## Headphone lithium ion batteries explode on flight to Australia





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"As I went to turn around I felt burning on my face," the woman said "I grabbed them off and threw them on the floor. They were sparking and had small amounts of fire." (AFP Photo/Handout) Sydney (AFP) - A woman whose headphones caught fire on a plane suffered burns to her face and hands, Australian officials said Wednesday as they warned about the dangers of battery-operated devices in-flight.

The passenger was listening to music on her own battery-operated headphones as she dozed about two hours into the trip from Beijing to Melbourne on February 19 when there was a loud explosion.

"As I went to turn around I felt burning on my face," she told the Australian Transport Safety Bureau (ATSB) which investigated the incident.

"I just grabbed my face which caused the headphones to go around my neck. I continued to feel burning so I grabbed them off and threw them on the floor.

"They were sparking and had small amounts of fire."

Flight attendants rushed to help and poured a bucket of water on the headphones, but the battery and its cover had both melted and stuck to the floor.

Pictures show the woman, who was not named, with a blackened face and neck and blisters on her hands.

Fellow passengers had to endure the smell of melted plastic, burnt electronics and singed hair for the remainder of the flight.

"People were coughing and choking the entire way home," the woman added.

The transport safety bureau, which did not identify the airline or brand of headphones involved ni the incident, said the lithium-ion batteries in the device likely caught fire.

"As the range of products using batteries grows, the potential for in-flight issues increases," it said, adding that such devices needed to be stored safely if they were not being used.

Spare batteries should be kept in carry-on luggage, and not checked in, the bureau said.

- Belching smoke -

The ATSB's Stuart Godley said it was the first report of headphones catching fire in Australia, but there have been a number of other phone and device battery incidents.

Last year, a flight due to leave Sydney had to be evacuated when smoke was seen coming from a passenger's hand luggage. It was later found that lithium batteries had caught fire.

Also last year, an electronic device began belching smoke then caught fire on a Qantas flight from Los Angeles to New York, with a crew member needing to use a fire extinguisher to put it out, the ATSB reported.

In another Qantas incident in 2016, attendants were alerted to smoke on a flight from Sydney to Dallas. They found a crushed and burnt out device wedged tightly in the seat.

"We've also had a case of a person using personal air purifier and the batteries in that have caught on fire on a flight," Godley told the Australian Broadcasting Corporation.

Many airlines last year barred all Samsung Galaxy Note 7 smartphones over fire risk concerns, following reports of exploding lithium-ion batteries.

The South Korean electronics giant, which prides itself on innovation and quality, was forced to recall all its Note 7s, costing it billions of dollars. Lithium-ion batteries are prized for handheld electronics because they can pack a considerable amount of energy for their weight.

Like all batteries, they use different materials, one holding positive ions -- the cathode -- and the other holding negative ions -- the anode.

These ions move one way when charging, and back again when discharging -- being used.

Manufacturing flaws affecting the separators are one potential source of fires. Another is damage to the battery.

In addition, overcharging the packs -- or charging them too fast -- can also lead to overheating and a short circuit that can cause a fire.