

## **NTP webinar informs Report on Carcinogens**

*By Robin Mackar*

The National Toxicology Program (NTP) successfully used a web-based meeting format April 11 to bring together scientific experts and members of the public for a discussion on [pentachlorophenol](http://ntp.niehs.nih.gov/?objectid=9518D219-D531-1B92-D2B379101E29894D) (<http://ntp.niehs.nih.gov/?objectid=9518D219-D531-1B92-D2B379101E29894D>) (PCP) exposure and cancer.

PCP, which is primarily used as a wood preservative in the United States for items such as utility poles, cross arms, fence posts, and railroad ties, is a candidate substance being formally reviewed for possible listing in the Report on Carcinogens (RoC). The webinar created a virtual meeting, allowing more than 70 registered participants to watch, listen, and participate in discussions, by phone and computer, from across the globe.

The half-day session was moderated by epidemiologist Glinda Cooper, Ph.D., from the U.S. Environmental Protection Agency. The meeting included presentations from four outside scientists who have been involved in PCP human studies. The objective of the meeting was to receive scientific input on how best to evaluate the epidemiologic, or human, studies related to PCP exposure. NTP was specifically interested in hearing about PCP components and contaminants, and distinguishing between cancer effects caused by PCP and those that might be caused by other chemicals or contaminants to which workers may have been exposed.

### **Purpose of webinar**

“This webinar is intended to help inform our cancer evaluation of PCP,” said Ruth Lunn, Dr.P.H., director of the NTP [Office of the Report on Carcinogens](#), while providing an update on the RoC process. “It is not to receive recommendations from invited speakers or the public on whether or not PCP should be listed in the RoC.” The cancer evaluation component, developed by Lunn and her staff, lays out all the information used to make a preliminary listing decision, and is an integral piece of the monograph that NTP prepares as part of its evaluation of a substance.

After some brief introductory comments, Cooper introduced the first panelist, and facilitated a question and answer session among participants after each presentation (see [text box](#)).

### **Discussion and next steps**

Mary Schubauer-Berigan, Ph.D., senior research epidemiologist at the National Institute for Occupational Safety and Health (NIOSH), competently served as discussion leader after the talks. She focused on some very straightforward questions, ranging from what is known about how many people are currently exposed to PCP, to asking if all PCP exposure is contaminated or mixed with dioxins or other byproducts, or whether people can be exposed to pure PCP. These types of questions made for a lively discussion between the speakers, NTP staff, and the public.

“Getting scientific and public input using this kind of virtual meeting format is a new way of doing business for us,” said Lunn after the meeting. “I was very pleased with how it all came together. We received a lot of good information that will provide a strong foundation as we move forward with our evaluation of PCP.”

Following completion of the cancer evaluation component, NTP will prepare the draft substance profile. Both documents will be part of the draft RoC monograph released for public comment and peer review.

(Robin Mackar is the news director in the NIEHS Office of Communications and Public Liaison, and a frequent contributor to the Environmental Factor.)



*Epidemiologist Cooper, formerly with NIEHS, moderated the RoC webinar on PCP. (Photo courtesy of Steve McCaw)*



*As discussion leader, Schubauer-Berigan helped clarify what is known about PCP exposure. (Photo courtesy of Mary Schubauer-Berigan)*

## Presentation Highlights

**Kevin Dunn, from NIOSH**, presented an overview of occupational exposures to PCP. He said PCP was produced in the United States from 1936 to 2006, but since 1984, its use in the U.S. has been restricted to wood preservation and can no longer be used on wood in residential or agricultural buildings. Dunn discussed how exposure for PCP manufacturing workers might occur, including through dust or vapors, depending on the finishing process used to prepare the PCP and exposure in the wood preservative industry. He also identified common PCP contaminants.

**Avima Ruder, Ph.D., also from NIOSH**, focused on occupational exposure to PCP and other chemicals, while further addressing some of the issues that need to be carefully considered when evaluating human epidemiology studies. She discussed these issues as they relate to what NIOSH recently found in a mortality study that includes 2,122 U.S. PCP production workers, from four large chemical plants operating from 1936-2006. The workers were exposed to other chemicals, as well, while working at the plants.

**James Collins, Ph.D., from the Dow Chemical Company**, focused his talk on biomonitoring and epidemiologic studies of PCP producers. He talked about how difficult it is to determine exposure assessment for PCP. He shared biomonitoring data on serum dioxins from different types of PCP workers, and suggested that the dioxins, which are long-lived in the body, may serve as an indicator for past exposure to PCP. He discussed findings from an epidemiology study of PCP manufacturing workers at the Dow chemical plant.

The final presentation came from **Paul Demers, Ph.D., a professor at the University of Toronto Dalla Lana School of Public Health and the Cancer Care Ontario Occupational Cancer Research Centre**. Demers focused much of his remarks on a large study he has been involved with in British Columbia that includes 27,464 workers, employed by 14 sawmills for 1 year or more, between 1950 and 1995. He also reviewed findings of other epidemiologic studies of PCP.

**PCP webinar** (<http://ntp.niehs.nih.gov/go/pcpwebinar>) information is available on the NTP website.

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