

FIRES INVOLVING RECHARGEABLE BATTERIES

	Jan – Apr 2016	Jan – Apr 2017
Electric Bicycles	4	4
PMDs	3	8
Power Banks	1	1

Table 1: Number of reported fires involving batteries of electric bicycles, PMDs and power banks

For the period January to April 2017, there were 13 cases of fires involving batteries of electric bicycles, PMDs and power banks. This is an increase of 5 cases for the same period last year.

2. Battery fires can be caused by faulty electrical circuitry that may lead to short-circuiting of the batteries. The high current drawn by faulty electrical circuitry can generate sufficient heat to ignite the devices or materials in close proximity to the devices.
3. Avoid overcharging the battery, especially leaving it to charge overnight. Overcharging can cause permanent damage to the battery and result in battery swelling. Some models do not have a power cut-off function to prevent overcharging which could lead to sparking off a fire. Such fires have the propensity to spread easily, particularly when there are combustible materials around.
4. When charging such batteries, place them on hard flat surfaces to allow optimal dissipation of heat. Do not place the battery near combustible materials.

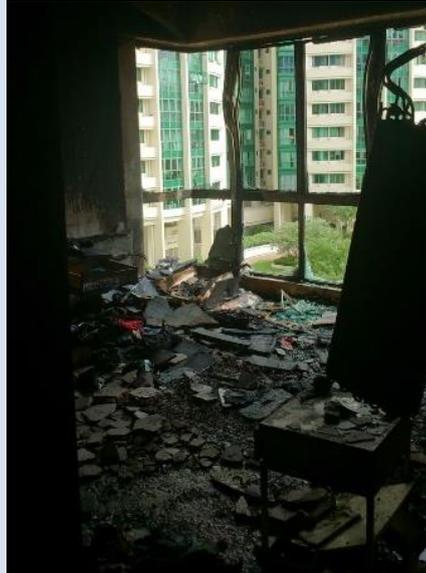
Recent Case of Fire Involving a Power Bank

INCIDENT

On 7 May 2017, a fire started in the bedroom where an individual had left a power bank charging unattended for several hours. At the time of the fire, there was no one in the unit. Investigations revealed that the cause of fire was accidental in nature and of electrical origin (battery).



Remains of the burnt power bank



Fire and smoke damages sustained in the bedroom

Learn about Battery Fire Prevention



BEFORE USE

Check for Damage and Deformities

- Examine batteries for damage
- Refrain from charging damaged batteries as it may lead to overheating

DURING USE

Allow Heat Dissipation

- Do not block air vents by placing electronic devices on upholsteries

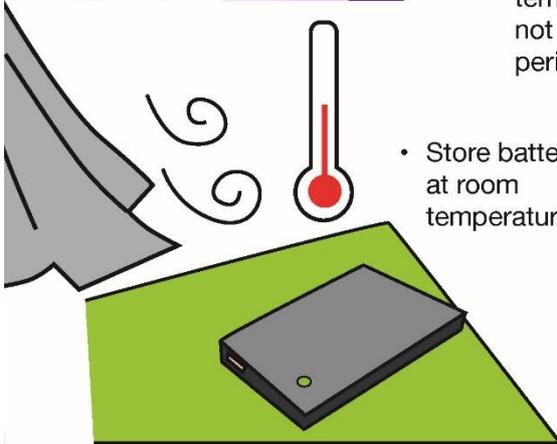


- Charge batteries of electronic devices on hard flat surfaces, such as on a table, to allow optimal dissipation of heat



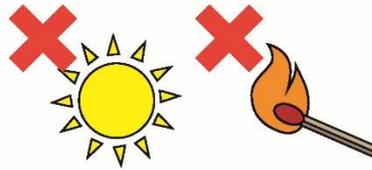
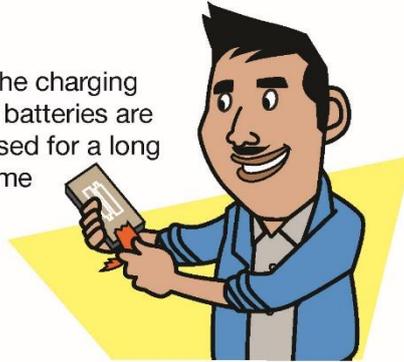
AFTER USE

Proper Storage



- Store batteries at room temperature

- Tape over the charging terminals if batteries are not to be used for a long period of time



- Avoid prolonged direct heat exposure and keep away from combustible or flammable materials

The manual says to **unplug** the power bank when all 5 indicator lights are green!



AFTER USE

Avoid Overcharging

- Do not overcharge batteries – some battery models do not have a power cut-off function

- Avoid over-charging your power bank
- Avoid charging it overnight

Look out for the **SAFETY Mark** on power adaptors when shopping for electronics.



For more information, please go to www.scdf.gov.sg/ community-volunteers/publications

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