

# Young adults of South Asian descent face higher risk of prediabetes, diabetes: study

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Compared to long-term residents, immigrants to Canada have a 40 percent higher risk of developing prediabetes, which is an early predictor of an individual's likelihood of developing Type 2 diabetes and associated illnesses, like heart disease.

Researchers from the University of Toronto's Institute of Health Policy, Management and Evaluation in the Dalla Lana School of Public Health have for the first time studied and measured the incidence of prediabetes among this population. Their results show that young adults of South Asian descent develop prediabetes 15 years earlier than those of Western European descent.

"This is a significant finding because our current guidelines recommend screening all adults for Type 2 diabetes at age 40. Yet there is evidence that those of South Asian descent are at a much greater risk of developing prediabetes at a much younger age," said lead author Ghazal Fazli, who conducted the study while a Ph.D. student at IHPME. She is now a lecturer at U of T.

The study was published in *BMC Medicine*.

Prediabetes can be screened for using a simple blood test, where an individual is shown to have an elevated blood glucose value, though it isn't as high as the threshold used to diagnosed Type 2 diabetes. Changes to lifestyle and diet could potentially reverse the effects, preventing or delaying the onset of Type 2 diabetes for many years.

The researchers used laboratory data that enables an examination for prediabetes, capturing results for people in urban centres where statistically 90 to 95 percent of [immigrant populations](#) reside.

Based on this new data, Fazli and her fellow researchers conclude there is now evidence to prompt future interventions and for policy shifts to include early screening to identify prediabetes among these high-risk populations.

"Theoretically if we identify someone's risk earlier, we can provide them with an opportunity to adopt lifestyle changes," said Fazli. "This could decrease their risk of developing Type 2 diabetes by nearly 60 percent, according to randomized trials, but if we don't identify them early, they enter the system too late and at a greater cost to the [health](#) system."

While the new data from this study highlights the importance of early screening for certain populations, it also underscores the need for a multi-pronged approach to diabetes prevention.

"A one-size-fits-all solution won't work in this situation any longer," said Fazli. "We need culturally tailored and culturally sensitive interventions that tackle the upstream determinants of diabetes."

She suggested supportive environments need to be created that include access to transit, greater walkability and healthy food options, but that we also need to address different beliefs around diets and physical activity that align with a culture's practices.

How individuals in these communities remain connected and operate socially, also known as [social capital](#), is another avenue Fazli indicates as being an important part of a health promotion strategy.

"When people have a sense of connectedness in their communities, or a

gathering place, they are more likely to engage in [physical activity](#) and have better health outcomes overall," said Fazli. "We know that immigrants tend to become sicker over time following migration. Our study also confirms this, so it is something we need to address as a health system and as a society."

In continuing her work on examining this trend of prediabetes risk in Ontario, Fazli believes that with more data and more information, the health system will be able to make informed decisions to tackle the growing [diabetes](#) epidemic.

"I think we are headed in the right direction," said Fazli, "I'm optimistic we can change the course of people's lives and make sure we are caring for our newcomers in the best way possible."

**More information:** Ghazal S. Fazli et al. Ethnic differences in prediabetes incidence among immigrants to Canada: a population-based cohort study, *BMC Medicine* (2019). [DOI: 10.1186/s12916-019-1337-2](https://doi.org/10.1186/s12916-019-1337-2)

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