

Wood Preservatives Cause Illnesses

Victims stories tell of trail of poisoning

by Greg Kidd, J.D.

With wood preservatives being among the most toxic chemicals known to humankind and representing over 30 percent of all pesticide use, the eerie silence of the U.S. Environmental Protection Agency (EPA) on wood preservative poisoning and contamination represents a longstanding failure to act in the public interest. The lack of adequate government attention to this means that people are hurt and children are made sick year in and year out. The stories recounted here describe the dimensions of the problem. They are the tip of the iceberg, where most of the harm and suffering remains uncollected, unreported, undiagnosed and unstudied. This occurs despite findings of widespread contamination with wood preservatives like pentachlorophenol (penta) in children. It occurs despite the knowledge that penta treated utility poles record the largest reservoir anywhere of the chemical's contaminant, dioxin. It continues even though penta can be banned without economic impact on utility companies, given the availability of cost effective alternatives. Similarly, railroad ties made out of recycled materials can be used at a competitive cost. Looking at wood preservatives takes us through a trail of horror stories from their production, to use in wood treatment facilities, to exposure through utility poles, to their disposal. At each one of these points, there are stories of poisoning and contamination.

Given that EPA does not operate a pesticide incident monitoring system, and instead relies on manufacturer reports of poisoning incidents, it is essential that Beyond Pesticides/NCAMP build a database of its own. We do this on all pesticides by collecting Pesticide Incident Report forms, which can be found on our website, <http://www.beyondpesticides.org>. In the case of wood preservatives, EPA has failed to move ahead expeditiously with a regulatory review of wood preservatives to which it committed itself over three years ago. This followed an agency finding in 1981 that wood preservative uses should only remain on the market because less hazardous substitutes could not be identified.

However, in a preliminary risk assessment of pentachlorophenol released in 1999, EPA found excessive risks to children

exposed to penta treated utility poles.¹ In a Beyond Pesticides/NCAMP survey, we found that 69 percent of responding utilities are in the practice of giving away utility poles taken out of service.²

There is no question that public exposure to wood preservatives is widespread and uncontrolled. People receiving free wood from utility companies seeking to avoid proper disposal of contaminated material do not suspect the hazards when they handle it and use it around their home and garden. Those purchasing lumber treated with copper chromium arsenate (CCA) at their local hardware store do not receive warnings on wearing protective equipment when handling the wood and proper disposal of the contaminated sawdust. As a result of widespread exposure, people are getting sick. This piece discusses some of the sicknesses that are being attributed to these chemicals.

If you think you have suffered adverse effects associated with wood preservatives in your home, community or workplace, or know of someone who has, please notify Beyond Pesticides/NCAMP.³ This information can be used as part of our effort to stop the use of hazardous wood preservatives.

BrightSpirit, Davenport, WA

As a cable TV installer for Cox Cable Company in Spokane, WA, BrightSpirit climbed 10 to 30 utility poles a day. When she began in 1982, at age 18, BrightSpirit was not familiar with the names or hazards of the chemicals that are pumped into the poles that she climbed, but she soon became very familiar with the strong chemical smell that stuck to her clothes and skin. The smell was penta, one of the three most commonly used wood preservatives. Penta is absorbed readily by the lungs, skin and stomach. Workers handling the most significant exposure first through skin contact and second through the air.

According to EPA the risk of cancer faced by people like BrightSpirit, who work with and climb on penta treated poles, is astronomical. For example,



BrightSpirit (right) with daughter Erin.

¹ U.S. Environmental Protection Agency, 1999. Science Chapter for the Reregistration Eligibility Decision (RED) Document for Pentachlorophenol (PC Code: 063001, Registration Case Number 2505).

² Beyond Pesticides/NCAMP. 1999. *Pole Pollution: New Utility Pole Chemical Risks Identified by EPA While Survey Shows Widespread Contamination.*

³ While we focus here on wood preservatives, Beyond Pesticides/NCAMP collects information through its Pesticide Incident Report form on all pesticides.

EPA has calculated that the people whose job it is to retreat poles in the field with a fresh dose of penta face a risk of cancer that is 3.4 million times higher than acceptable. Another huge risk comes from the contaminants of penta, dioxins, furans and hexachlorobenzene. EPA has determined that penta treated wood represents one of the largest reservoirs of dioxins in the environment.

BrightSpirit suffered from a consistent rash on her skin during her time as a pole climber. Skin contact with penta is known to cause both contact dermatitis and chloracne. When BrightSpirit realized that she was pregnant, she wisely took a desk job. Studies show that penta accumulates in fatty tissue and breast milk. BrightSpirit's daughter, Erin, was slow to learn to crawl. As she grew, it became clear that Erin was learning disabled. Now 18 years old, Erin suffers from serious short-term memory problems. She reads on a fifth grade level and simple math causes her stress. BrightSpirit is convinced that her exposure to penta, and dioxins during pregnancy is linked to her daughter's condition.

Shirley Simpson, North Little Rock, AR

As a result of the contamination caused by their neighbor, one of the largest producers of chemically-treated wood products, Koppers Industries, Inc., Shirley Simpson and other members of her community are working to force the company to clean up its act. Koppers produces chemically treated railroad ties and utility poles. Studies conducted by both EPA and the Arkansas Department of Environmental Quality (ADEQ) have found elevated levels of creosote, penta and arsenic, one of the constituents of CCA, in the local ground water. All of these chemicals are linked to cancer, while arsenic is a known human carcinogen.

Ms. Simpson can recount many horrible stories about the emissions coming from the Koppers plant. One recent example of a poisoning incident was on a clear day in August 1999, when Ms. Simpson and a neighbor were walking through the neighborhood collecting signatures on a petition for a drainage project. When they were about a block away from Ms. Simpson's home, they were overwhelmed with fumes coming from the plant. It instantly burned their eyes, nose and throat. By the time they arrived at her house, Ms. Simpson could hardly talk. The doctor stated that from all indications it was clear that she was chemically poisoned, but could not verify the chemicals without extensive testing.

Ms. Simpson's symptoms are consistent with dermal exposure to coal-tar creosote. Creosote can enter the body through the lungs, stomach and the skin. Skin contact with a few drops of creosote irritates and burns the skin and eyes. Ms. Simpson

has noted a large number of respiratory problems in her community. She has also noted elevated incidences of nerve disorders and cancer, both associated with chronic exposure to creosote and the other wood preservatives.

Ms. Simpson has discovered that grassroots action can make a difference. A public relations official of the ADEQ told her that the agency would not have become involved without Ms. Simpson's letter writing and organizing. In her effort to protect the health of her community, she initiated a lawsuit against Koppers. She has also decided to run for Alderman in her ward. One of the planks in her platform is to work towards a cleaner, safer and more prosperous community.

Steve Yokom, Lincoln, MI

Steve Yokom and other active members of his community have been working to get a power generating plant that burns chipped, treated wood to stop polluting the air. Most of the chipped wood that is burned is treated with creosote and some with penta. The plant also burns huge amounts of chipped tires that have been sprayed with insecticides in mosquito abatement programs. As a result of their efforts, Viking Energy stopped the wood chipping operation at the plant in early 2000 and has not received a permit to burn CCA treated wood, along with other demolition and construction waste. However, even without the chipping operation, massive amounts of toxic wood dust from the huge pile of chipped wood is blown across the area. It is not uncommon for the area around

the plant to have a strong chemical smell, so strong that people riding down the road alongside the plant report that it can take their breath away.

Since Consumers Power began burning treated wood in 1997, the residents of Lincoln have experienced what appears to be an elevation in ailments linked to acute and chronic exposure to creosote and penta, as well as other pesticides. People suffer from burning eyes and irritated skin. The asthma rate has increased dramatically in recent years. A large number of people in the community regularly experience cluster headaches, an incapacitating type of migraine.

The storage pile of wood chips and tires often grows above 40 feet in height. The pile sits uncovered in a wetland where rain can cause chemicals to leach out of the pile into the soil and ground water. One time the pile caught fire and burned out of control for four days before firefighters were called in. Mr. Yokom remembers the cloud of caustic smoke that irritated the eyes and lungs of the residents of Lincoln while the fire raged. Mr. Yokom is concerned about other communities that are facing similar situations, including the McBain power plant in Cadillac, MI that received a permit to burn CCA treated wood.



Caption: Shirley Simpson from her campaign literature.

J.D. Morris, Billings, MT

During the summer of 1997, after J.D. Morris, his wife and four children moved into their home, they noticed that the wooden deck attached to the back of their house gave off a chemical stink. The warm weather heated the deck and volatilized the chemicals in it. The Morris children began to complain about irritated, watering eyes, headaches and feelings of nausea as the fumes came in through their open windows. Mr. Morris put two and two together after seeing a program on PBS about toxic chemicals and environmental contamination and talking with a friend who smelled the fumes and was reminded of a transformer fire. On closer inspection, Mr. Morris determined that his deck was constructed of milled cross-arms from utility poles. Some of the planks of wood



The Morris children playing on the back deck before the family became aware of the hazards.

still had the aluminum tags that had been attached to the cross-arms and the drill holes from the bolts used to hold the cross-arms to the utility poles.

Mr. Morris decided to have a sample of the wood taken from his deck and analyzed by a laboratory that tests for pesticides and other types of synthetic chemicals. The lab found high levels of phenolic compounds (over 150,000 ug/kg), components of the wood preservative creosote in the wood sample. The levels in the wood prompted the lab to write to Mr. Morris with the following recommendations:

- 1) Discontinue use of the deck under circumstances where skin contact is possible. Avoid spreading the tar-like material to other surfaces exposed to human contact, especially inside of your home; and
- 2) Consider removing the source of the exposure by removing the deck and associated stained or contaminated materials and disposing of them properly.

Since then, Mr. Morris's twelve-year-old son has been suffering from headaches and regular bouts of nausea for which he has to take daily medication. In addition, a dermatologist has recommended that Mr. Morris have a biopsy conducted on an inch wide discolored and swollen persistent sore on his hand.

The Morris's cannot afford at this time to have the deck removed and disposed of (a local environmental organization estimated that it would cost approximately \$80,000 to

clean up the mess created by the wooden deck). Mr. Morris is pursuing a legal solution to his problem, asking that the local real estate interests take responsibility for removing the deck and cleaning up the environment. Mr. Morris notes that his is not the only family in his community that is facing health risks because toxic, chemically treated wood was used to build decks on other houses as well.

Johnny Shelton, Cullman, AL

Johnny Shelton began working with wood preservatives in 1993. For one year he worked at a small factory in Electric Mills, Mississippi that produced wood poles pressure treated with penta. The company, which has since gone out of business, produced between 100 and 300 poles each day. Mr. Shelton was responsible for climbing into the retort chamber to hook the cable to the cars loaded



Taylor Shelton at 18 months.

with freshly treated wood. As Mr. Shelton puts it, "I was waste deep in the stuff." When climbing over the poles, the strong chemical fumes that would burn his lungs often overwhelmed him. The fumes often caused Mr. Shelton to feel dizzy and vomit. He generally felt sick and run-down.

His employers never provided him with protective clothing, or even suggested that he wear any protection, and never stressed the risks associated with his exposure to penta. Mr. Shelton was told in an offhand way that if he got penta on himself or his clothing, a daily occurrence, that he should simply wash it off. At that time, he was told that penta could make him sterile, cause birth defects and cancer.

Mr. Shelton left the employ of the treatment plant and now works for a cable company, climbing poles and replacing old poles that are being taken out of service. He recognizes the same strong smell of penta as he climbs the poles and experiences skin irritation when his wrist touches the poles. When replacing old poles, he cuts the poles into six-foot lengths so that people can take them away to use around their homes. It is not uncommon for him to see all the plants die within a six-foot circle around the piles of cut up poles.

Mr. Shelton's son, Taylor, was born in November of 1998 with severe birth defects in his leg. The bones in young Taylor's ankle will not harden and he has swapped toes on that foot. The doctors have told Mr. Shelton that if his son's condition does not change by October of 2000 then his son's leg will have to be removed. Mr. Shelton is convinced that his exposure to penta is responsible for his son's birth defects.