# Asbestos Effects Reaches More Than Workers

**INCIDENT**

Heather's doctor asked the questions – "was your dad a miner or did he work in construction of any kind." Answer – yes. She was exposed to asbestos through the dust that permeated his clothing and his car. As a construction worker. Her father was involved in dry wall clean – up and demolition. Much of the dry-wall joint compound he worked on contained asbestos.

Most of the buildings he worked in doing demolition contained asbestos tiles in the floors and in the ceiling.

The insulation around pipes and boilers that he tore out had asbestos insulation.

He would come home from work many days covered in dust, a thick, greyish-white crust covering his work jacket. A jacket she would wear to do her outside chores. A jacket she would put on to go out to the rabbit hutch in the back shed to feed and play with her rabbits. A jacket she would wear because it didn't matter if it got dirty.

This jacket had asbestos dust all over it. His car had the same dust in it. The dust was just part of her childhood. This dust caused her illness.

**NEED TO KNOW**

Heather Von St. James was diagnosed with mesothelioma a rare cancer most closely associated with exposure to asbestos. Her father who worked with asbestos was diagnosed with clear cell renal carcinoma and passed away after a short-term battle.

**BUSINESS / REGULATIONS**

At the end of 2016, the EPA named asbestos as one of the top 10 chemicals that pose a health and environmental risk. It is the first step in getting a full ban on asbestos.

But there was the game-changing election in November 9/16, and subsequent appointment of Scott Pruitt to oversee the EPA. The very man chosen to run the EPA also sued the E.P.A

Pruitt has said he remains unconvinced of the dangers of asbestos. Mr. Pruitt's tenure or head of the E.P.A was cut short and resigned his position amidst swirling controversies. But Pruitt's departure does not signal the end of problems at the E.P.A. The Trump administration has proposed significant cuts to the E.P.A.

The E.P.A is the principal agency in charge of superfund sites all over the U.S many of which are contaminated with asbestos and other deadly chemicals.

OSHA estimates that over 500,000 employees work with asbestos products. Millions more are exposed because they work near or around work areas where asbestos products are used. Many thousands of members work on jobs which expose them to asbestos. Such members work with or around insulation materials or friction products like clutch facings and brake linings. In addition, many members who work at manufacturing, construction or renovation sites or perform telecommunications installation and service work in office buildings and private residences may be exposed to asbestos fibers released from building insulation.

Exposure can also occur in families of workers as in Heather Von St James case. Asbestos fibers can be carried into the home on the workers' bodies or clothing. Asbestos-related diseases have afflicted workers' families as a result of such exposure.

Heather Von St James was 36 years old, a new mom with a 3.5 years old baby at home, and she was told she had 15 months to live if she didn't do something drastic.

Her doctor laid out some options for her. The first was do nothing and maybe live 15 months, which was not an option with a new baby. The second option given was chemo and radiation, and hopefully make it 5 years.

The third option was an incredibly invasive surgery called an extra pleural pneumonectomy. This surgery entailed the removal of her entire left lung that was affected by the cancer, the lining of the lung, the left half of her diaphragm, the lining of her heart – both of which would be replaced with Gore-Tex – and then the removal of one or two ribs. This option afforded her the best prognosis: 7-10 years of survival, more if she was one of the lucky ones. Knowing now that mesothelioma usually kills its victims within the first 5 years, this option was the best option for her.

She traveled to Boston and had the surgery, which saved her life. She followed it up with four sessions of chemo and 30 sessions of radiation to completely eradicate any remaining cells they couldn't get with surgery. She celebrated 11 years since her surgery on Feb. 2, which marked officially one year beyond her best-case scenario.

Her battle has taken its toll on her body. Losing her lung has caused her spine to curve, her shoulders to hunch and live in constant pain.

Her left arm and hand are numb and damage from the combination of the surgery and extensive radiation. The entire left side of her body is frail and atrophied from the effects of the surgery and treatments. She has memory and concentration problems due to the chemo, affectionately called "chemo brain."

Her hearing is shot from the cisplatin, one of the chemo drugs. It gives people chronic tinnitus. She had to give up her career as a stylist and co-owner of a busy salon/spa, as she is not able to be around all the chemicals with one lung and she does not have the stamina to stand behind the chair for 8 hours a day.

**STATISTICS**

Nearly 3,000 people are diagnosed with mesothelioma each year in the United States. That represents 0.02 percent of all U.S. cancer cases. A 2017 report from the CDC shows the death rate in the United States from 1999 to 2015 was around 8 deaths per million people.

Disease specialists did not track the death rates from asbestos cancers over a long period of time. It wasn't until 1999 that the U.S. government began classifying the diseases as a cause of death. This was mostly because doctors rarely discovered them until a post-mortem examination. Thus, a latency period between the first exposure to asbestos and the diagnosis of a related cancer os usually between 25 and 50 years.

- The mesothelioma death rate is much higher among men. From 1999 to 2010, the age-adjusted death rate for men was 24.6 deaths per million, compared with 4.5 deaths per million for women.
- The rate for whites is more than double that of any other race. From 1999 to 2010, the age-adjusted death rate among whites was 13.9 deaths per million. The second highest rate was observed in American Indians or Alaska Natives (5.6 deaths per million), followed by Blacks or African Americans (5.4 deaths per million) and Asians or Pacific Islanders (3.3 deaths per million).
- The prevalence of asbestos use during the 20th century now poses serious risks, including death, for 1.3 million U.S. construction and general industry workers. The five most at-risk industries are ship and boat building and repairing, industrial and miscellaneous chemicals, petroleum refining, electric light and power and construction. Occupations such as plumbers, pipefitters and boiler makers, mechanical engineers, electricians and elementary school teachers are also at high risk.
- Research shows that the incidence of asbestos cancer in the United States likely peaked in 2010. People exposed to asbestos in the 1970s, when the U.S. government first began restricting asbestos use, continue to develop mesothelioma because of the disease's decades-long latency period.
- Asbestos cancer cases among males peaked from 2008 to 2010, with more than 2,000 cases reported per year. The CDC predicts the number of cases should be on the decline, with an expected return to background levels by 2055. Mesothelioma cases among women are expected to increase slightly.

**PREVENTION**

The questions rage on …

It is the "what to do" and "what can be done" scenario. There are four principal areas that encapsulate prevention:

- **Work Practices and Procedures**– In order that asbestos exposure is minimized/eliminated, the employer must develop and use appropriate, protective work practices and procedures. Issues of concern would include housekeeping procedures, wet-cleaning and vacuuming asbestos-containing waste and debris, and disposal of asbestos waste. Adherence to protective work practices and procedures is extremely important and necessary.
- **Monitoring**– The employer must conduct air monitoring sampling or tests to determine levels of airborne asbestos in all workplaces that contain either asbestos-containing products or presumed asbestos-containing products. In addition, the employer must notify the affected workers in writing or by posting the monitoring results in an appropriate and accessible location (e.g., an employee bulletin board) within fifteen days of receipt of the results. Workers must be allowed access to any record concerning their exposure to asbestos. The employer must keep records of asbestos exposures for at least 30 years.
- **Medical Surveillance**– Employers must institute a medical surveillance program for all workers who are exposed to airborne asbestos concentrations at or above either the standard's time-weighted average (TWA) or excursion limits. Pre-placement medical exams must be provided affected workers before they are assigned to perform work in areas where levels of airborne asbestos fibers have been identified at or above the standard's TWA or excursion limits. In addition,

follow-up medical examination must be provided annually. Medical examinations must also be provided affected workers within 30 calendar days before or after the termination of employment. The above asbestos medical exams must include a medical and work history, chest x-ray, and lung function tests.

Further, employers must keep workers' medical records for at least 30 years. Employees or former employees have the right to request that her/his medical records be made available to other doctors. Workers who change jobs should inform their doctor about their exposure to asbestos.

- **Personal Protective Equipment –** When airborne asbestos exceeds the OSHA standard or excursion limit, the employer must provide workers with personal protective equipment such as clothing, gloves, gauntlets, boots, head and foot coverings, and, where necessary, air-supplied respirators. The employer is also responsible for cleaning, maintaining, and disposing of all personal protective equipment.
  CWA members who regularly work at a single location where they are exposed to excessive amounts of asbestos must be provided with change rooms. These must have two separated lockers or containers – – one for street clothes and one for protective clothes for each worker. Shower facilities must also be provided. Workers should shower at the end of each shift.
- **Training and Information-**Employers must develop and provide an asbestos training and information program to all workers who are exposed at or above the Asbestos Standard's permissible exposure and/or excursion limits. This program should include the toxicity of and health effects related to asbestos exposure; engineering controls and work practices; protective measures such as appropriate work practices, emergency and clean-up procedures, and personal protective equipment; the medical surveillance program; and a copy of the OSHA Asbestos Standard.

By adopting and following these four measures, asbestos exposure will be minimized and hopefully eliminated.

"On ounce of prevention will fetch you a pound of cure."