Assessments by International Organizations

Comparison of Reports (Assessment Results)

Estimated ranges of average effective doses for groups of evacuees for the first one year after the
accident (The unit is mSv.)

UNSCEAR 2020/2021 Report						
	20 years old (adults)	1 year old (infants*3)				
(Group 1) Residents in Fukushima Prefecture who were evacuated :	0.046 - 5.5	0.15 - 7.8				
(Group 2) Residents in Fukushima Prefecture who were not evacuated:	0.079 - 3.8	0.12 - 5.3				
(Group 3) Prefectures neighboring Fukushima Prefecture*1:	0.10 - 0.92	0.15 - 1.3				
(Group 4) The rest of Japan :	0.004 - 0.36	0.005 - 0.51				

UNSCEAR 2013 Report			WHO Reports				
		20 years old (adults)	1 year old (infants*1)			20 years old (adults)	1 year old (infants*3)
(I)	Precautionary evacuation areas :	1.1 - 5.7	1.6 - 9.3	00	Fukushima Prefecture:	1 - 50	1 - 50
(2)	Deliberate evacuation areas :	4.8 - 9.3	7.1 -13	2	Prefectures neighboring Fukushima Prefecture:	0.1 - 10	0.1 - 10
(3)	Non-evacuated areas in Fukushima Prefecture:	1.0 - 4.3	2.0 - 7.5	(3)	The rest of Japan:	0.1 - 1	0.1 - 1
4	Prefectures neighboring Fukushima Prefecture*2:	0.2 - 1.4	0.3 - 2.5				
(5)	The rest of Japan:	0.1 - 0.3	0.2 - 0.5				

^{*1:} Miyagi, Yamagata, Ibaraki and Tochigi Prefectures (Group 3)

The estimated effective doses to the public for the first year after the accident in Reports of the UNSCEAR and the WHO are as shown in the table above. The ranges of doses here show those of average values for prefectures, municipalities in the targeted areas, or evacuation scenarios for targeted groups.

The results of dose assessment in the UNSCEAR 2020/2021 Report are lower or at the same level compared with those presented in the UNSCEAR 2013 Report (p.196 of Vol. 1, "UNSCEAR 2020/2021 Report (3/8): Update from the UNSCEAR 2013 Report upon Assessing Public Exposure Doses"). The UNSCEAR 2020/2021 Report also assesses the uncertainties in dose assessment.

The WHO Reports and the UNSCEAR 2013 Report state that their assessments of exposure doses contain certain uncertainties due to uncertainties inherent to basic data. However, in the UNSCEAR 2020/2021 Report, dose estimation with less uncertainties became possible as a broader range of knowledge was made available.

[Relevant parts in the Reports]

- WHO's Preliminary dose assessment (prepared based on pages 40 to 45 (3. Results))
- UNSCEAR 2013 Report (prepared based on paragraphs 209 to 214 on pages 86 to 87, Annex A)
- UNSCEAR 2020/2021 Report (prepared based on paragraphs 166 to 169 on pages 64 to 66, ANNEX B)

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The radionuclide deposition density information in parts of these prefectures was sufficient for estimates of doses to be made from inhalation and external exposure pathways at the municipality-average level on a 1-km square basis. As a result, prefectures making up Group 3 are different from those considered in the UNSCEAR 2013 Report.

^{*2:} Iwate, Miyagi, Ibaraki, Tochigi, Gunma, and Chiba Prefectures

^{*3:} The original text in English, the term "infant" is used for young children and babies. This table uses the descriptions in the original texts of Japanese versions of the Reports. As the WHO Reports are not translated into Japanese, the same expressions as used in the UNSCEAR 2020/2021 Report are used here.