

*Alexander
Litvinenko*

Alexander Litvinenko

KGB then FSB officer

1998



Serious critic of Russian government

2000



Asylum in London

2006



Became very ill and died in hospital

Alexander Litvinenko

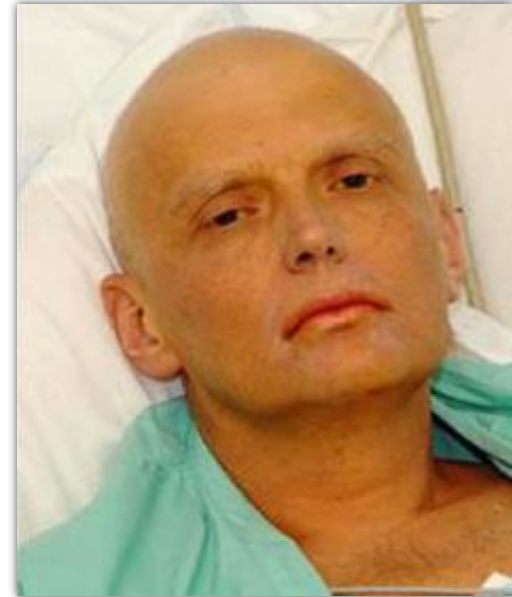
Hair loss



Thallium poisoning?

No thallium detected

Poisoned with Polonium-210



**Alexander Litvinenko
after being poisoned**

Polonium

Radioactive

Occurs in trace amounts

Manufactured in nuclear reactors



Russia

Polonium

Contained ^{210}Po is not very dangerous

If ingested



No barrier between radioactive atoms and biochemical molecules

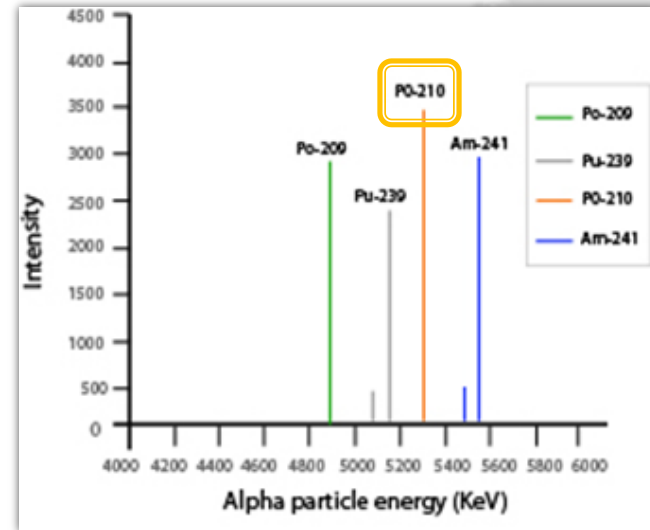
Radiation poison

Radiation

Energy given out is highly characteristic

^{210}Po found at over 30 locations in London

Tracked to two British Airways planes



Summary

- 1 Different types of poisons and their effects
- 2 Modes of actions of different poisons
- 3 Importance of routes of administration
- 4 Measuring toxicity using LD₅₀

Summary

5 Xenobiotics

6 Alcohol

7 Paracelsus

8 Actions of arsenic, thallium, sarin, atropine