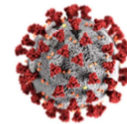


# Small Business Webinar Series

## Airborne Transmissible Disease (ATD) Prevention “Moving the Needle Forward”

June 10, 2021

John Staley, PhD, MSEH and Ernie Stracener, CIH, CSP, CHMM



NORTH CAROLINA  
Occupational Safety and  
Health Education  
and Research Center



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



Wisconsin State  
Laboratory of Hygiene  
UNIVERSITY OF WISCONSIN-MADISON



WisCon

# Agenda

- Pandemic update
- Assessing ATD risk in your workplace
- Using the “Hierarchy of Controls” for ATD prevention
- Elements of your workplace ATD prevention and response plan going forward
- OSHA’s efforts towards Emergency Temporary Standard for COVID-19
- Resources for your business
- Q/A

# Terminology



- **Coronaviruses:** family of viruses that cause illness ranging from the common cold to more severe diseases
- **SARS-CoV-2:** the specific, novel coronavirus that causes COVID-19 disease
- **SARS-CoV-2 variants:** mutated forms of the virus that can result in different ways of affecting the population
- **COVID-19:** the disease caused by the novel coronavirus, SARS-CoV-2, and is short for “Coronavirus Disease 2019”
- **ATD:** a “disease process caused by a novel or unknown pathogen for which there is no evidence to rule out...the possibility that the pathogen is **transmissible through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles** containing the novel or unknown pathogen.”
- **ETS:** Emergency temporary standard- may be federal or state level that has specific workplace health and safety elements that are required during the specified time period just like “traditional” standards
- **Hierarchy of Controls:** a traditional way of determining how to implement “feasible and effective control solutions” in the workplace.



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



# SARS-CoV-2 Variants in the U.S.

- U.S. Government classifies variants in 3 classes:

- Variant of Interest
- Variant of Concern
- Variant of High Consequence

- “Notables”

- **“Alpha”** B.1.1.7: **Most common**. Detected in the U.S. in December 2020. It was initially detected in the United Kingdom. “Alpha”
- **“Beta”** B.1.351: Detected in the U.S. at the end of January 2021. It was initially detected in South Africa in December 2020.
- **“Gamma”** P.1: Detected in the U.S. in January 2021. P.1 was initially identified in travelers from Brazil, who were tested during routine screening at an airport in Japan, in early January.
- **“Epsilon”** B.1.427 and B.1.429: These two variants were first identified in California in February 2021. Seems to be dying out.
- **“Delta”** B.1.617: Detected in the U.S.- **More infectious than U.K. variant (50%-60%)**. Initially detected in India in October 2020.



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



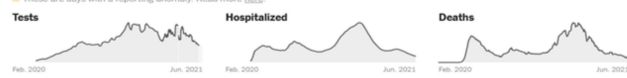
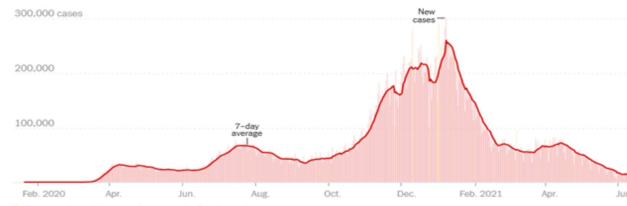
Variant Classification resource: <https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html#Interest>

<https://nymag.com/intelligencer/2021/06/covid-b-1-617-2-delta-variant-what-we-know.html>

# COVID-19 Update- Where we are today

Total Cases and Deaths  
(06/10/21)

## New reported cases



	AVG. ON JUN. 9	14-DAY CHANGE	TOTAL REPORTED
Cases	14,809	-36%	33,420,582
Tests	654,481	—	—
Hospitalized	21,677	-22%	—
Deaths	417	-20%	598,355



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH

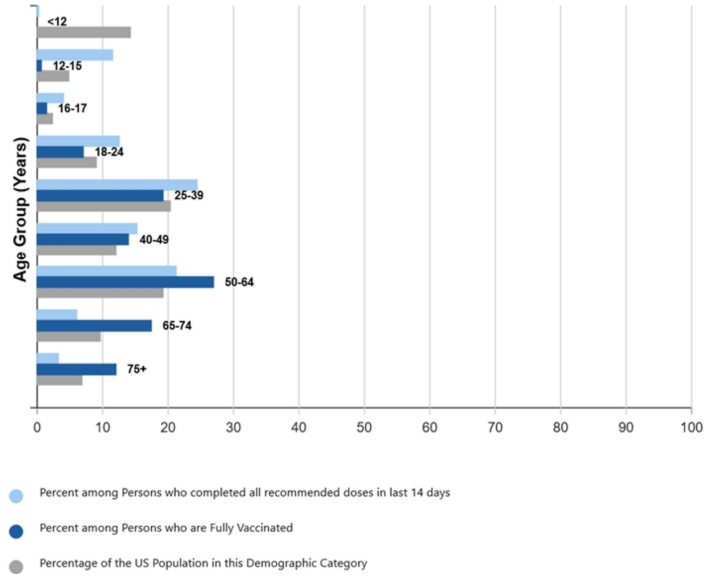


**As of June 10, 2021- 42% of U.S. fully vaccinated, and 52% have started vaccination process**

NY Times source: <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>

# COVID-19 Update- Where we are today

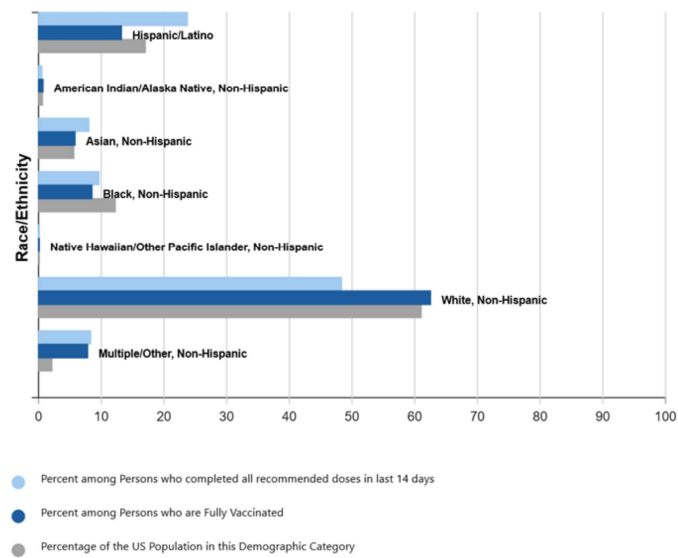
Age Groups of People Fully  
Vaccinated in U.S. (06/09/21)



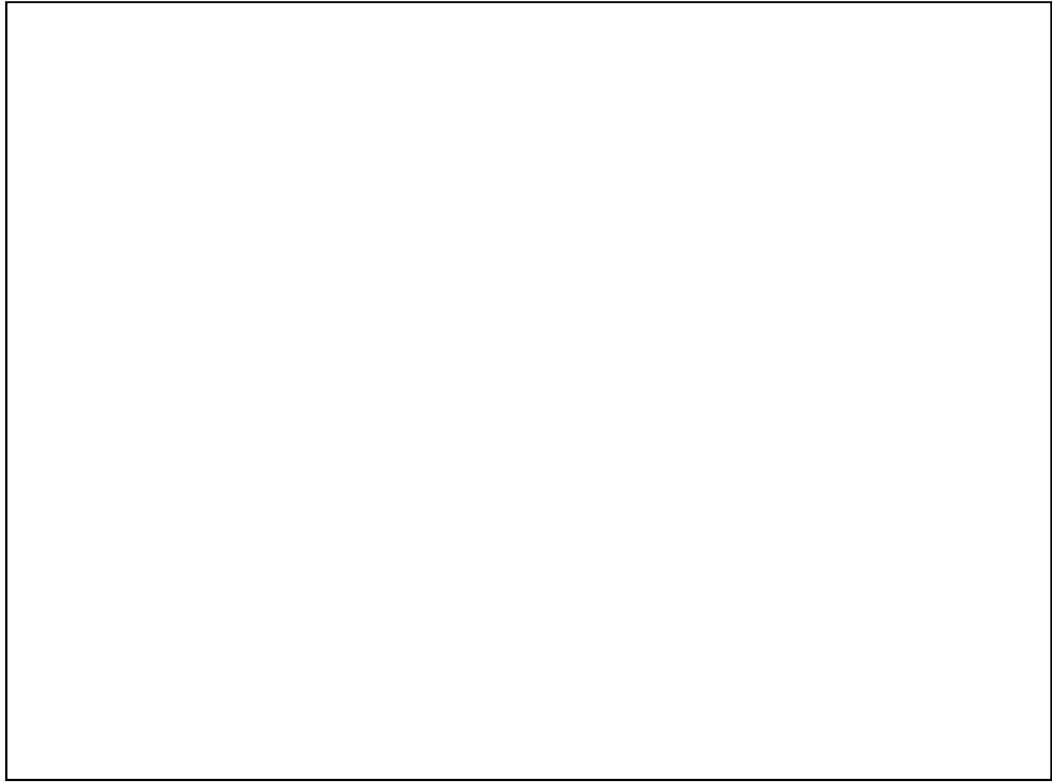
U.S. CDC source: <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographic>

# COVID-19 Update- Where we are today

Race/Ethnicity of People Fully  
Vaccinated in U.S. (06/09/21)



U.S. CDC source: <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographic>



From resource "<https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/cpip-pclcpi/assets/pdf/ann-f-eng.pdf>"

<https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/scientific-brief-sars-cov-2.html>



# Johnson and Johnson/Janssen Vaccine

- Risk from the vaccine?
  - Temporary pause April 12, 2021 for review by U.S. CDC and U.S. FDA
  - Resumed use April 23, 2021



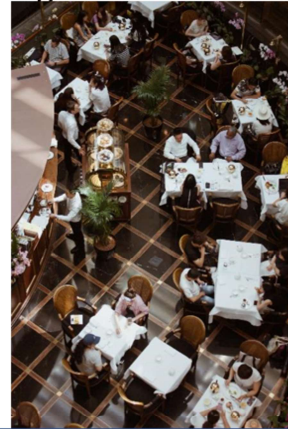
May 6, 2021: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/JJUpdate.html>

## Assessing ATD risk in your workplace

- Identifying work activities or situations that might cause transmission
- Identifying which workers might be at risk
- Consider likelihood of exposure
- Establish exposure controls

# Assessing ATD risk in your workplace

- Identifying work activities or situations that might cause transmission



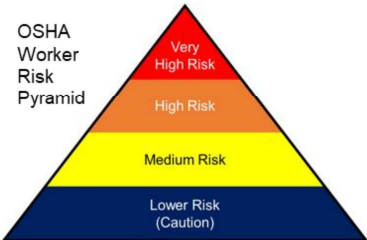
GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



Construction site Photo Source: M.T. Copeland  
Restaurant Photo source: Photo by [K8](#) on [Unsplash](#)

# Assessing ATD risk in your workplace

- Identifying work activities or situations that might cause transmission
- Identifying which workers might be at risk
- Consider likelihood of exposure
- Establishing control measures



OSHA Risk Classification Pyramid Source:

<https://www.osha.gov/sites/default/files/publications/OSHA3993.pdf>

Photo by Nathan Dumlao on Unsplash- lower risk

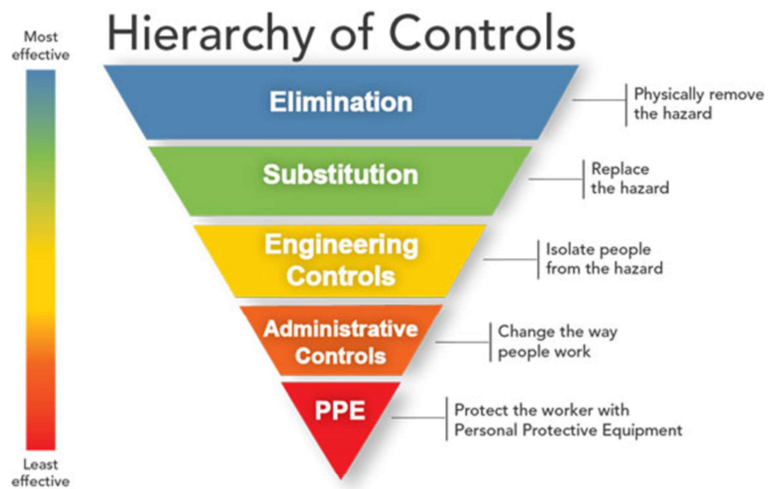
Construction outside but frequent contacts- medium, another example would be schools  
EMS and First Responders frequent contacts with potentially infected individuals Photo by  
Benjamins Voros, Unsplash

Photo by Mufid Majnun on Unsplash- Very high risk

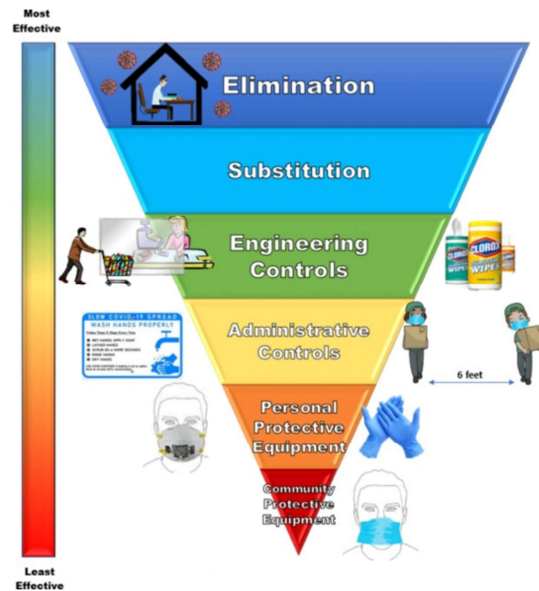
## Assessing ATD risk in your workplace

- Identifying work activities or situations that might cause transmission
- Identifying which workers might be at risk
- Consider likelihood of exposure
- Establish exposure controls- more on this shortly

Traditional  
approach



## Applying the hierarchy to a virus like SARS-CoV-2



Graphic Source: <https://ehs.cornell.edu/campus-health-safety/occupational-health/covid-19/covid-19-hierarchy-controls#:~:text=Elimination%20%E2%80%93%20Completely%20eliminating%20exposure%20to,The%20most%20effective%20control.&text=Engineering%20Controls%20%E2%80%93%20Isolating%20the%20person,the%20way%20that%20people%20work.>

# Workplace Plan

- Factors to consider
  - For educating and notifying employees
  - Teleworking, reduced hours, alternating shifts, etc.
  - Protections for workers, at-risk workers, vendors/contractors, customers
  - Need a gatekeeper (and source for company updates)



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



Picture source: Jackson, P. (2001). The Lord of the Rings: The Fellowship of the Ring



## Factors to Consider Cont'd

- What to do when employees get sick, symptomatic, or exposed?
  - Quarantine asymptomatic workers?
  - Send home symptomatic
  - Call Health Department
  - Offer SARS-CoV-2 testing?
- Staying up to date on SARS-CoV-2, COVID-19, but also emerging diseases



Mask Picture Source: <https://www.cdc.gov/coronavirus/2019-ncov/community/workplaces-businesses/index.html>

## Factors to Consider Cont'd

- Plans for overall safety in the workplace
- When do OSHA regulations and state specific regulations come into play?
  - General Duty Clause
  - Work-specific hazards
  - State and City specific sick leave laws (Federal level FFCRA expired 12/31/20, but other requirements may still exist in some states)



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



FFCRA Graphic Source: <https://www.dol.gov>

).

## Factors to Consider Cont'd

- Health and Wellbeing (think mental health)
- Financial (of the business and employees)



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



Picture Source: Getty Images via  
<https://www.forbes.com/sites/margiewarrell/2020/10/10/world-mental-health-day--why-leaders-must-prioritize-employee-mental-health--wellbeing/?sh=21598c6f172f>

## OSHA Emergency Temporary Standard for COVID-19

- Draft sent by OSHA to the White House Office of Information and Regulatory Affairs – April 24, 2021
- No set timetable for putting ETS into effect (**Actually, just today!**)
- Given decreasing cases, maybe not put into effect?

# Vaccine Update

- Still learning about long term effectiveness (versus lab efficacy ), side effects
- Can employers mandate employees get vaccinated?

## Resources you might find helpful

CDC vaccine safety webpage: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety.html>

NSC SAFER has employer guidance on vaccinations at: <https://www.nsc.org/workplace/safety-topics/vaccines/employer-guidance>



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



Photo Source:

<https://www.insurancejournal.com/news/national/2020/10/30/588822.htm>

## Resources

- NIOSH Educational Resource Centers (map / weblink <https://www.cdc.gov/niosh/oep/ercportfolio.html> )
- OSHA's On-Site Safety and Health Consultation Program (map / weblink <https://www.osha.gov/consultation/directory-text> )
- Small Business Development Centers (map/weblink (<https://www.sba.gov/local-assistance/find?type=Small%20Business%20Development%20Center&pageNumber=1> )
- CDC Resuming Business Toolkit (<https://www.cdc.gov/coronavirus/2019-ncov/community/resuming-business-toolkit.html>)
- National Safety Council SAFER: Safe Actions for Employee Returns (<https://www.nsc.org/workplace/safety-topics/safer/safer-home>)
- NC OSHERC Carolina PROSPER Small Business Resources (<https://sph.unc.edu/osherc/carolina-prosper-and-other-covid-resources/>)



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH



# Thank you!

For information or questions about this presentation:

**John A. Staley, PhD, MSEH**

Director, Outreach and Continuing Education

North Carolina Occupational Safety and Health Education and Research Center

BSPH Core Faculty, Gillings School of Global Public Health; Adjunct Assistant Professor, Department of Health Policy and Management

University of North Carolina at Chapel Hill

<https://go.unc.edu/NCOSHERC>

Email: [johnstaley@unc.edu](mailto:johnstaley@unc.edu)

**Ernie Stracener, CIH, CSP, CHMM**

Consultation Program Manager

WisCon On-Site Safety and Health Consultation Program

Wisconsin State Laboratory of Hygiene

University of Wisconsin-Madison

<http://slh.wisc.edu/wiscon>

Email: [ernie.stracener@slh.wisc.edu](mailto:ernie.stracener@slh.wisc.edu)



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH

