

Big Ideas*

Growing Here

Idea #05: 'Clear the Air'

Why are our kids coughing?

Children under 14 in the Cowichan are more than 20 per cent more likely to suffer respiratory distress—coughing, painful breathing, wheezing or serious illnesses like asthma and pneumonia—than other kids their age in British Columbia.

The finding was made in the region's first-ever environmental check-up, undertaken earlier this year by the Cowichan Valley Regional District Environment Commission. Citing information collected by the Vancouver Island Health Authority, it reports that hospital admission rates for children with respiratory problems in the Cowichan region are "consistently more than 20% higher than the provincial average and,—at times—are *twice the BC average.*" [emphasis added]

Respiratory distress is closely tied to air quality, and while air-quality in the Cowichan is good for much of the year, we're entering the season when woodstove use and waste-burning can contribute to serious localized air pollution.

How serious? Air sampling during last winter's heating season detected 'fine particulate matter', a component of wood smoke, in every CVRD community tested. Some individual readings in Duncan, Shawnigan Lake and Cobble Hill spiked to over three times levels known to be associated with elevated rates of illness and death if they continued over 24 hours. Pollution was highest in low-lying areas on cold, still nights when wood smoke hung in the air.

But this is one health problem we can all help solve. There are several ways to help reduce the amount of fine particulate matter polluting our winter air—and help lower our rate of childhood hospital admissions.

Don't burn yard waste. Bring clippings and brush scraps to a CVRD recycling depot for free disposal.

Use only a modern, high-efficiency wood stove or furnace. It's estimated that one in every four woodstoves in use in the CVRD is an older model that fails to meet current standards for clean burning. New models can reduce smoke emissions by up to 90%, and sharply lower the amount of wood needed to heat a home. If you live in Duncan or North Cowichan, contact the Municipality of North Cowichan to see if you qualify for a cash incentive to replace an older stove or furnace.

Pay attention to your fuel. Burning 'green' or inadequately dried firewood will create pollution even in a high-efficiency firebox. Invest in an affordable meter and ensure the moisture content of firewood is below 20% before it goes into the stove.

Wood smoke may not be the only factor contributing to our kid's breathing troubles. VIHA, in partnership with the BC Lung Association and BC Ministry of Healthy Living, is pursuing funding for additional research into what's behind the spike in hospital admissions.

We all share the environment. The CVRD Environment Commission is committed to clearing the air. Follow what we're doing here or online, and let us know what you think at

12things@cvrdenviro.com.

How green *is* our valley? The Environment Commission's first-ever comprehensive assessment of the CVRD's natural resilience and ecological health looked at everything from shoreline conditions to climate change. It found a few bright spots, but most trends were negative: our natural wealth is being run down. One bright spot: there are lots of efforts underway to reverse the decline. Read the entire State of the Environment Report, at <http://www.12things.ca/12things/uploads/FinalSoEReport.pdf>

* In 2009, residents of the CVRD overwhelmingly endorsed the '12 Big Ideas' vision for a Cowichan region that will support a growing population, adapt to a changing climate, and preserve its natural wealth for future generations.