## Doctors question annual TB testing of health workers

■ Cite as: CMAJ 2019 August 12;191:E904-5. doi: 10.1503/cmaj.109-5797

Posted on cmajnews.com on July 23, 2019.

ome Canadian doctors are questioning why they must undergo annual testing for tuberculosis (TB) when an updated American guideline recommends against the practice. According to Toronto-based internist Dr. Michael Fralick, yearly TB tests are unnecessary for most health workers and may expose some to harm. He and other physicians recently vented frustration about the policy on Twitter.

"We just can't believe we have to do this every single year," Fralick told *CMAJ*.

In May, the United States Centers for Disease Control and Prevention recommended against annual TB testing of health workers unless there is a known

exposure or ongoing transmission. The change reflects an overall decrease in TB in America and health professionals' low risk of infection at work.

The risk of TB infection among Canadian health workers is likewise "extremely low," said Fralick. Guidelines on testing vary across the country, as does adherence to their recommendations. The Ontario Hospital Association, for example, recommends yearly testing depending on the size of an institution, number of TB cases it handles, and the type of activities individuals perform.

In theory, this should target professionals at higher risk of infection. But according to Fralick, many hospitals have a blanket policy requiring annual testing of all clin-

icians and trainees, regardless of individual risk. "Of the 10 hospitals that I rotated through during my residency training, every single one of those hospitals has applied that policy."

Most people infected with TB are not contagious and do not feel sick. Even without treatment, only 5%–10% ever develop active TB disease. Annual testing helps identify and treat these rare cases, but at a high cost to the health system and workers, said Fralick.

A recent McGill University study found that blanket screening of North American health professionals costs an extra \$1717539 for every case prevented compared to targeted screening; and targeted screening costs an extra \$426678 per case prevented compared to post-exposure screening only. "For most North American health care workers, annual tuberculosis screening appears poorly cost-effective. Reconsideration of screening practices is warranted," concluded the authors.

Individually, taking a couple hours off each year to undergo TB testing may not seem like a big deal, Fralick said. But just counting residents, it can add up to tens of thousands of hours of missed work each year. "Collectively, that's a lot of time that could be put toward patient care." Annual TB testing can be particularly burdensome for trainees who work at multiple hospitals in a year and may



Some Canadian hospitals require health workers to undergo annual testing for tuberculosis, but American guidelines advise against it unless there is a known exposure.

have to retake the test at each site, Fralick added.

Each time health workers undergo TB testing, they also run the risk of false positives and complications from further investigations and treatment. The risk is greatest for people who test positive because they were vaccinated against TB as children. Some report being forced to undergo chest x-rays year after year to rule out active TB, even thought it's highly unlikely they have the disease. "I was speaking to one of my residents about this, and she's had three chest x-rays in the last five years for this reason," said Fralick.

According to infectious disease expert Dr. Lucas Castellani, good occupational

health programs should recognize this problem, "but for some reason there are these dogmatic approaches."

Some hospitals may adopt blanket rules because it's easier to enforce than targeted testing, he said. In other cases, rigid policies may reflect institutional inertia or a misunderstanding of the guidelines. However, "if everyone is doing annual testing and very few people need it, there's going to be a big problem that's just hard to characterize," he said.

With updated American advice, it's worth reexamining the guidelines and practices in Canada, Castellani said. However, it's not clear who should lead that discussion. In Ontario, most hospitals look

to the Ontario Hospital Association (OHA) for guidance, he said. The association's director of public affairs declined a request for comment, noting that the TB surveillance protocol issued by the OHA and Ontario Medical Association was written by a committee of independent experts. The Ontario Medical Association did not respond to a request for comment.

"People look to the OHA, not whoever is on the guidelines committee at the time, so I think the buck should stop, perhaps not with them, but certainly they should be involved in the discussion," said Castellani.

Lauren Vogel, CMAJ