



Jen Jamieson, recycling attendant for the Cowichan Valley Regional District, helps unload a customer's truck. The illegal dumping of hazardous materials puts workers like Jen at risk.

# Asbestos: the hidden killer

By Ryan Parton

**“If I had my life to live again and I knew then what I know now, I’d live to be 100.”**

Brian Duncan, a 68-year-old Vancouver Island retiree who spent most of his adult life in the manufacturing and construction trades, has a lot of regrets. He has even more resentment — resentment that for more than 50 years he was allowed to work with a supposed miracle material that’s now widely known as “the hidden killer.”

As a shipwright in the 1960s and ’70s, Duncan was regularly exposed to an asbestos-containing, spray-on fire retardant known as Limpet. “There were times when you couldn’t see five feet in front of you because of the dust that was flying around,” he recalls. “I really resent the fact that I was told it was safe.”

Duncan’s asbestos exposure only increased in the following decades, when he worked on home renovation projects throughout the Victoria area. Then, in 2012, after seeing his doctor about a cold he couldn’t seem to shake, Duncan was diagnosed with asbestosis — a chronic scarring of the lungs caused by continued exposure to asbestos. Though seldom fatal on its own, asbestosis progressively diminishes lung function (at the time of his diagnosis, Duncan’s lung function was just 47 percent) and often develops into cancers like mesothelioma — a fast-acting cancer that is almost always deadly.

So far, Duncan has been fortunate — his asbestosis hasn’t progressed. Though he no longer plays hockey or fastball, the shortness of breath he experiences hasn’t yet stopped him from doing other things he loves, like restoring an old sailboat with his son or tending to his five-hectare hobby farm in the Cowichan Valley. For many other B.C. workers the picture is not as good.

In recent years, work-related fatalities in B.C. have generally declined, despite an ever-growing workforce. Deaths related to occupational disease (primarily driven by asbestos-related exposure), however accounted for 59 percent of worker deaths in 2015 — this makes asbestos the leading cause of work-related death in the province. In 2015 alone, 48 British Columbians lost their lives to conditions related to workplace asbestos exposure. Exposure issues are still significant and ongoing today with more than 400 new asbestos exposures reported to WorkSafeBC in 2015.

## **Incremental progress**

Though asbestos is largely considered a dirty word here in 2016, just how ever-present it is in homes built prior to 1990 is largely underestimated. Because of its high tensile strength and great insulating and fireproofing properties, asbestos was widely used in construction and manufacturing between the 1950s and the 1980s. By the mid-1970s health concerns about asbestos exposure had begun to surface, and in 1979 the Canadian government banned the manufacture of most asbestos-containing materials (ACMs). However, importing of asbestos still continued and non-friable ACMs (materials that can’t be pulverized by the human hand) continued to be produced. Today, asbestos is commonly found in the insulation, flooring, plumbing, light fixtures, and many other components of homes built as late as 1990.

“When you look at consumption of asbestos-containing materials on a per capita basis, we in B.C. consumed more than any other province,” notes Corinne Lapointe, a Victoria-based occupational hygiene officer with WorkSafeBC whose primary focus is asbestos-related issues. “Homeowners who decide to renovate their homes, especially those built before 1990, need to be particularly aware of the potential for exposure — both in work they undertake themselves or by those they hire.”

Though usually harmless if left undisturbed, asbestos becomes a killer when it is disturbed or through degradation causing it to become airborne. With friable materials, like vermiculite, opening up an attic space where asbestos is present can result in fibre release. For non-friable materials, actions like cutting, drilling, or crushing causes its fibres to become airborne.

**“Once people learn [about the dangers of asbestos exposure], they wish they had known long ago.”**

—**Ilse Sarady**, environmental technologist for the Cowichan Valley Regional District



Occupational hygiene officer Corinne Lapointe and Jason Adair, superintendent of Solid Waste Operations, discuss the details of the CVRD awareness campaign with environmental technologist Ilse Sarady.

Given the largely underappreciated risks of asbestos and its disproportionate share of the cause of death of B.C. workers, WorkSafeBC has taken a proactive approach to targeting employers who fail to protect their workers or take asbestos seriously. Since 2014, WorkSafeBC officers have conducted a targeted asbestos enforcement initiative each year during the construction season. Between July and December 2015, officers inspected 158 single family residential demolition and renovation sites, citing 203 initiating orders for asbestos-related violations.

Though there has been resistance, asbestos awareness, and the willingness to deal with the material carefully and in accordance with regulation, is gradually increasing, says Lapointe.

“Compared to four or five years ago, it’s improving,” she says, noting that many people initially balked at the

additional costs associated with safely managing asbestos. “We’re still in a phase of resistance, but we are meeting with less. More home owners and contractors are effectively managing hazardous materials, helping to protect workers from asbestos exposure.”

Lapointe compares the gradual acceptance of safe asbestos practices with the introduction of B.C.’s seatbelt law in 1977 — while there was pushback at first, buckling up behind the wheel is now second nature to most B.C. drivers.

“It happens incrementally,” she explains. “It’s the odd television interview speaking to the perils of asbestos; a newspaper article outlining the issues around dumping of construction waste, parents who are concerned about asbestos in their child’s school ... it’s all part of the fuel that compels social change.”



Occupational hygiene officer Corinne Lapointe and environmental technologist Ilse Sarady look over rack cards and pamphlets that provided informational support for the awareness campaign.

## Partnering with communities

The social change for which Lapointe is striving seems that much more achievable with the buy-in and participation of local municipalities. The most recent example is the Cowichan Valley Regional District (CVRD), Brian Duncan's former employer, which launched an innovative asbestos awareness campaign in May with educational support from WorkSafeBC.

Initially prompted by safety concerns for employees of its three recycling and waste transfer facilities, the CVRD campaign consisted of a dedicated website ([cprd.bc.ca/asbestos-kills](http://cprd.bc.ca/asbestos-kills)), awareness-building collateral such as billboards, rack cards, and social media messaging, and a "lunch and learn" for CVRD staff and local real estate professionals. While attendance at the lunch and learn was low, its organizer says those who did turn up left with eyes "as wide as saucers."

"They were like, 'Wow, everyone should receive this information,'" says Ilse Sarady, the CVRD environmental technologist who spearheaded the campaign. "For them it was new and it was all terrifying but really interesting. It just shows that once people learn, they wish they had known long ago."

While quantitative statistics on the CVRD campaign are low, Sarady says the initiative is having a noticeable effect.

"The first thing that happened was an elderly man came in with a yogurt container full of vermiculite insulation wanting to know if it was asbestos," Sarady explains. "He'd seen the billboard, so that was effective in terms of visibility." She adds that rack cards and a sandwich board set up at local recycling and waste centres were also effective.

"These two tools really helped those working at the facilities talk to people about asbestos," she says,

**“There’s this underground economy that we’re battling with; that’s where the education has to get out to the community. You may save a few bucks, but at the end of the day it’s going to cost you your life.”**

—Brian Duncan, retired worker

noting that staff encounters ACMs on a weekly basis. “When people came with [ACMs] and we had to turn them away ... we had the opportunity to hand them this tool; something visual that we could use to start the discussion.”

It’s those direct conversations with community members that Lapointe believes are so important in increasing asbestos awareness. For that reason, she describes the organizers of the CVRD campaign as “trailblazers.”

“There’s no question they’re trailblazers putting together this public awareness campaign,” she says. “In their efforts to manage asbestos in the community, they are protecting their own staff and the community; property owners and the people who live in structures with asbestos.”


While Lapointe stresses that there is still much more work to be done — noting that getting the message out in larger centres has been a challenge — she says the CVRD campaign is a step in the right direction.

“It’s a win for them and it’s a win for the community,” she says. “Ultimately, that also results in better protection of workers, which is the focus of WorkSafeBC.”

Unsurprisingly, Brian Duncan is also glad to see his former employer embrace the responsibility of asbestos awareness that municipalities share with employers, workers, and regulatory bodies. And like Lapointe, he also acknowledges that there’s still a long way to go.

“Contractors are starting to wear proper respiratory equipment, but there are still people out there who are bucking the system and hiring kids to do this work for cash,” he says. “There’s this underground economy that we’re battling with; that’s where the education has to get out to the community. You may save a few bucks, but at the end of the day it’s going to cost you

your life ... I’m very careful now, but it’s too late for me. Once it’s in you, it’s not coming out.”

To see where asbestos may be hiding in your home, and for resources on how to mitigate the risks of asbestos exposure, visit [worksafebc.ca](http://worksafebc.ca). 



Retired worker, Brian Duncan, with his dogs on his five-hectare hobby farm in the Cowichan Valley.

# Be informed about asbestos exposure

It can be difficult to know if you're working with asbestos because it is often mixed with other materials. However, in structures built before 1990, it's likely that at least some parts of the building will include asbestos-containing materials (ACMs).

Some common ACMs are linoleum (vinyl sheet flooring), floor tiles, drywall taping compound, textured decorative finishes on ceilings and walls, spray-in fire protection, cement pipes, and insulation (vermiculite).

Here are five key facts about asbestos that you may not know:

- Once an ACM is disturbed, it is common for asbestos fibres to remain airborne for up to 72 hours (and longer if the area is disturbed). Meaning, exposure can happen for days after initial demolition.
- Ensuring a hazardous materials survey is completed is the shared responsibility of the homeowner and hired contractor.
- The latency period for asbestos exposure ranges from 20 to 50 years.
- Exposure to ACMs is cumulative and there is no way to measure a worker's level of exposure.
- In most cases, illnesses as a result of asbestos exposure are fatal.



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