Best Online Resources for Understanding and Responding to COVID-19

written by Theresa Hush | April 9, 2020



As Roji Health Intelligence focuses on how our business can support the heroic efforts of health care providers in the front lines of the pandemic, I'm spending hours researching and reading the best science and public health information about COVID-19. Here are resources that I've found to be indispensable, as well as significant research to date, and some other articles and videos worth your time. I hope you find these useful as we all work to flatten the curve and plan for the long-term health effects of this insidious virus.

Johns Hopkins University Center for Systems Science and Engineering: Map of Coronavirus COVID-19 Global Cases

The essential resource for reported confirmed cases, by country/region/sovereignty, updated throughout the day.

Semantic Scholar COVID-19 Open Research Dataset (CORD-19)

A partnership of the Allen Institute for Al and leading research groups to prepare and distribute a fee resource of more than 45,000 scholarly articles, including more than 33,000 with full text, about COVID-19 and the coronavirus family of viruses for use by the global research community. Updated weekly.

World Health Organization Global Research on Coronavirus Disease (COVID-19) A database of the latest scientific findings and knowledge on COVID-19, updated daily.

"A Science Reader for COVID-19," JSTOR Daily, 3-27-2020

From spill-over to virus mutation, this collection of free-access readings gives scientific context to the pandemic.

<u>"Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus</u> (SARS-CoV2), AAAS Science, 3-16-2020

Research based on data from China estimates that 86 percent of all infections were undocumented prior to January 23 travel restrictions. Per person, the transmission rate of undocumented infections was 55 percent of documented infections; however, due to their greater numbers, undocumented infections were the infection source for 79 percent of documented cases. This explains the rapid geographic spread of the virus and challenges of containment.

"Vaccine designers take first shots at COVID-19," AAAS Science, 4-3-2020

Report on the first small clinical trials of COVID-19 vaccines and the global collaboration among researchers to develop a vaccine.

"How Does the Coronavirus Behave Inside a Patient?" The New Yorker, 3-26-2020

Medical researcher and physician Siddhartha Mukherjee, author of *The Emperor of All Maladies: A Biography of Cancer*, examines how level of exposure to COVID-19 may be a critical factor in severity of the illness.

<u>"False Negative: COVID-19 Testing's Catch-22—And the consequences of being wrong,"</u> <u>Medpage Today, 3-31-2020</u>

Testing depends on identifying the reverse transcription-polymerase chain reaction (RT-PCR) caused by the virus. However, because of lower viral load following initial infection, RT-PCR's sensitivity is low in early illness and even lower in asymptomatics—raising the probability of false negatives. While no test is perfect, a negative test in the presence of COVID-19-like symptoms is not a get-out-of-jail-free card.

"The Workers Who Face the Greatest Coronavirus Risk," The New York Times, 3-15-2020

An interactive graphic of risk levels to employees across the workforce, in terms of exposure to the disease and infection, proximity to others during an average workday. Data also includes data on average income and access to paid leave benefits.

"Nonwovens at Frontline in Battle Against Coronavirus," Technical Textile

How the demand for disposable Personal Protective Equipment is driving a surge in demand for nonwoven textiles around the world.

Dr. Jeffrey VanWingen's tips for how to apply sterile techniques to grocery shopping and takeout food. YouTube, 3-24-2020

The ultimate guide for how to avoid bringing COVID-19 into your home after shopping at the grocery store or buying restaurant take-out.

<u>"Lightfoot Shares Hilarious PSA Urging People to 'Stay Home, Save Lives,'" NBC 5Chicago,</u> <u>3-31-2020</u>

A light touch for a serious message in this PSA from Chicago Mayor Lori Lightfoot.

Founded in 2002, Roji Health Intelligence guides health care systems, providers and patients on the path to better health through <u>Solutions</u> that help providers improve their value and succeed in Risk.

Image: Jeremy Bishop