, or via phone at 1-800-222-1222. X-rays are required to rule out or verify ingestion and location, to allow for removal or treatment plan. **Transport to an appropriate facility within a short time frame is of utmost importance for a positive outcome for these patients.**

While the information provided is geared towards button batteries, please remember that lithium-ion batteries are found now in all shapes, sizes, dimensions, and uses. In years past, ingestion may not have been a life-threatening concern, however as technology changes, so does the threat it presents towards those who may accidentally ingest them.

