

National Tribal Air Association

IAQ Considerations to Assist Tribes in Re-Opening Tribal Buildings: An Overview of COVID in the Workplace and Funding for Tribes

July 29, 2020

Indoor Air Quality Informational Webinar

An Overview of COVID in the Workplace &
Funding for Tribes: Re-Opening Tribal Buildings
Wednesday, July 29th, 2pm ET



Webinar Agenda:

1. Welcome & Introductions
2. An Overview of COVID in the workplace & Indoor Air Quality Considerations
3. Funding for Tribes to re-open the workplace
4. Questions & Discussion



Featured speakers include:

Philmer Bluehouse (Diné), Mansel Nelson (ITEP),
Holly Thompson Duffy (NPAIHB), Gillian Mittelstadt
(THHN), Hilary Atkin and Danielle Schopp (HUD
ONAP), & Pat Childers and Nate McMichael (EPA
OAR)



Informational webinars
will last 1.5 hours
and are free and
open to the public.

Click here to
register!

Hosted by the National Tribal Air Association
Indoor Air Quality Work Group





Webinar Agenda:

1. **Welcome and Introductions:** Ernie Grooms, NTAA IAQ Work Group Lead
2. **An Overview of COVID in the workplace & Indoor Air Quality Considerations:**
 - a. An Indigenous Perspectives on COVID: *Philmer Bluehouse, Traditional Diné Peacemaker*
 - b. Latest science review: *Mansel Nelson, Institute for Tribal Environmental Professionals*
 - c. Summary of Recommendations: *Holly Thompson Duffy, Environmental Health Consultant for the Northwest Portland Area Indian Health Board*
3. **Funding for Tribes to re-open the workplace**
 - a. CARES Act Technical Assistance Guidance: *Oxcenia O'Domin of Alaska Native Tribal Health Consortium*
 - b. Indoor Air Funding Directory for Tribes: *Gillian Mittelstaedt of the Tribal Healthy Homes Network*
 - c. Overview of HUD Funds: *Danielle Schopp from the U.S. Department of Housing and Urban Development's Office of Native American Programs (HUD ONAP)*
 - d. Overview of EPA Indoor Air Quality Resources: *Pat Childers and Nate McMichael, EPA's Office of Air and Radiation (EPA OAR)*
4. **Review Attendee Questions and Discussion:** Andy Bessler, NTAA Project Director

An Overview of COVID in the workplace & Indoor Air Quality Considerations:

An Indigenous Perspective on COVID-19

Philmer Bluehouse, Diné Peacemaker



An Overview of COVID in the workplace & Indoor Air Quality Considerations:

An Overview of COVID-19 Science

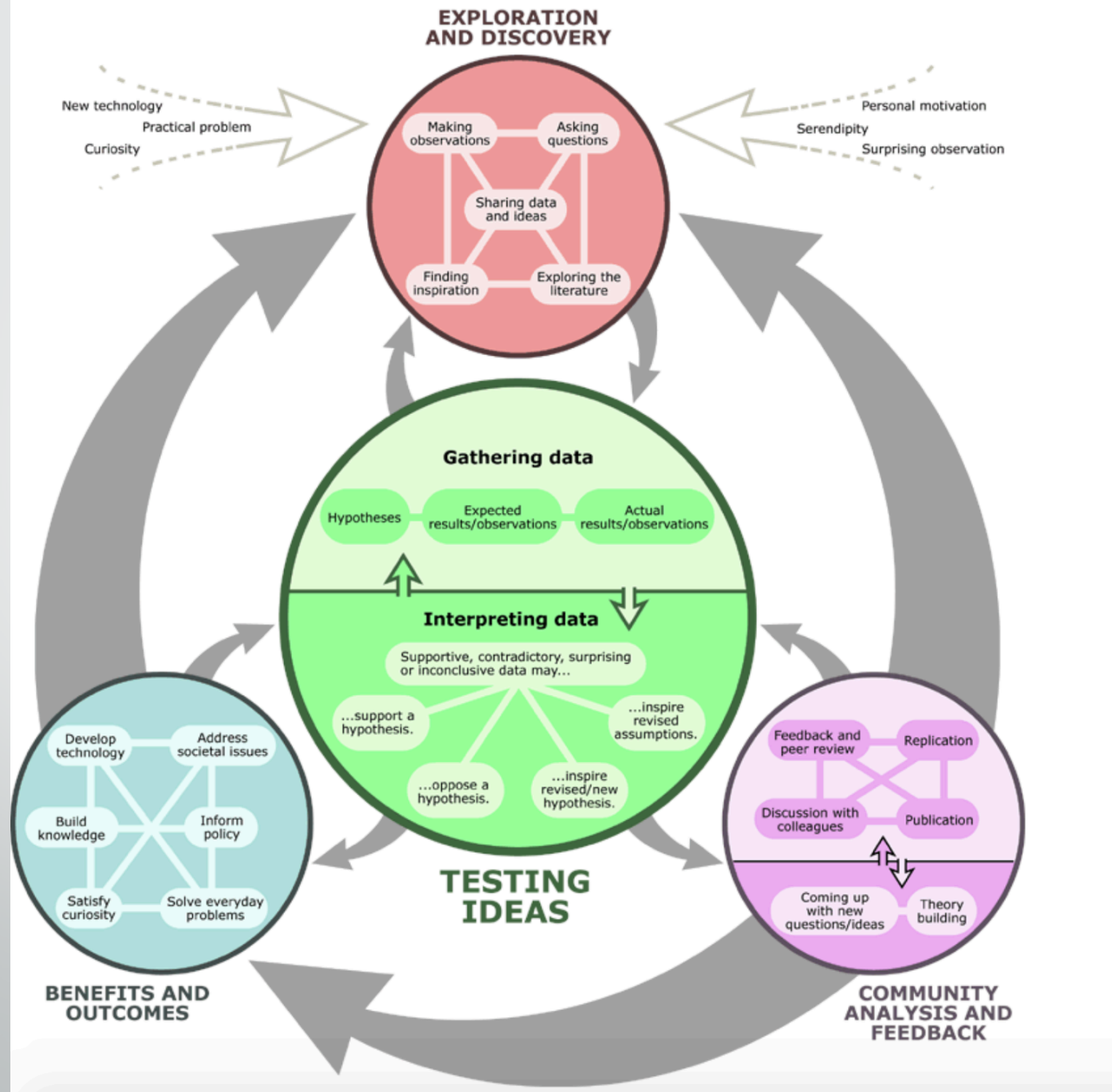
*Mansel A. Nelson, Institute for Tribal
Environmental Professionals*





Science

- Science is not just a set of “facts”
- Science is process of gaining knowledge
 - Observation
 - Experimentation
 - Discussion





Engineering

Application of Science

Solve a Problem





Risk for Exposure to COVID

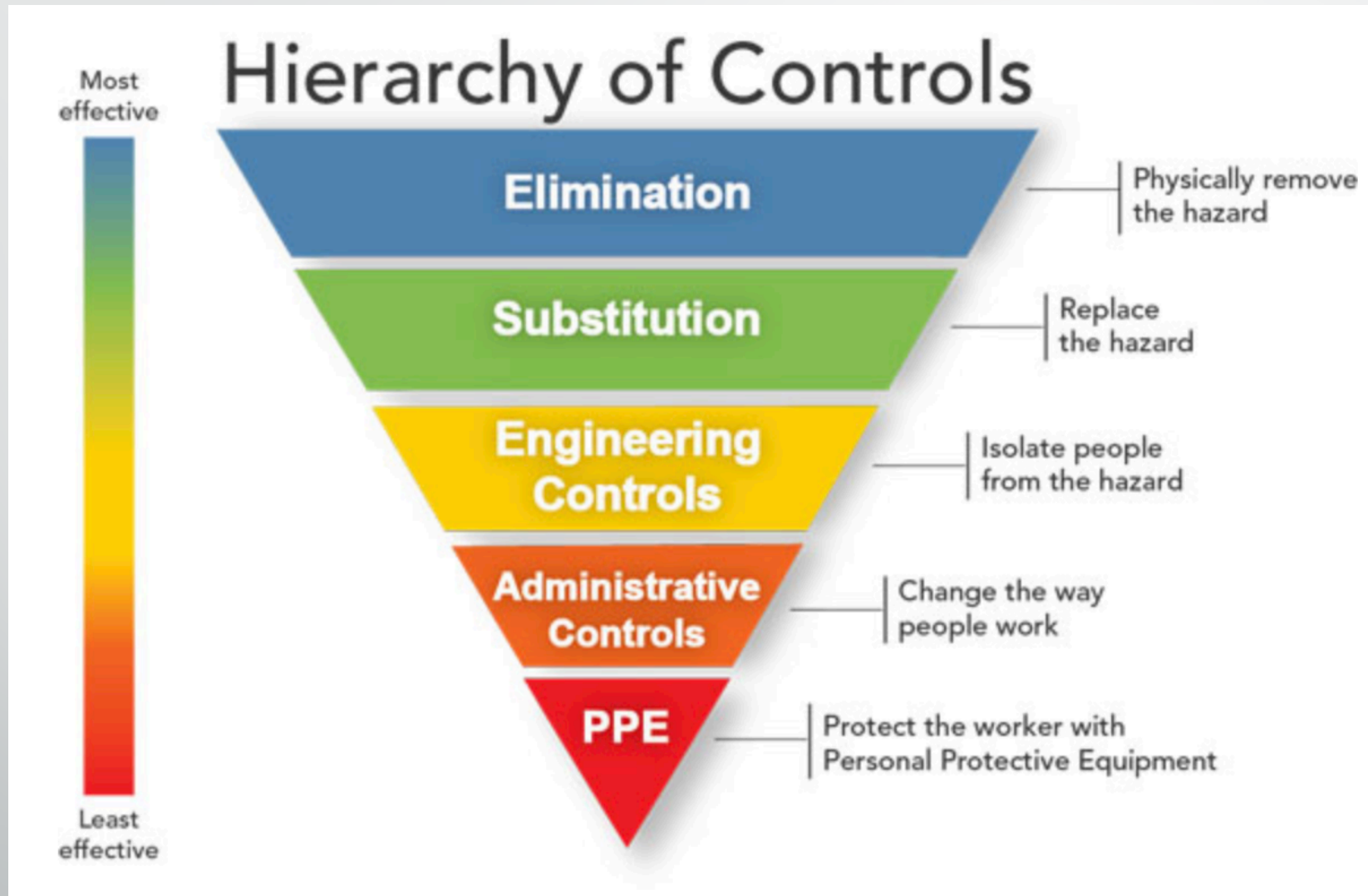
Highest

Crowded indoor spaces

Singing

Lower

Outdoor spaces





Elimination

Physically remove the hazard

- Most effective
- Can be difficult
- May require major efforts



Elimination (Science)

- People Spread COVID-19
 - Asymptomatic
 - Pre-symptomatic
- COVID testing is essential
 - Many challenges
 - Current wait time is long



CDC's laboratory test kit for the SARS-CoV-2 virus.



Elimination (Actions)

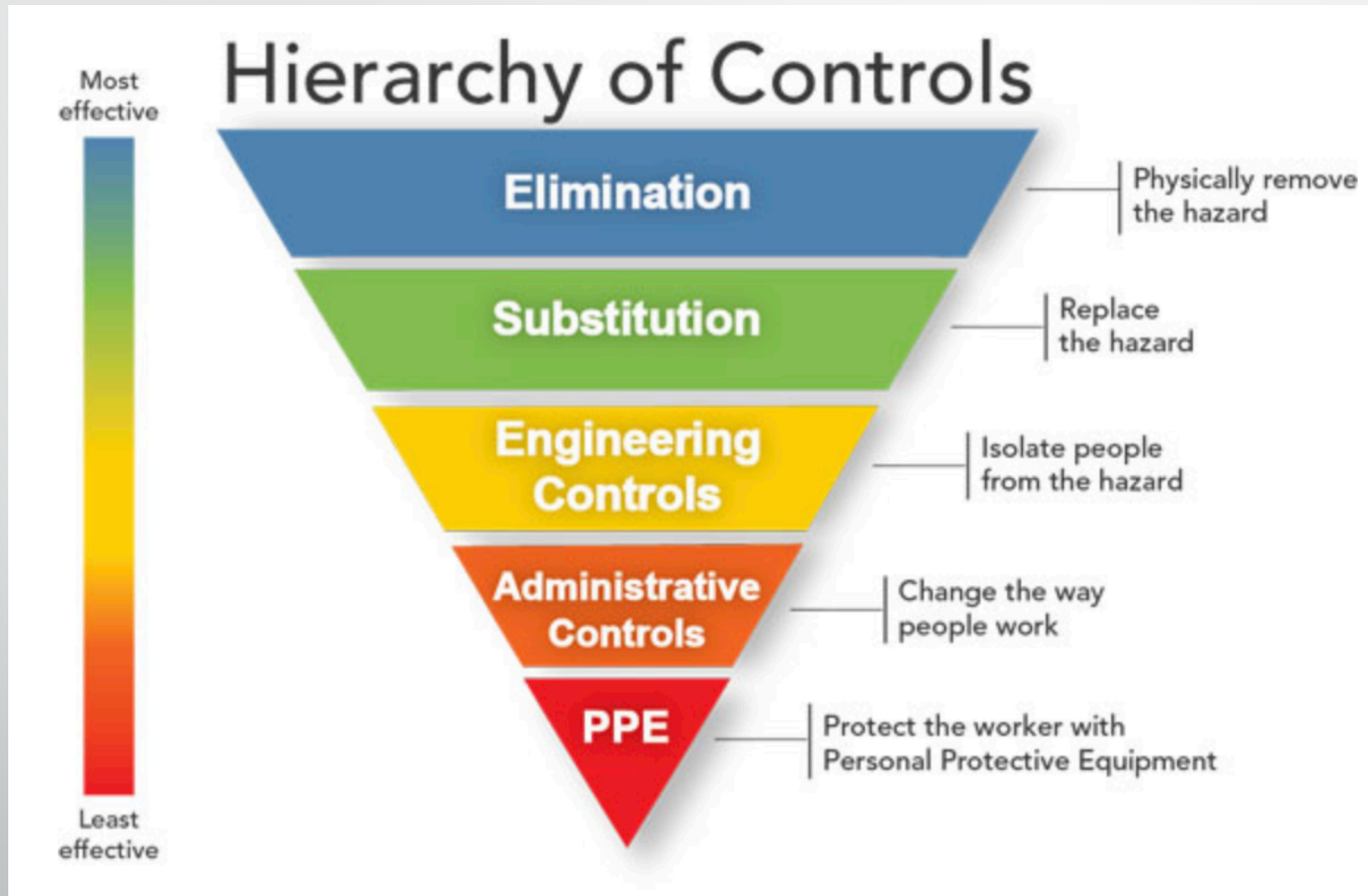
- Keep sick people out of buildings
- Regular testing
- Encourage sick people to stay/go home
 - Leave policies
 - Self monitoring – Be aware of typical symptoms



Elimination (Actions)

Vaccines ???







Engineering Controls

Isolate People from the hazard

- Remove the hazard before impacting people
- Independent of people actions



Engineering (Science)

- No Silver Bullets
- Healthy Building Principles still apply
- Many of the “new” technologies may release Ozone
 - Ozone is a lung irritant





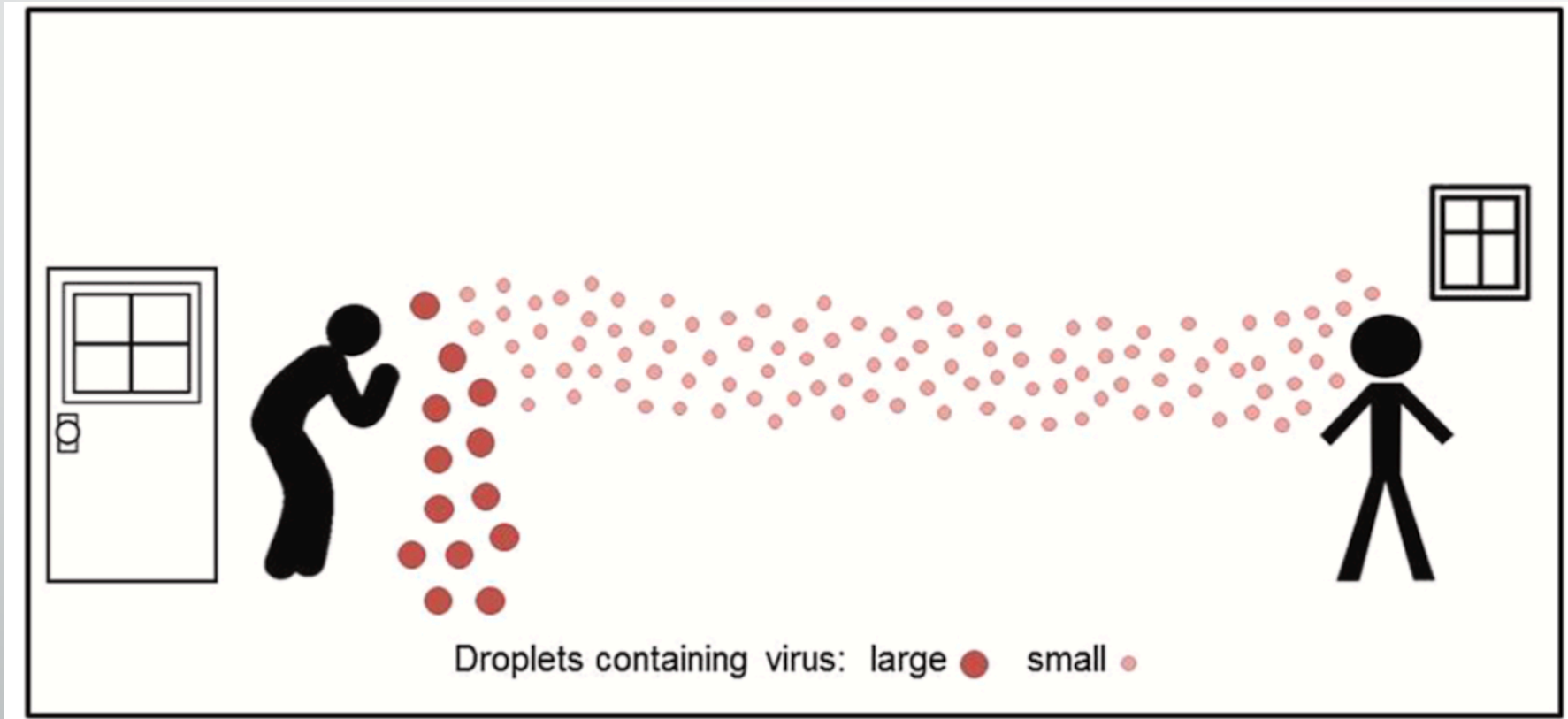
Transmission Routes

- Large Droplets
 - Short distance
- Surface Contact
- Fecal-oral
- Small Droplets
 - Airborne – longer distance





Aerosol Transmission



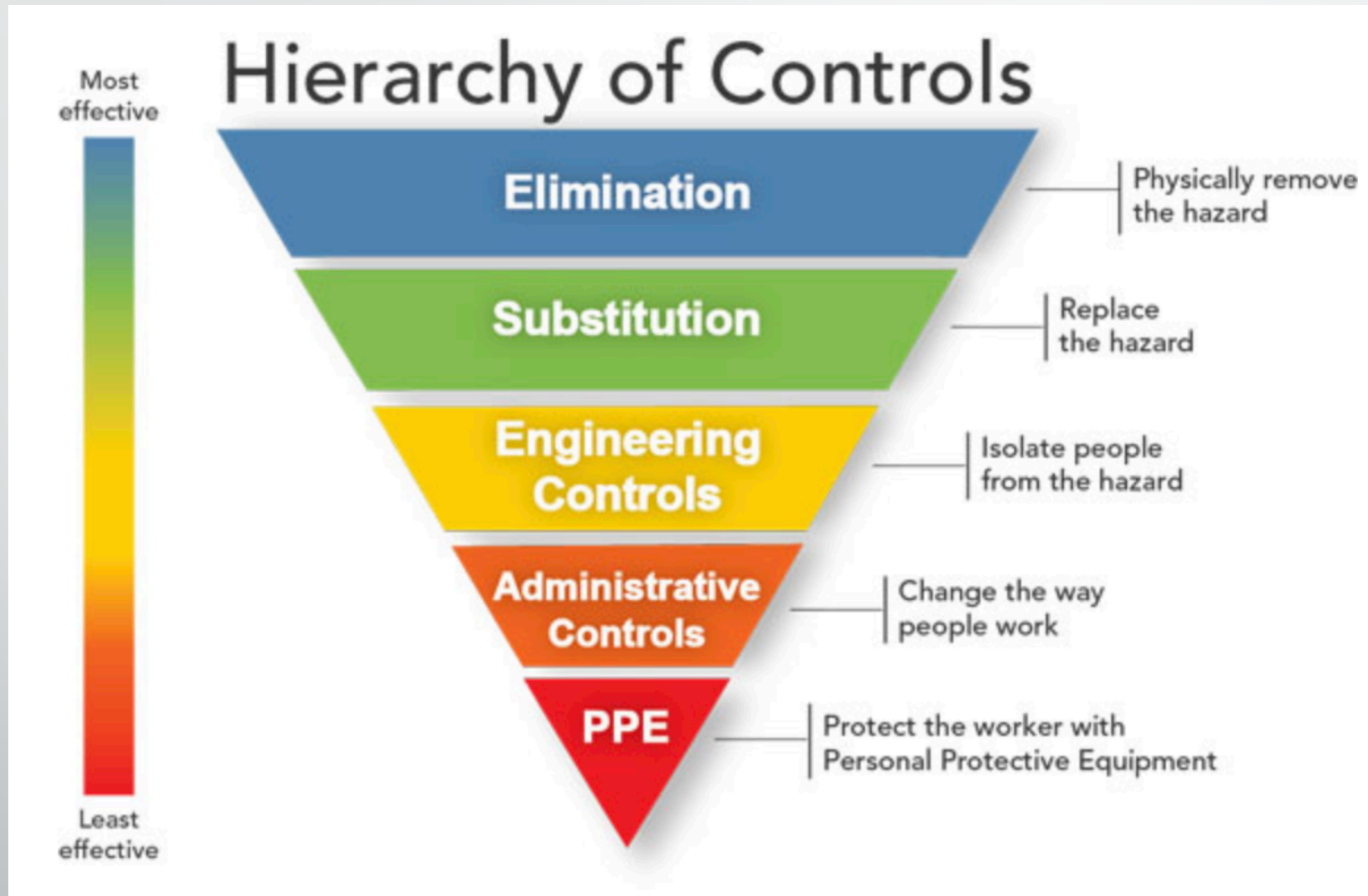


Engineering (Action)

Improve Indoor Environments

- Better ventilation (ASHRAE)
 - More outside air
- Limit recirculation
 - More outside air
- Improve filtration
- Avoid unproven technologies
- Social distancing
 - Similar to improving ventilation







Administrative and PPE

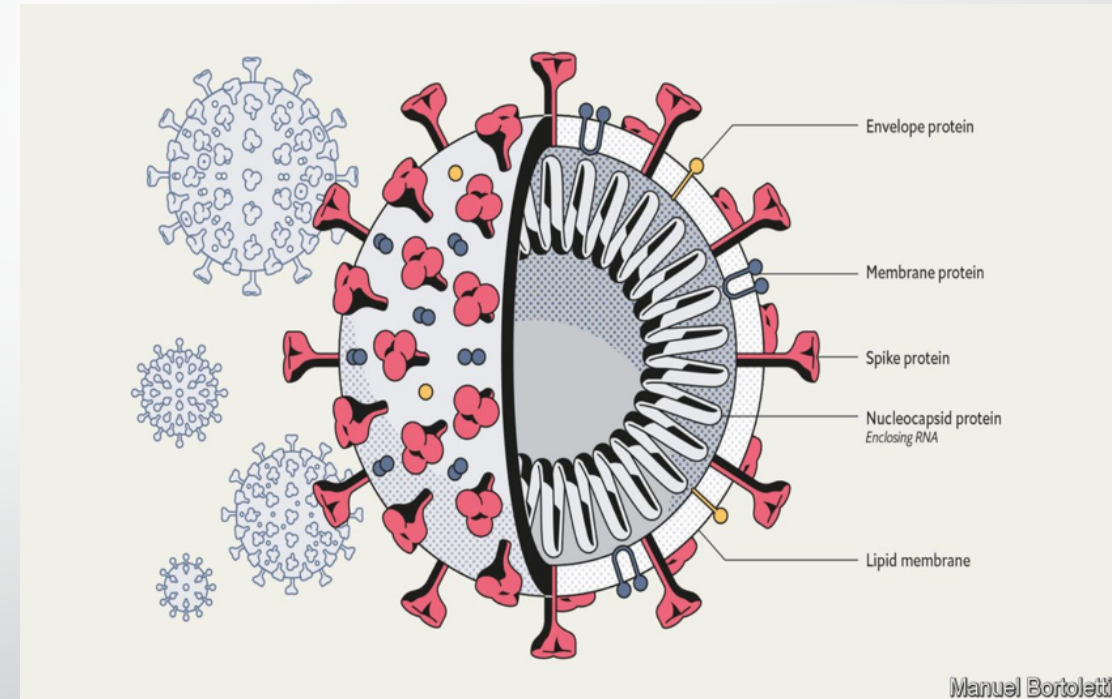
Change the way people work

- Often used where hazards are not well controlled
- May be inexpensive to establish
- Probably expensive to maintain
- Generally less effective
- Requires effort from staff



Administrative (Science)

- Aerosol?
- Larger Droplets
- Surface survival
 - 7 days virus mostly gone
- SARS-CoV-2 has flimsy shell





Administrative (Actions)

Cleaning

- Avoid toxic cleaners (Not needed)
- Empty Building > 7 days
 - Routine cleaning





Administrative (Actions)

Masks

- Masks reduce spread of virus
- Your mask protects me
- My mask protects you
- Social distancing also

Involves individuals changing behavior





Administrative (Actions)

Wash Hands

- Soap and water

Hand sanitizers

- Back-up option
- Watch for BAD batches



www.cdc.gov/handwashing



Air Quality and COVID

Scientists collecting evidence...

"...air pollution has significantly worsened the COVID-19 outbreak and led to more deaths than if pollution-free skies were the norm."

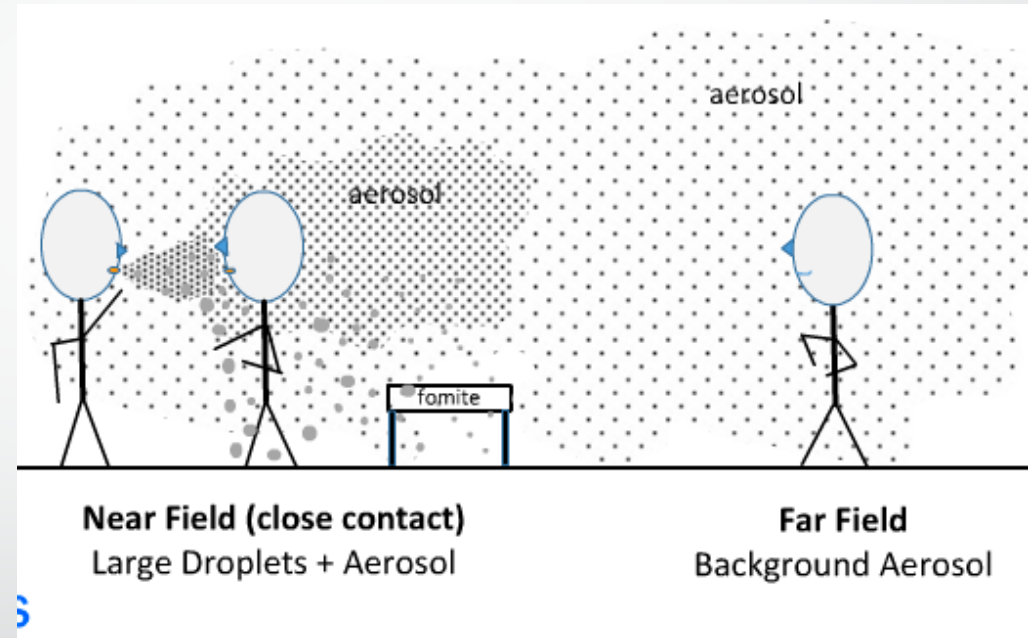




Summary

Know your environment

- Higher Risk
 - Poor ventilation
 - Confined Spaces
 - High breathing rates
- Weapons to lower risk
 - Mask, distance, ventilate, go outside





More Information...

<https://www.epa.gov/coronavirus>

<https://www.ashrae.org/technical-resources/resources>

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

<https://brightspotcdn.byu.edu/7b/e7/75df64714f30a59c1ba7766a1coo/byu-covid-masks-abbott.pdf>



Institute for Tribal Environmental Professionals (ITEP)

Mansel A. Nelson, Project Director

Indoor Air Quality in Tribal Communities

Northern Arizona University (NAU)

nau.edu/iaqtc/

mansel.nelson@nau.edu

Voice 928 523 1275

FAX 928 286 8882

PO Box 5768, Flagstaff, AZ 86011

