



ALIGNMENT CONTINUITY

Iodine 101

Iodine

TL;DR: I'm not an expert, but from what I've read - it's not a magic pill, and the protection provided to adults might not even be statistically significant.

Overview

So a nuclear explosion happens, clouds of aerosolized(?) Iodine-131 (half-life of 8 days), amongst other things, are released. These may be able to spread quite widely (i.e. neighbouring countries, probably not the other side of the world).

The significant risk in the first 24 hours is inhaling the I-131, after this the risk is ingesting it via contaminated food and drink.

Iodine tablets protect your thyroid from absorbing this radioactive I-131 by filling it up with normal, non-radioactive, Iodine. They offer no protection against any other components of radioactive fallout.

If you are in a situation where you are at genuine risk of inhaling I-131 it seems highly likely you're at risk of exposure to a whole bunch of other radioactive fallout too.

Further, [according to wikipedia](#):

“The risk of thyroid cancer in later life appears to diminish with increasing age at time of exposure. Most risk estimates are based on studies in which radiation exposures occurred in children or teenagers. When adults are exposed, it has been difficult for epidemiologists to detect a statistically significant difference in the rates of thyroid disease above that of a similar but otherwise-unexposed group.^{[3][17]}”

I expect that in any situation where Iodine pills are technically useful, a CBRN rated gas mask is actually useful - i.e. more likely to actually prevent life threatening radiation exposure.

Nevertheless, below is everything you need to know about using Iodine, courtesy of the [WHO](#):



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When/How To Use

- “[iodine thyroid blocking] is a protective action that is implemented only in the urgent phase (hours to one day after the onset of the emergency).”
- “Regarding the early phase (days to weeks) the effective way to limit the ingestion of radioiodine (as shown by the experience of Fukushima) and the most important method of limiting thyroid doses, especially to children, is to restrict the consumption of contaminated food, drinking water and fresh milk from grazing cows.”
- “The optimal period of administration of stable iodine is less than 24 hours prior to, and up to two hours after, the expected onset of exposure (14) (36).”
- “It would still be reasonable to administer ITB up to eight hours after the estimated onset of exposure (41).”
- “Commencing ITB later than 24 hours following the exposure may do more harm than benefit
(by prolonging the biological half-life of radioactive iodine that has already accumulated in the thyroid).”
- “A single administration of stable iodine is usually sufficient. However, in the case of prolonged (beyond 24 hours) or repeated exposure, unavoidable ingestion of contaminated food and drinking water, and where evacuation is not feasible, repeated administration of stable may be necessary”

Dosage

Age group	Mass of iodine, mg	Mass of KI, mg	Mass of KIO ₃ , mg	Fraction of a tablet containing 100 mg of iodine	Fraction of a tablet containing 50 mg of iodine
Neonates (birth to 1 month)	12.5	16	21	1/8	1/4
Infants (1 month to 3 years)	25	32	42	1/4	1/2
Children (3 to 12 years)	50	65	85	1/2	1
Adults and adolescents (over 12 years)	100	130	170	1	2



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Suppliers

Finding a supplier for legitimate, sufficient strength, Iodine can be quite difficult and expensive depending on where you live. The commonly sold dietary supplements are far, far too weak to be effective for this use case.

Potentially not available without prescription in the UK.

(<https://www.amazon.co.uk/Best-Naturals-Potassium-Iodide-Supplement/dp/B09TPW1V7R/> are suspect.)

iOSAT is legit and cheap in the US.

Lannacher KI 65mg is legit and cheap in Europe.

[A useful reddit discussion on sourcing Iodine](#)