

What Lives in Your Lungs?

Not much is known about the tiny living things found in human lungs. Scientists call these groups of living things microbiomes. Researchers only recently discovered these living things in the human lung because of new technologies (1).

What lives in your lungs matters.

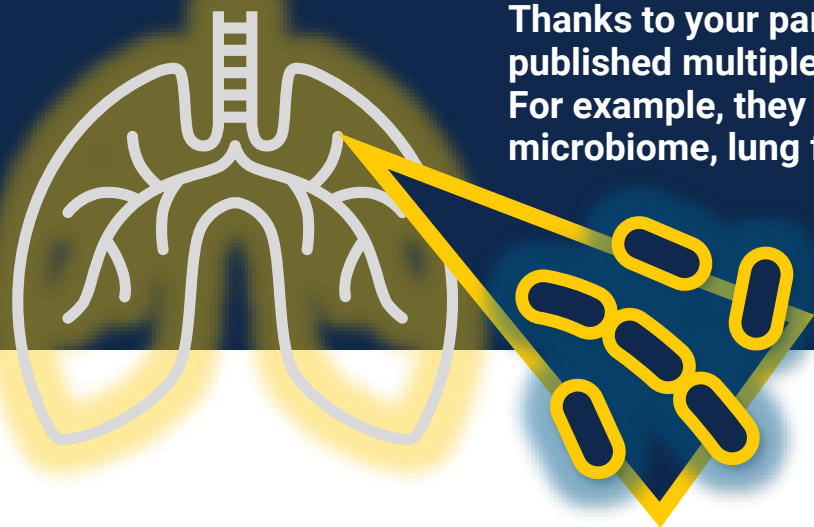
Studying what lives in your lungs through SPIROMICS and SOURCE is important because:

1 Not a lot is known about the microbiome's effects on people without COPD or with mild COPD. We are learning more through the help of SPIROMICS and SOURCE participants like you.

2 SPIROMICS is a long-term study. That means following you and other study participants over time. That includes studying your microbiome. With your help, we may be able to see how the microbiome affects the progression of COPD over time.

Learning about different microbes in your lung may help researchers find new ways to understand the impact of COPD. That makes what lives in your lungs so important. As a SPIROMICS or SOURCE participant, you may provide information about your lung microbiome in these ways:

- Nasal swab
- Sputum collection
- Stool collection
- Bronchoscopy



Thanks to your participation, SPIROMICS researchers published multiple findings about the lung microbiome. For example, they found connections between the microbiome, lung function, and COPD symptoms (2).

The hope is that collecting and studying what lives in your lungs leads to new disease treatments, learning about how COPD progresses, and better diagnosis methods.

Thank you for participating in SPIROMICS or SOURCE!

SPIROMICS
SOURCE
SPIROMICS Study of Early COPD Progression

Information sources: 1.) [The Microbiome of the Lung, National Institutes of Health, National Library of Medicine. https://pmc.ncbi.nlm.nih.gov/articles/PMC3440512](https://pmc.ncbi.nlm.nih.gov/articles/PMC3440512). 2.) [Associations of serum and bronchoalveolar immunoglobulins with lung microbiota diversity, B-cell memory phenotypes, and COPD morbidity and exacerbations. https://pmc.ncbi.nlm.nih.gov/articles/PMC12275290](https://pmc.ncbi.nlm.nih.gov/articles/PMC12275290)