

Main findings and recommendations of the WHO Core Assessment Group on Pesticides
Expert task force on Diazinon, Glyphosate and Malathion

The task force worked under the “Terms of Reference” that can be accessed at: http://www.who.int/foodsafety/areas_work/chemical-risks/jmpr/en/

Process of work of the task force

- The task force worked in English via email and held three meetings via teleconference on 05/06, 09/07 and 03/09 and completed its work on 11/09/15.
- The IARC Monographs Vol. 112 references from glyphosate, malathion and diazinon monographs were provided to the task force in May 2015, with the understanding that according to the IARC Monographs Secretariat these references had been identified from comprehensive electronic searches of peer-reviewed literature, screened for relevance to the topic and supplemented by manual searching (e.g. of other authoritative reviews) as well as government reports in their final form, and that when published, Volume 112 of the IARC Monographs on Carcinogenic Risks to Humans might not necessarily cite all listed studies.
- The Monograph on glyphosate was published on 29 July 2015 (<http://monographs.iarc.fr/ENG/Monographs/vol112/mono112-02.pdf>) and it was considered by the taskforce. The Monographs on malathion and diazinon were not published as of September 2015 and were therefore not available to the taskforce.
- The task force compared the publications considered by IARC and those considered by the JMPR for each of the 3 pesticides, including (i) epidemiological studies; (ii) animal cancer bioassays; (iii) studies of genotoxicity, and (iv) other mechanistic evidence. The task force did not assess the relevance of the studies used by IARC for the remit of JMPR, because such an activity was outside the Terms of Reference of the task force.
- For Glyphosate, the task force compared the publications in the published monograph (IARC 2015) and the evaluations by JMPR (2004, 2011). For Malathion, the task force compared the draft list of publications considered by the IARC Monographs Vol. 112 working group and the evaluations by JMPR (1997, 2003). For Diazinon, the task force compared the draft list of publications considered by the IARC Monographs Vol. 112 working group in the evaluation of diazinon and the evaluations by JMPR (1993, 2001, 2006).
- Additional comparisons were undertaken by individual taskforce members. These included the scientific studies considered by the United States Environmental Protection Agency, Health Canada Pest Management Regulatory Agency, and the European Food Safety Authority, as well as some additional literature searches conducted by the taskforce members.
- The taskforce will report back to the JMPR in September 2015 for further discussion and action.

Main findings of the task force

- The task force found that the databases for IARC and JMPR monographs for glyphosate, malathion and diazinon were significantly different and that many studies, mainly from the published peer reviewed scientific literature, that had not been evaluated by JMPR were available to the IARC Monographs working group.
- The task force noted that IARC Monographs working group considered studies of active substance, commercial formulations and primary metabolites and that such information is useful to the overall evaluation.
- The task force noted that the future re-evaluation of glyphosate, malathion and diazinon by JMPR may need to extend beyond their residues in food resulting from their use as crop protection products.

Recommendations of the task force

- The task force recommends full re-evaluation of glyphosate, malathion and diazinon by Joint FAO/WHO Meeting on Pesticide Residues (JMPR).
- The task force recommends that JMPR reviews internal guidelines to consolidate the criteria for data inclusion/exclusion with respect to published and/or proprietary data sources.