

Message

From: HEYDENS, WILLIAM F [AG/1000] [/O=MONSANTO/OU=NA-1000-01/CN=RECIPIENTS/CN=230737]
Sent: 3/31/2016 11:34:45 PM
To: JENKINS, DANIEL J [AG/1920] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=813004]; HEERING, DAVID C [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=RECIPIENTS/cn=68681]; LISTELLO, JENNIFER J [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=533682]; REBMAN, JOHN [AG/1000] [/O=MONSANTO/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JREBMc1a]
Subject: Re: EPA glyphosate questions

Dan, will folks from HE'D be at this meeting?

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

Subject: EPA glyphosate questions

From: "JENKINS, DANIEL J [AG/1920]" <daniel.j.jenkins@monsanto.com>

Date: Mar 31, 2016, 5:15 PM

To: "HEERING, DAVID C [AG/1000]" <david.c.heering@monsanto.com>, "HEYDENS, WILLIAM F [AG/1000]" <william.f.heydens@monsanto.com>, "LISTELLO, JENNIFER J [AG/1000]" <jennifer.j.listello@monsanto.com>, "REBMAN, JOHN [AG/1000]" <john.rebman@monsanto.com>

Dan Jenkins
US Agency Lead
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202 383 2851 (o)
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Begin forwarded message:

From: "Nguyen, Khue" <Nguyen.Khue@epa.gov>

Date: March 31, 2016 at 5:27:43 PM EDT

To: "JENKINS, DANIEL J [AG/1920]" <daniel.j.jenkins@monsanto.com>

Cc: "Smith, Charles" <Smith.Charles@epa.gov>, "Anderson, Neil" <Anderson.Neil@epa.gov>, "Moriarty, Thomas" <Moriarty.Thomas@epa.gov>

Subject: meeting next week

Hi Dan,

I'm forwarding additional details from our human health folks about the meeting next week:

As part of Registration Review, the agency has been evaluating the extensive data that is available for glyphosate, including the IARC and EFSA reports on carcinogenicity. This has included a toxicological analysis consisting of a wide variety of experimental animal data and *in vitro* data from the guideline studies and from the scientific literature. In addition we are evaluating the

epidemiological database of about a dozen US and European studies. In order to better characterize the significant toxicological and epidemiological data that is available for glyphosate in the registration review preliminary risk assessment, the agency has been attempting to determine changes over the last 20 or 30 years in the use of glyphosate products over time (i.e., which formulations have dominated the market). EPA is also interested in how the inert compounds used in the major glyphosate products utilized in agricultural settings in the US and in Europe have changed over the last 20 or 30 years. The agency is particularly interested in utilizing this data to help characterize any potential differences in the US and European glyphosate epidemiology studies (mid 1980s – early 2000s, see list below). We would like to discuss this in more detail during next week's meeting.

List of glyphosate epidemiology studies:

De Roos, A. J., Blair, A., Rusiecki, J. A., Hoppin, J. A., Svec, M., Dosemeci, M., Alavanja, M. C. (2005). Cancer incidence among glyphosate-exposed pesticide applicators in the Agricultural Health Study. *Environ Health Perspect*, 113(1), 49- 54.

De Roos, A. J., Zahm, S. H., Cantor, K. P., Weisenburger, D. D., Holmes, F. F., Burmeister, L. F., & Blair, A. (2003). Integrative assessment of multiple pesticides as risk factors for non-Hodgkin's lymphoma among men. *Occup Environ Med*, 60(9), E11.

Eriksson, M., Hardell, L., Carlberg, M., & Akerman, M. (2008). Pesticide exposure as risk factor for non-Hodgkin lymphoma including histopathological subgroup analysis. *Int J Cancer*, 123(7), 1657-1663.

Hardell, L., Eriksson, M., & Nordstrom, M. (2002). Exposure to pesticides as risk factor for non-Hodgkin's lymphoma and hairy cell leukemia: pooled analysis of two Swedish case-control studies. *Leuk Lymphoma*, 43(5), 1043- 1049.

McDuffie, H. H., Pahwa, P., Mclaughlin, J. R., Spinelli, J. J., Fincham, S., Dosman, J. A., Choi, N. W. (2001). Non-Hodgkin's lymphoma and specific pesticide exposures in men: cross-Canada study of pesticides and health. *Cancer Epidemiol Biomarkers Prev*, 10(11), 1155-1163.

Orsi, L., Delabre, L., Monnereau, A., Delval, P., Berthou, C., Fenaux, P., Clavel, J. (2009). Occupational exposure to pesticides and lymphoid neoplasms among men: results of a French case-control study. *Occupational and Environmental Medicine*, 66(5), 291-298.

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Let me know if you have any questions.

Thanks,

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