

Finding Valid Information & Keeping Up-to-Date on COVID-19

Since the early days of the COVID-19 outbreak, later named a Pandemic, everyone from scientists, to medical experts in a variety of specialties and fields, and most of the general population have been craving solid (aka valid) information about this super scary disease. A year into the Pandemic, there is lots of information out there – more and more based on sound science -- but not all of it. We absolutely want & need the cutting-edge info to help guide recommendations for all things COVID, but we also need it to be based on validatable science so we can rely on it.

Therefore, when you are reading or listening to information, look carefully at the source, and at the writer and their credentials. There are excellent science or medical writers hired by medical news or "regular" news organizations. Online articles (or videos/podcasts) often have embedded links to go straight to the original research, source, or other articles on the subject, whether collaborating or countering. Confirm with these sources **or** find the info in at least 2 different articles by different authors, ideally peer-reviewed. These articles are often published in medical or science journals you may have heard of or read. Read the Comments, Questions, Limitations of the Study, and/or any Editorials that may be associated with the article (they'll be part of the published article or a link or URL on the first or last page). In lieu of peer-review, in pre-published research articles or lay news reporting, look for Comments or Questions, particularly from someone who identifies their credentials to speak on the subject. Read these Comments or Opinions with skepticism and then research those positions to find validity. Lastly, you can use a well-established browser such as Firefox, Safari, Google, Google Scholar, etc. to look for other validating articles. If you can find collaboration without lots of counter argument, the info is likely valid. At least until it's superseded by new and more up-to-date research, which is coming out constantly.

You can also subscribe, for free, to newsletters or briefings such as CIDRAP, Medscape, Contagion, Nature, Science, etc. Many medical journals (even the New England Journal of Medicine - NEJM), have made COVID-related research articles FREE for reading & printing, just for signing up (most of them allow you to control cookies). Also, check governmental or national, state/province or local public health sites (i.e., CDC, NIOSH, PHAC) for information & guidance. However, keep in mind that sometimes governmental resources lag behind the literature, as those agencies do their due diligence or may be censored and made to withhold scientifically valid material.

Finally, please understand that even scientists and physicians, or other healthcare workers, with good credentials, can be sources of outdated or just plain wrong information, even when well intentioned. Yes, all physicians have gone to medical school, but some are a long time away from their formal learning, and many did their residencies in a particular specialty. They are really good at their specialty, but are likely not experts in all things COVID-19, unless their specialty overlaps with a particular body system attacked by COVID, and then their expertise generally only applies to their system. For COVID, those in Infectious Disease, Infectious Disease Prevention & Control, Virology, Epidemiology, Critical Care, Pulmonology, and Internal Medicine have

the greatest fund of knowledge for these patients. Other specialties and allied health care providers add expertise as well. Listen to those that seem to be making sense but consider their credentials regarding the subjects they are covering. This includes so many speaking about a particular subject and offering advice on , for example, masking, while incorrectly labeling or conflating the masks, mostly out of ignorance, I believe. The most common one is calling a procedure mask (the paper masks that have ear loops) a surgical mask. A surgical mask is a multiple layer paper mask that has 2 sets of ties and, usually, a bloodborne pathogen barrier. They provide different levels of protection, based mostly on their ability to fit to the face. The mask with ties that are tied around the head provide a more personalized fit than the procedure masks, with ear loops, which generally leave more gaps. The same conflation is made with the Medical N95 respirator and the KN95. First, how much protection they provide is measured in different ways in the lab, with the Medical N95, that is properly fit tested to the individual, providing superior protection to a KN95 (which don't have to be fit tested). And, an N95 must two elastic bands that are secured around the head; the KN95 often has ear loops. One other discrepancy, is that the Medical N95 has better protection for respiratory droplet than the industrial N95. So, when deciding what mask is appropriate, depending on the degree of protection needed, a certified respirator provides the best protection, followed, in most cases, by the certified KN95, then a surgical mask, then a procedure mask, and then a cloth mask. Individual masks may be engineered to be more or less protective based on their construction, materials and layers, particularly when dealing with KN95s, procedure, and cloth masks.

We're not out of the woods with regards to COVID-19. It's a race against time to see if enough people can get vaccinated before too many people are infected with COVID-19, so that the virus drifts (mutates enough to significantly change the virus) and the vaccine no longer works. At that point, it starts all over again with a potentially more damaging virus. The more times the virus replicates, the more chances there are for mutations, which can lead to new viral variants and even new strains.