

## Research Summary

### COPD and Frailty

While people with Chronic Obstructive Pulmonary Disease (COPD) are living longer, it does not mean they are living in better health. Measuring frailty can determine the overall health of a person including those with COPD. Frailty is a state of reduced function and health. People with more health problems are more frail. Studies show that people with COPD are frailer than people without COPD. This is a problem because frailty in COPD is related to worse quality of life, more COPD disease flare-ups (called an exacerbation), reduced physical fitness and activity, and a greater risk of dying. Even though frailty is common in COPD, it is not known how frailty changes over time in people with COPD compared to people without COPD. This project will track changes in frailty, called frailty trajectories, using data from a large population-based study, called CanCOLD. CanCOLD includes adults from across Canada with and without COPD who have been followed for more than a decade. This project will also study whether physical fitness and activity are affected by how quickly frailty develops because these factors can influence long-term health outcomes. Lastly, the project will determine if COPD exacerbations and their burden of COPD symptoms impact their frailty trajectory. The results from this research study are important because they could improve how resources are used for the delivery of healthcare to patients who need it the most as part of their treatment or prevention of COPD. If this study is successful, then future research could identify if it is important and feasible to measure frailty as a part of COPD prevention and treatment.