



Town of New Castle, NH
Settled 1623
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Public Health Update December 1, 2021

A) This is really about our ever present devilish companion COVID (and influenza). Our hospitalization numbers with COVID have hit a record high in our state. It is expected that we will have another worsening in the weeks after Thanksgiving. Emergency rooms and Hospitals are overwhelmed. And they are understaffed. You do not want to be a patient or a COVID patient in an overwhelmed and understaffed hospital.

There are several things you can do (if you haven't already) to decrease your risk of severe COVID, hospitalization, and death. There will be additional details below the list.

1. Get immunized. All people ages 5 and up are recommended to get immunized.
2. Get the booster shot. It is available for everyone over age 18.
3. Practice community mitigation measures. This includes masking indoors, washing hands frequently, staying home if you are ill, and home testing if you feel ill or before any group gatherings.

Initial vaccines and boosters can be scheduled at:

www.vaccines.gov

Additionally, the state will hold a 1 day “Booster Blitz” on December 11 at multiple sites throughout the state. You can sign up at :

www.Vaccines.nh.gov

B) For more details:

You can receive the flu shot and COVID vaccine at the same time.

For boosters, you are eligible if you are at least 6 months out from the second Moderna or Pfizer vaccine. If you had Johnson and Johnson, a booster is recommended 2 months after your first dose.

You can mix and match vaccines for the booster. Meaning, if you had Pfizer as your first 2 dose series, you can have either Pfizer or Moderna for your booster and vice versa if you had Moderna first.

If you had Johnson and Johnson first, a Moderna booster seems to provide the best protection.

There have been some free COVID at home test kits made available for people to have mailed to their homes. These are to be used if you have cold symptoms to understand if they are COVID. Right now the free supply has already been exhausted in our area, but I assume there will be more allocated in the future (and they are already talking about it). Keep checking the website.

Website for free at home COVID tests:

<https://sayyeshometest.org/?fbclid=IwAR3XB16fUmKjyKPkm2BRycbVeU1r3K1OF6Oo4KIHMMb912QWjrqrEAVFK5Y>

C) Influenza is also a nasty beast and kills many people annually. Please, please get your flu shot if you have not done so already. This can be done through your physician's office or pharmacies.

D) Omicron-Classified as a COVID variant of concern.

The short answer is that we do not yet have enough information on it to understand if it represents a truly terrible change, or if it is remotely possible that it is better. What is known is that it has over 30 mutations on the spike protein. This is the part of the COVID virus which our immunizations target. We will know more in a couple of weeks. Below is more in depth explanation of what is currently known by Dr. Jeremy Faust.

For those interested in further detail:

All viruses mutate while replicating. The more infections, the more mutations. That's why in just two years since the first known human case, there are already many notable variants of SARS-CoV-2, the virus that causes Covid-19. Omicron is but the most recent to grab our attention.

Most mutations—which are changes to a genetic code—are “silent.” They don't cause detectable differences in a virus's behavior. Some can actually be good for us, such as when a mutation makes a virus *easier* for neutralizing antibodies to cling to. Some can be bad, such as when a mutation makes it *harder* for neutralizing antibodies to attach to them.

Whether or not a mutated version of a virus is a threat does not actually depend on the number of mutations. One single change in a virus's genetic code could be a calamity for us while 100 others could add up to no meaningful difference. What matters is the behavior of each resulting virus.

Late last week, the World Health Organization [declared](#) the B.1.1.529 a “variant of concern,” and therefore designated it with a Greek letter, Omicron.

There are [four categories](#): variants under monitoring (VUM), variants of interest (VOI), variants of concern (VOC), and variants of high consequence (VOHC). (Emphasis added in the descriptions below.)

- Variants under monitoring ([VUM](#)) contain genetic changes which are “*suspected to affect* virus characteristics with some indication that it may pose a future risk.” However, the virus's actual behavior or epidemiological impact is not clear. This classification is based on biological/laboratory information, not clinical observations.



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- Variants of interest ([VOI](#)) must meet two separate criteria: 1. There must be genetic changes which are “predicted or *known to affect* virus characteristics such as transmissibility, disease severity, immune escape, diagnostic or therapeutic escape,” *and*; 2. The variant must have been *identified to cause* “significant community transmission or multiple COVID-19 clusters, in multiple countries with increasing relative prevalence alongside increasing number of cases over time...[to] suggest an emerging risk to global public health.” This classification is based on a combination of biological (laboratory) and clinical (patient) data.
- Variants of concern ([VOC](#)) must meet one of three criteria, in addition to those that would qualify it as a VOI. There must be: 1. a documented “increase in transmissibility or detrimental change in COVID-19 epidemiology,” *or*; 2. a documented “increase in virulence or change in clinical disease presentation,” *or*; 3. a documented “decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.” This classification is *supposedly* determined on clinical data only (more on this in a moment). The biological criteria for a VOC do not differ from those in the VOI category.
- Variants of high consequence ([VOHC](#)) can be designated when there is “clear evidence that prevention measures or medical countermeasures have significantly reduced effectiveness relative to previously circulating variants” or when there is evidence that the variant causes “more severe clinical disease and increased hospitalizations.” In other words, a VOHC is a worse disease that renders our diagnostic tests, vaccines, and effective drugs measurably and substantially less effective. Like VOC, VOHC is determined based on clinical information. (Any alterations in vaccine and drug effectiveness must be determined from “real-world” clinical data, not merely changes detected in laboratories, such as lower antibody affinities to the variant.)

So far, there have been 21 VUM, 7 active, and 14 “retired.” Currently, there are two VOI, five VOC (including Omicron), and (officially) zero VOHC. (Of note, no Covid-19 variant has ever been designated as a VOHC. ‘

Again, since this is happening in real time, we will know a lot more in the next couple of weeks. Stay tuned and stay healthy.

Yours in Health,

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