



SAFER

Safe Actions For Employee Returns

Special Issues in Workplace Safety: COVID-19 Variants

As daily COVID-19 vaccination rates decline in the U.S., more contagious and severe variants will become a growing problem. The R_0 , or number of people one person infected with COVID-19 can be expected to infect, has been substantially higher in variants than it was in the initial strain. A virus variant first identified in India is of particular concern to safety professionals. The Centers for Disease Control and Prevention has classified this Delta variant (B.1.617.2) as a [Variant of Concern](#) due to its increased transmissibility and evidence of causing more severe illness. As of July 2021, Delta has become the leading driver of new COVID-19 cases in the U.S., with an R_0 value of six. This suggests one infected person could infect six unvaccinated people under non-lockdown conditions.

Delta is the dominant strain in many countries, and transmission rates have been growing exponentially in the U.S., nearly doubling every [two weeks](#) as a proportion of total cases. Evidence shows this strain of the novel coronavirus causes more severe illness, particularly in younger individuals. Research based on health data from the population of Scotland found hospitalization rates are approximately double for patients infected with Delta compared to other variants. Similarly, another variant first identified in Peru has been classified as a variant of interest by the [World Health Organization](#) due to genetic changes that are predicted to affect transmissibility and disease severity. As of July 2021, the Lambda variant is prevalent in South America, and is the dominant strain in Peru.

The CDC has confirmed individuals who have been fully vaccinated are generally protected against the Delta variant, however, researchers in the U.K. are reporting they are not seeing as much protection from a single dose of an mRNA vaccine as they did earlier in the pandemic. Health data from the U.K. highlight the importance of making sure individuals receive their second vaccine dose.

While vaccinations are effective against preventing severe illness, hospitalization and death against the most common variants, vaccines are showing lower efficacy in preventing transmission of COVID-19 variants to vaccinated individuals. Based on data from Israel, Canada and the U.K., the effectiveness of the Pfizer-BioNTech vaccine against symptomatic disease from Delta range from 64-88%, as opposed to 95% or higher effectiveness against earlier strains.

SAFER

Safe Actions For Employee Returns

Another complicating factor is symptoms of variants may differ from those of the initial strain, increasing the likelihood infected people won't recognize when they should be tested for COVID-19. For example, evidence from a self-reporting system in the U.K. show symptoms of the Delta variant are headache, runny nose and sneezing. Reports of cough, fever or loss of smell are rare, meaning temperature screening may be less effective at identifying potential cases of the Delta variant.

Infection rates are highest in areas with lower rates of vaccination, and the key to slowing the spread of the Delta variant will be accelerating the vaccination effort. Due to the higher rate of contagion and severe illness, employers should take measures immediately to avoid a workplace outbreak. Several questions are outstanding about COVID-19 variants, but explore the following action steps your organization can take to mitigate the risk of workplace spread based on current data.

Steps employers can take right now to stem the spread of COVID-19 variants, and avoid potential workplace outbreaks:

1. Monitor information about [variants](#) and [infection rates](#) in your state and county, and implement control measures in the workplace as appropriate.
2. Consider implementing increased COVID-19 control measures, and re-instating masking and social distancing policies that might have been previously discontinued.
3. Monitor information about specific variants, and how [prevalent they are becoming](#) in the U.S. or other areas of the world where your organization operates. Please note, many variants are first identified outside the U.S. To stay aware of more robust research and guidance, monitor information coming from areas where a variant is a major concern. For example, [resources from the U.K.](#), where the Delta variant has been the dominant strain since mid-June 2021, provide a clearer picture of how the variant affects the population.
4. Monitor [vaccination rates](#) in your state and county, and make sure control measures are appropriately strict until [herd immunity](#) is reached.
5. Prioritize getting the workforce [vaccinated](#) through information sharing, incentives or mandates, including the second shot. Some may want to consider getting an mRNA vaccine if they initially received Johnson & Johnson.
6. Educate workers on the symptoms of variants. For example, they can contract the Delta variant without experiencing the more classic COVID-19 symptoms.
7. Update screening methods to include the more [common symptoms](#) as new variants emerge.
8. Require workers to get a COVID-19 test before coming to work if they feel ill or have been in close contact with someone who has been ill. Consider weekly testing, even of [asymptomatic individuals](#), and providing at-home test kits for your workforce or partnering with a local testing site to regularly test workers.
9. Set up a mobile vaccination site at your workplace, or partner with a local vaccination site to facilitate scheduling, transportation and relieve barriers to vaccination access, especially for workers who may not have transportation, available time off, child care or other factors making it difficult for them to get to a community-based vaccination site.
10. Offer paid time off for vaccination and recovery time, approximately 4 hours per dose.

SAFER

Safe Actions For Employee Returns

11. Consider implementing remote work mandates for unvaccinated workers, or limiting the number of unvaccinated workers within enclosed workspaces.
12. Verify workers' vaccination status. If possible, use secure and private methods, such as electronic databases or mobile applications.

Other Resources:

Centers for Disease Control and Prevention:
[About Variants of the Virus that Causes COVID-19](#)

Public Health England:
[Risk assessments](#)

ZOE COVID Study (UK):
<https://covid.joinzoe.com/post/new-top-5-covid-symptoms>

World Health Organization:
[Tracking SARS-CoV-2 Variants](#)

Health Action Alliance:
[Safer Reopening Resources](#)

References:

Public Health England. (11 June 2021). SARS-CoV-2 variants of concern and variants under investigation in England. [Technical Briefing](#).

Boloze, A. et al. (in press). [Rapid displacement of SARS-CoV-2 variant B.1.1.7 by B.1.617.2 and P.1 in the United States](#)

Sheikh, A., McMenamin, J., Taylor, B., & Robertson, C. (2021). [SARS-CoV-2 Delta VOC in Scotland: demographics, risk of hospital admission, and vaccine effectiveness](#)