

**To:** Kent, Ray[Kent.Ray@epa.gov]  
**From:** Miller, David  
**Sent:** Tue 3/17/2015 7:46:56 PM  
**Subject:** FW: IARC- Glyphosate summary

FYI--

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**From:** Miller, David  
**Sent:** Tuesday, March 17, 2015 2:14 PM  
**To:** Housenger, Jack; Rowland, Jess; Vogel, Dana  
**Cc:** Christensen, Carol  
**Subject:** RE: IARC- Glyphosate summary

I forwarded this to Carol and provided her the hardcopy document that Jess provided me (a draft of the IARC document).

Carol's computer isn't functioning right now, so I said I would relay what she and I just spoke about on this topic.

Firstly with respect to the question of whether we reviewed the epi studies they discuss here. I checked with Jess and the big ones IARC considered for glyphosate and NHL are De Roos, McDuffie, Erickson, and Hardell. Carol indicates that yes, she is familiar with and considered each of these on our glyphosate review. So there is nothing new here that was weight heavily by IARC that we were unfamiliar with.

(b)(5) deliberative process



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(b)(5) deliberative process Here is how we summarized this in our glyphosate review:

HED identified 55 environmental epidemiology studies regarding potential cancer and noncancer, chronic health effects in association with pesticide use including glyphosate. As noted above, few of these studies reflected an a priori research interest in the potential role of glyphosate and chronic disease outcomes. Most studies were hypothesis-generating in nature,

and study authors evaluated use of glyphosate in addition to several other pesticides. Therefore, the role of chance given the many different statistical tests performed and the lack of a prespecified hypothesis limit epidemiologic inference. Given this and other limitations of these studies, we cannot conclude glyphosate plays a role in any of the health outcomes studied across this epidemiologic database. EPA will continue to follow the literature concerning the potential role of the chemical in respiratory health (asthma in particular), as well as adverse pregnancy and birth outcomes such as increased time to pregnancy. Across the several population-based case control studies on NHL and pesticide use, some investigators observed non-statistically significantly increased risk in relation to glyphosate use, while others reported no observation of a statistical association with glyphosate use. Variation in the quality of exposure assessment, study design and methods, as well as available information concerning potential confounding variables could explain these inconsistencies in the data. A prospective study devoid of the limitations of exposure recall inherent to case control studies will greatly aid causal inference. EPA will await with interest any new study using prospective exposure assessment methods to investigate the role of glyphosate and NHL and other lymphohematopoietic tumors.

(b)(5) deliberative process

David.

-----Original Message-----

From: Housenger, Jack  
Sent: Monday, March 16, 2015 9:05 PM  
To: Rowland, Jess; Miller, David; Vogel, Dana  
Subject: FW: IARC- Glyphosate summary  
Importance: High

thanks again Jess for the attached

(b)(5) deliberative process

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From: Rowland, Jess  
Sent: Monday, March 16, 2015 12:06 PM  
To: Housenger, Jack  
Subject: IARC- Glyphosate summary

Hi Jack

As per your request, attached is the summary on Glyphosate.

Also, I asked Dr. Kate Guyton, Responsible officer of IARC as to how one gets selected to be a voting member on the work group. Below is her response. Let me know if you need additional info.

Regards

Jess

Dear Jess,

Thank you for your message. We are pleased to know you have returned safely. We thank you for joining us for the volume 112 meeting, it was truly an honour to have your participation!

Please do be reminded that the results of the meeting are strictly embargoed until the Lancet Oncology summary is published. I'll be pleased to let you know when that occurs. In the meantime, it is fine if you discuss the meeting internally with managers.

Other than the volume 113 meeting in June, for which the Working Group has already been formed, we don't have immediate plans for evaluating other pesticides in a monograph meeting. In general, national and international health agencies participate in the "representative" category as you did. IARC uses literature searches to identify most experts and Working Group members have generally published significant research related to the carcinogenicity of the agents being reviewed. Working Group members are selected on the basis of (a) knowledge and experience and (b) absence of real or apparent conflicts of interest. Other factors, including demographic diversity and balance of scientific findings and views, are also considered in forming the Working Groups. More information here: <http://monographs.iarc.fr/ENG/Preamble/currenta5participants0706.php>.