From: Sass, Jennifer [jsass@nrdc.org] 8/8/2014 3:47:20 PM Sent: To: Huff, James (NIH/NIEHS) [G] [huff1@niehs.nih.gov]; Lunn, Ruth (NIH/NIEHS) [E] [lunn@niehs.nih.gov]; Dana Loomis [LoomisD@iarc.fr]; Neela Guha [guhan@iarc.fr]; kmb@sciencecorps.org; Kathryn Guyton [GuytonK@iarc.fr]; Cooper, Glinda [Cooper.Glinda@epa.gov]; Cogliano, Vincent [cogliano.vincent@epa.gov]; fiorella belpoggi [belpoggif@ramazzini.it]; morando soffritti [soffrittim@ramazzini.it]; frank mirer [fmirer@hunter.cuny.edu]; peter infante [pinfante@starpower.net]; Elihu D Richter | Ex. 6 Personal Privacy (PP) | danny teitelbaum [toxdoc@ix.netcom.com]; phil landrigan [phil.landrigan@mssm.edu]; Kathleen Ruff [kruff@bulkley.net]; joe ladou Ex. 6 Personal Privacy (PP) Lauren Zeise Ex. 6 Personal Privacy (PP) colin soskoine [Colin.Soskolne@ualberta.ca]; Caldwell, Jane [Caldwell.Jane@epa.gov]; Dunnick, June (NIH/NIEHS) [E] [dunnickj@niehs.nih.gov] CC: bucher@niehs.nih.gov; Birnbaum, Linda (NIH/NIEHS) [E] [birnbaumls@niehs.nih.gov] RE: NAS formaldehyde -- endorses RoC/NTP [AGAIN!!!!!] Subject: Great work!! My blog below.... Jennifer Sass's Blog National Academies fully supports Report on Carcinogens assessment - formaldehyde still causes cancer, despite industry arguments otherwise Posted August 8, 2014 The National Academies of Science (NAS) issued its assessment of the cancer risks from formaldehyde, a common and highly toxic chemical found in our furniture, home building materials, and clothing. The National Academies conducted a thorough and rigorous scientific review, and concluded that it posed a threat to humans for three types of cancer: nasopharyngeal cancer; sinonasal cancer; and myeloid leukemia. FULL BLOG HERE: http://switchboard.nrdc.org/blogs/jsass/national_academies_fully_suppo.html Jennifer B. Sass, Ph.D. SENIOR SCIENTIST, NATURAL RESOURCES DEFENSE COUNCIL (NRDC) PROFESSORIAL LECTURER, GEORGE WASHINGTON UNIV (SEIU LOCAL 500) NRDC | 1152 15th Street, NW | Washington, DC 20005 P: 202-289-2362 | E: jsass@nrdc.org | Twitter: JBSass | Skype: sass.jen ----Original Message----From: Huff, James (NIH/NIEHS) [G] [mailto:huff1@niehs.nih.gov] Sent: Friday, August 08, 2014 11:40 AM To: Lunn, Ruth (NIH/NIEHS) [E]; Dana Loomis; Neela Guha; kathy burns; Kathryn Guyton; Cooper, Glinda; vincent cogliano; fiorella belpoggi; morando soffritti; frank mirer; peter infante; Elihu D Richter; danny teitelbaum; phil landrigan; Kathleen Ruff; joe ladou; Lauren Zeise; Sass, Jennifer; colin soskoine; Jane Caldwell; Dunnick, June (NIH/NIEHS) [E]
Cc: Bucher, John (NIH/NIEHS) [E]; Birnbaum, Linda (NIH/NIEHS) [E] Subject: NAS formaldehyde -- endorses RoC/NTP [AGAIN!!!!!] ruth way to go - two in a row - wonderful. Onwards and upwards for PUBLIC HEALTH. james On /Fri8Aug/14 11:17 AM, "Lunn, Ruth (NIH/NIEHS) [E]" <lunn@niehs.nih.gov> wrote: Here is the brief release NAS has on their website about the formaldehyde report. http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=18948 [cid:3490342740_2317033]FOR IMMEDIATE RELEASE Formaldehyde Confirmed as Known Human Carcinogen A new report http://www.nap.edu/catalog.php?record_id=18948 from the National Research Council has upheld the listing of formaldehyde as "known to be a human carcinogen" in the National Toxicology Program 12th Report on Carcinogens (RoC). The committee that wrote the Research Council report found that the listing

is supported by sufficient evidence from human studies that indicate a causal relationship between exposure to the chemical and at least one type of human cancer. The committee reached the same conclusion after conducting both a peer review of the RoC and an independent assessment of the

formaldehyde literature. The NTP is an interagency program that produces the RoC. Formaldehyde is a substance of interest for the RoC because many people in the United States are exposed, either through environmental sources such as combustion processes and tobacco smoke, or in occupational settings that include the furniture, textile, and construction industries. Formaldehyde is also produced naturally by human cells. It was first listed by NTP as "reasonably anticipated to be a human carcinogen" in 1981 before being upgraded to "known carcinogen" in the 2011 RoC. Based on RoC listing criteria, a substance can be classified as known to be a human carcinogen if there is sufficient evidence of carcinogenicity from studies in humans that indicate a causal relationship between exposure to the substance and human cancer. In its peer review of the RoC, the Research Council committee found that NTP described the strengths and weaknesses of relevant studies in a way that was consistent and balanced, but noted that it would be more complete if it also discussed why weaker evidence did not alter the conclusion. In addition, NTP did not include a description of its interpretation of "limited" and "sufficient" evidence for human studies, which factors into whether a chemical is listed as reasonably anticipated to be or known to be a human carcinogen. The Research Council committee defined "limited evidence" in humans to be two or more studies of varied design that suggest an association between formaldehyde and a specific type of cancer but that cannot exclude alternative explanations such as chance, bias, or confounding factors. Evidence was deemed to be "sufficient" if those alternative explanations could be ruled out with confidence. On this basis, the committee agreed that there is sufficient evidence to support an association between formaldehyde and cancer in humans. In its independent assessment, the committee considered human, animal, and mechanistic studies published through November 8, 2013 that focused on nasopharyngeal cancer, sinonasal cancer, and myeloid leukemia. It found sufficient evidence of carcinogenicity in human and animal studies and "convincing relevant information" that formaldehyde induces mechanistic events associated with the development of cancer in humans. Based on these findings, the committee concluded that formaldehyde should be listed in the RoC as "known to be a human carcinogen." Contacts: Lauren Rugani, Media Officer Christina Anderson, Media Assistant Office of News and Public Information 202-334-2138; e-mail news@nas.edu <mailto:news@nas.edu> www.nationalacademies.org/newsroom http://www.national-academies.org/newsroom Twitter: @NAS_news <https://twitter.com/NAS_news> and @NASciences <https://twitter.com/NASciences> RSS feed: http://www.nationalacademies.org/rss/index.html <http://www.nationalacademies.org/rss/index.html> Flickr: http://www.flickr.com/photos/nationalacademyofsciences/sets <http://www.flickr.com/photos/nationalacademyofsciences/sets>

copies of Review of the Formaldehyde Assessment in the National Toxicology Program 12th Report on Carcinogens http://www.nap.edu/catalog.php?record_id=18948> available from the National Academies Press on the Internet at www.nap.edu http://www.nap.edu/ or by calling 202-334-3313 or 1-800-624-6242. Reporters may obtain a copy from the Office of News and Public Information (contacts listed above). # NATIONAL RESEARCH COUNCIL Division on Earth and Life Studies Board on Environmental Studies and Toxicology Committee to Review the Formaldehyde Assessment in the National Toxicology Program 12th Report on Carcinogens Alfred O. Berg*(chair) Professor and Chair Emeritus Department of Family Medicine University of Washington Seattle John C. Bailar III* Professor Emeritus University of Chicago Mitchellville, Md. A. Jay Gandolfi Professor Emeritus College of Pharmacy University of Arizona Tucson David Kriebel Co-Director Lowell Center for Sustainable Production; and Professor Department of Work Environment University of Massachusetts Lowell John B. Morris Board of Trustees Distinguished Professor; Professor of Pharmacology and Toxicology Department of Pharmaceutical Sciences; and Interim Dean University of Connecticut School of Pharmacy Storrs Kent E. Pinkerton Director Center for Health and the Environment; Professor Department of Pediatrics School of Medicine; and Professor Department of Anatomy, Physiology, and Cell Biology School of Veterinary Medicine University of California Davis Ivan Rusyn Professor Department of Environmental Sciences and Engineering; Director Laboratory of Environmental Genomics; and Director Carolina Center for Computational Toxicology Gillings School of Global Public Health University of North Carolina Chapel Hill Toshihiro Shioda Associate Professor of Medicine Harvard Medical School; and Director Molecular Profiling Laboratory Massachusetts General Hospital Cancer Center Charlestown Thomas J. Smith Professor Emeritus Department of Environmental Health Environmental Science and Engineering Program Harvard School of Public Health Boston Meir Wetzler Chief Division of Leukemia Department of Medicine Roswell Park Cancer Institute; and Professor of Medicine School of Medicine and Biomedical Sciences University at Buffalo State University of New York Buffalo Lauren Zeise Deputy Director for Scientific Affairs Office of Environmental Health Hazard Assessment California Environmental Protection Agency Oakland Patrick Zweidler-McKay Section Chief Pediatric Leukemia and Lymphoma; and Associate Professor Department of Medicine Division of Pediatrics The Children's Cancer Hospital The University of Texas M.D. Anderson Cancer Center Houston STAFF Heidi Murray-Smith Study *Member, Institute of Medicine Director

Robin Mackar

Office of Communications and Public Liaison National Institute of Environmental Health Sciences National Institutes of Health PO Box 12233, Research Triangle Park, NC 27709 919-541-0073; rmackar@niehs.nih.gov NIH . . . Turning Discovery Into Health