

Urgent search for lost radioactive capsule in Australia

30th January 2023



A radiation alert was issued in Australia on Saturday over a missing radioactive capsule. The warning was from authorities in Western Australia. State officials there warned residents of a "radioactive substance risk" in several

regions, including the state capital Perth. The search is now on for the tiny capsule, which contains the harmful and radioactive substance Caesium-137. The capsule is just 8 mm high and 6 mm wide. However, it contains a sufficient amount of radioactive material to "cause serious health consequences". The capsule went missing as it was being transported from the mining town of Newman to a northeast suburb of Perth. Officials believe it fell through a hole in the truck transporting it.

Caesium-137 is used by the mining industry in Australia. The chief health officer for Western Australia, Andrew Robertson, urged caution to anyone finding the capsule. He warned: "Exposure to this substance could cause radiation burns or severe illness. If people see the capsule or something that looks similar, stay away from it and keep others away from it too." He added: "If you are very close to the material or touch it, the radiation risk increases immensely and could cause serious damage to your health, including causing radiation burns to the skin." Even being within a metre of the capsule could expose someone to radiation levels that are the equivalent of ten X-rays.

Sources: [reuters.com](https://www.reuters.com) / [thetimes.co.uk](https://www.thetimes.co.uk) / [abc.net.au](https://www.abc.net.au)

Writing

All industries should stop using radioactive materials. Discuss.

Chat

Talk about these words from the article.

radiation / alert / capsule / capital / harmful / health consequences / mining / truck / industry / chief / caution / illness / material / damage / risk / burns / skin / X-rays

True / False

- 1) A radioactive capsule went missing in South Australia. T / F
- 2) Officials warned of a radioactive substance risk in several regions. T / F
- 3) The capsule is about 8 cm in height. T / F
- 4) Officials believe the capsule was stolen from a truck. T / F
- 5) The article says the substance Caesium-137 is used for nuclear energy. T / F
- 6) A health chief said the capsule was deadly. T / F
- 7) The substance could burn the skin. T / F
- 8) Being a metre away from the capsule is the same as having 10 X-rays. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|----------------------|-------------------|
| 1. alert | a. enough |
| 2. residents | b. conurbation |
| 3. harmful | c. wariness |
| 4. sufficient | d. citizens |
| 5. suburb | e. tremendously |
| 6. caution | f. put at risk of |
| 7. severe | g. warning |
| 8. immensely | h. bringing about |
| 9. causing | i. injurious |
| 10. expose | j. acute |

Discussion – Student A

- a) What do you think about what you read?
- b) What do you think the mining industry does with Caesium-137?
- c) What do you think of the mining industry?
- d) What compensation should people get if they touch the capsule?
- e) What do you think of X-rays?
- f) What three adjectives best describe this story?
- g) Should radioactive materials be banned?
- h) What questions would you like to ask the mining company?

Phrase Match

1. A radiation alert was
 2. The warning was from
 3. The search is now
 4. it contains a sufficient
 5. a northeast
 6. Exposure to this substance
 7. the radiation risk
 8. including causing radiation
 9. expose someone
 10. the equivalent
- a. increases immensely
 - b. on for the tiny capsule
 - c. of ten X-rays
 - d. suburb of Perth
 - e. to radiation levels
 - f. issued in Australia
 - g. burns to the skin
 - h. amount of radioactive material
 - i. could cause radiation burns
 - j. authorities in Western Australia

Discussion – Student B

- a) What do you think of radioactive material?
- b) How dangerous might the missing capsule be?
- c) Should anyone be punished for the missing material?
- d) What are radioactive materials good for?
- e) What are the dangers of radiation?
- f) How should radioactive materials be transported?
- g) How worried are you about radiation?
- h) What advice do you have for people near Perth?

Spelling

1. ourhaetist in Western Australia
2. in several origens
3. the harmful and radioactive nbeastcus
4. a ncefutisif amount of radioactive material
5. serious health oneenqeccuss
6. a northeast rbbsuu of Perth
7. used by the mining rytunids in Australia
8. Andrew Robertson urged ouactni
9. radiation burns or eersve illness
10. If you are very close to the aralimet
11. the radiation risk increases enysemmil
12. the ueavetilqn of ten X-rays

Answers – Synonym Match

1. g	2. d	3. i	4. a	5. b
6. c	7. j	8. e	9. h	10. f

Role Play

Role A – Nuclear

You think nuclear is the best form of energy. Tell the others three reasons why. Tell them what is wrong with their forms of energy. Also, tell the others which is the worst of these (and why): solar, wind or wave.

Role B – Solar

You think solar is the best form of energy. Tell the others three reasons why. Tell them what is wrong with their forms of energy. Also, tell the others which is the worst of these (and why): nuclear, wind or wave.

Role C – Wind

You think wind is the best form of energy. Tell the others three reasons why. Tell them what is wrong with their forms of energy. Also, tell the others which is the worst of these (and why): solar, nuclear or wave.

Role D – Wave

You think wave is the best form of energy. Tell the others three reasons why. Tell them what is wrong with their forms of energy. Also, tell the others which is the worst of these (and why): solar, wind or nuclear.

Speaking – Energy

Rank these with your partner. Put the best energy at the top. Change partners often and share your rankings.

- Nuclear
- Coal
- Gas
- Wind
- Solar
- Biofuels
- Hydro-electricity
- Wave power

Answers – True False

1 F	2 T	3 F	4 F	5 F	6 F	7 T	8 T
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Answers to Phrase Match and Spelling are in the text.