Iodine tablets distribution as part of iodine prophylaxis in case of a nuclear accident in France

Philippe Chappé - Project manager - Nuclear safety authority
Directorate for environment protection and emergency preparedness
1. In the event of a nuclear accident, release of radioactive iodine may occur and affect the health of the population exposed to it.

2. When taken in time, stable iodine prevent the accumulation of radioactive iodine in the thyroid gland by blockading its functioning.

3. This protection measure has been adopted by France.
In the course of time, many problems have been faced to implement this protection measure in practice.

What kind of stable iodine to use?  
What time constraint to take into account?  
Which targeted population to cover?  
How to stock and how to manage these stocks?  
Who decide with which responsibility?  
How to inform the public in case of emergency?  
When and how to distribute?  

And so on …
After some trials and errors, on the basis of more than twenty years of experience, a satisfactory (?) plan of action has been set up with the agreement of the main stakeholders.
1. Preparation of radiological emergency plans

2. Preventive distribution of iodine tablets

3. Information of the populations about the risks and the counter measures to limit them

4. Organisation of regular drills

5. Regular evaluations and integration of their results in the plan of action
Problem

*how to guarantee a complete and permanent coverage of the population around the nuclear facilities?*

Solution

*Based on the network of chemist’s and a free preventive distribution of iodine tablets, around the nuclear facilities*
Advertising in local mass media

Dispatch of a personal mail to all inhabitants

Distribution in chemist's shop

Supplementary dispatch of tablets by mail

Availability for supplementary tablets in chemist's shop at any time up to the next distribution
This plan of action allows a complete and permanent coverage.

Its costs are paid by the operators of the nuclear facilities.
The three main lessons learnt

Better to use *what is already existing* and functioning

*In case of a “no issue” look back at the aims as there is no unique solution*

*Be aware of what is at stake so as to avoid focusing on details*
Thank you for your attention