

LHO 14

## Spring Items

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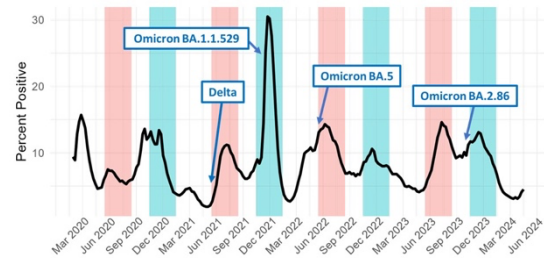
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31 March 2025

It really is Spring. Really. No kidding. But it is time to pick up a few loose ends before our Town doubles in size for the Summer.

### Covid

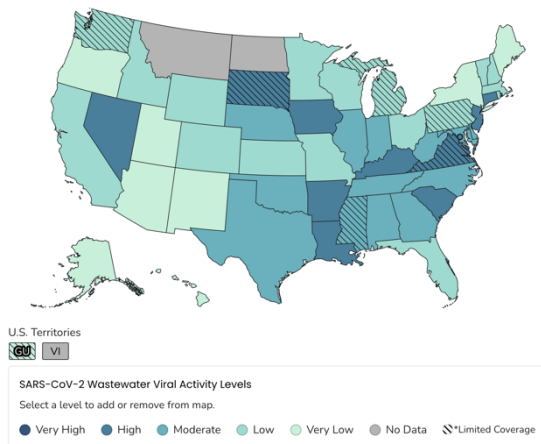
I have had a number of questions about the Covid vaccine for this year. Despite earlier predictions (including from me), Covid has not settled into a seasonal pattern. Covid outbreaks seem more to be



driven by the emergence of new variants than any seasonal behavior as can be seen in the chart to the left. Having said that, when world-wide data are considered, Covid is more common in the winter months when transmission is likely higher. Unfortunately, vaccine protection lasts about six months

(although the protection from death or hospitalization lasts longer.) So, the current thought is that people who would be very adversely affected by a Covid infection such as those with chronic respiratory or cardiac diseases and the elderly (you decide for yourself who is elderly but generally over 65 qualifies) should get a booster every six months, or four months after a Covid infection. That booster restores immunity to its previous level. A quick check shows that the Pfizer and Moderna mRNA vaccines are widely available in our area. If you want Novovax though, it may be harder to find. Having said that, Covid activity is low in our area and declining. I have written before about the ability of wastewater sampling to provide an early warning of outbreaks of Covid. That sampling shows very low activity in

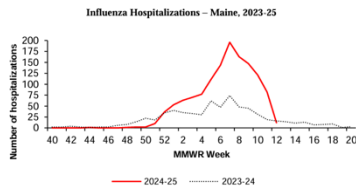
Time Period: March 16, 2025 - March 22, 2025



Maine, and really nationwide. So, why get vaccinated?

It's because the virus is still not predictable and you have to have immunity on board to avoid infection, hospitalization, or death. It takes three or so weeks after the shot to be protected. So, that's why. One more thing. You probably know about "long Covid," the persistence of debilitating symptoms long after the acute problem subsides. This condition takes many forms and believe me, if you could avoid it, you would. Well, you can. The vaccine is very effective in preventing long Covid, perhaps by as much as a 2/3 reduction. 'Nuff said.

## Flu

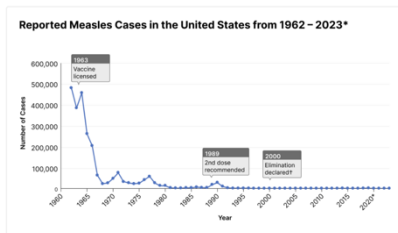


Flu has peaked for the year. This chart shows hospitalizations for flu in Maine for this year compared to last (dotted line). You can see that last year's epidemic was a washout compared to this year's. The flu shot was moderately effective this year. It protected about 50%.

That's terrible, you say, unless you were one of the 50% who were protected. Then you think it's great, if you knew. But you don't. So just assume that it worked for you. Although the data are not yet in for this year, historically the flu shot has been good at preventing hospitalization and death. There is no reason to expect that this year will be different. And the vaccine was once again safe. I have still been handing out flu shots at Knox Clinic but I will probably stop as the epidemic seems to have petered out. But it was a doozy after several years of quiescence during the pandemic.

## Measles

This is no joke, folks. The US is experiencing more measles cases than there have been reported in several years. Only two of the close to 500 cases had received any vaccine at all. Measles is serious. Kids can get very sick; some have already died. People can get encephalitis, a devastating brain infection from measles. Those of us of a certain age remember measles keeping us inside for 2 weeks in bed in a darkened room because the light hurt our eyes so much. The cases are spreading in unvaccinated communities. OK, you say, I had my measles shots and so did my kids. Why do I care? You care because,



although the shot is highly effective, there are a few people who could still get it. To keep that risk low, it is critical to not have the virus circulating in the community. No exposure=no sickness. You can see here that the measles immunization has been amazingly effective in eliminating measles from the US. Indeed, the World Health Organization declared that the US eliminated measles in 2000. That means that all cases were acquired outside of the

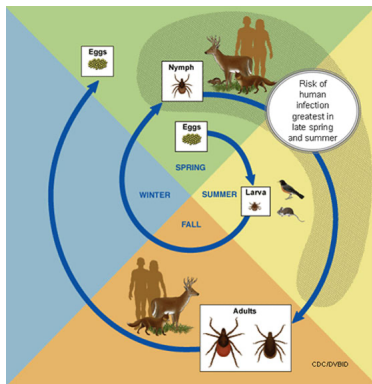
country; none were from spread within. So, it is critical to maintain immunization rates above 95%. That's not happening across the country, although we still do very well in Maine. In 2024, we exceeded the 95% threshold meaning that, although the vaccine is "only" 97% effective, measles spread will not occur because it is highly unlikely that a susceptible individual will encounter an infectious one. Measles is one of the most contagious viruses known. It has an  $R_0$  value of about 17.  $R_0$  (pronounced "R nought") is a measure of the number of people that one infected person will infect. By contrast, seasonal flu has an  $R_0$  of about 2-3, Covid about 4, and Ebola 1.8. So, measles will "find" a susceptible person if that person is in range.

Nonetheless, some adults have not yet been vaccinated. If you were born before 1957, you can assume that you had natural measles and that will confer lifetime immunity. If you have any doubt, a simple blood test can resolve the question. Measles vaccine is easily available and there is no reason we can not eliminate this disease in the US again.

## Lyme and other tick-borne diseases.

Spring is the time to start thinking about tick-proofing your life, as much as possible. Knox County, historically, is ground zero for tick-borne infectious diseases. As in all infectious diseases, there are few to no mysteries. If you know the life cycle of the germs and how they travel (“vectors”) you can prevent the illness.

Lyme disease (named after Old Lyme, Connecticut, not the fruit) is spread exclusively by tick bite, other than the extremely rare (if ever) transmission through the placenta. Lyme can not be spread by touching, kissing, or sex. It can not be transmitted through the air, food, water, or from the bites of other insects. Dogs and cats can not spread the infection directly to humans but they can bring ticks into the home. Deer carry the tick but do not themselves get infected. The deer, however, serve as a source of blood for the ticks and are necessary for their survival. The ticks acquire the Lyme bacterium from rodents.



Blacklegged ticks have a 2-to-3-year life cycle. During this time, they go through four life stages: egg, larva, nymph, and adult. After the egg hatches, the larva and nymph each must take a blood meal to develop to the next life stage, and the female needs blood to produce eggs.

So, you see that if you interrupt the life cycle of the tick, or prevent it from contaminating your habitat, you can greatly reduce the likelihood that you will acquire Lyme.

Here are the recommendations from the Tick Management Handbook of Connecticut (and they should know!)

<https://www.ct.gov/caes/lib/caes/documents/publications/bulletins/b1010.pdf> (a terrific reference on all things tick)

- Remove leaf litter and brush from your yard. This will decrease the areas where ticks can hide.
- Keep your lawn mowed to 3 inches or less. This lowers the humidity at ground level making it difficult for ticks to survive.
- Create a 3-foot barrier of mulch or crushed stone around the outside of your yard. Ticks do not like to cross over dry areas.
- Do not plant invasive plants such as Japanese barberry and glossy buckthorn. These plants provide the perfect habitat for deer ticks. If you already have these plants in your yard, consider removing them and planting native perennials or shrubs.
- Increase sunlight by pruning the lower branches of trees or thinning out shrubs and hedges. This will cause ticks to dry out and die.

## One more thing.

Tires. It is almost impossible to get water out of a tire in the yard and next to impossible to keep it dry. Leaves and other organic material also collect in yard tires and so you have the Ritz hotel with a full meal plan for mosquitoes. Tires can be disposed of at the Transfer Station. If you are using a tire for a swing

(and I do not recommend this because of toxins used in tire construction), make sure you put many large holes in the tire to allow all water to drain out and think about sealing it somehow to keep it out of contact with kids' skin.

Eventually it will warm up and the snow will stop. Feel free to contact me about anything in this note or public health matters in general. If I do not know the answer, I probably know someone who does: [healthofficer@souththomaston.me](mailto:healthofficer@souththomaston.me).