

UNSCEAR 2013

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Arguably the major public health detriment of the Chernobyl accident, notwithstanding the epidemic in childhood thyroid cancer, was the so called psychosocial effect.

At the root of the psychosocial effect is TRUST in the appropriate authorities to protect public health from what for many is an unknown and undetectable (with the senses) hazard – ionising radiation.

The authorities in the former Soviet Union failed, from the outset, to inform the public of the nature of the accident at Chernobyl.

The psychosocial effect is therefore eminently preventable by simply being open and honest about what is happening at the time it is happening.

Similarly, after the accident at Fukushima Daiichi in March 2011 disclosure of the extent of releases was withheld for several days.

The public health risks of accidents with major public health implications should be thoroughly assessed comprehensively from a scientific standpoint in an open and transparent manner by an independent organisation as soon as possible after the accident.

Does the 2013 UNSCEAR constitute such a timely, transparent, comprehensive, independent and scientific risk assessment of the Fukushima accident?

The answer is NO!

Timeliness

Appearing as it did more than 3 years after the accident it cannot be described as “timely”: it should have been available within months and certainly before the end of 2011 if it was to be useful in countering any psychosocial effect.

Transparency

The UNSCEAR report fails on transparency grounds because it relates a history of the events that occurred which is not consistent with the way those events “unfolded” in terms of information provided by the media or the UN organisations at the time of the accident. In fact, the legally binding international conventions set in place after Chernobyl were not complied with by the IAEA or the WHO, but the reader cannot find that out from the UNSCEAR report. Had the nuclear emergency response system worked as planned UNSCEAR might have been able to prepare a more comprehensive risk assessment.

Comprehensiveness

The 2013 UNSCEAR report lacks comprehensiveness in that it leaves considerable uncertainty about doses incurred in the very early period after the accident and in respect of internal doses which were not even directly measured until several months (July 2011) after the accident. This is the “difficult part” of the risk assessment. It is easy to estimate external doses from ground deposition measurements but much more difficult to estimate doses from immersion in the plume and inhalation. Data were available from suspended particle monitors (SPM) but it appears that UNSCEAR did not use it.

Independence

UNSCEAR is supported financially and its membership nominated overwhelmingly by governments with an interest and investment in nuclear energy.

At an international symposium in Fukushima City earlier this year the WHO representative stated that in evaluating risks of the Fukushima accident the IAEA, WHO and UNSCEAR worked together. The IAEA, having the mandate to promote nuclear power, has a massive conflict of interest as far as assessing radiation risks is concerned. Furthermore, that same WHO representative stated that in determining public health priorities following the accident the economic future of nuclear power had to be considered and some remedial measures would be too expensive.

In making judgements about the magnitude of early doses from the Fukushima accident UNSCEAR used the source term published by **JAEA** rather than an **internationally** derived source term. Is JAEA independent of TEPCO? Did it have any kind of advisory or supervisory role in respect of safety before the accident? Did it know that the reactors at Fukushima Daiichi did not have nitrogen purging or other means of preventing hydrogen explosions? Was it aware that a tsunami of more than 7 m would cause serious problems at Fukushima Daiichi?

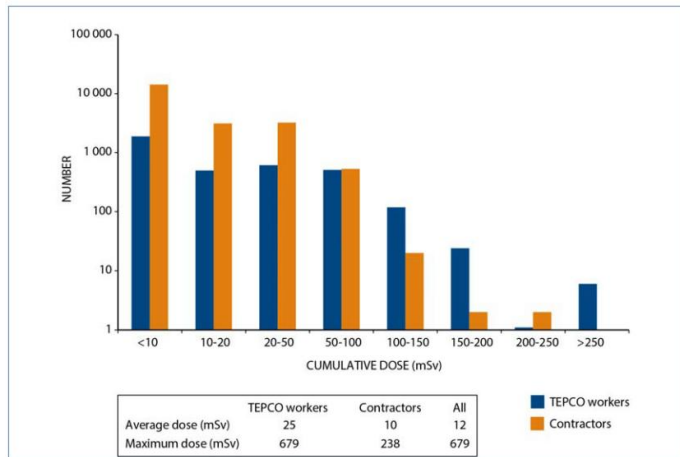
Scientific

Although the “S” in UNSCEAR stands for “Scientific” the report does not qualify as a “scientific document”. A truly scientific document would have been at pains to ensure transparency, comprehensiveness and independence and I have just shown you that none of these ideals is met.

UNSCEAR claims in a press release on 2 April this year that “more than 80 leading scientists” contributed to the risk assessment. However, the CV’s and publication records of these experts is not provided so the reader has no assurances as to the scientific competence of the committee. A truly “scientific” report would ensure that there are no “conflicts of interest” among the authors. Again there is nothing to assure the reader of this.

Finally, UNSCEAR effectively announces in its own press release **“Increase in Cancer Unlikely following Fukushima Exposure - says UN Report”**. Given the worker doses this can hardly be true.

The report gives the distribution of worker doses up to October 2012



Using standard risk factors one can deduce of the order of 50 excess cancers in some 10,000 workers and contractors with doses more than 10 mSv. These are not “unlikely” cases. In addition there are likely to be as many non-cancer diseases.

The report also estimates 18,000 person-Sv in the first year after the accident for the total population of Japan. Again on standard risk factors this would suggest between 2,500 and 3,000 excess cancers.

UNSCEAR can only say these cancers are unlikely by imposing an arbitrary threshold for the induction of cancer at say 100 mSv, an action for which there is **no scientific basis**.

Conclusions

In conclusion the report from UNSCEAR has not satisfied the primary requirements to enable it to qualify as a timely, transparent, comprehensive, independent and scientific risk assessment of the accident at TEPCO's Fukushima Daiichi nuclear power plant.

The UN member states, most of which do not have nuclear power stations, but may well be affected by accidents in states that do, need such a report and the UN should commission one.

The present UNSCEAR Committee should be dissolved.