

**NSP Southern Division
Virtual Fall conference
COVID-19 Update**

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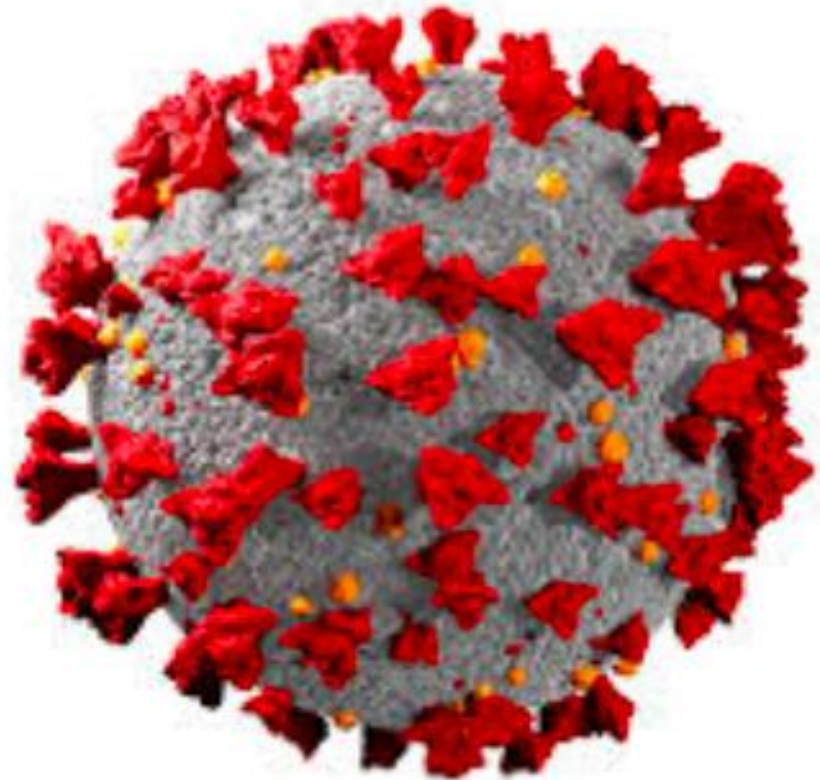
Southern Division Medical Advisor

Wintergreen Ski Patrol

Introduction



- Last years numbers at this time
- 5.6 M+ Cases (US)
- 175K+ Deaths
- No end in sight



A toast to Vaccines





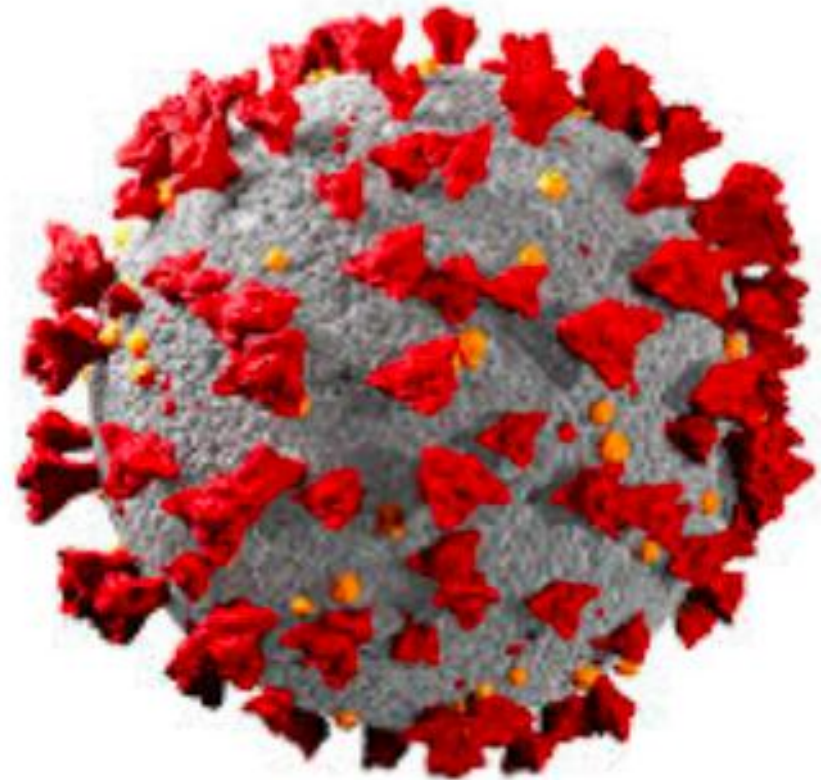
A toast to Vaccines

- 5 billion (yes with a B) + doses vaccines administered worldwide
- 1B in past 28 days
- However...viruses can be tricky

Introduction



- Current numbers
- 38.7 M+ Cases (US)
- 636K+ Deaths
- Continues to spread
 - Unvaccinated at high risk
 - Delta Variant major player

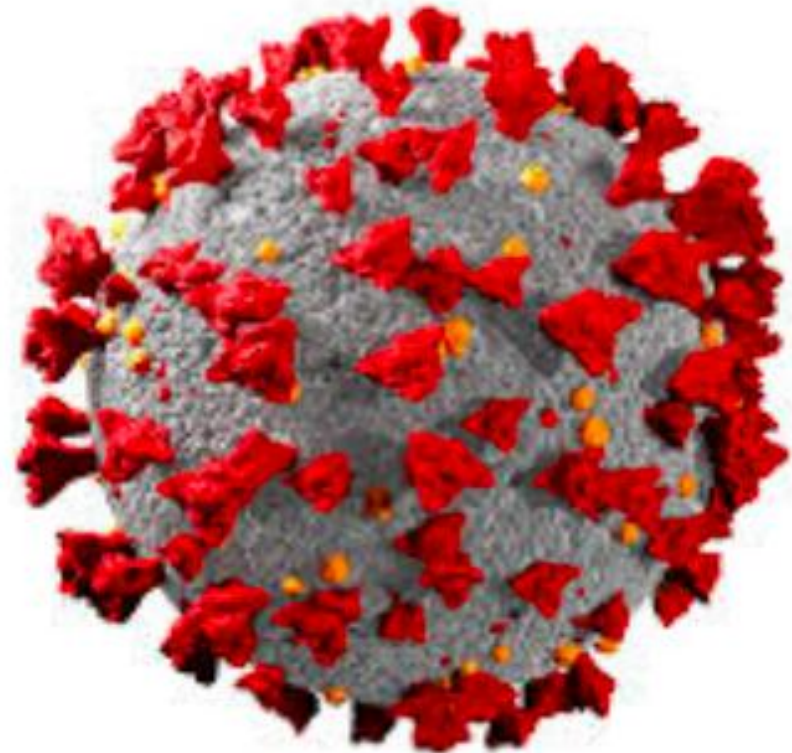


Delta Variant



- Viruses will naturally mutate and new variants will emerge
- Circulates more freely in unvaccinated population

Unvaccinated at high risk



Introduction



- Review Current State of Affairs
 - Vaccines
 - Other preventive methods
- Potential Solutions- PD roundtable
 - Discuss what worked last season and current guidance
 - Moving target

2020-2021



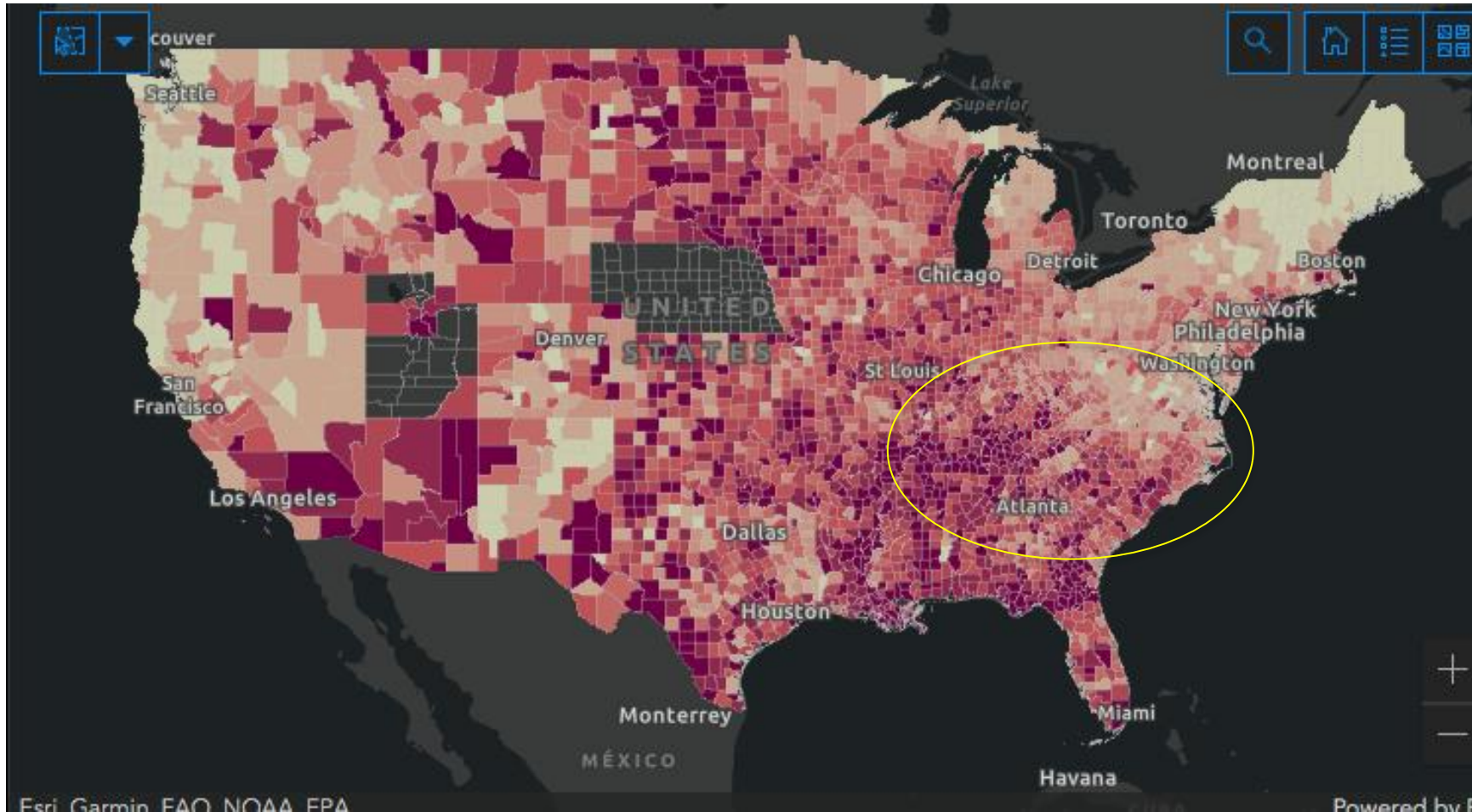
- Training
 - Virtual
 - Courses have hybrid component-part online, part in person
 - other training- modified
- Clinical
 - Protocols for patrollers and aid room
 - Good success in preventing local spread despite busier then expected season

Current state



- Seeing current surge in cases nationwide
 - Areas with low vaccination rates particularly hard hit
 - Schools starting up- most areas in person
 - Mask wearing continues to be politicized in some areas
 - Vaccines now available starting age 12
 - Seeing increasing rates of infection in younger age group –some with serious complications

New Cases



From JHU Covid19 dashboard accessed 8/27/21

Vaccines



- 3 currently approved in US
 - Pfizer/Moderna
 - mRNA technology- 90+% effective against initial variants
 - Requires 2 shots 2-3 weeks apart
 - Fully protection 2 weeks after 2nd shot
 - Immunity seems to wane at 6-8 months
 - Boosters coming on line- immunocompromised first
 - Still highly effective against Delta

Vaccines



- 3 currently approved in US
 - J and J
 - Traditional vector technology
 - Single injection
 - Easier to store and transport
 - ~70+% effective against initial wave
 - Full protection 2 weeks after injection
 - Data on immunity longevity will be here soon (trailing by ~2 months)
 - Still highly effective against Delta Variant

Vaccines



- ALL ARE NEAR 100% EFFECTIVE FOR PREVENTING HOSPITALIZATION/DEATH
 - Breakthrough infections increasing but tend to be mild/asymptomatic
 - 90-97% hospitalizations in unvaccinated
 - Small number immunized with co-morbid

Vaccines



– Side effects

- Most are VERY mild- sore arm, fatigue, chills
 - More intense after 2nd dose mRNA
- Small number of cases myocarditis with mRNA
- Very small number cerebral blood clots with J and J
 - Women 20-45 slightly higher risk

– Severe health risks of COVID far outweigh these

Delta Variant



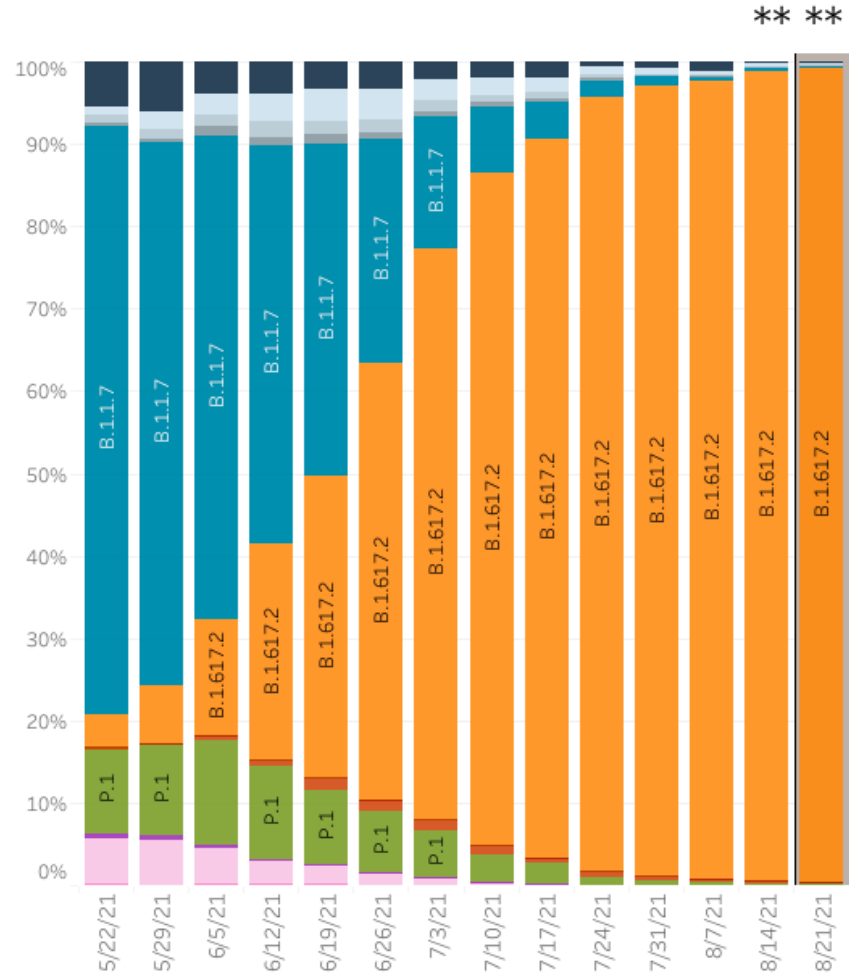
- More infectious and can cause worse disease
- Even immunized can harbor and transmit
 - But.....
 - Don't tend to get sick or get mild symptoms
 - Shortened time they can transmit to others
- 99%+ current new cases in US are thought to be Delta variant

Delta Variant

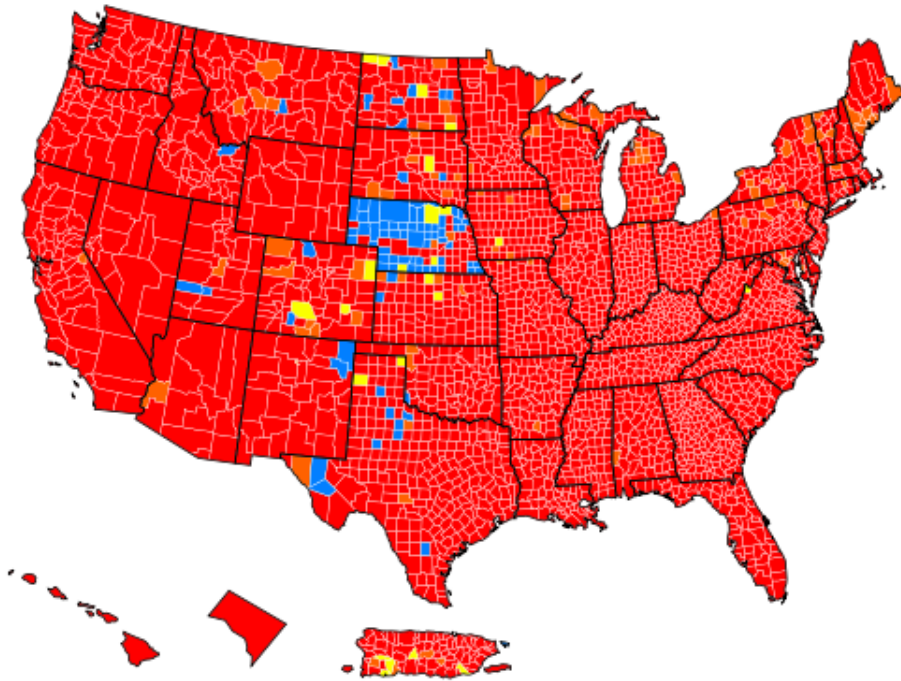


CDC Nowcast Data from
May 22-Aug 21 2021

United States: 5/16/2021 – 8/21/2021



Delta Variant



Community Transmission in US by County

	Total	Percent	% Change
High	2993	92.95%	5.59%
Substantial	114	3.54%	-4.01%
Moderate	27	0.84%	-1.15%
Low	85	2.64%	-0.43%

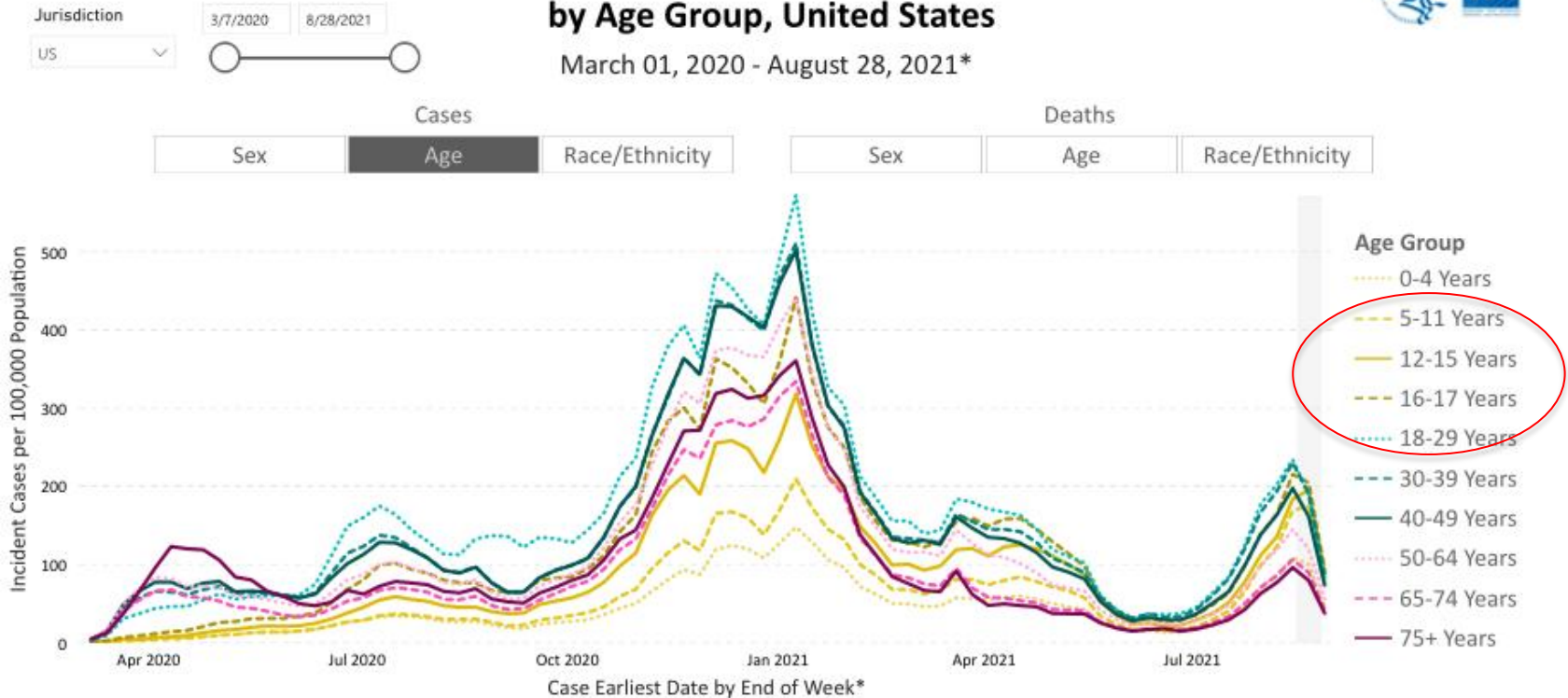
[How is community transmission calculated?](#)

Delta Variant



COVID-19 Weekly Cases per 100,000 Population by Age Group, United States

March 01, 2020 - August 28, 2021*



US: The most recent line level case record was reported during the week ending on Aug 28, 2021. Percentage of cases reporting age by date - 98.76%

US territories are included in case and death counts but not in population counts. Potential two-week delay in case reporting to CDC denoted by gray bars.

*Case Earliest Date is the earliest of the clinical date (related to illness or specimen collection and chosen by a defined hierarchy) and the Date Received by CDC.

Last Updated: Aug 28, 2021

Source: CDC COVID-19 Case Line-Level Data, 2019 US Census, HHS Protect; Visualization: Data, Analytics & Visualization Task Force and CDC CPR DEO Situational Awareness Public Health Science

From CDC Covid tracker cdc.gov

Moving forward



- 73%+ Americans have at least 1 vaccine dose
- What if I already had Covid- do I need vaccine?
 - Yes- can decrease long term risks/symptoms
 - Provides better immunity
 - 2.4x incr risk of repeat infection if no vaccine post covid (from KY data)

Moving forward



Vaccination is most powerful tool

NSP cannot(will not) mandate- they do **STRONGLY RECOMMEND** but....

Corporations/private business/govt agencies can

Your mountain/resort may....likely will

Your state can

Your employer can

Moving forward



Vaccination is most powerful tool

Pfizer vaccine now full FDA approval for >16+ so will likely see more mandates

Military has new mandate

Medical/religious exemptions getting stricter

Will also make testing/masking onerous for those who refuse vaccine if not mandated

Moving forward



- **Vaccines alone cannot completely prevent transmission**
 - Need layered protections
- Masks/Social Distancing
- When to wear
- Who has to (or at least should) wear them

Moving Forward



- Masks

- Gaiter vs fitted mask

- Material type and ply affects efficiency
 - 1 ply gaiters don't trap many droplets
 - Fit of mask – cloth over surgical improves seal
 - Exhaust valves (don't do it)



Moving Forward



- Masks
 - N-95/respirator
 - Recommended for aerosolizing procedures
 - Who gets them- Fit test?
 - How do you replace/reuse?



Surgical mask



N95 respirator mask



Moving Forward

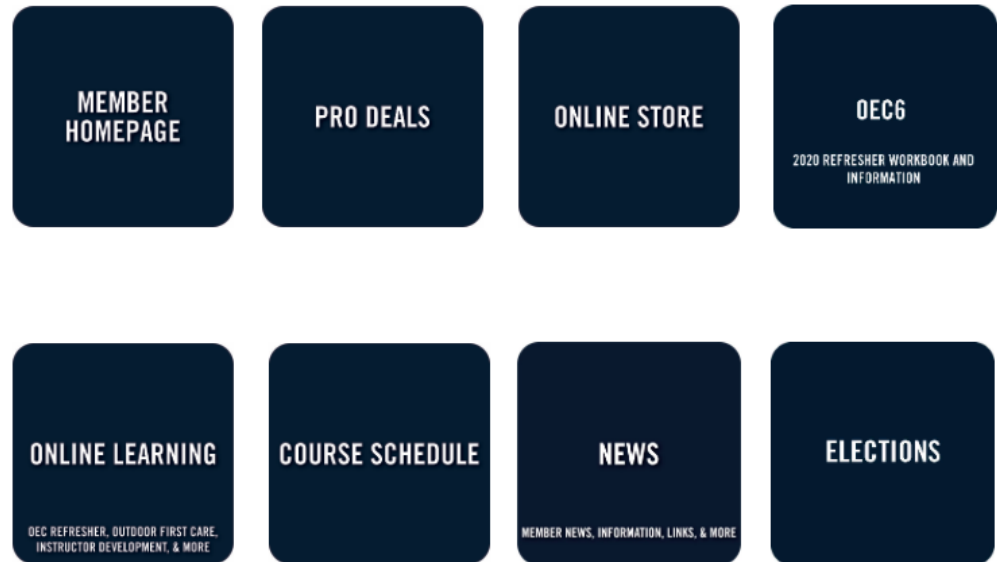


- Masks-
- When to wear- has taken on political/social implications but the science is clear
 - Current guideline- Indoors
 - (med comm opinion- always when around others)
 - Important to model good behavior
 - Provide guidance to young patrollers
 - Good example for public
 - Don't wipe out your patrol
 - What is your mountain policy?

Resources



- NSP member page
 - Click on News



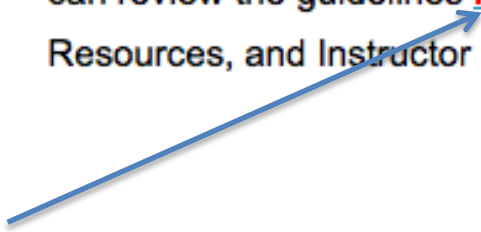
Resources



- Click on

Updated COVID-19 guidance for NSP Refreshers and other training

As the situation around COVID-19 evolves, and as we all approach the beginning of our training and Refresher season, we know that many of our members have questions and concerns about fall Refreshers and other NSP training. These questions include possible requirements for vaccination or masking, and how to handle specific kinds of practical skills training where distancing is difficult. The COVID-19 Task Force, which includes NSP's Medical Advisor and OEC Program Director, has issued updated guidance for NSP Refreshers and other training. You can review the guidelines [here](#), download them [here](#), or find them on the Instructor Resources, and Instructor Resources > OEC pages of this website.



Resources



- General guidance from NSP
- Breaks down areas to consider with suggestions
- Need to have regional and area specific adaptation/modification
- Will continue to be updated as ski season approaches

Resources



- [Covid.cdc.gov](https://www.covid.cdc.gov)
 - Updated daily/weekly
 - Big picture
- State/County Health dept in your area
 - More granular data on your region

Summary



We have been successful over the past year but new challenges continue to emerge

We will be dealing with restrictions/prevention etc for at least another season

Vaccination is the most powerful tool we have...but needs to be combined with other techniques

Engage with your mountain now to get protocols in place for training/refresher and start of season

Summary



- Use your local medical advisor to help with protocols, local resources
- Share Best Practices/Protocols with the division
- FIGHT MIS/DISINFORMATION
 - You may be the most knowledgeable voice at the table as to the science and real (not alternate) facts

Questions/Discussion

