Three Rivers Health District COVID 19 Update 7/27/2020

REMEMBER: SOCIAL DISTANCE AND MASKS HELP PROTECT US ALL

Pandemic Status: Case counts continue high, Eastern Region is driving the pandemic surge in Virginia

COVID 19 cases continue to surge across the United States. Many states currently are experiencing increasing case counts, but the case count trend might be leveling off in some areas. Hospitalizations, critical illnesses and deaths have also increased in the most severely affected areas. We now have over 4.2 million cases in the United States, approaching 147,000 deaths. The CDC published a serology study (antibody testing) earlier this month that suggests 10 times more people in the United States have been infected than previously thought.

In Virginia, the 7-day moving average of cases by date reported has gone from just over 500 in mid-June to 900 - 1200 daily. Percent positivity of tests is at 7.5%. The number of people hospitalized daily with coronavirus across the state is again over 1100. The municipal areas of Hampton Roads are driving this increase, thought to be due to increased social gatherings without masking and social distancing in resort areas, restaurants, and bars. Percent positivity in the Hampton Roads health districts currently ranges from 10 to 24%, and community transmission is moderate to substantial across the jurisdictions. We still have good hospital and ICU capability across the state at this time, but some hospitals have reported difficulty in obtaining PPE over the last week.

In Three Rivers, case counts have been increasing for the last 4 weeks. We had 64 new cases last week, 29 of those were in Gloucester. We hope we have stabilized at about 3-4 times the weekly new case rate we had in phase 2. Looking at our case investigation information thus far, it appears most of our new cases are due to social gatherings in private settings and smaller, non-commercial venues. We are not able to identify any clear sources of community spread in specific retail or food businesses. Remember: If we all mask in public, practice social distancing, stay out of crowds, wash our hands, and practice good sanitation, we can drive community levels of this virus very low and resume all activities far more safely.

Executive Order Compliance: Most businesses are compliant, but if case counts do not decrease, we may have to regress

Governor Northam stipulated increased enforcement actions, especially in the Eastern Region, for egregious violations of executive orders, as a first step in pandemic control before phase regression. We have had many complaints from citizens, and our approach thus far has been educational. We have had good compliance cooperation, but we are prepared to ramp up enforcement if necessary. Governor Northam warned again, on Saturday “if numbers don’t come down in Hampton Roads, we may have to take additional steps to blunt the virus.”

There are two pathways to possible enforcement: complaints about a business, and case investigations/contact tracing pointing to a business as a source of new cases. If the violations involved a facility we permit, there is no problem, we have experience in helping those facilities comply with

regulations. We will pursue any necessary enforcement actions against businesses that we do not permit as a cooperative effort involving other agencies (VDACS, ABC), local government, the Commonwealth Attorney, and the VDH Commissioner's office. We hope when the business owners realize they are facing a coalition of enforcement entities their compliance attitude might improve. As I indicated over the weekend, it appears to me that the VDH will continue to recommend partial phase regression in the Eastern Region, and we will hear the Governor's response tomorrow. We are evaluating our local data continually and the VDH central office epidemiology personnel are keeping track of it as well. They will let us know if they think we should join with the Hampton Roads districts in pandemic phase regression.

Virus update: The CDC changes guidance post infection, says there have been no documented cases of COVID 19 reinfection thus far

The virus is undergoing genetic drift, and has become more infectious but not more lethal over time. The CDC last week changed its acute illness isolation guidance: *"Persons with COVID-19 who have symptoms and were directed to care for themselves at home may discontinue isolation under the following conditions: At least 10 days have passed since symptom onset* ***and*** *at least 24 hours have passed since resolution of fever without the use of fever-reducing medications* ***and*** *other symptoms have improved. Persons infected with SARS-CoV-2 who never develop COVID-19 symptoms may discontinue isolation and other precautions 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA. Test based strategy for detection of SARS-CoV-2 RNA for discontinuing isolation could be considered for persons who are severely immunocompromised, in consultation with infectious disease experts."*

Antibody levels fall in most people over several months following infection. Although virus capable of causing infection was not isolated 3 weeks after symptom onset in most recovered patients, recovered patients with more serious illness can continue to have SARS-CoV-2 RNA detected in their upper respiratory specimens for up to 12 weeks. None of this virus was capable of causing infection, however. The question of persistent shedding and the possibility of reinfection, which happens with other common coronaviruses, needs more investigation. At this point, the CDC stated 2 days ago *"Currently, 6 months after the emergence of SARS-CoV-2, there have been no confirmed cases of SARS-CoV-2 reinfection."*

Vaccine development continues with the Moderna vaccine entering phase 3 clinical trials last week. The federal government is investing in the Moderna, AstraZeneca, Novovax, Pfizer and Johnson and Johnson vaccine development efforts. Remdesivir and steroids may help recovery and survival in very ill patients. Many questions remain about quality and duration of immunity, and about the effectiveness of vaccines that are developed.

Testing: Long delays cause major problems

Testing results delays from exceeding laboratory capacity are very significant at this point. Delays in detecting new cases impedes our case investigation and contact tracing effort, which is our primary public health protective activity after infections occur. Dr. Parham Jaberi, VDH Chief Deputy for Public

Health and Preparedness, is leading the VDH effort to address this. Obviously, more testing is better, but we cannot test to the point that we negate our infection control containment measures. None of us has a ready solution for this other than to increase lab capacity or to reduce testing requirements, but we are working on it at all levels.

We are still planning to initiate testing efforts in the Three Rivers Health District before the end of the month. We sent email offers for faculty and staff testing to each school system last week, and we are beginning to schedule events. This will give our team a chance to work together in smaller settings before ramping up to larger testing events, it will give us an idea of point prevalence of active disease across our jurisdictions, and it will give school managers knowledge of the status of their staff before classes begin.

Pandemic Containment: Three Rivers pandemic containment capability remains good

Our case investigation and contact tracing capability is good, but we are requesting to hire five full time investigators and four contact tracers for this fall in anticipation of increased community transmission levels. That will allow most of our nursing staff to return to their normal duties, and augment the containment team based on surge demands.

K-12 Planning: Children need to be in school, but officials must tie school opening and protective measures to viral community transmission levels

The CDC published new guidance for school reopening last week. The guidance first emphasizes the imperative to protect the health, safety and wellbeing of students, teachers, other school staff, their families, and communities. They reiterated the measures for minimizing the spread of COVID 19 in schools, but they also listed and described the critical role of schools and all the risks of children being out of school and all the reasons they should return. The CDC guidance states *"Schools provide safe, supportive learning environments for students, employ teachers and other staff, and enable parents, guardians, and caregivers to work. Schools also provide critical services that help to mitigate health disparities, such as school meal programs, and social, physical, behavioral, and mental health services. School closure disrupts the delivery of these critical services to children and families, and places additional economic and psychological stress on families, which can increase the risk for family conflict and violence."*

The CDC also addresses viral risks in children and adolescents: "*Early reports suggest the number of COVID-19 cases among children may vary by age and other factors. Adolescents aged 10-17 may be more likely to become infected with SARS-CoV-2 than children younger than age 10, but adolescents do not appear to be at higher risk of developing severe illness. There are currently a higher proportion of COVID-19 cases among Hispanic/Latino children as compared to non-Hispanic white children. Children and adults with certain underlying medical conditions are at increased risk of severe illness from COVID-19. [10] Severe illness means that they may require hospitalization, intensive care, or a ventilator to help them breathe, or may even die. Children with intellectual and developmental disabilities are more likely to have comorbid medical conditions (e.g., diseases of the respiratory system; endocrine, nutritional and metabolic diseases; and diseases of the circulatory system) that may put them at increased risk for*

severe illness from COVID-19. [11] Although rare, some children have developed multisystem inflammatory syndrome (MIS-C) after exposure to SARS-CoV-2. As of May 20, 2020, the majority of children hospitalized with MIS-C had recovered. [12] Data on SARS-CoV-2 transmission among children are limited. Evidence from other countries suggests that the majority of children with COVID-19 were infected by a family member."

There is mixed evidence about whether returning to school results in increased community transmission or outbreaks. The CDC cited evidence from Denmark where schools were reopened at low community transmission levels without increasing community transmission. In Israel, however, the pandemic surged with outbreaks in schools after reopening. School reopening must be approached with caution, and protective measures must be appropriate for the levels of viral transmission in the community.

The message is that it is better for the majority of students and families for children to be in school, but the pandemic risks must be addressed as best we can. The guidance strongly emphasizes the need to consider community viral transmission levels when reopening schools. Administrators should make decisions about mitigation activities and closures in collaboration with local health officials based on a number of factors, including the level of community transmission. We have been consulting with school officials for weeks, reviewing their plans and advising them on reopening activities. We are emphasizing the principles of social distancing, masking when possible, sanitation, keeping sick students and staff out of the school, detecting sick children at school, isolating them, and getting them out of the school to health care as soon as possible. There are questions about distancing between students, masking, degree of virtual learning to pursue, equity, protection of vulnerable children and staff, all difficult to definitively answer. We are counseling school systems to posture their risk acceptance and mitigation procedures commensurate with levels of viral community spread. The lower the level of community transmission, the safer we all will be. We need to get control of this pandemic as best we can prior to school reopening activities.

Forward Plans: Prevent new cases, test widely, contain community spread, schools are safer and economy is better

This virus has demonstrated its ability to transmit briskly if given the opportunity. With a highly susceptible population, no potential for widespread immunity in the near future, and no effective antiviral therapy, we can be confident this virus will remain in the community for the indefinite future. Our best defense is to prevent exposures by social distance, masking, avoiding crowds, washing our hands, and practicing good sanitation methods. Containment activity is our secondary line of defense, initiated to control spread of active infections that have not been prevented. Phase regression can be attempted if other measures fail. Predictably, there will be pandemic surges in our future, especially during the fall and winter months. This pandemic response may take years. We are configuring a COVID response team within the district, consisting of dedicated case investigators, contact tracers, Executive Order compliance personnel, epidemiologists, long term care facilities/assisted living facilities liaison, K-12 liaison, testing personnel, immunization personnel, and communications. We will receive augmentation for our COVID team through the VDH Central Office. We will hire all new personnel through contracts, and local governments will incur no additional costs.

Remember, masking, social distancing, avoiding crowds, hand washing, and good sanitization practices all work together to reduce transmission risk and to get this pandemic under control. If you are sick at all, even if your symptoms do not feel like COVID 19, stay at home and consult your health care provider. The virus can masquerade as many other diseases, and can fool us all. Difficulty breathing remains a sign of possible serious disease; if this develops, seek help very quickly.