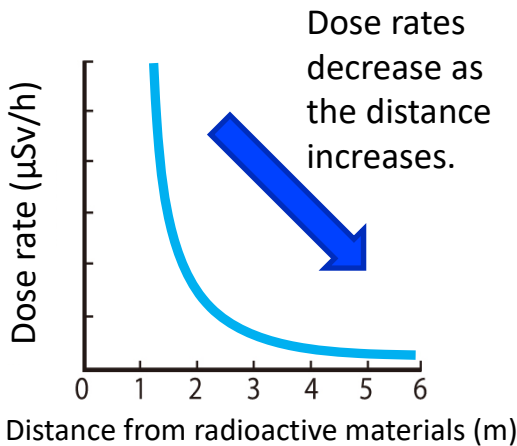
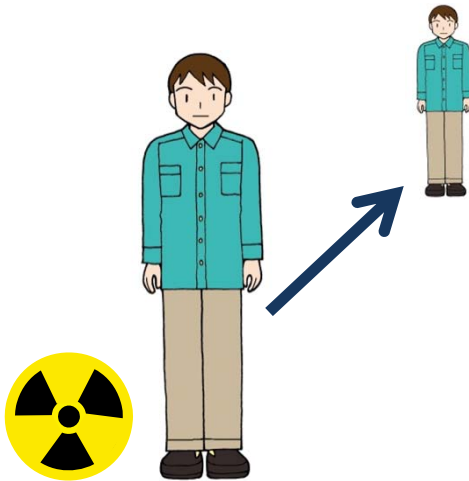
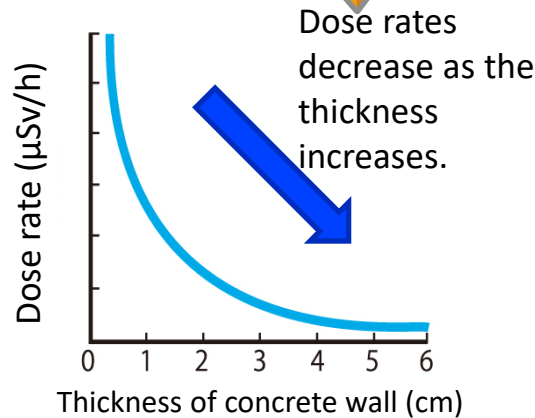
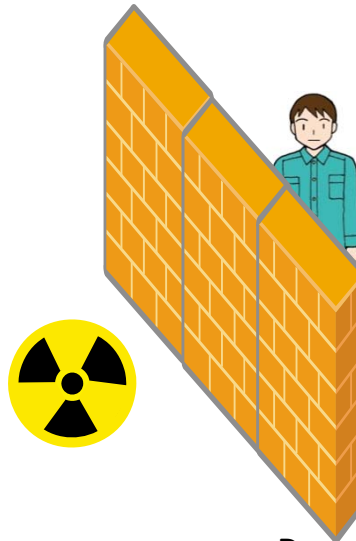


# Three Principles of Reduction of External Exposure

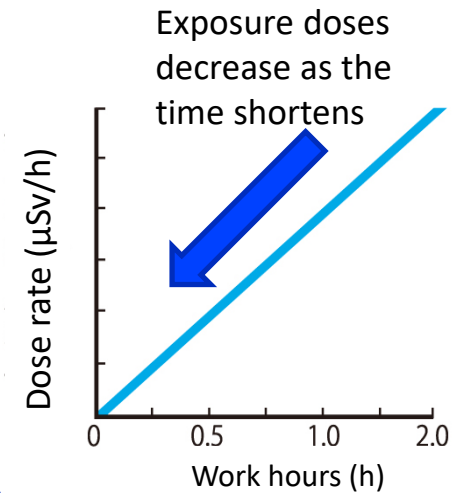
(i) Keep away  
(**distance**)



(ii) Place something heavy in between  
(**shielding**)



(iii) Shorten time while being close to radioactive materials  
(**time**)



# Internal Exposure - Responses Immediately after a Nuclear Hazard -

- Prevent radioactive materials from entering the body through the mouth, nose or wounds, in principle.
- Be careful not to lose nutritional balance, being excessively worried about a small amount of radioactive materials below the standard limit.
- Be aware of information on the release of radioactive materials.
- Wash off soil immediately from the body, shoes and clothes.



# Removal of Radioactive Cesium through Cooking and Processing of Foods

Radioactive materials can be reduced through cooking.

Item	Cooking/Processing methods	Removal rate (%)
Rice	Polishing - Washing - Cooking	66~72
Leaf vegetables (spinach, etc.)	Washing - Boiling	7~78
Bamboo shoots	Boiling	26~36
Marron	Boiling - Peeling astringent skin	11~34
Japanese radish	Peeling	24~46
Japanese plum	Salting	34~43
Cherry leaves	Salting	78~87
Dried <i>shiitake</i> mushrooms	Reconstituting (do not use soaking water)	51~54
Beef meat	Boiling sliced meat ( <i>Shabu-shabu</i> )	55~69
Fish	Cooked lake smelt soaked in Japanese sweet and peppery vegetable sauce	22~32

- Avoid eating wild foods too much.

$$\text{Removal rate (\%)} = \left( 1 - \frac{\text{Total amount of radioactivity in cooked or processed foods (Bq)}}{\text{Total amount of radioactivity in raw materials (Bq)}} \right) \times 100$$

Source: "Environmental Parameters Series Expanded Edition (2013): Radionuclide Removal Rates through Cooking and Processing of Foods - Centered on Data on Radioactive Cs Removal Rates in Japan -" (September 2013), Radioactive Waste Management Funding and Research Center