

Influenza-Like Illnesses

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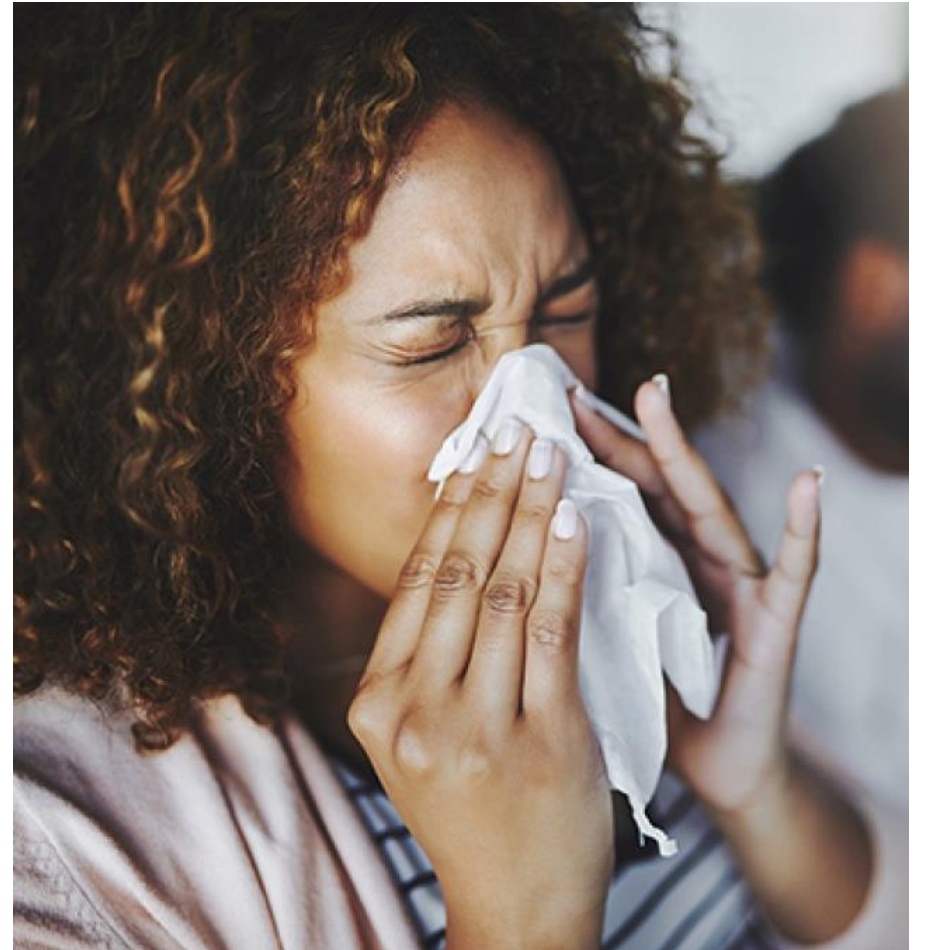
What Is An Influenza-Like Illness (ILI)?

Influenza (i.e., the “flu”) is an infectious disease specifically caused by influenza viruses

ILIs have similar symptoms as influenza

Examples of ILIs include ...

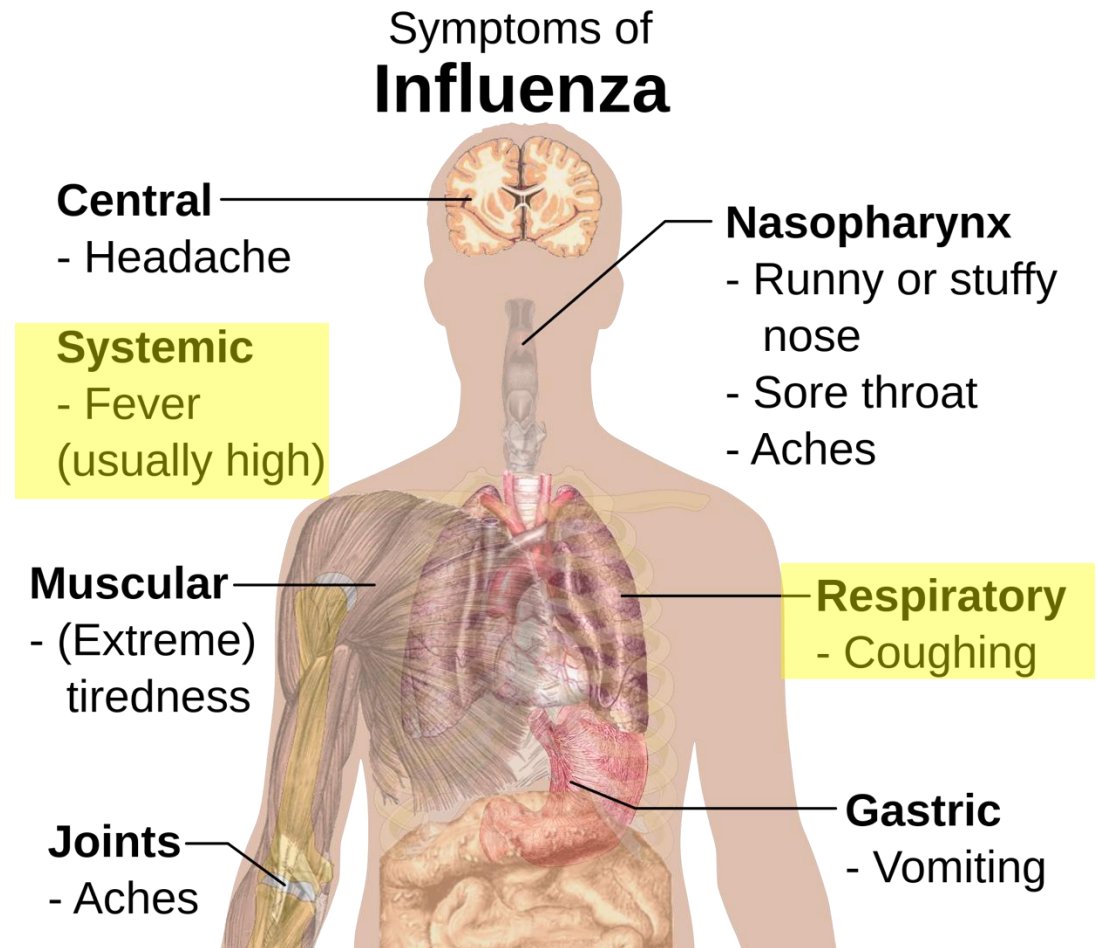
- Common cold
- COVID-19
- Pneumonia



What Are The Symptoms of ILIs?

The WHO defines an illness as an ILI if the patient has ...

- Has a fever greater than or equal to 38 °C
- Has a cough that began in the last 10 days



Why Talk About ILIs Instead of Influenza?

Mobile health tools generally aren't "detecting influenza"; they're "detecting symptoms of influenza"

Having influenza may lead to a high probability of fever and cough, but having a fever and cough may not mean a person has influenza

The same holds true for many other mobile health tools

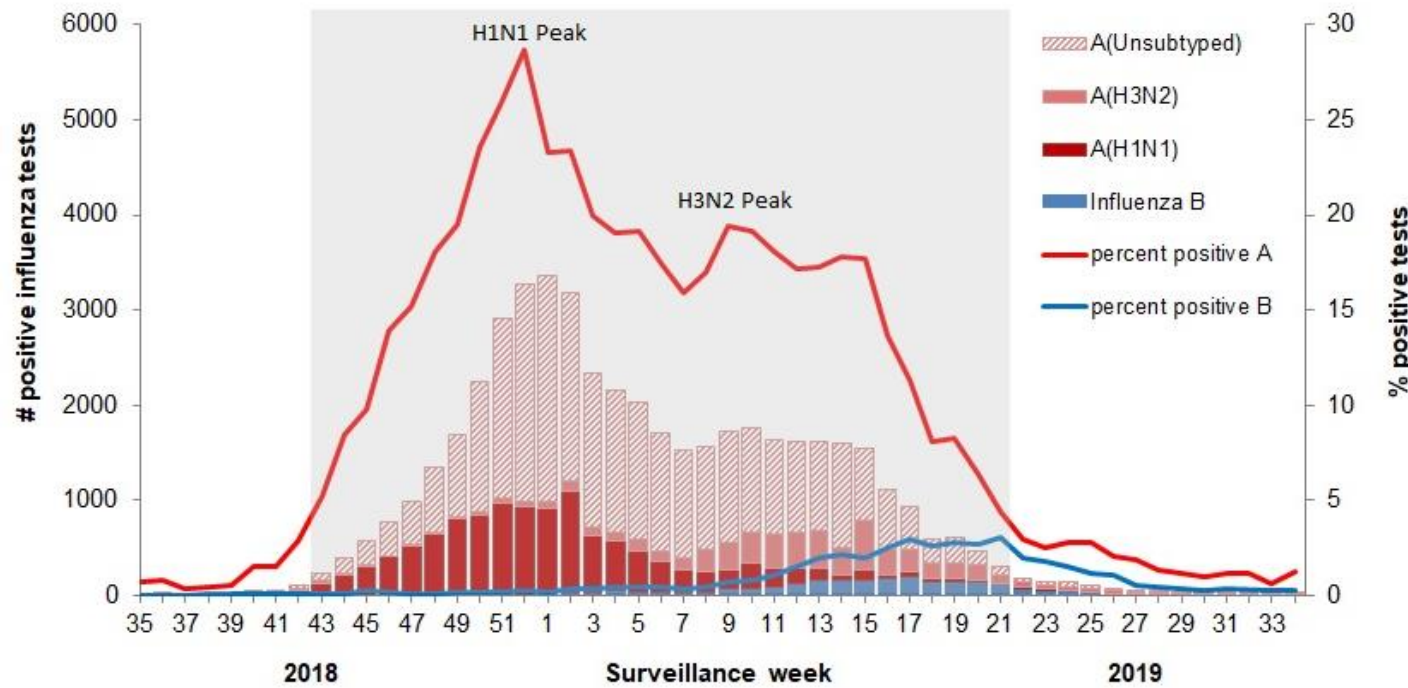
- Fatigue could imply insomnia, depression, etc.
- Breathlessness could imply COPD, asthma, etc.

How Can We Detect Ill Symptoms?

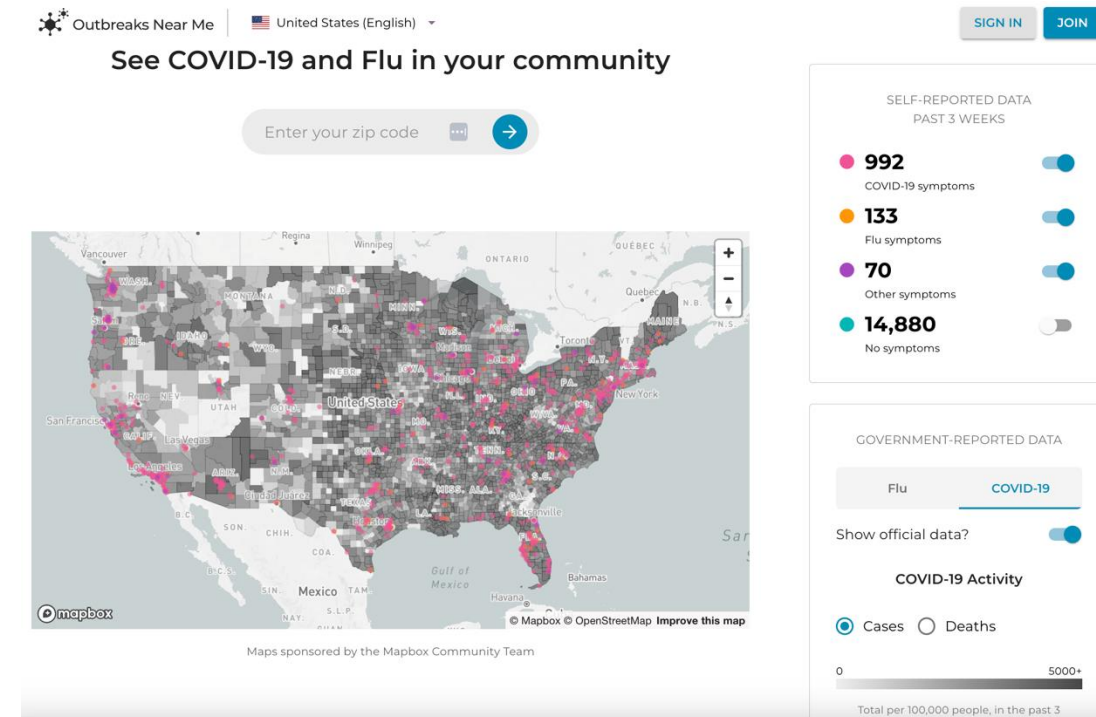
Symptom	Mobile Health Measurement Techniques
Coughing	<ul style="list-style-type: none">• Personal, portable microphones on smartphones and smartwatches• Personal, static microphones in home smartspeakers• Public, static microphones in waiting rooms
Fever	<ul style="list-style-type: none">• Personal thermistors on smartwatches and smart rings (note: peripheral body temperature \neq core body temperature)• Public thermal cameras and handheld infrared thermometers (e.g., “temperature guns”)
Fatigue	<ul style="list-style-type: none">• Personal sleep tracking on smartwatches and smart rings

Public Health Surveillance

Time and location can provide important context for population-level surveillance, helping agencies target interventions



FluWatch
by Health Canada



Outbreaks Near Me
by Boston Children's Hospital

Resources

Overview of Influenza Monitoring in Canada
([Health Canada](#))

Outbreaks Near Me
([Boston Children's Hospital](#))