

Few male babies born in Chemical Valley community

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SARNIA, Ont. (CP) - The people living among a notorious cluster of chemical plants in southwestern Ontario want to know where the boys are.

A recent review of Aamjiwnaang First Nation birth records found there aren't very many boys being born in the Chemical Valley community, and Sarnia-area residents can't help but point the finger at the toxic industry that surrounds them.

According to the study, published in the American journal *Environmental Health Perspectives*, only about a third of babies born on the reserve between 1999 and 2003 were male. Going back to include another five years, only 41 per cent of babies born in the decade were boys. The ratio is normally something closer to 50:50.

"Is it what we're breathing in on a daily basis? Is it where we played as kids? Is it something our parents did? Is it these small exposures or is it because we've been living here our whole lives?" asked Ada Lockridge, a member of the band's environmental committee who also sits on the band council.

Residents of the 850-member native community started asking questions in 2003 when they realized there were three all-girl softball teams and only one for boys.

Lockridge was charged with the task of going through the birth records for the study. The lifelong resident of the area was stunned to realize her findings were far from normal.

"I felt like I wanted to throw up," she said. "I did a lot of crying."

Then she took a second look at her own family. She and her two sisters have nine kids between them. There is only one boy.

The Sarnia area is home to Canada's largest cluster of chemical, allied manufacturing and research and development facilities. Out of the 10 largest chemical companies in the world, eight have operations in Ontario. Lockridge can see the smokestacks of many of them just by stepping outside her front door.

While researchers are reluctant to point the finger at any one chemical being manufactured and processed in the area, some say it is difficult to think the industry is unrelated to the decline.

"It's a pretty significant decline," said Constanze Mackenzie, the fourth-year medical student at the University of Ottawa who led the study.

"The implications of this are that there appears to be some sort of influence on their reproductive ability," she said. "We're not sure what this influence is."

The sex of a human embryo is determined at conception, but it is thought factors including stress, chemical exposure and hormones can play a part.

"The community is located right in the centre of a number of large petrochemical and chemical industrial plants, so it is suspected they do have multiple exposures to environmental contaminants," said MacKenzie.

She added there is ongoing research in the area that shows similar changes in sex ratios and the reproductive ability of local wildlife.

The Canadian Chemical Producers' Association said Thursday it was aware of the study, but a spokesman said further research was needed.

"We would encourage more investigation by scientists to better identify reasons for the apparent change in sex ratios," said Michael Bourque, association spokesman.

Lockridge said even though studies like these raise questions about the safety of her home, she isn't planning to leave.

"It just depends which way the wind's blowing. This is our home, all our family is here and our friends we've grown up with all our lives."