1

Considerations for a COVID-Safe Office for Psychotherapy

Re-open and Maintain Your In-Person Office Responsibly

Oregon Psychological Association

2021 Annual Conference

May 1, 11am to 12 noon

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non-profit 501c3
Portland Oregon
Providing Consumer Protection and Professional Training Since 1995
www.MentorResearch.org
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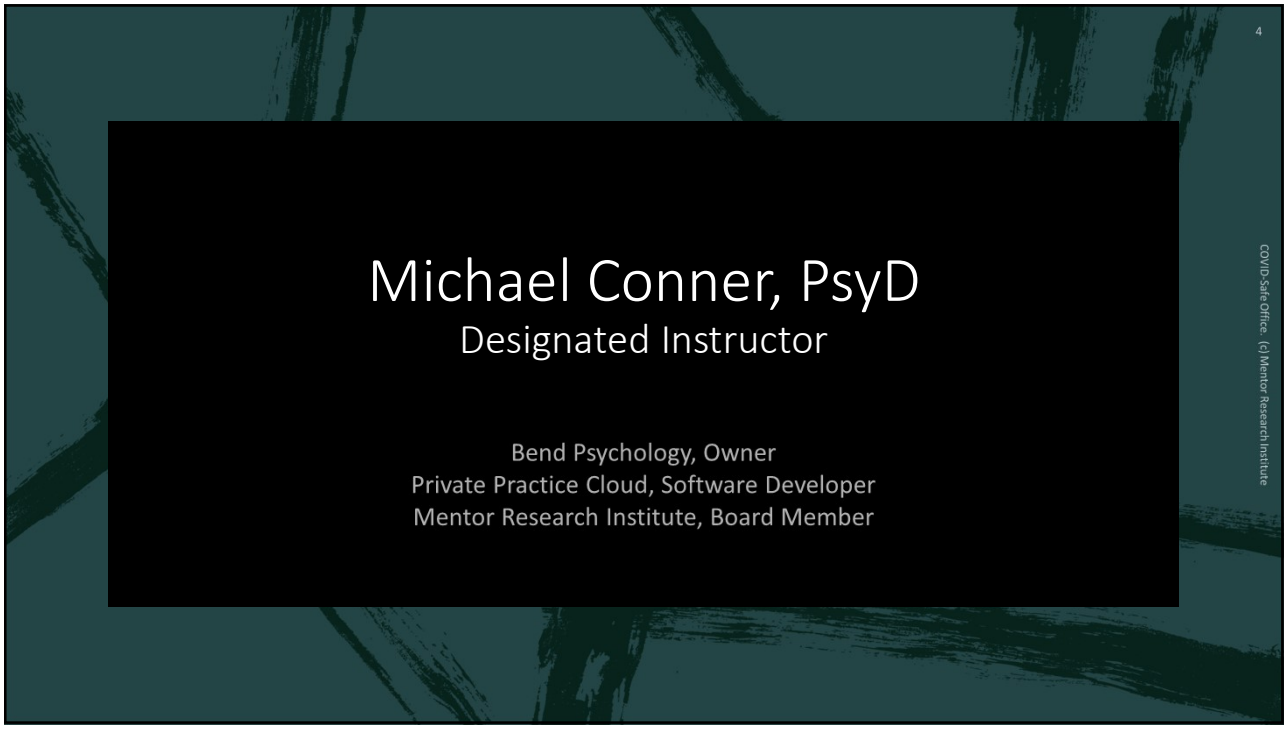
4
Michael Conner, PsyD
Designated Instructor
Bend Psychology, Owner
Private Practice Cloud, Software Developer
Mentor Research Institute, Board Member
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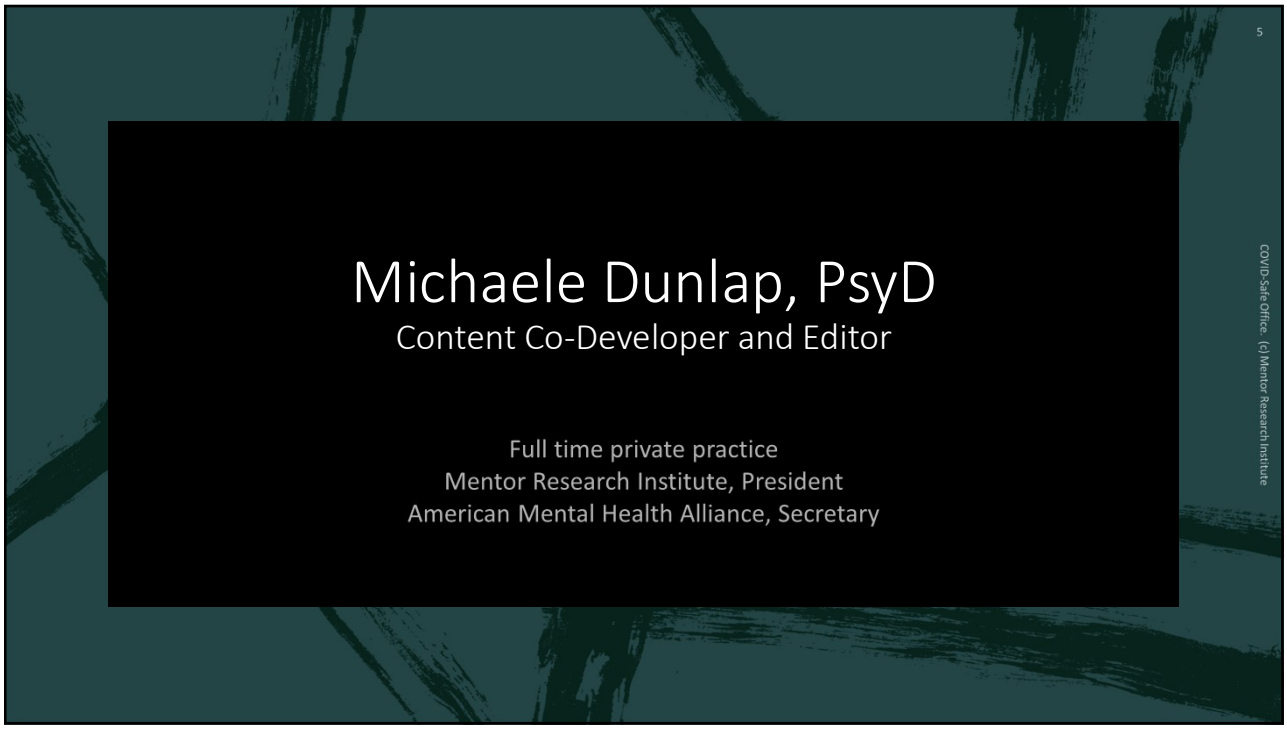
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Michaele Dunlap, PsyD
Content Co-Developer and Editor
Full time private practice
Mentor Research Institute, President
American Mental Health Alliance, Secretary
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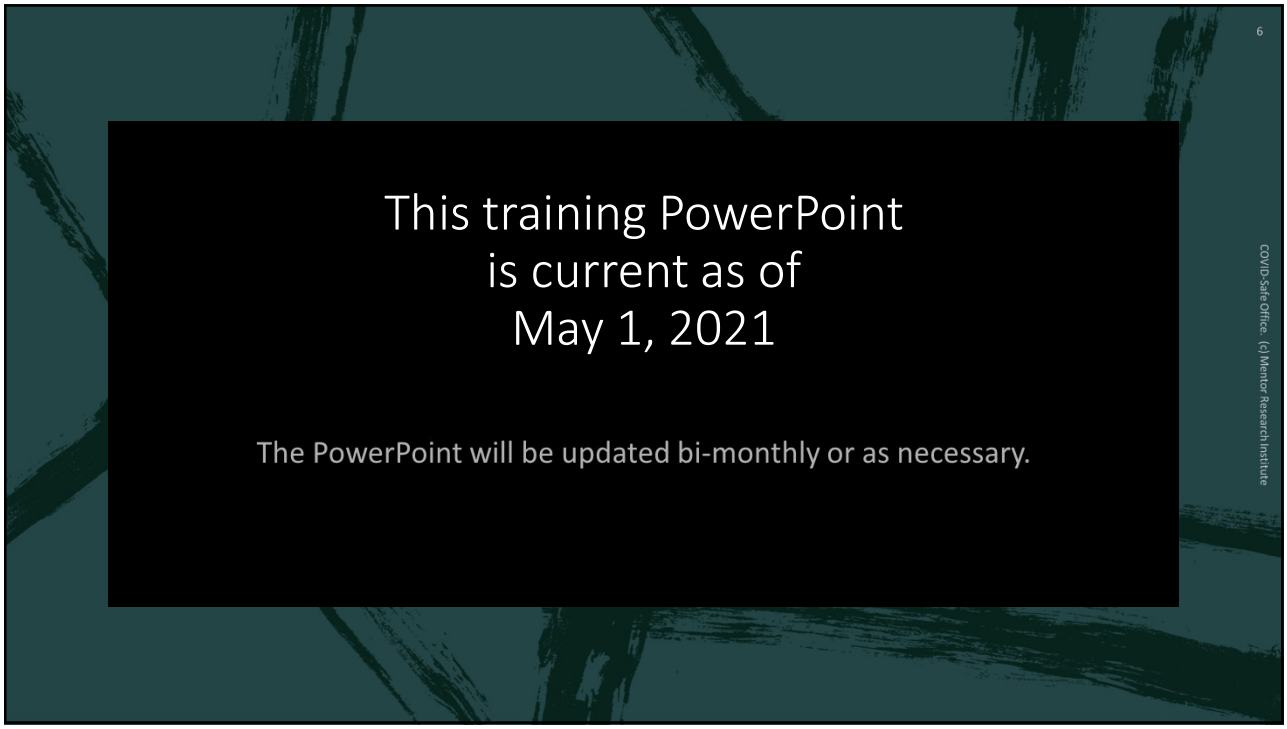
6
This training PowerPoint
is current as of
May 1, 2021
The PowerPoint will be updated bi-monthly or as necessary.
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Mentor Research Institute
- 4 Resources

1. Ethical Considerations For A COVID-Safe Office (March 23, 2021)
2. COVID-19 Re-Open & Maintain Your Practice - Training (July 2020)
3. COVID-19 Safe Air Quality For Psychotherapy Practice – Training (Release date: May, 2021)
4. COVID Safe Home Considerations (November 15, 2020)

7

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This training is aligned with 13 authoritative resources…

1. American Psychiatric Association Practice Guidance for COVID-19 (January 2021)
2. American Professional Agency - The Nuts and Bolts of Reopening your Practice after COVID-19 (May 2020)
3. InterOrganizational Practice Committee (IOPC): Guidance Recommendation for Models of Care During the Novel Coronavirus Pandemic (September 30, 2020).
4. Coronavirus (COVID-19) Response Resources form ASHRAE and others
5. APA COVID-19 Information and Resources
6. COVID-19 (2019 novel coronavirus) Resource Center for Physicians
7. Department of Labor – OSHA Guidance on Preparing Workplaces for COVID-19 (May 2020)
8. OSHA - Healthcare Workers and Employers
9. OSHA – COVID-19 Hazard Recognition
10. American Psychiatric Association Practice Guidance for COVID-19 (January 2021)
11. .COVID-19 and Oregon OSHA
12. Steps Healthcare Facilities Can Take to Stay Prepared for COVID-19
13. Factors to Consider in Reopening In-person Psychological Services During the COVID-19 Crisis (May 7, 2020)

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Research, writing & development of the technology for MRI COVID-19 Office safety trainings has consumed 498 hours (and counting).

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How long will SARS-CoV-2 be a problem?

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Depending on science and geopolitical factors -> 3 to 20+ years

The Pandemic may already be Endemic

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Are you already seeing or planning to see patients in-person?
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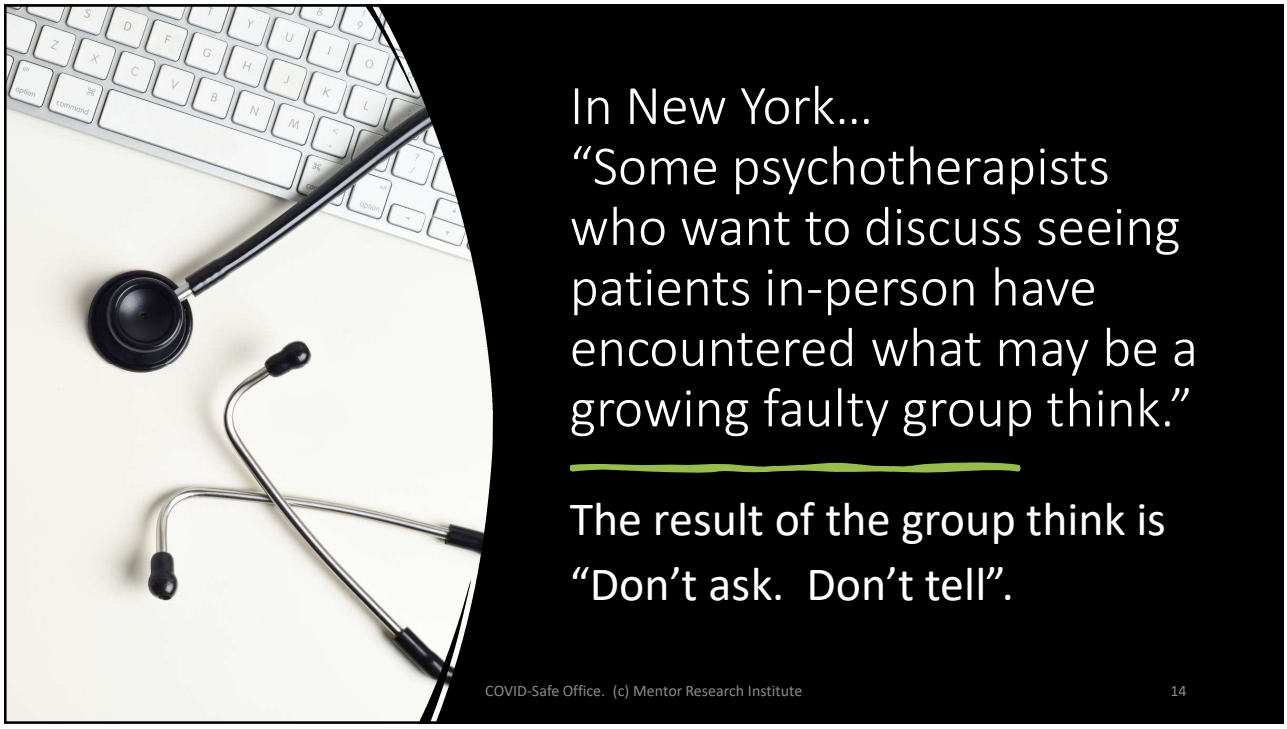
In New York…
“Some psychotherapists who want to discuss seeing patients in-person have encountered what may be a growing faulty group think.”
The result of the group think is “Don’t ask. Don’t tell”.
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Fully vaccinated people can socialize with people they trust.

What does that mean to an engineer?

15

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How do people make the wrong decision?

Herd Mentality - They follow what other people are doing.

Selection Bias - support evidence that will make their wishes come true.

Declarative Reasoning - They ignore 1st principles reasoning.

17

Failed "Committee" Reasoning Based on Declarations

Examples of Healthcare Work Tasks Associated with Exposure Risk Levels

Did 3,500 nurses die because of committees that relied of declarative reasoning and not science and engineering?

~~Lower~~ Medium (caution)	~~Medium~~ High	VERY High	~~Very~~ High
• Performing administrative duties in non-public areas of healthcare facilities, away from other staff members. • Note: For activities in the lower (caution) risk category, OSHA's *Interim Guidance for Workers and Employers of Workers at Lower Risk of Exposure* may be most appropriate.	• Providing care to the general public who are not known or suspected COVID-19 patients. • Working at busy staff work areas within a healthcare facility.	• Entering a known or suspected COVID-19 patient's room. • Providing care for a known or suspected COVID-19 patient not involving aerosol-generating procedures.	• Performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients. • Collecting or handling specimens from known or suspected COVID-19 patients.

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The following are assertions for consideration based on evidence and science.

There is no conclusion.

Physics > atmospheric science > epidemiology > biostatistics > engineering > ethics > psychotherapy

The Argumentative Theory: Predictions and Empirical Evidence, Hugo Mercier
Trends in Cognitive Science, 2016.
https://drive.google.com/file/d/12prGJndZqwZ1uBJ864fS86sfQOdrd0Kb/view

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CDC guidelines…
are designed to protect populations and reduce population disease and mortality.

Public health declarations and orders are published that can confusing especially if they are contrary to science and engineering.

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According to the CDC

- Indoor visits or small gatherings likely represent minimal risk to fully vaccinated people.
- What is minimal risk?
- Is minimal acceptable?
- https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html

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According to the CDC

- The level of precautions taken should be determined by the characteristics of the *unvaccinated* people, who remain unprotected against COVID-19
- What are the precaution levels?
- https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html

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According to the CDC

- If there is an increased risk of severe COVID-19, the safest place to visit is outdoors.
  - Indoor seating and conversation in an office with properly filtered air can be safer.
- If the visit takes place indoors, all attendees should take precautions including wearing a well-fitted mask, staying at least 6 feet away from others, and visiting in a well-ventilated space.
  - What is well ventilated? Properly filtered air can be better than well ventilated air
- ….if a fully vaccinated individual visits indoors with an unvaccinated friend who is seventy years old and therefore at risk of severe disease, they should both wear masks that fit snuggly, and maintain physical distance (at least 6 feet) or, to be safer, move the visit outdoors.
  - That is the same type of declarative reasoning that has been associated with the death of 3500 nurses. Why not present the risk?

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html

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According to CCD Guidelines

Revised: April 10, 2021

Vaccination means

1. It will probably keep you out of an intensive care unit in a hospital for the current predominant strains.
2. 5 out of 100 vaccinated ipeople will end up in a hospital (approximately).
3. You may refrain from quarantine and testing if you do not have symptoms of COVID-19 after contact with someone who has COVID-19.
4. You can still have Multisystem Inflammatory Syndrome (MIS-A, MIS-C).
5. New strains are showing greater infectivity, severity and/or reinfection rates.
6. You should not gather with people who do not live close by.
7. You can visit with other fully vaccinated people indoors without wearing masks or staying 6 feet apart.
8. You can visit with unvaccinated people from one other household indoors without wearing masks or staying 6 feet apart if everyone in the other household is at low risk for severe disease.
9. You can still become a carrier.
10. Infection rates among children is increasing with new strains.

CDC Issues First Set of Guidelines on How Fully Vaccinated People Can Visit Safely with Others

Pre-Infection is No Protection Against South African Variant

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The fact that a psychotherapist is vaccinated means they will not be likely to end up in a hospital.

However, the **next patient** can become infected by the previous patient if you do not maintain a COVID-Safe office.

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COVID-19 Vaccines vs Variants—
How Much Immunity Is Enough

JAMA, March 2021

B.1.351, B.1.1.7 & SARS-CoV-2

- "…nearly all vaccines used in humans prevent asymptomatic infection and spread."
- "In general, vaccines that are effective in reducing infections do have major impacts on reducing transmission,"
- "…In March, Pfizer and BioNTech announced that non–peer-reviewed data from Israel showed their vaccine was 94% effective against asymptomatic SARS-CoV-2 infection."
- Modifying vaccines to target variants isn't difficult. For example, with Pfizer-BioNTech's and Moderna's mRNA vaccines, "it's very convenient, because, basically, all you do is change a computer program and the synthetic for the synthesizing portion of this and you can change the vaccine,"

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Can we make our offices a "fortress" against ..
SARS-CoV-2
& dust, pollen, fumes, bacteria and other viruses?
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The first thing you need is…
a method to ethically screen out patients who represent an unacceptable risk.
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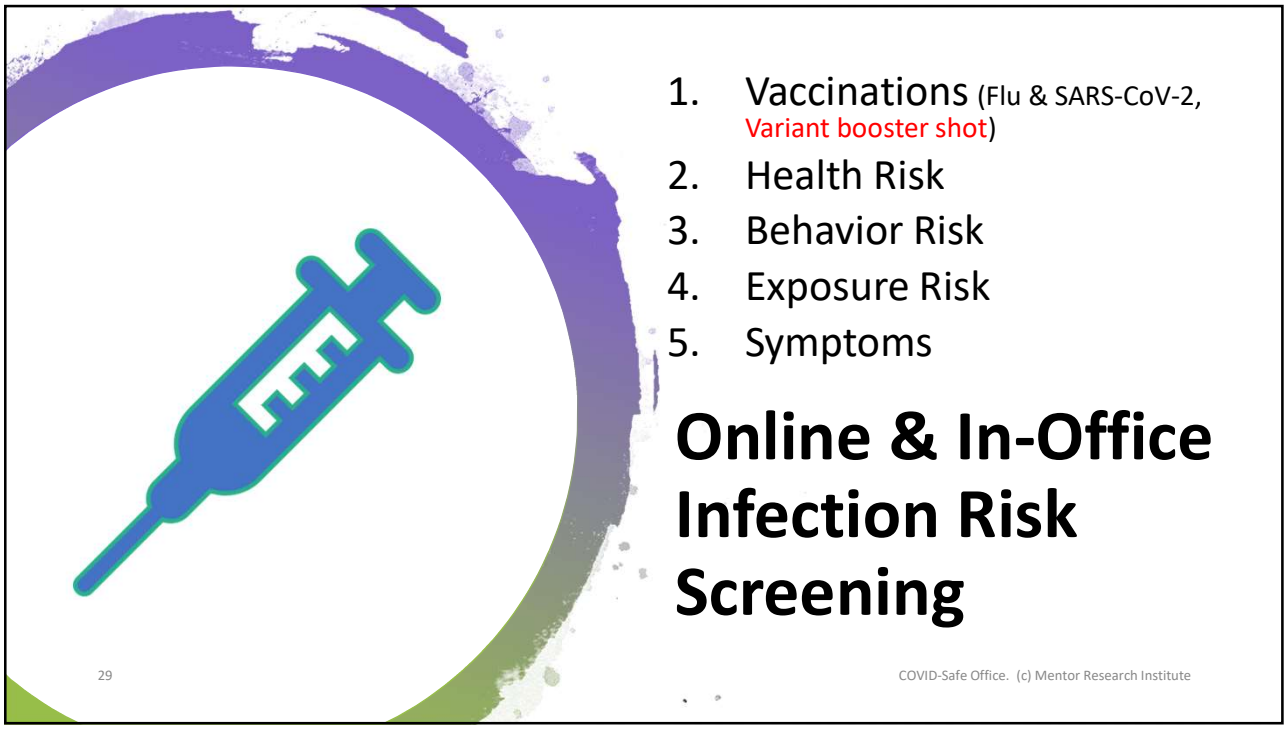
1. Vaccinations (Flu & SARS-CoV-2, Variant booster shot)
2. Health Risk
3. Behavior Risk
4. Exposure Risk
5. Symptoms
Online & In-Office Infection Risk Screening
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COVID-Safe Office. (c) Mentor Research Institute

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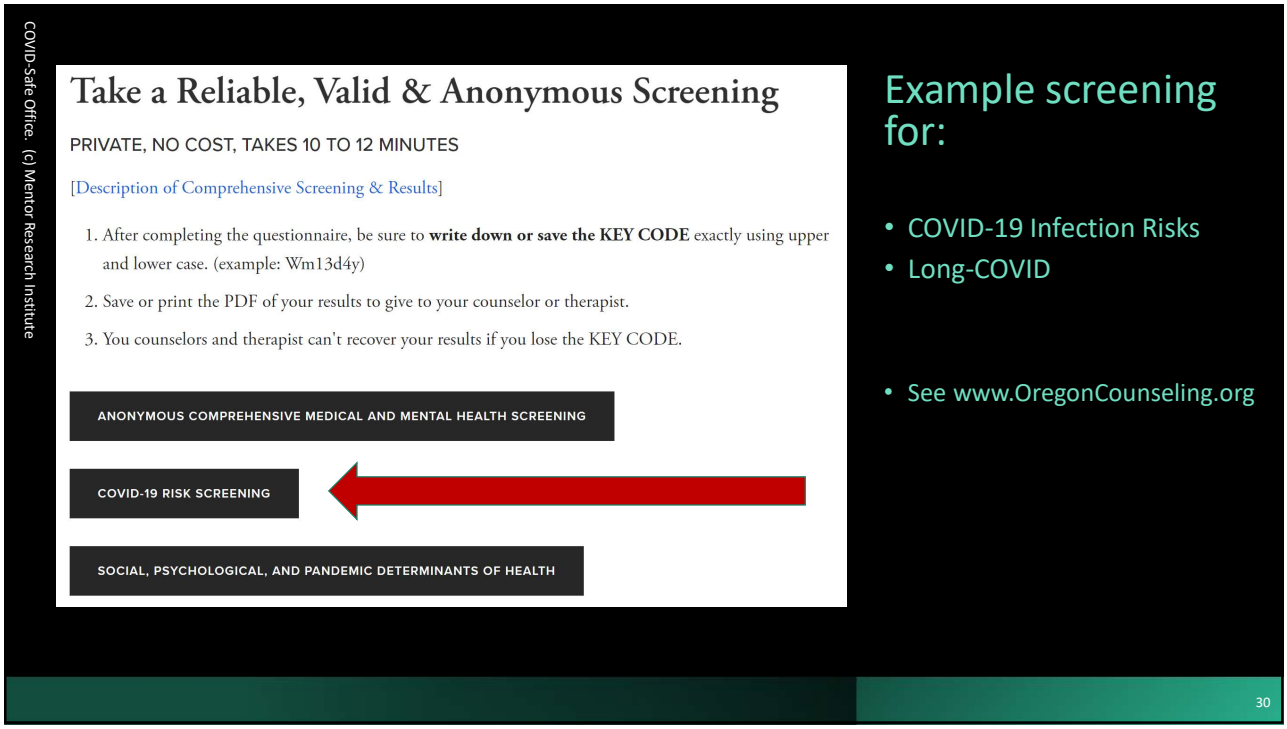
COVID-Safe Office. (c) Mentor Research Institute
Take a Reliable, Valid & Anonymous Screening
PRIVATE, NO COST, TAKES 10 TO 12 MINUTES
[Description of Comprehensive Screening & Results]
1. After completing the questionnaire, be sure to write down or save the KEY CODE exactly using upper and lower case. (example: Wm13d4y)
2. Save or print the PDF of your results to give to your counselor or therapist.
3. You counselors and therapist can't recover your results if you lose the KEY CODE.
ANONYMOUS COMPREHENSIVE MEDICAL AND MENTAL HEALTH SCREENING
COVID-19 RISK SCREENING
SOCIAL, PSYCHOLOGICAL, AND PANDEMIC DETERMINANTS OF HEALTH
Example screening for:
• COVID-19 Infection Risks
• Long-COVID
• See www.OregonCounseling.org
30

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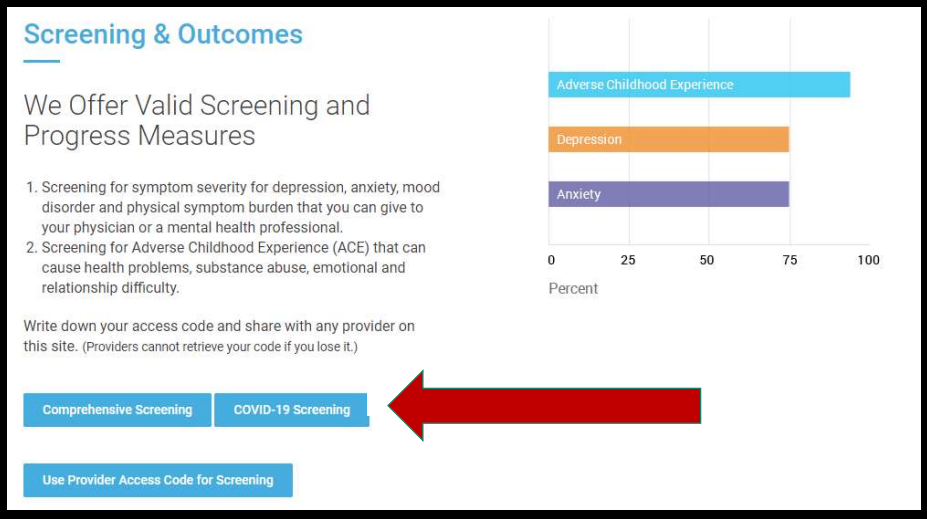

Another example screening:

OregonTherapyOptions.com

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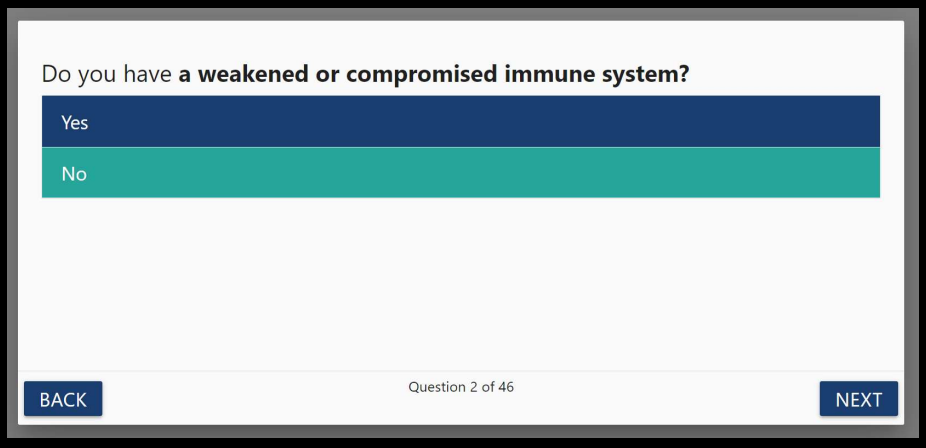

Comprehensive Screening: 46 questions

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Anonymous Links on Mentor Research Institute Servers that have HIPAA assurance

https://client.lightq.net/anonymousquestionnaire.html?AccessCode=mhWA5In&QuestionnaireName=COVID-19%20Comprehensive%20Infection%20Risk%20Screening%20v1.33

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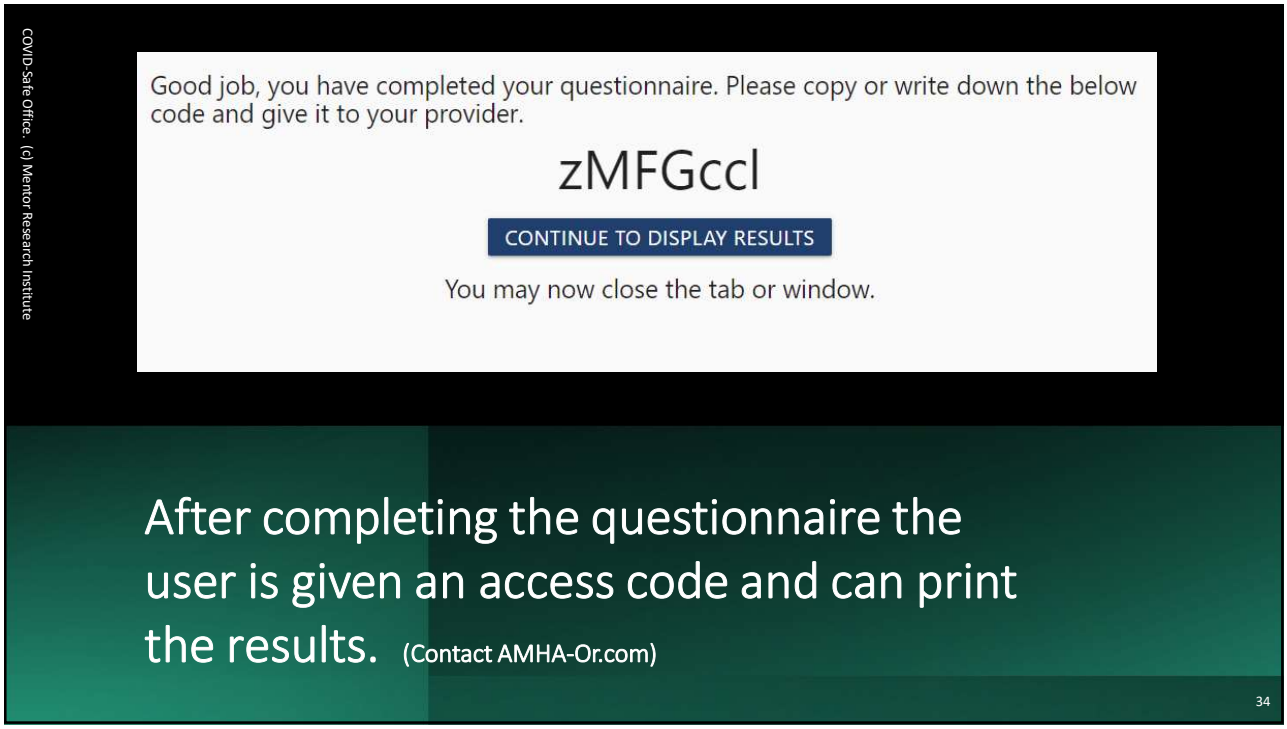

After completing the questionnaire the user is given an access code and can print the results. (Contact AMHA-Or.com)

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Screening can be used as evidence for an ethical decision whether or not to see a patient in-person.

Is it acceptable to rely on valid content to estimate the risk that a patient may be infectious?

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Confidential Report

Anonymous Questionnaire Summary

Access Code	zMFGccl
COVID-19 Health Risks score:	1
Covid-19 Symptoms v1.6 score:	25
COVID-19 Exposure v1.8 score:	19
COVID-19 Activity v1.4 score:	6
COVID-19 and Flu Vaccinations score:	1

COVID-19 Health Risks

Adults of any age with the following conditions are at increased risk of severe illness from the virus that causes COVID-19. Patients with weakened immune system, and any underlying health problems, are more likely when infected and to have a severe illness.

0	No	Do you have	a history of asthma, lung disease or breathing problems?
0	No	Do you have	a weakened or compromised immune system?
1	Yes	Are you	mildly, moderately or severely overweight?
0	No	Do you have	a history of kidney or liver problems?
0	No	Are you	a current or former cigarette, cigar or other tobacco smoker?
0	No	Are you	diabetic or pre-diabetic?
0	No	Do you have	cancer or been treated for cancer?
0	No	Do you have	a history of heart conditions and other cardiovascular (heart blood circulation) or cerebrovascular (brain circulation) problems?
0	No	Do you have	multiple health problems?

Example Report

Screenings should have a moderate to high rate of false positives.

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Body Temperature

- > 99.1F (1 SD)
- Outside temperature effects
- Hat effects

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The second task is to address…

Fomite Sanitization

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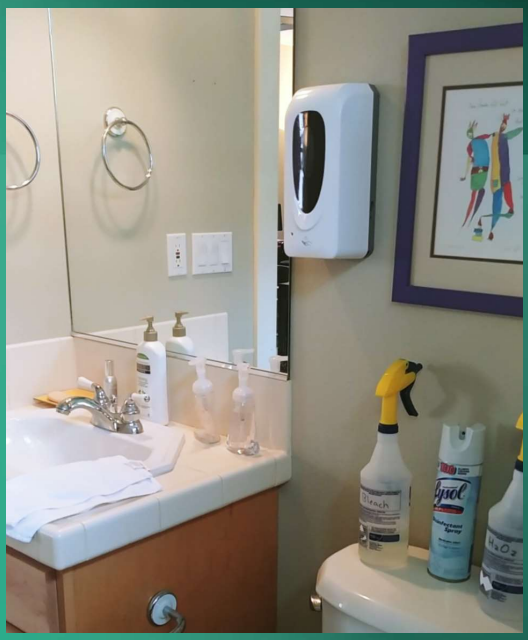
How often…

At least every 24 hours if used less that 12 hours per day.

https://osha.oregon.gov/OSHARules/div1/437-001-0744.pdf

- Soap
- Cloth hand towel
- Alcohol
- Bleach
- Hydrogen peroxide



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SOAP

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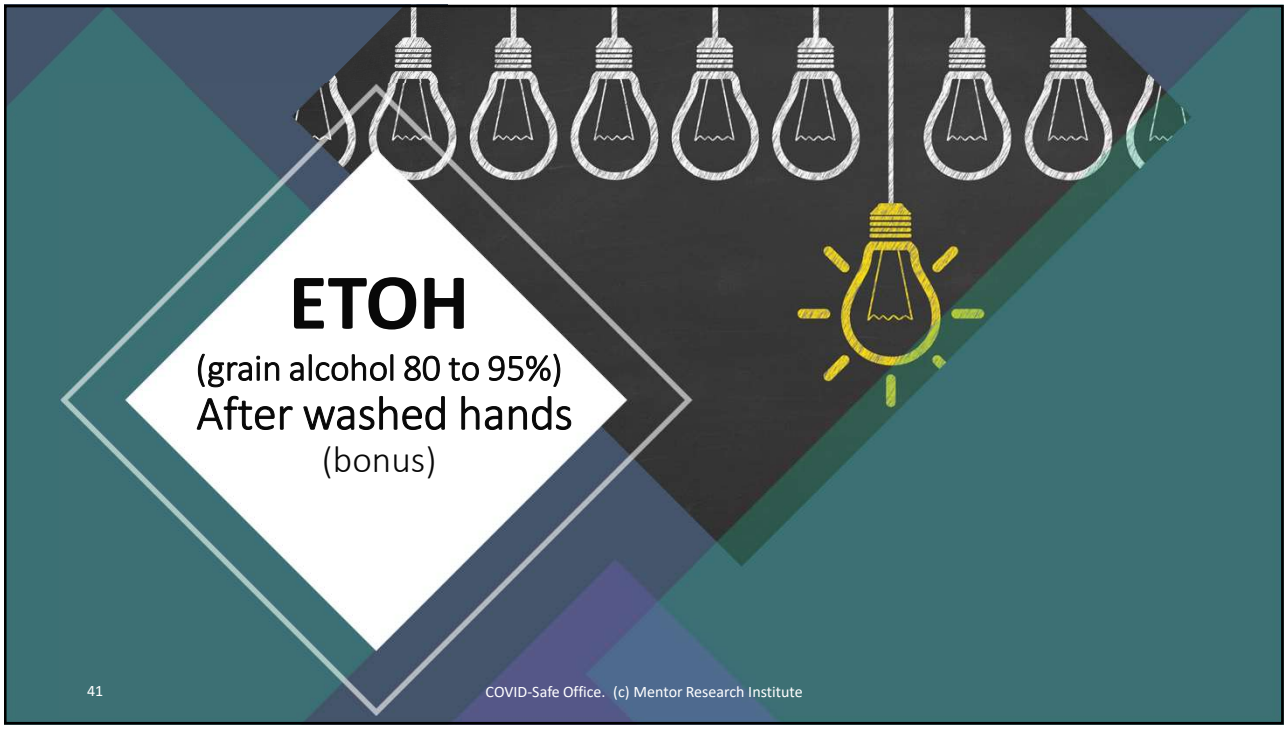
- **exposes fomites**
- **removes mediums**
- **kills SARS-CoV-2**

Target:

- Hands
- Removing grime from surfaces

40


ETOH
(grain alcohol 80 to 95%)
After washed hands
(bonus)
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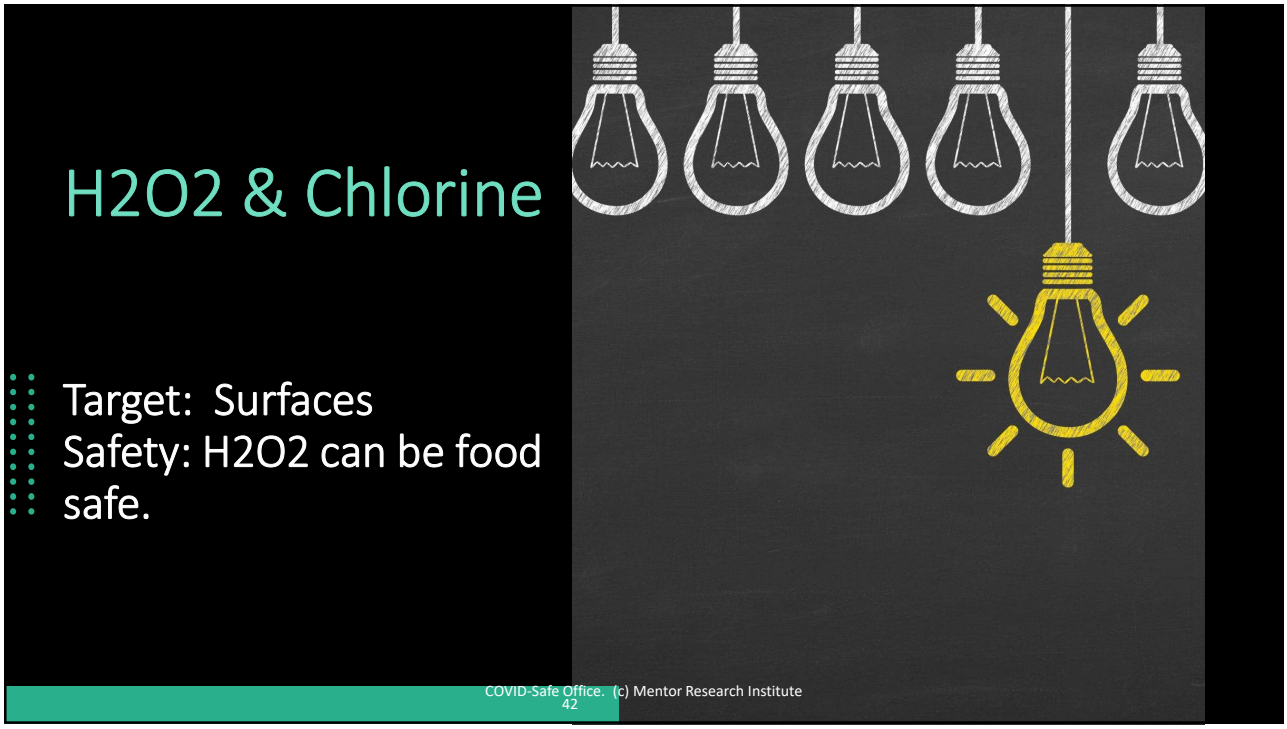
H2O2 & Chlorine
Target: Surfaces
Safety: H2O2 can be food safe.
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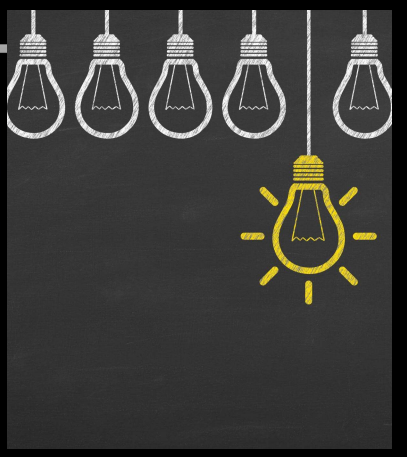
Atomized Disinfectant

Food safe H2O2 (6%)



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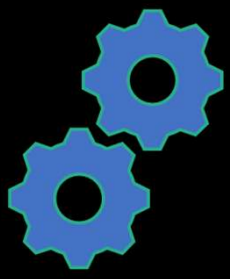

Engineering Controls

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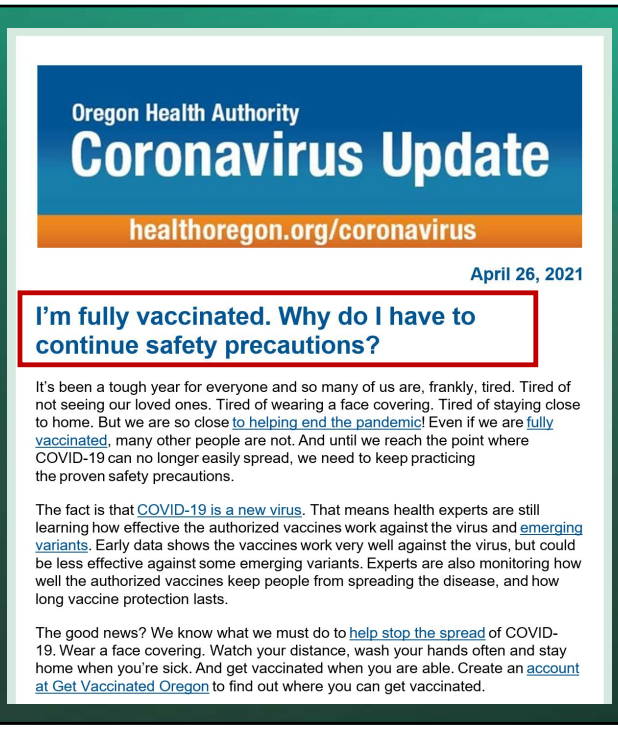

Oregon Health Authority

Coronavirus Update

healthoregon.org/coronavirus

April 26, 2021

I'm fully vaccinated. Why do I have to continue safety precautions?

It's been a tough year for everyone and so many of us are, frankly, tired. Tired of not seeing our loved ones. Tired of wearing a face covering. Tired of staying close to home. But we are so close to helping end the pandemic! Even if we are fully vaccinated, many other people are not. And until we reach the point where COVID-19 can no longer easily spread, we need to keep practicing the proven safety precautions.

The fact is that COVID-19 is a new virus. That means health experts are still learning how effective the authorized vaccines work against the virus and emerging variants. Early data shows the vaccines work very well against the virus, but could be less effective against some emerging variants. Experts are also monitoring how well the authorized vaccines keep people from spreading the disease, and how long vaccine protection lasts.

The good news? We know what we must do to help stop the spread of COVID-19. Wear a face covering. Watch your distance, wash your hands often and stay home when you're sick. And get vaccinated when you are able. Create an account at Get Vaccinated Oregon to find out where you can get vaccinated.

Which of these is safer?

Breathing air from an N-95 face-coverings that filters 95% of particles down to 0.1 microns.

Breathing air from a UltraHEPA filter that removes 99.997% of particles down to 0.003 microns.

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Engineering Controls

https://osha.oregon.gov/OSHARules/div1/437-001-0744.pdf

How have engineering controls such as ventilation and physical barriers been used to minimize peoples exposure to COVID-19?

- Portable air filtration units equipped with HEPA filters
- Airborne infection isolation rooms
- Physician exam rooms
- Local exhaust ventilation
- Whole-building HVAC systems

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Terminology you need to know

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HVAC

Heating Ventilation Air Conditioning

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CADR
Clean Air Delivery Rate
100ft3 to 250ft3
0.003 to 0.1 µ
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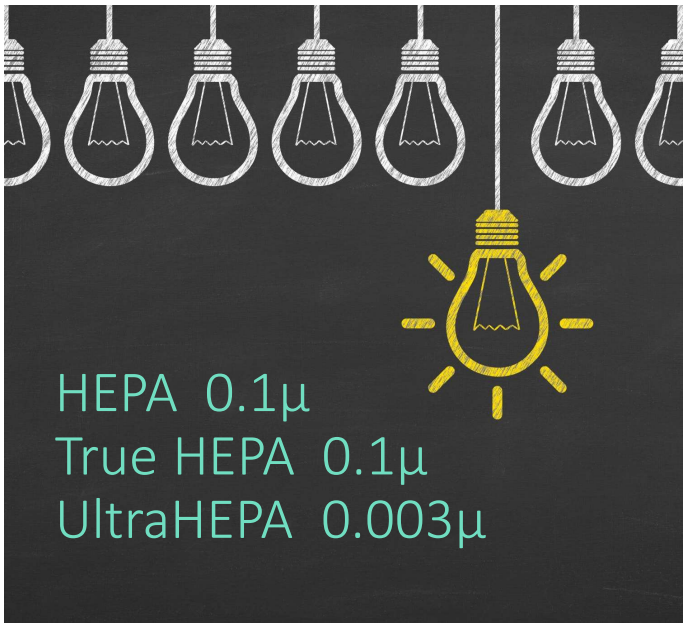
RAC
Room Air Clearance
The required number of air exchanges between patient visits
Physician exam room RAC >= 6
Airborn infectious disease RAC >=13
50

50

HEPA

- High-Efficiency Particulate Air
- High-Efficiency Particulate Arrestor



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MERV Rating	Minimum % of particles removed by air filter		
	E1 particles (0.3 - 1.0 microns)	E2 particles (1.0 - 3.0 microns)	E3 particles (3.0 - 10.0 microns)
MERV-1	-	-	<20%
MERV-2	-	-	<20%
MERV-3	-	-	<20%
MERV-4	-	-	<20%
MERV-5	-	-	>20%
MERV-6	-	-	>35%
MERV-7	-	-	>50%
MERV-8	-	>20%	>70%
MERV-9	-	>35%	>75%
MERV-10	-	>50%	>80%
MERV-11	>20%	>65%	>85%
MERV-12	>35%	>80%	>90%
MERV-13	>50%	>85%	>90%
MERV-14	>75%	>90%	>95%
MERV-15	>85%	>90%	>95%
MERV-16	>95%	>95%	>95%

MERV

(Minimum Efficiency Reporting Value)

The MERV rating system is intended to be used to classify a filter's ability to remove particulates from the air.

Is MERV 13 adequate?

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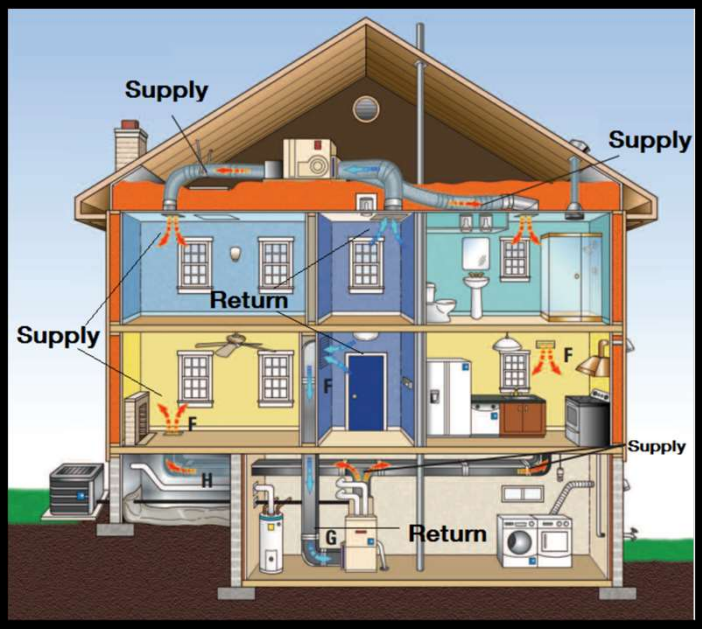
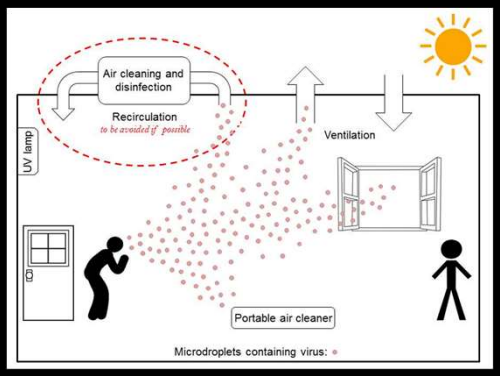


SHARED AIR

- Shared air among offices.
- Requires a sealed building.
- MERV 13 is not great but may be "good enough"



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Local Ventilation

1. Air supply
2. Air exhaust
3. Air exchange

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Pressurized Air Wall & Dedicated Clean Air Supply for Patient

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What does 99.997% CADR and 0.003 microns mean?
0.003% of particles escape.

UltraHEPA also kills virus
1. Impaction
2. Desiccation
3. Wind shear

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Dehumidifier

- 35% ideal
- < 30% is too low
- Add bleach to tank

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Ventilation using HVAC

For employers

OSHA – Oregon

Confusion

The employer is **not** required to meet the provisions of the American National Standards (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards 62.1 and 62.2 (ASHRAE 2019a, 2019b), but to the degree the employer does so it is in compliance with this paragraph. In accordance with the HVAC manufacturer's instructions and the design specifics of the HVAC system and as frequently as is necessary, the employer must ensure the following:

A) All air filters are maintained and replaced as necessary to ensure the proper function of the ventilation system; and

B) All intake ports that provide outside air to the HVAC system are cleaned, maintained, and cleared of any debris that may affect the function and performance of the ventilation system.

Pg 9

https://osha.oregon.gov/OSHARules/div1/437-001-0744.pdf

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Psychothrapist BEWARE - ASHRAE Ventilation Standards in General for a Psychiatric Exam Room (RAC) is not Engineered for SAR-CoV-2 Infection Control

Table L-1 Check Table for the Ventilation Rate Procedure *(Continued)*

Occupancy Category	Combined Outdoor Air Rate (R_c) cfm/ft^2	L/s· m^2
Psychiatric consultation room	0.21	
Psychiatric examination room	0.21	
Psychiatric group room	0.41	
Psychiatric seclusion room	0.15	
Urgent care examination room	0.36	
Urgent care observation room	0.21	
Urgent care treatment room	0.44	
Urgent care triage room	0.51	

- **A CDC RAC of 6 requires 15 minutes in a typical physician exam room appointment. (e.g. 180 to 200ft3)**
- **ASHRAE standard HVAC RAC 6 ventilation is 50 minutes when clearing 105ft3/min in 5000ft3.**

OHSA Oregon does not expect ASHRAE ventilation standards for SARS-Cov-2 mitigation. Those standards may not be adequate alone for infection control if 50 minutes exposure in a 500ft2 psychotherapy office.

ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers

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Suspended Ceilings (These considerations are based on simplifications)

Suspended ceilings have special considerations that require inspection and may require special engineering.

In order for air filtration and ventilation to work, there should be adequate air circulation with minimal turbulence to ensure that stagnate air does not accumulate aerosols.

The space between a ceiling and suspended ceiling should have minimal dust and potential contaminants.

In general, the room air clearance rate (RAC) might be increased to correct for effects of stagnant air.

The ceiling space might require sealing with a hard surface coating.

The ceiling space might require ventilation.
.

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Proxies for Aerosolized Infection Risk Monitoring

1. CO2
2. Particle Count
3. Room temperature
4. Humidity
5. Visibility improvement (sight & laser)
6. Time (virus biological weaknesses)

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Monitoring

1. CO2
2. Temperature
3. Humidity

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Particle Monitoring

- 2.5 to 5.0 microns
- > 5 microns

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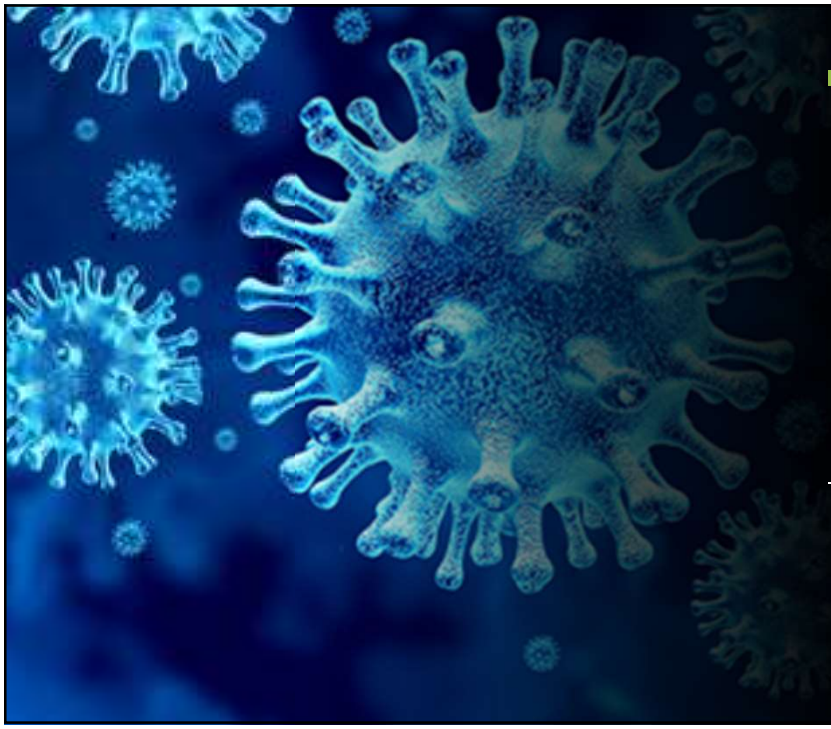
Proxy measures of air quality are
visual, odor, CO2, humidity, temperature, & particle count.

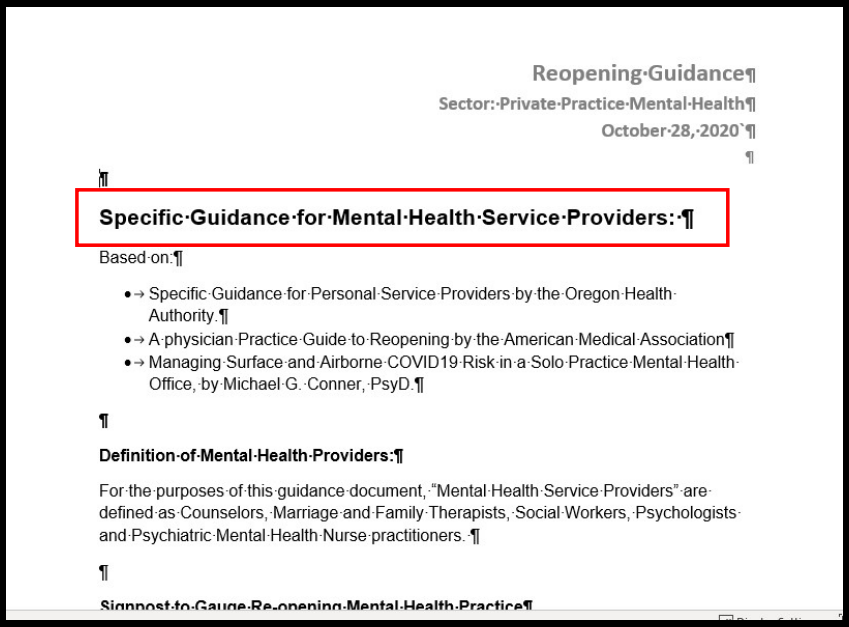
Cleared in 16 minutes with 2 AirDoctor machines running at high speed.

65



The half life of aerosolized SARS-CoV-2 is 50 to 60% per hour

66



Reopening·Guidance¶
Sector:·Private·Practice·Mental·Health¶
October·28,·2020`¶
¶

Specific·Guidance·for·Mental·Health·Service·Providers:·¶

Based·on:¶

- → Specific·Guidance·for·Personal·Service·Providers·by·the·Oregon·Health·Authority.¶
- → A·physician·Practice·Guide·to·Reopening·by·the·American·Medical·Association¶
- → Managing·Surface·and·Airborne·COVID19·Risk·in·a·Solo·Practice·Mental·Health·Office,·by·Michael·G.·Conner,·PsyD.¶

¶

Definition·of·Mental·Health·Providers:¶

For·the·purposes·of·this·guidance·document,·"Mental·Health·Service·Providers"·are·defined·as·Counselors,·Marriage·and·Family·Therapists,·Social·Workers,·Psychologists·and·Psychiatric·Mental·Health·Nurse·practitioners.·¶

¶

Signpost·to·Gauge·Re-opening·Mental·Health·Practice¶

Specific Office Guidance

Available for download:
www.OregonTherapyForum.com

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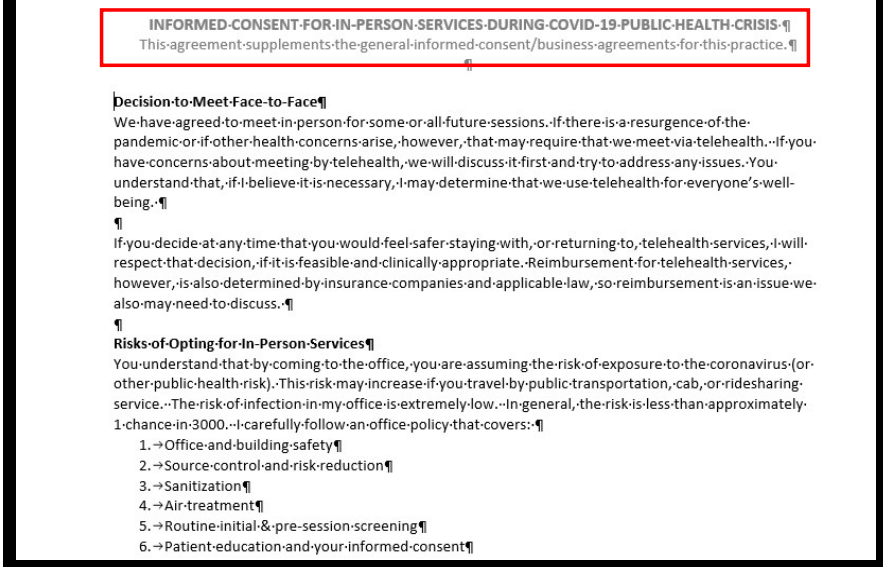

INFORMED·CONSENT·FOR·IN-PERSON·SERVICES·DURING·COVID-19·PUBLIC·HEALTH·CRISIS·¶
This·agreement·supplements·the·general·informed·consent/business·agreements·for·this·practice.¶
¶

Decision·to·Meet·Face-to-Face¶
We·have·agreed·to·meet·in·person·for·some·or·all·future·sessions.·If·there·is·a·resurgence·of·the·pandemic·or·if·other·health·concerns·arise,·however,·that·may·require·that·we·meet·via·telehealth.··If·you·have·concerns·about·meeting·by·telehealth,·we·will·discuss·it·first·and·try·to·address·any·issues.·You·understand·that,·if·I·believe·it·is·necessary,·I·may·determine·that·we·use·telehealth·for·everyone's·well-being.·¶
¶
If·you·decide·at·any·time·that·you·would·feel·safer·staying·with,·or·returning·to,·telehealth·services,·I·will·respect·that·decision,·if·it·is·feasible·and·clinically·appropriate.·Reimbursement·for·telehealth·services,·however,·is·also·determined·by·insurance·companies·and·applicable·law,·so·reimbursement·is·an·issue·we·also·may·need·to·discuss.·¶
¶
Risks·of·Opting·for·In-Person·Services¶
You·understand·that·by·coming·to·the·office,·you·are·assuming·the·risk·of·exposure·to·the·coronavirus·(or·other·public·health·risk).·This·risk·may·increase·if·you·travel·by·public·transportation,·cab,·or·ridesharing·service.··The·risk·of·infection·in·my·office·is·extremely·low.··In·general,·the·risk·is·less·than·approximately·1·chance·in·3000.··I·carefully·follow·an·office·policy·that·covers:·¶

1. → Office·and·building·safety¶
2. → Source·control·and·risk·reduction¶
3. → Sanitization¶
4. → Air·treatment¶
5. → Routine·initial·&·pre-session·screening¶
6. → Patient·education·and·your·informed·consent¶

Informed Consent for In-Person Psychotherapy

Available at:
www.OregonTherapyForum.com

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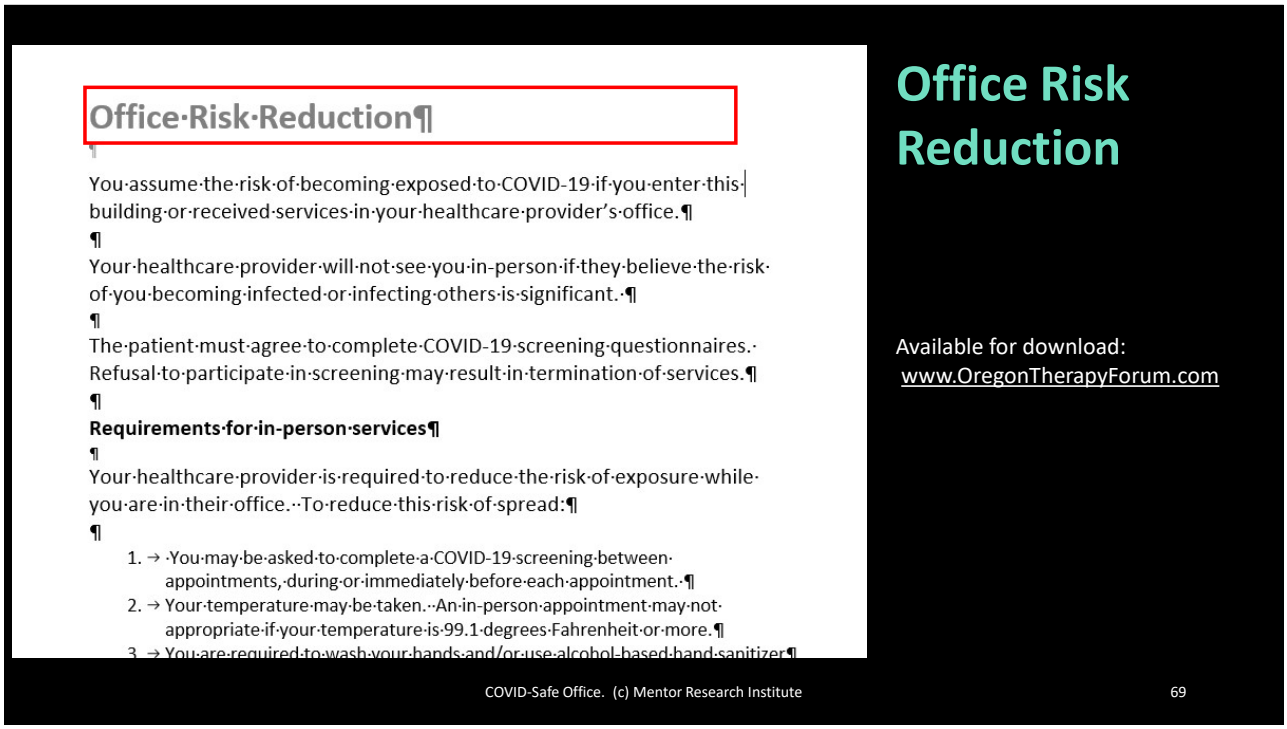

Office Risk Reduction

Available for download: www.OregonTherapyForum.com

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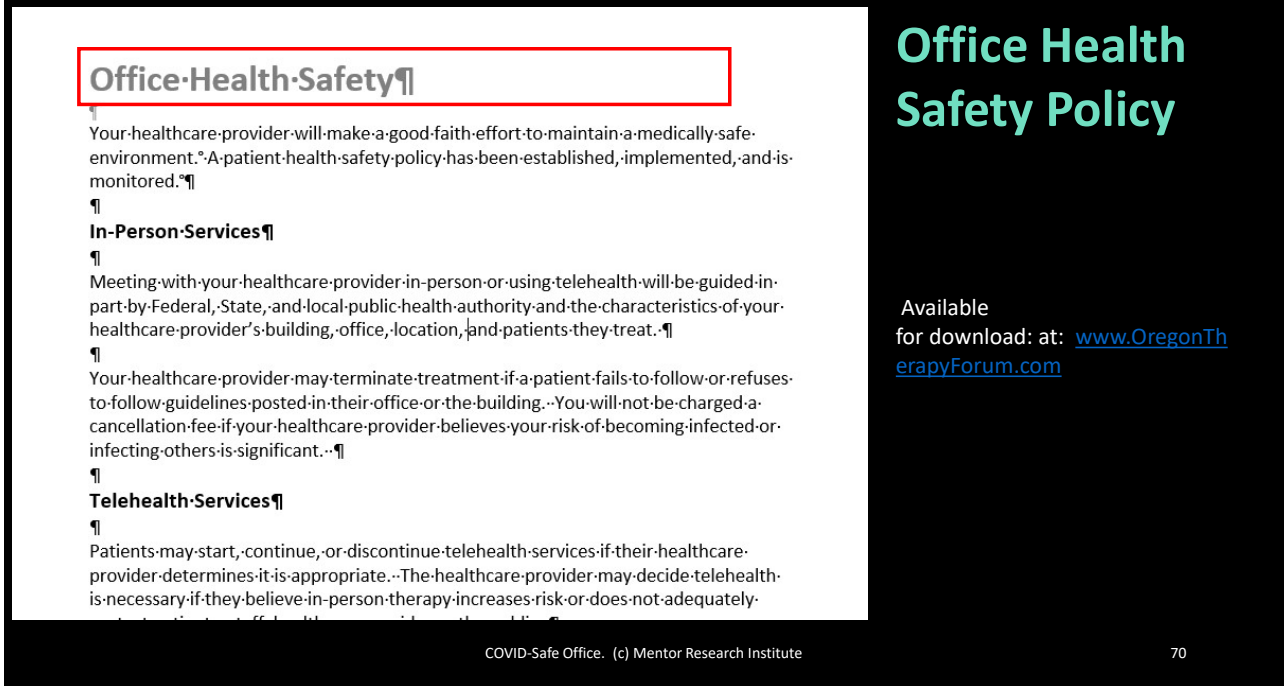

Office Health Safety Policy

Available for download: at: www.OregonTherapyForum.com

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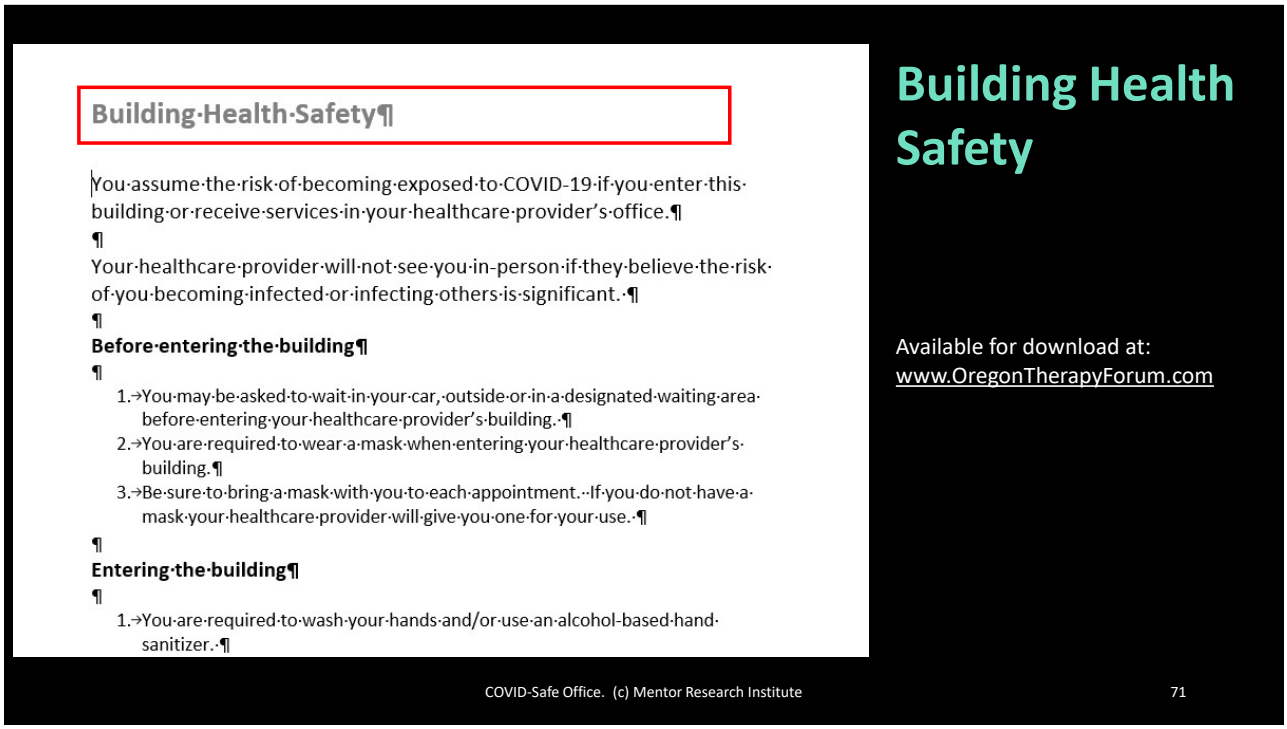
Building·Health·Safety¶
You·assume·the·risk·of·becoming·exposed·to·COVID-19·if·you·enter·this·building·or·receive·services·in·your·healthcare·provider's·office.¶
¶
Your·healthcare·provider·will·not·see·you·in-person·if·they·believe·the·risk·of·you·becoming·infected·or·infecting·others·is·significant.·¶
¶
Before·entering·the·building¶
¶
1.→You·may·be·asked·to·wait·in·your·car,·outside·or·in·a·designated·waiting·area·before·entering·your·healthcare·provider's·building.·¶
2.→You·are·required·to·wear·a·mask·when·entering·your·healthcare·provider's·building.¶
3.→Be·sure·to·bring·a·mask·with·you·to·each·appointment.··If·you·do·not·have·a·mask·your·healthcare·provider·will·give·you·one·for·your·use.·¶
¶
Entering·the·building¶
¶
1.→You·are·required·to·wash·your·hands·and/or·use·an·alcohol-based·hand·sanitizer.·¶
Building Health Safety
Available for download at:
www.OregonTherapyForum.com
COVID-Safe Office. (c) Mentor Research Institute
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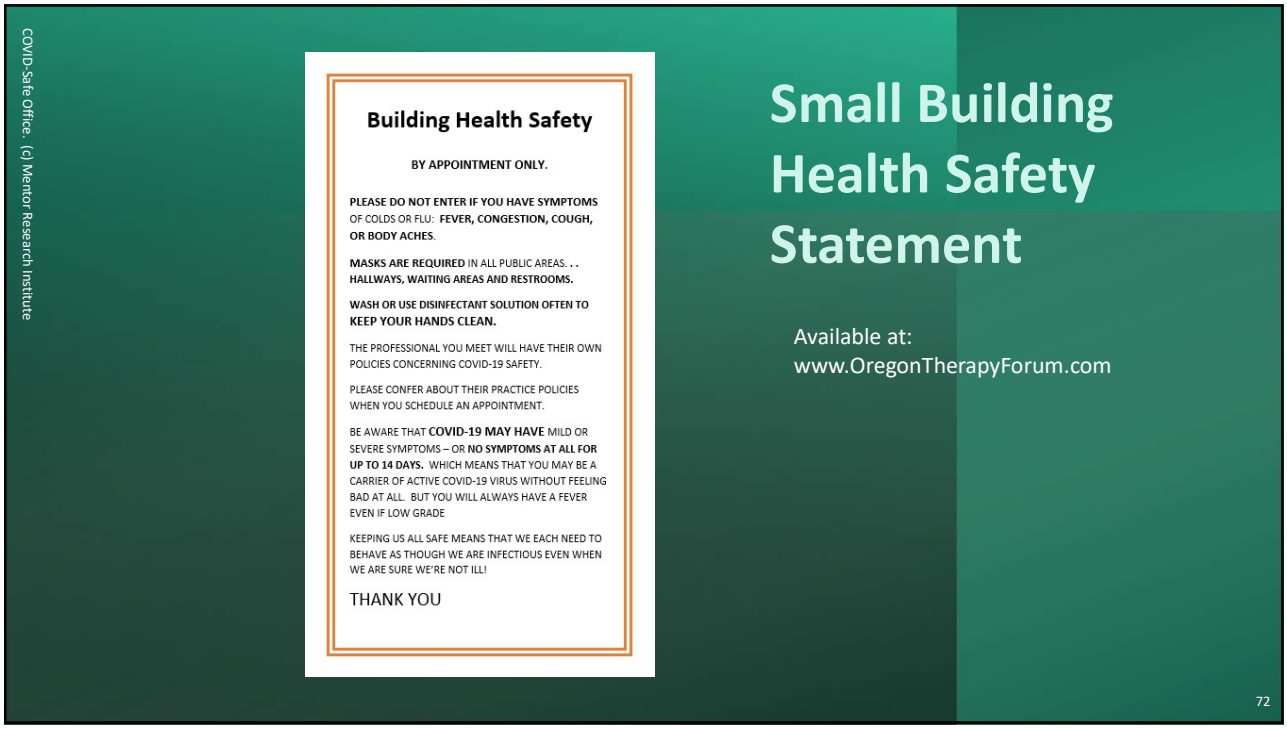
COVID-Safe Office. (c) Mentor Research Institute
Building Health Safety
BY APPOINTMENT ONLY.
PLEASE DO NOT ENTER IF YOU HAVE SYMPTOMS OF COLDS OR FLU: FEVER, CONGESTION, COUGH, OR BODY ACHES.
MASKS ARE REQUIRED IN ALL PUBLIC AREAS. . . HALLWAYS, WAITING AREAS AND RESTROOMS.
WASH OR USE DISINFECTANT SOLUTION OFTEN TO KEEP YOUR HANDS CLEAN.
THE PROFESSIONAL YOU MEET WILL HAVE THEIR OWN POLICIES CONCERNING COVID-19 SAFETY.
PLEASE CONFER ABOUT THEIR PRACTICE POLICIES WHEN YOU SCHEDULE AN APPOINTMENT.
BE AWARE THAT COVID-19 MAY HAVE MILD OR SEVERE SYMPTOMS – OR NO SYMPTOMS AT ALL FOR UP TO 14 DAYS. WHICH MEANS THAT YOU MAY BE A CARRIER OF ACTIVE COVID-19 VIRUS WITHOUT FEELING BAD AT ALL. BUT YOU WILL ALWAYS HAVE A FEVER EVEN IF LOW GRADE
KEEPING US ALL SAFE MEANS THAT WE EACH NEED TO BEHAVE AS THOUGH WE ARE INFECTIOUS EVEN WHEN WE ARE SURE WE'RE NOT ILL!
THANK YOU
Small Building Health Safety Statement
Available at:
www.OregonTherapyForum.com
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Is walking and talking safer than sitting in your office?

Estimation of airborne viral emission: Quanta emission rate of SARS-CoV-2 for infection risk assessment

G. Buonanno[a,b,*], L. Stabile[a], L. Morawska[b]

[a] Department of Civil and Mechanical Engineering, University of Cassino and Southern Lazio, Cassino, FR, Italy
[b] International Laboratory for Air Quality and Health, Queensland University of Technology, Brisbane, Qld, Australia

The results showed that high quanta emission rates (> 100 quanta h−1) can be reached by an asymptomatic infectious SARS-CoV-2 subject performing vocalization during light activities (i.e. walking slowly) whereas a symptomatic SARS-CoV-2 subject in resting conditions mostly has a low quanta emission rate (< 1 quanta h−1).

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https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le2342C.pdf

PUBLIC HEALTH DIVISION
Kate Brown, Governor

Oregon Health Authority

800 NE Oregon
Portland OR 97232
COVID.19@dhsoha.state.or.us
healthoregon.org/coronavirus

Effective Date: January 29, 2021

Sector Guidance — General Guidance for Employers and Organizations

Authority: Executive Order No. 20-66, ORS 433.441, ORS 433.443, ORS 431A.010

Applicability: All employers subject to Executive Order 20-66.

Enforcement: To the extent this guidance requires compliance with certain provisions, it is enforceable as specified in Executive Order No. 20-66, paragraph 10.

Definitions: For purposes of this guidance, the following definition applies:

- "Net Area" means the actual occupied area not including unoccupied accessory areas such as corridors, stairways, ramps, toilet rooms, mechanical rooms and closets. The net area is intended to include only the area of the room used for a specific purpose and does not include the areas mentioned above and therefore is not included in the net area.
- "Outdoor" means any open-air space including any space which may have a temporary or fixed cover (e.g. awning or roof) and at least fifty percent of the square footage of its sides open for airflow such that open sides are not adjacent to each other.

Sector Guidance — General Guidance for Employers and Organizations

January 29, 2021

The Public Health Division manages public health. They expect healthcare professionals will practice competently.

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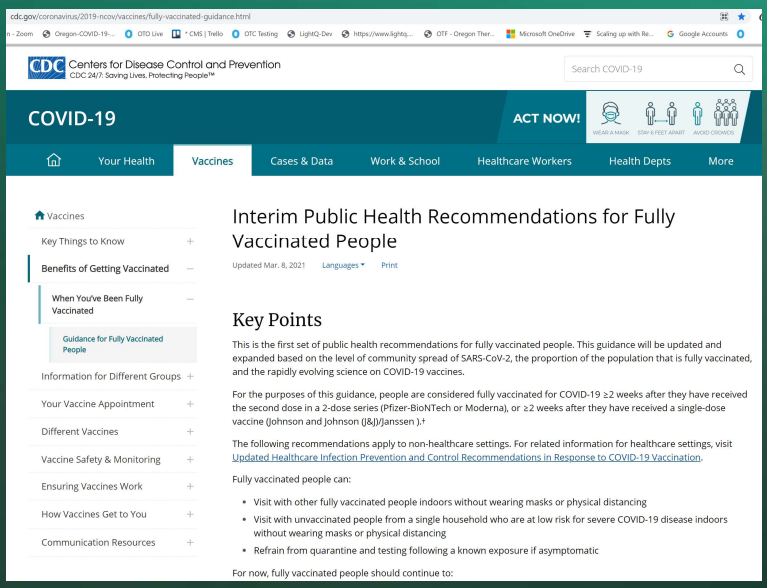
https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html



Recommendations for Fully Vaccinated People

March 8, 2021

Immunogenicity of a Single Dose of SARS-CoV-2 Messenger RNA Vaccine in Solid Organ Transplant Recipients

JAMA, March 8, 2021
https://jamanetwork.com/journals/jama/fullarticle/2777685

MRI recommends that for immunosuppressed patient psychotherapists consider additionally making the office vacant for 1 hour before appointments.

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One can create a set of declarative statements and call it conclusive evidence that seeing patients in your office is NOT safe.

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Declarative arguments & conclusions

1. There is always a risk of infection from SARS-CoV2.
2. A multi-night karaoke event led to 36 cases, three hospitalizations and one death.
3. The public health department has recommended reduced seating in restaurants for inside public dining.
4. Previous infection is no protection against the African variant.
5. You can still get Multisystem Inflammatory Syndrome (MIS-A, MIS-C) if vaccinated.
6. The governor has announced that people must socially distance and wear a mask in public, except when eating outdoors.
7. Telehealth is reliable, valid and useful.
8. Some psychotherapists live alone.
9. Psychotherapist should consider their level of loneliness to ensure they are not placing patients at risk for personal needs.
10. Psychologists can be sanctioned and sued for unprofessional or negligent conduct.
11. All things considered; it is not safe for the public to see psychotherapists in their offices.

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Oregon Health Authority
Coronavirus Update
healthoregon.org/coronavirus

April 26, 2021

I'm fully vaccinated. Why do I have to continue safety precautions?

It's been a tough year for everyone and so many of us are, frankly, tired. Tired of not seeing our loved ones. Tired of wearing a face covering. Tired of staying close to home. But we are so close to helping end the pandemic! Even if we are fully vaccinated, many other people are not. And until we reach the point where COVID-19 can no longer easily spread, we need to keep practicing the proven safety precautions.

The fact is that COVID-19 is a new virus. That means health experts are still learning how effective the authorized vaccines work against the virus and emerging variants. Early data shows the vaccines work very well against the virus, but could be less effective against some emerging variants. Experts are also monitoring how well the authorized vaccines keep people from spreading the disease, and how long vaccine protection lasts.

The good news? We know what we must do to help stop the spread of COVID-19. Wear a face covering. Watch your distance, wash your hands often and stay home when you're sick. And get vaccinated when you are able. Create an account at Get Vaccinated Oregon to find out where you can get vaccinated.

There are problems with guidance based on declarative arguments.

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CDC Guidance for HCPs in a healthcare facility

- In general, fully vaccinated HCP should continue to wear source control while at work. However, fully vaccinated HCP could dine and socialize together in break rooms and conduct in- person meetings without source control or physical distancing. If unvaccinated HCP are present, everyone should wear source control and unvaccinated HCP should physically distance from others.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-after-vaccination.html

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People who have been exposed to a person with COVID-19 are not required to quarantine if they have been fully vaccinated.

But a psychotherapists is responsible to not become an infection vector, i.e. infecting the next patient.

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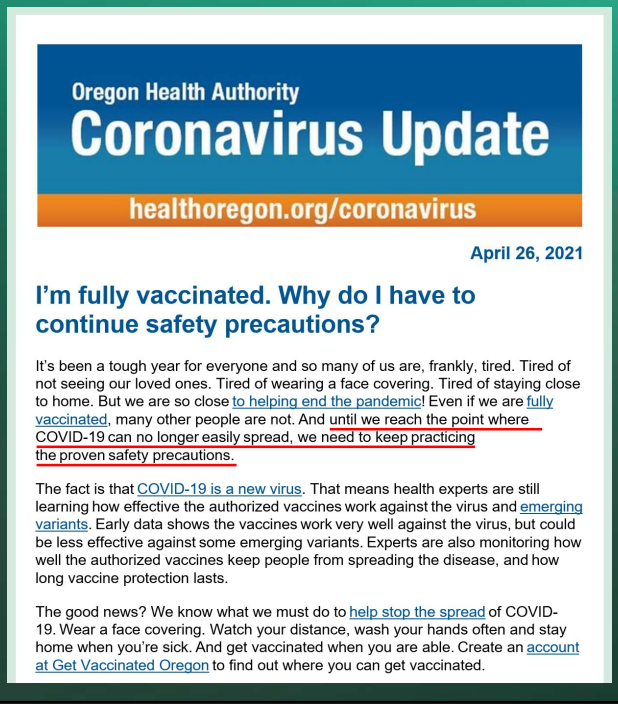

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Which of these is safer?

Breathing air from an N-95 face-coverings that filters 95% of particles down to 0.3 microns. (most use an "N " of "50")

Breathing air from a UltraHEPA filter that removes 99.997% of particles down to 0.003 microns.

N = NIOSH

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What do "Risk of Infection" terms mean?

Very High?
High?
Moderate?
Low?

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Fortunately, we have engineers. SARS fears their engineering powers.

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Engineers can give you the odds and relative risk that you will become infected. They…

1. ….use mathematical models based on the science of fluid dynamics and airborne infection transmission. (Air is a fluid)
2. Created software based on comprehensive models that simulate and test limits.
3. Found that different models (quanta vs viral load) generated the same numerical estimates of transmission risk.
4. Discovered that using machines to capture live virus and measure infection risk killed SARS-CoV-2. (This theoretically may provide evidence for an increased effectiveness of air filtration)
5. The virus transmission risk estimators are excellent tools to assess relative risk based on local and setting parameters.
6. With such data you can establish a safety factor (or make decisions based on an order of magnitude).

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How do you Determine the Risk of Aerosolized SARS-CoV-2 Infection?

2 Different Models (same results)

1. Viral load (viruses/ml of air exhaled)
2. Quanta (statistical unit of infectivity)

Level of Certainty (recommended)

1. Safety factor = 2 or 3
2. Order of magnitude = 1 decimal point

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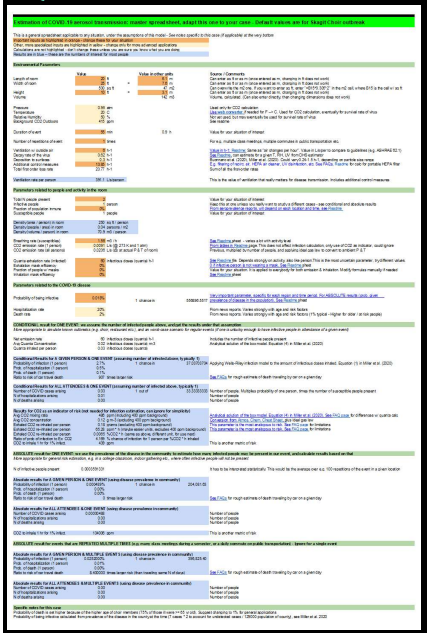
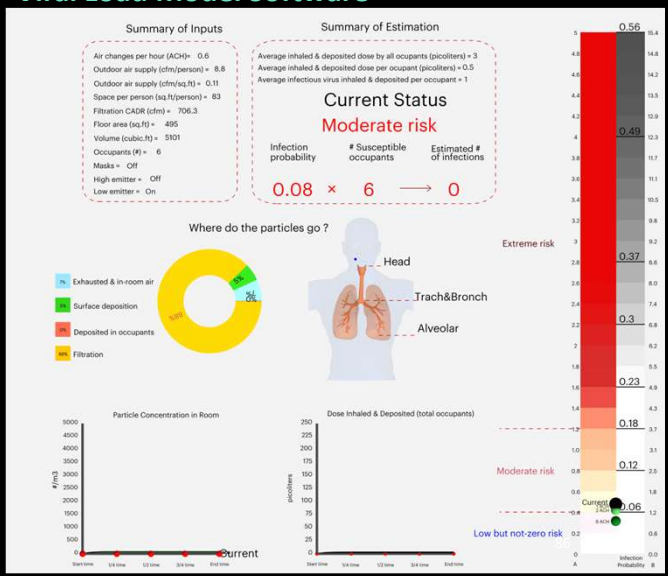
Estimation Methods for SARS-CoV-2 Aerosol Transmission Risk

Quanta Model Software



Viral Load Model Software



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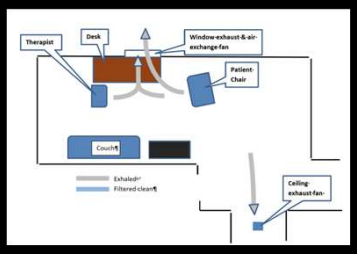
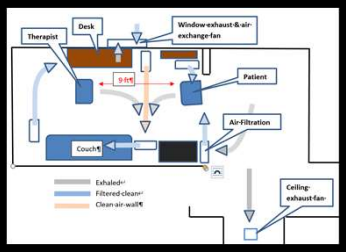
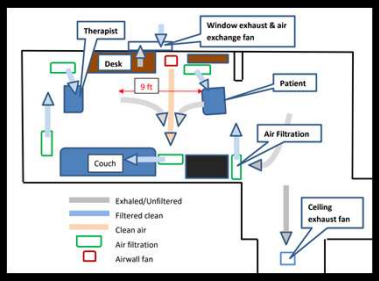
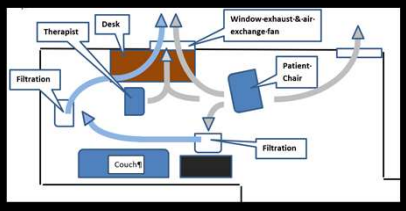




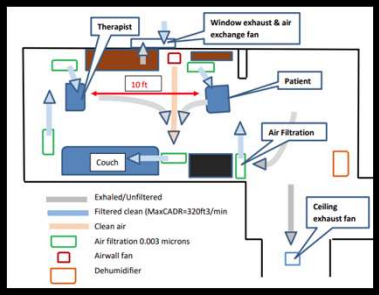




These were all tested using

1. odor
2. fog
3. particle
4. room temperature
5. CO2 monitors

All 5 dropped in 15 to 20 minutes



Design possibilities

87

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What are some first principles?

1. SARS-COV-2 is fluid in a lipid container.
2. SARS-COV-2 is about 0.1 microns in size.
3. N95 mask filters 95% of particles down to 0.3 microns.
4. A cloth mask filters 50% of particles down to 1 microns.
5. The half life of a SARS-COV-2 is about 1 hour.
6. A ultraHEPA filter will capture 99.997% of particles down to 0.003 microns.
7. A folder cotton wash cloth is better than a N95 for sneezing and coughing.
8. The speed of air moving through a filter can exceed 65 mph.

89

Based on the CDC.

- The odds of being struck by a car when driving in **the United States** is about 1 in 4,292.
- The odds of dying as the result of being struck by a car are about 1 in 47,273.

https://www.cdc.gov/transportationsafety/pedestrian_safety/index.html

90

Here are 4000 gumballs.

What is the chance of picking the one gumball that has no gum in it?

91

Do vaccines prevent asymptomatic infection?

Vaccinations may reduce asymptomatic infection 35% to 80%.

Some people who receive only 1 of 2 required vaccinations may have no protection against asymptomatic infection.

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Safety Factor

A usually applied Safety Factor is 1.5

Pressurized airplane cabin is 2.0

Main landing gear it is often 1.25

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No-Mask: An engineering first principles analysis of aerosolized infection transmission risk estimators

EXAMPLE

Safety factor = 3

1. Prevalence (%) = < 3% or .03 (actually < 0.018%, or 0.00018)
2. Asymptomatic (%) = 40% or 0.4
3. Screening false positive (%) = 80% or 0.8
4. Aerosol infection risk (%) = < 3.0% or 0.03 **[1] (actually 2.7%, or 0.027)
5. Vaccinated (to keep you out of the hospital) (%) = 95% or 0.05

Chance of getting infected	= [.03 + (0.4 x 0.03)]x 0.2 x 0.03 = 0.000252 or 1 chance in 3,967
Chance of long COVID	= 0.000252 x 0.5 = 0.000126 = 0.000126 or 1 chance in 7,936
Chance of hospitalization	= 0.05 x 0.000252 = 0.000063 = 0.0000063 or 1 chance in 158,730

**[1] Using the University Colorado Boulder Aerosolized COVID-19 Risk Estimator: 2 people, 1 infected, 55-minute appointment, 5000ft3 office, 9 feet apart, 800ft3/min CADR, 0.003μ, comprehensive screening, 1 hour between in-person appointments, sanitization of fomites between appointment, safety factor 3.

94

Here are 4000 gumballs.

What is the chance of picking the one gumball that has no gum in it?

95

Psychotherapy is not a physician office visit.

Psychotherapy in a physician exam room (<200ft2) is probably not safe unless you are both vaccinated and there is excellent air treatment.

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Evidence-supported Arguments to NOT See Patients In-person: Examples

1. My office is too small.
2. I share my office with other psychotherapists.
3. Patients cannot pass symptom, exposure, behavioral and security risk screenings.
4. The office design does not allow safe distances.
5. Ventilation is not adequate or possible in my office.
6. Air exchange is not adequate or possible.
7. The building has a retrofitted HVAC with shared office air.
8. Office HVAC MERV 17 air filtration is not adequate or possible.
9. Standalone air filtration requirements are not aligned with required parameters.
10. Psychotherapist is immunosuppressed.
11. A high number of patients are immunosuppressed.
12. You can still have some Multisystem Inflammatory Syndrome (MIS-A, MIS-C).
13. There is a new variants of the coronavirus in the community.
14. Community adjusted prevalence of positive and presumed positives is > 3% (1 chance in 33)
15. The psychotherapist's office could become infection vector.
16. There are no State or Federal approved standards to address aerosolized SARS-CoV-2 infection transmission in a psychotherapy setting.

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For your consideration:

Maintaining a COVID-Safe Practice

With regard to meeting with patients in-person MRI offers comprehensive recommendations and cautions that pandemic risks require continuous thoughtful attention.

www.MentorResearchInstitute.com

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References

1. Indoor Air Changes and Potential Implications for SARS-CoV-2 Transmission
https://jamanetwork.com/journals/jama/fullarticle/2779062?guestAccessKey=fe95af75-5d27-4f8c-93ec-be2ccbb662c1&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_content=olf&utm_term=041621
2. Science Brief: Background Rationale and Evidence for Public Health Recommendations for Fully Vaccinated People
https://www.cdc.gov/coronavirus/2019-ncov/more/fully-vaccinated-people.html
3. CDC Issues First Set of Guidelines on How Fully Vaccinated People Can Visit Safely with Others
https://www.cdc.gov/media/releases/2021/p0308-vaccinated-guidelines.html
4. AirDoctor
https://www.airdoctorpro.com
5. **Can we get rid of Covid-19 forever?**
https://www.vox.com/videos/2021/3/10/22323060/covid-19-disease-eradication-smallpox
6. Assessing the Role of HVAC Systems in Fighting COVID-19
https://www.hpac.com/covid-19/article/21138820/assessing-the-role-of-hvac-systems-in-fighting-covid19
7. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1
https://www.nejm.org/doi/10.1056/NEJMc2004973
8. COVID-19: When is it OK to provide more in-person services?
https://www.apaservices.org/practice/news/in-person-services-covid-19
9. **Deposition rates of viruses and bacteria above the atmospheric boundary layer**
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5864199/
10. **RHYTHMS IN BREATHING AND LUNG CAPACITY**
http://www.tiem.utk.edu/~gross/bioed/webmodules/lungcapacity.html
11. Mathematical models for assessing the role of airflow on the risk of airborne infection in hospital wards
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2843948/pdf/rsif20090305.pdf

10. Centers for Disease Control (CDC)2020*b* CDC Guidelines on Social Distancing
https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html
11. Centers for Disease Control (CDC) 2020*a* How COVID-19 Spreads.
https://www.cdc.gov/coronavirus/2019-ncov/prepare/transmission.html.
12. Centers for Medicare & Medicaid Services (CMS) Recommendations Re-opening Facilities to Provide Non-emergent Non-COVID-19 Healthcare.
https://www.cms.gov/files/document/covid-recommendations-reopening-facilities-provide-non-emergent-care.pdf
13. Coronavirus (COVID-19): 8 Ethical Considerations for Social Workers.
https://www.socialworkers.org/About/Ethics/Ethics-Education-and-Resources/Ethics-8/Coronavirus-8-Ethical-Considerations-for-Social-Workers
14. COVID-19 testing problems started early, U.S. still playing from behind.
https://www.modernhealthcare.com/technology/covid-19-testing-problems-started-early-us-still-playing-behind
15. COVID-19: Pandemic Response as it Relates to Workplace Safety and Health in Oregon.
https://osha.oregon.gov/covid19/Pages/default.aspx
16. COVID-19: The implications for suicide in older adults. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7235297/
17. COVID-19: When is it OK to resume in-person services?
https://www.apaservices.org/practice/news/in-person-services-covid-19
18. Disinfectants approved by EPA
https://cfpub.epa.gov/giwiz/disinfectants/index.cfm
19. Important Update: CoV Transmissibility.
https://www.erinbromage.com/post/important-update-cov-transmissibilty
20. Ethical Considerations for Psychologists in the Time of COVID-19.
https://psycnet.apa.org/fulltext/2020-35285-001.pdf
21. Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic.
https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html

22. Important Update: CoV Transmissibility
https://www.erinbromage.com/post/important-update-cov-transmissibilty

23. Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19)
https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html

24. Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

25. Keep it clean: The surprising 130-year history of handwashing. The Guardian.
https://www.theguardian.com/world/2020/mar/18/keep-it-clean-the-surprising-130-year-history-of-handwashing

26. Three Stages to COVID-19 Brain Damage Identified by Top Neurologists in Journal of Alzheimer Disease Paper.
https://www.j-alz.com/content/three-stages-covid-19-brain-damage-identified-top-neurologists-journal-alzheimer-disease.
https://content.iospress.com/articles/journal-of-alzheimers-disease/jad200581

27. Sample informed consent form for resuming in-person services.
https://www.apaservices.org/practice/clinic/covid-19-informed-consent

28. State and National Resources for COVID-19 https://osha.oregon.gov/covid19/Pages/covid-19-resources.aspx#cdc

29. Telepsychotherapy During a Pandemic: A Traumatic Stress Perspective
https://doi.apa.org/fulltext/2020-39749-003.html

30. Updated telehealth guidance by state in response to COVID-19
https://www.apaservices.org/practice/clinic/covid-19-state-telehealth-policies

31. What are the Odds of dying, National Safety Council
https://injuryfacts.nsc.org/all-injuries/preventable-death-overview/odds-of-dying/

32. What to Do When You Need to Use a Public Bathroom During a Pandemic.
https://www.nytimes.com/2020/06/24/style/coronavirus-public-bathrooms.html?surface=home-living-vi&fellback=false&req_id=271310347&algo=identity&imp_id=622543323&action=click&module=Smarter%20Living&pgtype=Homepage

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33. Neutralizing Antibodies Against SARS-CoV-2 Variants After Infection and Vaccination
https://jamanetwork.com/journals/jama/fullarticle/2777898?guestAccessKey=baff0b77-b43b-427e-93cd-4b3ab8b46297&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_content=olf&utm_term=031921

34. COVID-19 Vaccines vs Variants—Determining How Much Immunity Is Enough
https://jamanetwork.com/journals/jama/fullarticle/2777785?guestAccessKey=1bf2f016-157f-41d1-a606-9708a03bed91&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_term=mostread&utm_content=olf-widget_04082021

35. Neurobiology of COVID-19.
Majid Fotuhia, Ali Mianc, Somayeh Meysamid and Cyrus A. Raji. Journal of Alzheimer's Disease. May 2020.

36. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease-2019 (COVID-19).
Chih-Cheng Lai a, Tzu-Ping Shihb, Wen-Chien Koc, Hung-Jen Tang d, Po-Ren Hsuehe. The epidemic and the challenges. International Journal of Antimicrobial Agents. 2020.

37. The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission.
Valentyn Stadnytskyi, Christina E. Bax, Adriaan Bax, and Philip Anfinrud. JAMAnetwork. May 13, 2020.

38. The flow physics of Covid 19. Focus on Fluids .
Rajat Mittral, Rui NI ad Jung-Hee Seo.. Cambridge Press, 2020.

39. Turbulent Gas Clouds and Respiratory Pathogen Emissions. Potential Implications for Reducing Transmission of COVID-19.
Lydia Bourouiba, PhD. JAMA Insights, March 2020.

40. Understanding basic fan laws.
Geoff Edwards. AXAIR. January 2018.

41. Estimation of airborne viral emission: Quanta emission rate of SARS-CoV-2 for infection risk assessment Buonannoa , Stabilea , Morawskab, May 2020.

42. Impact of the COVID-19 Vaccine on Asymptomatic Infection Among Patients , Aaron J Tande, Benjamin D Pollock, March 2021.

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