



Seasonal Flu Prevention

Main Strategies

- 1. Masks
- 2. Social Distancing
- 3. Hand Hygiene
- 4. Flu Vaccination

Seasonal Flu & COVID-19



How will COVID-19 affect the coming flu season? Scientists struggle for clues

By **Kelly Servick** Aug. 14, 2020, 4:30 PM

Because the Southern Hemisphere has largely been spared, researchers have little evidence about how COVID-19 might influence the course of a flu outbreak. One big concern is coinfection—people getting COVID-19 and flu at once, says Ian Barr, deputy director of the World Health Organization Collaborating Centre for Reference and Research on Influenza in Melbourne, Australia. "Two or three viruses infecting you are normally worse than one," he says.

https://www.sciencemag.org/news/2020/08/how-will-covid-19-affect-coming-flu-season-scientists-struggle-clues

Lasting Disability

JAMA Network

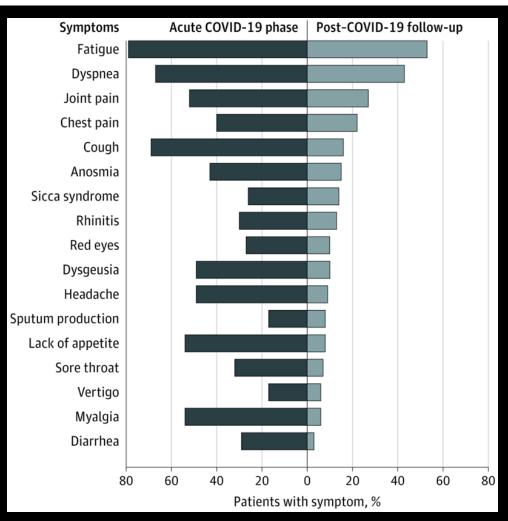
Persistent Symptoms in Patients After Acute COVID-19

Angelo Carfi, MD¹; Roberto Bernabei, MD¹; Francesco Landi, MD, PhD¹; et al JAMA. Published online July 9, 2020. doi:10.1001/jama.2020.12603

Rome, Italy: Discharged hospital patients: mean of 2 months post COVID-19 first symptoms:

- -- 87.4% reported persistence of at least 1 symptom,
- -- Shortness of Breath (dyspnea) (43%),
- -- Tiredness (53%),
- -- Worsened quality of life was observed among 44.1% of patients

https://jamanetwork.com/journals/jama/fullarticle/2768351



False Information



Russia deploying coronavirus disinformation to sow panic in West, EU document says

The EU document said the Russian campaign, pushing fake news online in English, Spanish, Italian, German and French, uses contradictory, confusing and malicious reports to make it harder for the EU to communicate its response to the pandemic.

Emmott R. Researchers: Russia deploying coronavirus disinformation to sow panic in West, EU document says. Reuters. March 18, 2020. https://www.reuters.com/article/us-health-coronavirus-disinformation-to-sow-panic-in-west-eudocument-says-idUSKBN21518F

False Information



Researchers: Nearly Half Of Accounts Tweeting About Coronavirus Are Likely Bots

"We do know that it looks like it's a propaganda machine, and it definitely matches the Russian and Chinese playbooks, but it would take a tremendous amount of resources to substantiate that," said Kathleen Carley, a professor of computer science at Carnegie Mellon University

Allyn B. Researchers: Nearly Half of Accounts Tweeting About Coronavirus are Likely Bots. NPR. May 20, 2020. https://www.npr.org/sections/coronavirus-live-updates/2020/05/20/859814085/researchers-nearly-half-of-accounts-tweeting-about-coronavirus-are-likely-bots

College Closures

The Washington Post

Democracy Dies in Darkness

Education

UNC-Chapel Hill pivots to remote teaching after coronavirus spreads among students during first week of class

By Nick Anderson

August 17, 2020 at 3:49 p.m. EDT

They said 177 cases of the dangerous pathogen had been confirmed among students, out of hundreds tested. Another 349 students were in quarantine, on and off campus, because of possible exposure to the virus, they said.

Herd Immunity



COVID-19

SCHOOL OF PUBLIC HEALTH EXPERT INSIGHTS



What is herd immunity?

When most of a population is immune to an infectious disease, this provides indirect protection or herd immunity (also called herd protection)—to those who are not immune to the disease.

For example, if 80% of a population is immune to a virus, four out of every five people who encounter someone with the disease won't get sick (and won't spread the disease any further). In this way, the spread of infectious diseases is kept under control. Depending how contagious an infection is, usually 70% to 90% of a population needs immunity to achieve herd immunity.

Antibody Levels

Prolonged Natural Immunity Has Not Been Supported by Recent Studies, Especially In Those Who Are Asymptomatic or Have Mild Symptoms.

- ➤ A recent study in Nature found that at 39 days post infection 33% had a low neutralizing antibody level. https://www.nature.com/articles/s41586-020-2456-9
- ➤ Another study out of China found that 2 to 3 months after symptom onset "Forty percent of asymptomatic individuals became seronegative and 12.9% of the symptomatic group became negative for IgG in the early convalescent phase." https://www.nature.com/articles/s41591-020-0965-6

Herd Immunity

Los Angeles Times

San Quentin's coronavirus outbreak shows why 'herd immunity' could mean disaster

That means more than two-thirds of the prison's population has been infected, said Dr. George Rutherford, epidemiologist and infectious diseases expert at UC San Francisco.

And though new cases have slowed, they are still occurring — with 60 reported in the last two weeks — suggesting herd immunity has not yet been achieved.

Seroprevalence

Imperial College London

Largest study on home coronavirus antibody testing publishes first findings

by Justine Alford
13 August 2020

"The findings, available in a non-peer-reviewed report published on medRxiv, show that slightly under 6% of the population had antibodies to the virus and had likely previously had COVID-19 by the end of June, an estimated 3.4 million people. London had the highest numbers at over twice the national average (13%), while the South West had the lowest (3%)."

Seroprevalence

THE LANCET

SARS-CoV-2 seroprevalence in COVID-19 hotspots

Isabella Eckerle □ • Benjamin Meyer

Published: July 06, 2020 • DOI: https://doi.org/10.1016/S0140-6736(20)31482-3 •



"By analogy to common-cold coronaviruses, immunity after SARS-CoV-2 infection is thought to be incomplete and temporary, lasting only several months to a few years."

"In light of these findings, any proposed approach to achieve herd immunity through natural infection is not only highly unethical, but also unachievable. With a large majority of the population being infection naive, virus circulation can quickly return to early pandemic dimensions in a second wave once measures are lifted."

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31482-3/fulltext