Community Outreach Column
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Understanding Breakthrough Cases
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Over the past few months, you have likely heard the term "breakthrough case" used a lot and may have some questions about what this "breakthrough" actually means. At the Roanoke City and Alleghany Health Districts, we hear a lot of questions and thought it may be helpful to review some of the more common questions.

What is a breakthrough COVID-19 case?
According to the Centers for Disease Control and Prevention (CDC), a breakthrough case occurs when a person tests positive for COVID-19 at least two weeks after becoming fully vaccinated (either receiving a one-dose vaccine or the second dose of a two-shot vaccine).

Is it normal to see breakthrough cases?
Yes, breakthrough cases should be expected because no vaccine is 100% effective at preventing infection. There are many reasons for this, including, but not limited to decreased immunity over time. This is one of the reasons that boosters are now recommended for certain people who are fully vaccinated. As long as we have high levels of COVID-19 disease activity, especially at the rates we've seen locally in recent months, we can expect to continue to see breakthrough infections.

What are the symptoms of a breakthrough case?
Most people who have breakthrough infections have either no symptoms or milder symptoms when compared to people who are not vaccinated. However when people with breakthrough infection do develop symptoms, the symptoms are similar to typical COVID-19 cases, but they are far less likely to have those symptoms progress to severe disease.

If breakthrough infections can occur and if people can become sick from COVID-19 anyway, why should I get vaccinated?
Even though breakthrough cases do happen, people who are fully vaccinated are much less likely to get COVID-19. In recent weeks, the rate of COVID-19 disease in people who are unvaccinated has been more than 15 times the rate in people who are vaccinated. Most importantly, the vaccine is *highly* effective against severe disease, hospitalization, and death, even if a vaccinated person does develop symptoms.

Is the delta variant causing breakthrough cases?
While most current breakthrough cases are from the delta variant because that is the strain that is circulating and because it is highly contagious, it's important to note breakthrough cases can come from all COVID-19 variants.

What steps can I take to avoid a breakthrough illness?
The highly transmissible nature of the delta variant proves the importance of getting fully vaccinated against COVID-19. All of the currently available vaccines are effective against all variants of concern to date, including the delta variant. In addition, if you are eligible for a booster shot, consider getting it to ensure that you are optimally protected.

But don't leave it all up to the vaccine. As long as we have high rates of COVID in our community, wear masks indoors when you are around people outside your family, stay away

from big gatherings with unvaccinated people, and cut down on travel. The good news is that while we still have high levels of COVID-19 activity locally, our cases have come down over the last two weeks. Let's all do our part to make this latest surge in COVID-19 our last one!