

## Frequently Asked Questions from Webinar

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The following questions were answered by the rest of the Task Force while Dr. John C. KoIs was presenting. Additional questions can be sent to: [taskforce@koiscenter.com](mailto:taskforce@koiscenter.com)

**Hi Dr. KoIs, how does vital oxide fogging compare to HoCl fogging?**

We have not researched that

**There are so many vendors out there now promoting External suction systems. How relevant are those and scientifically proven to prevent the spread of virus? Also is there any system that are FDA approved to use?**

We will address this

**If you buy it. Do you have to monitor HOCL solution?**

I recommend that you monitor it with the pH meter and the ORP meter so you are certain what you actually have at any given moment. The "recepte" that I recommended has been tested for predictability and appropriate pH and ORP readings every hour up to 30 hours so far

**Can we use the solution for wiping everything down In addition to spraying.**

yes

**i know the webinar is going to be available online. Will the slides be available as a seperate download? Thank you for putting this on today. Much appreciated**

Video only

**Ecolox directions say to use 0.5 liters to produce 200ppm**

correct

**What about ozone machine? for after hours**

It is an option. We will not discuss that much

<https://www.koiscenter.com/support-material/covid-19/>

**Where is the scientific evidence to support the hypochlorous acid?**

References are on the slides

**Does Jeff have the recipe available?**

yes on the handout

**Is that HOCL solution stable when you make it in the office? how long?**

48 hours

**the personel doing the fogging needs to wear PPE obviously. how elaborate PPE ?**

Yes. Same PPE that they wold use to clean the operatory. Gown, gloves, eye protectio, mask

**I've been told that Caviwipes are not effective against COVID-19, specifically the wipes. Any data on this?**

The virus is weak and easily killed. They will work.

**Can essential oils be added to make the solution to enhance the smell**

Maybe. The only concern would be the potential reactions of the chemicals. To be safe, HOCl by itself is the recommedation

**would an ozonator be useful instead of a chlorofogger?**

Could use both

**will whoel office be fogged or just the operatory?**

entire office, end of day

**how many square feet will one liter solution fog?**

depends on how long one lingers. An average sized office will be able to be fogged ith 1 L, but it is very easy to produce in 8 min, so you could always make more

**Can you fog with purifier on? Or do you recommend having air purifier off, if so how long?**

There is some concern that the purifiers and air scrubbers will "suck the solution" out of the air before they are able to contact all of the surfaces, but we just don't know yet. I am recommending to turn them off and fog, then turn them back on after

**How are the premixed purchase solutions stabilized?**

each company does their own thing, but often they use a more alkaline solution which is more stable, but may not contain as much HOCl

**are you advising HOCl in fogger once per day, but otherwise disinfect with usual operatory disinfectants per normal office protocols?**

correct. although the fogging COULD be done more frequently if you prefer and if it is not disruptive to you and your office

**Can you please speak to the safety of inhalation?**

Should wear PPE but safe at the correct concentration

**Have you heard of using Graco paint sprayer or electrostatic gun for "fogging"**

No

**Thank you. Where is the handout please?**

Will be online at [KoisCenter.com](http://KoisCenter.com)

**Question: Is it true the HOCl fogger can be used to disinfect gowns and masks?**

Yes but follow manufacturer's instructions on sanitizing

**are cavicide wipes the best to use?**

We like them because many offices already carry them but Lysol and Clorox wipes work well also.

**Is it categorized as an intermediate level or high level disinfectant by EPA?**

<https://www.koiscenter.com/support-material/covid-19/>

Depends on strength you make it.

**can you spray fogger on computers, etc.?**

It depends on the solution being used. Yes you can use HOCl at 200ppm. turn off the computer first.

**Are you meant to walk around the office with the fogger? Or place it in the corner somewhere and wait?**

Walk around after hours

**so when you fog the HOCL what should surfaces look like wet or not really noticable**

Not so noticable

**does it discolour fabrics etc?**

no

**Will they demonstrate the actual technique of fogging a room? I am curious how much time or "fog" needs to fill a space to be considered adequate**

No you can see this online

**Is HOCl safe to electronics? Furniture? Clothes?**

yes

**More than 1 fogger needed? One for each room? One well-placed? (where?)**

only one

**How do you protect electronic equipment/LCD screens when spraying Hypochlorus Acid in the operatory?**

They can be lightly misted or wiped

**Is HOCL solution save to use on computers?**

Light mist only

**Had trouble connecting..can you please tell me what solution we use in fogger again**

HOCI

**What about using as a surface disinfectant instead of cavicide?**

It is an option

**Where would you recommend buying a fogger**

It is a nice option

**I missed it, how long does the fogged surface need to be disinfected? ie if you fog a door handle, how long before someone else can touch it safely?**

Immediately, they use this solution in food care and on vegetables with the mister in the supermarkets. Check it out online.

**On the Kois web site, this link is broken: How to Put on Personal Protective Equipment (PPE)**

They will all be fixed. Some docs are being modified. We didn't expect them to be downloaded during the presentation.

**Where will the recording be found? on the Kois website or will a link be emails?**

Both

**If we are to wear masks 100% of the time in the office, what do you recommend for the lunch hour? Are you allowing staff to eat inside the office?**

If they are socially distanced

**I spoke to NIOSH and they specifically told me the KN95 is not validated as tested and effective. How is this product still being recommended?**

We will have to look into it. We are trying to outline the differences between the different types of PPE.

**Do KN95s have a NIOSH label on the mask?**

Depends on where you get it

**What about the 3D printed ones that go over the surgical masks? It's a very precise fit - where do they fall?**

Dean will address that

**Are 3D printed frames make for comparable option with surgical masks?**

3D printed options will be presented

**Yeah, that's crazy Chad if our organizations we are supporting is recommending or "selling" things that are not protective.**

Hope the research we present helps. Lots of misinformation out there

**Does the 3D printed custom frame with a level 3 surgical mask close to equivalent to n95?**

NO different filtration levels

**Did you happen to look at the DolphinPods HOCL product? Tablets that are mixed with water. Seems to fall in between DIY and pre-made.**

Did not see it.

**I checked with my State OSHA office & they told me that initial fit test is required (Maryland) & OSHA only waived annual test - only need to wear them during interim**

Yes a fit test is recommended

**FYI in PA the DOH mandates N95 fit test by OSHA certified personnel. This info from the Pennsylvania Dental Association**

We are aware

**Will I be in compliance of OSHA if i have my team wear Bellus APP created brace instead of the KN95 masks which I have in the office?**

Would have to check with your state OSHA

**I came late so sorry if this is a repeat question; if N95 is not available, can we use KN95? It seems so thin.**

Yes, next best option.

Welcome, glad your here

**Could you Fog the mask?**

yes, it is an option. The concerns are what happens to the mask if and when it gets wet.

**should we use your ecolox to disinfect the mask?**

it is an option. You just don't want to get the masks wet

**Why are dental professionals not required to have a Fit Test? If State and professional Associations are requiring their use in high risk procedures, wouldn't the use of the N95 become required and therefore not voluntary? And therefore a Fit Test would**

There are self fit test directions. Logistics is an issue right now. Some people are back to work.

**Can fogger be used to disinfecting masks?**

yes

**Are the reuse recommendations only for the N95 or also for the Level 3 masks?**

Depends on the availability and if they are soiled

**How many times can an n95 be reused?**

Depends on usage and if it is soiled or not.

**Can disposable gowns be re-used? When to dispose?**

If they are soiled then yes. Use your judgement about walking between rooms. Your patients want your PPE to be clean.

**How many times (days) can you reuse the mask before you need to dispose of it?**

Depends on if it gets soiled

**is n95 meant to be used 1 per patient? once we do get normal supply, can 1 n95 serve a clinician per day?**

Depends on usage and if it is soiled

**If the coronavirus is 0.125 microns and the n95 mask filters at 0.3 microns (95%) it seems that n95 masks are not sufficient to do what they are expected to do.**

This is the issue and we are trying to do everything we can to reduce the risk of exposure.

**how can i get the previous lecture slides: proper way to put on PPE.**

There will be a handout and the video

**If the N95/KN95 does not fit well, are there any recommendations to improve fit? PVS to customize?**

Dean covered that

**How are you guys handling the gown recommendations given what seems to be shortage of disposable gowns?**

Be reasonable and reuse if not soiled or contaminated

**Surgical masks must be thrown out after each patient correct?**

That is the recommendation but not what people do often

**Any comments on the External suction machine?**

info coming soon on this webinar

**Can I sterilize the N95?**

disinfect several ways if necessary

**what about covering the N95 with a level 1/2 to reduce soiling?**

yes I said this during. We are recommending faceshield to protect mask from being soiled not another mask since the PPE shortage but this is absolutely acceptable

**can Level 3 masks be re-used by placing in breathable paper bags for 5 days (like N95 respirator masks)?**

Could be a practical solution

**Any information for those of us who have been using Microscopes? Faceshields not possible in these cases? Do we not use them until things “normalize”?**

We have not addressed this. Will look into it.

**I’m confused. Is an n95 respirator mandatory & recommended when administering aerosal producing tx? The slide you showed had it listed under Mandatory & highly recommended catagories**

Yes

**anyone figured out how to work in N95 and a faceshild AND using a surgical microscope?**

Difficult

**Cut a hole in the face shield?**

yes. to allow room for the loupes and or light

**i have read N95 masks can only filter particles of 0.3microns or larger. however the size of the coronavirus is 0.1microns. is this information in correct?**

Yes but virus attaches to dust and water droplets and water vapor making it larger. this is how mask catches it

**Unfortunaely OP D op is not available from distributors**

Burkhart has them.

**won't a hole in the shield provide an entry space for aerosols**

yes, but the shield is not sealed anyway. the aerossols can get around the shield also

**Why shoe coverings? if the respiratory droplet is on the floor, we are not directly aerosolizing the floor to put that up into the air**

One reason would be the contaminants on the top of the shoe... unless covered

**When disposing soiled PPE , are they going to the general garbage at the end of the day ?**

Yes

**N95 filter at 0.3 microns. Coronavirus is 0.125 microns. So N95 is inadequate. Why are we told we have to use it if it is insufficient to do the job?**

Typically the virus attaches to water droplets and vapor and dust. It makes it larger. Its the car for the virus That is how mask catches it..

**Do we need to change out our disposable gown after EACH patient?**

Depends on if it is soiled or not

**Dean, so a Level 1 is fine oer an N95 or respirtor or should that outer mask be a Level 3?**

You can but I like type 3 more waterproof

**This is phenomenal information. Thank you to everyone involved for putting this information together! Best regards, SC**

TY

**is it ok to wear short sleeve scrub shirts under the PPC gown?**

Sure. Should have neck covered

**some offices are saying that the disposable gown can be used all day—is there a clear indication that it should be for every patient as she just said in some kind of “guideline” in writing ?**

Have to use judgement

**How often do u replace gown if not soiled**

If not contaminated you can use. Once contaminated it must be changed or disinfected

**Do the backless gowns meet the criteria for gowns?**

yes

**Would you recommend business as usual or would you recommend they enter the office with masks, gloves etc...?**

Masks are mandatory

**Since the virus stays on the surface for days...the handling of product literature will go away most likely.**

Probably

**The recommendation is to dispose of your disposable gown after each patient?**

If soiled or contaminated

**Is there any benefit to using face shield that is attached to mask and extends from mask UP?**

This is an option but leaves the forehead exposed

**In Oregon, to reopen you must wear a fit tested N95 for any aerosol generating procedure**

This has been very frustrating for us.... It is different all over the country!!!!

**Can we use HOCL for everything? or is that because of 10 min wait time**

yes, you can, but you have to be certain that you have the appropriate disinfection properties. We feel like it is proven and easy enough to continue using your normal protocol, then use the HOCl in the fogger to reach those areas that you don't get with your normal protocol

**can staff take scrubs home in a bag to wash at home**

yes

**change of GLC after every patient treatment appointment is not mandatory, correct?**

**same applies to hygiene exam appt, correct?**

correct

**So donning a new gown for every patient.**

a clean gown always yes; if it is disposable, it must be new. If it is not soiled, disinfection done properly is acceptable.

**are alcohol sprays acceptable for hand sanitizing instead of hand sanitizers?**

Should have over 60% alcohol

**Sorry I missed it, but what did she recommend to spray the reusable gowns with?**

HOCl in the fogger

**would i need to wear an N95 mask when taking impressions on a patient?**

No. Surgical mask is fine.

**Do u recommend dedicated shoes for front desk staff also?**

yes

**can you home launder PPE?**

yes

**can u plz email the recoding, my connection wasnt good today. thanks**

Will be available by video

**Do you have any recommendation for neck cover?**

Just a crew collar

**Can staff take scrubs home in a bag to launder?**

Y

**I noticed there was no discussion on AAMI levels of gowns for non aerosol vs aerosol producing procedures. Is this significant? Should we be seeking out at minimum Level 3 or 4?**

Yes we will address

**Is a surgical mask enough for all orthodontic procedures?**

except the bond and debond procedure. Anything highspeed handpiece

**Do you recomend to provide shoe covers for patients?**

not now

**What are yall recommending for treating healthcare workers who will have contact with Covid exposed patients within 14 days? They will likely not pass screening for a long time**

Screenin form would find them and we would delay treatment unless we were set up to see COVID Patients

**How about emergency pts that need to come over on short notice or do not have email addresses?**

Screen them and use protective PPE

**i dont see loss of smell and or taste on that list?**

it is on the list

**The coronavirus is an endothelial disease, that is why the COVID toes develop.**

Yep agree

**what do you think about using a fan and open window inthe operatories**

Hard to control the humidity and temp

**If one of patients was covid 19 positive and now is okay (cleared by medical doctor), how long do we have to delay the treatment? when can we start to treat them?**

Testing will be addressed

**Chris mentioned PPE fees, what is a reasonable PPE fee? In NYC area? Thank you!**

depends on your internal costs no fee recommendations can be made

**curious to hear from the speakers. How long do you anticipate implementing these protocols? Is there an end date, or do we wait for further definitive guidance?**

still waiting further guidance. this is all new to us all

**In other words dentists closing operatories for sure. Are they upgrading hvac to negative pressure?**

Some are

**Which thermometers are reliable for temperature recordings?**

We covered that

**Where is this workflow model avilalbe on the online sources?**

On the website

**when does the screening questionnaire occur at the office?**

Both before and there

**Is 1% hydrogen peroxide pre-rinse recommended?**

Will address

**what's your protocol if a patient wants to go to washroom?**

Disinfect after

**With all this "protocols" taking so much time, how can we restore the pre-Covid era cashflow?**

**(taking into consideration not only cost of PPE, but also cost to dispose of them properly, cost of all this wasted time, etc)**

Will need to make adjustments in many areas

**Was there a discussion about air filtration or extra oral suction?**

not yet. coming

**Is negative necessary?**

depends on your state or country

**when while there? only heard assistant takes temp and brings right back to operatory**

Can be done many ways

**but if humidity and temp is not an issue**

You could try because airflow direction may be significant.

**can patient be tested for covid as an sop before pt seen at the office ?**

Yes OralDNA can do this as well as MicroGenDx with saliva. steve is covering it now

**What is the reason for the front staff wearing a gown?**

Not to bring anything in from the outside

<https://www.koiscenter.com/support-material/covid-19/>

**in ortho offices is there any increased risk of patients brushing their teeth/spitting in the operatories? should the whole room be thoroughly disinfected in between patients besides the normal protocol of cleaning surfaces?**

Should or may have ambient air management. Would recommend to come with teeth brushed

## **GUIDELINES FOR CHECKING EMPLOYEES IN AND OUT**

### **CAN EMPLOYEES EAT IN OFFICE?**

Yes and ADA has an employee has a checklist for employees

### **If a patient arrives with their mask is it necessary to tell them they need a new mask provided by the dentist**

we are asking them to bring their own mask. they will remove it after entering the operatory and hand washing, sterilization with sanitizer and the temp and pulse ox readings

### **How long to keep the room empty after procedure is finished ?**

diferent areas have their own mandates, I am aware of areas of Canada. I think these will change over time. In the US, we do not currently have a time mandate

### **How about the cross contamination of the BP cuff. Any suggestions?**

wipe and/or fog

### **Do you recommend closing semi open ops completely then?**

yes

### **When you recieve a cases final/try-in from a dental laboratory how should it be handled**

Disinfect and seat

### **is there a specific type of fogger that works best to use with HOCl?**

We have not done extensive testing on these yet. But we want the smallest droplets possible

**Since most dental offices have an open concept, do you recommend putting doors on each operatory or installing plastic barriers on all entrances into operatories?**

May or may not be necessary, depends on your state or country requirements. Kois Center is a global teaching center and we have different considerations for different places in the world

**Do we test employees when they came back? Even they didn't have anything which I ask?**

Screen at a minimum. Testing would be nice. I will test mine.

**Are any tests FDA approved??? I hear there are none.**

yes

**are we saying the dental office should perform the test or to recommend they see physician for test?**

Both options. Do what works best for you. Some of the tests are saliva designed for you to do it.

**The accuracy of most PCR testing is 70-80%. How accurate is the Oral DNA? Do we have numbers on that?**

Very accurate and the negative result is almost 100%

**is the oral DNA test for active virus only, or also antibody past exposure as well?**

Active only

**what is the name of the company Dr. Acker mentioned where is the test from where it's sent to their home? two days prior.**

MicroGenDX

**Great thanks. I will close the ops.**

**I won't upgrade hvac unless my province tells me too since there is no conclusive data on that hvac upgrade. Correct?**

Check your local regs

**what was the name of the faceshield company that allows for use of loupes/headlight combo?**

Op D OP

**I have been creating a Clo2 Chlorine dioxide solution and adding it to my water bottles. I use test strips to ensure a minimum concentration that will reduce pathogens yet not ruin water taste. It has the side benefit of keeping biofilm under control in t**

perfect

**Can we access this lecture again to re-listen?**

video online

**Pulsimeter any names**

NO specific recommendations

**Test what the name of company 99\$ for test**

OralDNA and MicroGenDX

**Should all staff members wear - head gown, gown and shoe covers and gloves? (receptionsit, manager)**

May make some exceptions for those in isolated rooms like lab techs and office managers. Everyone needs masks

**People who had covid 19 usually have a follow up with their MD and they do the blood test so we would not need to repeat this for any reason?**

Yes follow up

**Are we supposed to be testing each patient for COVID-19?**

Nope not unless that is your protocol

**with allergy season in bloom, does this give a false results in antibody test?**

No

**If an office does not work with the medical insurance, what would be your recommendation for billing the medical? What are the companies that are doing the medical billing?**

Fill out a generic med ins form and let the patient submit

**thank you - do we have supporting literature?**

yes, everywhere

**Is testing mandatory before staff return?**

Not mandatory that we know of

**i am trying to read all the answers before i post here . can you save all these questions and answers for us review**

We may be able to do that

**Which ones ? My MD says there are none.**

Check OralDNA Wayne

**how often would you be doing antibody tests for the staff?**

If a staff member has previously had covid -19 and recovered and now has IgG, I would recommend repeating in 3-6 months based on what we don't know about immunity.

If a staff member is totally negative, with no future symptoms, I would not test again until a vaccine is available.

Did I answer that well.

**can we disinfect the disposable non soiled gown with fogger?**

yes, it is an option

**do dentist currently have ability to test staff or patients for precautionary reasons onsite and/or request they get a test from their physicians?**

We can do PCR testing, and the Oral DNA protocol is the easiest. Antibody testing by dentists is a state by state decision. It is easiest to create a relationship with a physician who can write the order to the lab or do the blood draw in the physicians office in states where the dentist can not request the test.

**how to disinfect the pulse oximeter?**

wipe and/or fog

**They are not approved. This FDA approval is preventing most of us from getting tested at this time.**

live answered

**Is chlorhexidine gluconate oral rinsing by the patient recommended before starting any oral screening or procedure? is that of any considerable help?**

We do not recommend chx

**Are you recommending not scheduling high risk patients for now( immune compromised, diabetec, etc)?**

We are only not recommending treating patients in group 1 who are or might be contagious. If they are not in category 1, there is no reason not to treat them. They are category 3, vulnerable , like many of us.

**Sorry I miss something ...**

**Patient will be wearing a mask. is this their mask? we are not providing that, right?**

Correct in the letter to patient and scripting from front desk communication. Patient brings their own mask!!!

**nail polish intereferes with Pulse oximeter reading ?**

it can

**I see there was a question regarding use of an Ozone generating machine. I have done a lot of reading on ozone generators. The FDA and EPA do not recommend use. They generate free radicals which can interact with many different materials giving off VOCs.**

this is accurate

**we recommend rinsing into a papercup so to avoid aerosol generation around the sink area**

yes, expectorate right back into the same cup, then discard

**can we use hypochloric acid in a rinse if so what ppm**

one could use HOCl but we believe there are better products for oral pre-rinse with more data

**OralDNA is not even approved for their salivary tests. Check them out.**

live answered

**)2 level of 92% or less need mandatory testing? did I hear that correctly?**

live answered

**Will a patient with Reynaud's Disease have a pulse ox reading that is valid?**

live answered

**But using rubber dam WITH hypochlorite swab of isolated teeth neutralises bouced back aerosol?????**

this wasnt addressed in that study

**what about the dilution of the virus load when you are working with spary? is not the same load first minute than afte 5 min working with aerosol?**

Yes it will diminish however it is in the respiratory tract

**If they are pre rinse at the sink what about that aerosol?**

expectorate right back into the cup then discard

**So, rubber dam is of no use? Little use? Better than not?**

not for aerosol reduction. May make more aerosols

**02 rather**

Patients with COPD or peripheral vascular issues, the pulse ox reading is not necessarily indicative of virus suspicion. I should have mentioned that.

**FDA approved is what I mean.**

Antibody blood draw testing is way more easily available this past week since quest and lab corp are in the game now. We sent over 20 patients this week for testing with no problem in NY.

Oral DNA with give you documentation on their communication with FDA

**are we to use rubber dams or not?**

rubber dams have their place, and are appropriate and recommended for isolation for many procedures, but we are not recommending using them for the purposes of decreasing aerosols

**how about piezzo scalers—less aerosol????**

Similar to a cavitron

**Is hydrogen peroxide solution ok as a prerinse? 1.5%?**

Yes this is ok and recommended by some associations

**You are showing contradicting info re rubber dam: one study show RD can cause more bacterial leaking out and then next study showed RD cn reduce aerosol up to 90%. Please clarify? Thank you**

rubber dam is not recommended to reduce aerosols

**if a patients pulse ox is showing 92 or below are you dismissing the patient and referring them to their MD and rescheduling them with medical clearance**

Always a medical referral!

**what is HVE?**

High volume evacuation

**Chlorohexidine is not the recommended preprocedure rinse. Now 1.5% hydrogen peroxide is recommended.**

yes. CHx not recommended. We recomend Carifree Ctx 4 treatment rinse

**So RD is mainly for dental moisture isolation purely and does not significantly help in this post Covid 19 time?**

not to reduce aerosols

**Is the use of an isolite better than rubber dam for aerosol control?**

Yes

**will door less operatories need to be fitted with doors? is that highly reommended to contain aerosol within the operatory?**

Not with proper aerosol managment and ambient air filtration.

**thanks - is PCR testing for patients billable by Insurance to the dentist? or is this a fee to the patient directly, with no rembiursement if done by dentist?**

Dentist charges the patient and the company charges the dentist. No sure about insurance.

**It has been suggested that adding dilute hypochlorite to the water resevoir can reduce the viral load in the aerosols . Your thoughts?**

Would work like a prerinse

**what's the hair salon thing Doug is mentioning?**

To cover keyboards

**which are your preferred wipes/sprays for surfaces?**

Cavicide for contaminated surfaces in operatories. Lysol or clorox wipes for high touch areas in the rest of the office.

**i heard finger cots reduce contaminants on digital xray holders. I think it brings it to 6%**

Nice idea Sue.

**Will there be a reply of this or can I rewatch this anywhere?**

This is being recorded

**Can HOCL be used for face shield? can we just fog room instead of wrapping everything? except for things like keyboard?**

yes, you can wipe with HOCl, but we are recommending to use your normal protocol to wipe the operatory and then use the HOCl in the fogger to reach the areas that you would not reach with your normal protocol

**it looks for me most of the papers, the data, the conclusions is coming from information from hospitals, no for dental clinical environments, and again do you think type of patients we treat in dental clinic is the same type of patients the overload hospital**

Agree

**I didn't realize questions were answered real time. Do we have access to these Q and A after to read through?**

Yes they will be made available

**What is the log reduction in viral activity with CTX4? Any consideration given to ioRinse?**

Yes IoRinse is a great option too.

**how do you disinfect the lead apron?**

wipe and/or fog

**What if you wipe the dam down with iodine after placement. The only liquid being aerosolized is the water from my waterlines.**

That may reduce risk, but there is still aerosol generation from the tooth and any saliva that seeps up through the dam. Wear a head covering to minimize risk.

**last question about aerosol, you assume, for security the aerosol might contain sufficient virus load to infect, but there is not evidence right ? amazing webinar**

That is correct, makes logical sense but no evidence.

**Any info about UV Light Unit Disinfection for chairs, furniture or walls?**

Not a lot but this is a method

**Any problem with chemicals mixing? For instance, if you use Hydrogen Peroxide wipes then using HOCl fogger?**

yes, there may be chemical reactions depending on what you are using, so we recommend waiting 10 min

**My understanding is we could print all this information to share with our team by going on koiscenter.com?**

Yes that is correct.

**The slide/table that compared the amount of aerosols generated by ultrasonics to air polishing and air water syringes - what is the reference(s) for that information?**

Molinari, John and Aerosols - Good information on this

**Also, any comment on 4603ppm HOCL for 1min kill time on SARS-CoV-2?**

ppm is very difficult to measure. a much more accurate way to determine the disinfection ability of the solution is ORP. Also, Concentration X time. lower concentrations will easily kill the virus with more time. The higher the concentration, the more acidic. trade-offs

**Even with air management, do you recommend spacing out patients more?**

I have been working all week, and I can tell you that I need more time to manage all of the protocols

<https://www.koiscenter.com/support-material/covid-19/>

**Do you have any legal consent forms which patients and staff should sign which will protect the dentist from lawsuits from those who have acquired the virus?**

No check with the counsel of your Dental Association

**Are you recommending hygiene to avoid any use of cavitron at this time?**

We are handscaling only at the moment

**Can i use HOCL in the water bottle of my delivery unit?**

yes, but it is not recommended. It is a weak acid and adding it to your current water supply, you will not know the properties after it mixes with whatever is in the water. Same reason we don't give fluoride tablets anymore because we don't know how much other fluoride they are getting from other sources. (just as an example)

**How can you use a face shield if all dentists use microscopes?**

this is a prolem

**If there are windows in each op, do you still recommend getting HEPA air purifiers?**

Everyone's situation will be different.

**can extra oral suction with HEPA 13 filter prevent COVID? corona virus is 0.15 micron i believe**

you are correct. You need to look at a higher rated filter and system with high MERV rating >18

**Also do u recommend changing out disposable gown after EACH patient?**

We are not using disposable gowns for non aerosol producing procedures.

**Will you please repeat the contact time for Hydrochloric acid? Thank you.**

10min for hypochlorous acid

**where would i place the HEPA filter if the vent is on the ceiling**

<https://www.koiscenter.com/support-material/covid-19/>

Self standing units are available

**do you recommend to take PPE off outside ops?**

If soiled when exiting

'@Jeff....4603ppm with EvaClean Purtabs. 4 tabs per quart.

yes. several companies and several options.

**i am a bit confused. Where are exactly should we put our air purifier in the op again? should it be on the top of patient's head or at the patient's feet to bring the air out?**

Near the foot of the patient

**Isn't ozone layer can produce lung irritants elements?**

there are some concerns about these products, yes

**what is the brand of air purifier Dr. Kois just mentioned? Jade?**

Jade by Surgically Clean Air

**doesn't adding more hve reduce the suction power?**

yes

**Doesn't dual suction reduce suction power? Is the benefit that you're coming from 2 different positions?**

yes

**what is the clear mouth retraction device on patient in the photo?**

extra oral suction device connected to cheek retractors

**Which is your preference dry shieldd, isolite,kulzer**

For aerosol control. all of them works well. Dryshield is what I use. your cost is \$0.50 per use.

<https://www.koiscenter.com/support-material/covid-19/>

**will the webinar stay recorded and where?thanks**

Yes it will be available on the Kois Center website.

**So is it best to place air purifier by pt head or foot of patient?**

Great question: The extra-oral dental vacuum is by the head and the purifier by the feet. Hope that make sense.

**any research into treating ambient air passively with hydroxyl radicals?**

We have not seen any

**So you recommend an air purifier and an external suction unit? Room for everything??**

If you can afford it. Yes during AGP's.

**Will the webinar be released at the end?**

**How many CE credits are we eligible for?**

yes it will be released next week. We are not providing CE for this webinar.

**I was not going to get extra oral suctioning. all extra oral suctioning device has HEPA 13 or lower grade. Do you still recommend that we use it as a KOIS trained standpoint?**

Hi Ben, If you can find something with Hepa 14, that would do better.

**If we already have a Jade unit, is there something that is out there that will work as an extraoral suction unit that will bring aerosols down to the jade unit?**

We have not seen anything like this

**First of all thank you so much for doing this.**

**Am I the only one thinking that all of this is so overwhelming and so impossible to acquire everything recommended that it is nearly impossible to practice dentistry safely.**

you are not the only one. It is a LOT of information. We are trying to simplify it as much as possible. Try not to be overwhelmed. We are distilling it down as much as is currently possible and it will get better

**Can hypochlorous acid that we produce for our cold fogger be used as an oral pre-rinse? If so how should it be diluted?**

This has not been researched so we do not recommend.

**John keeps talking about closing the door. What if there is an open bay design. Cabinets are the walls.**

Ambient air management and periodically spray or fog with HOCl. Also minimize aerosols with HVE.

**can additives be added to bottle water systems for cavitron to reduce harmful aerosols?**

We have not seen any research to support this.

**would a hand sanitiser be an acceptable alternative to getting patients to wash hands ?**

It is only recommended when hand washing is not available.

**I missed why rubber dam doesn't decrease aerosol. Can you repeat why? Thanks!**

The aerosol actually bounces off the dam out of the mouth. Hope that makes sense.

**So if use of the air/water syringe produces as much aerosol as an ultrasonic, why the recommendation to not use ultrasonic? Wouldn't a better approach be to use the US selectively, only in sites indicated by active bleeding?**

droplets may bounce off the rubber dam and out of the mouth

**Some extra oral suction units utilize a HEPA filter. The filter will trap bacteria and moisture. The moisture can be somewhat eliminated by running the suction for five minutes to dry the filter. However, I am concerned a bacterial odor could occur. A UV**

More of the extra oral suction has carbon filters that will can remove the odors.

**What about the water cooler in the reception room ? Also, we provide a blanket to the patient because often young girls come to the clinic with very short skirts. Patients also routinely go to the bathroom as they enter the practice. All of these are to**

You should remove all beverage stations in the reception area. Patient should place gloves on prior to going to the bathroom.

**Placed an order for a Jade unit and company said 6 times per hour air change. Is that good enough. Also said MERV 17 not 18??**

the Jade is Merv 20 or Hepa 14 or higher. At maximum speed it does 382 cfm. Excellent for a 3 person room. It's also has the lowest noise level.

**What is your source for CTx4?**

CariFree

**Will this Q & A session (with answers) be available for review later?**

Yes, Next week when we release the recording.

**why recommending patients and front office personnel wear gloves?**

Front office staff will handle objects from patients. Patients will touch things inadvertently.

**how do you handle fogging where computers are present**

go ahead and fog. it should not affect adversely. Small droplet size <50 microns

**I had other classes recommend not using the same operatory back to back. What is your thought, is it necessary with other ambient air management?**

Kunio please clarify you question.

**Does the pre-procedural rinse itself create an aerosol?**

have the patient expectorate right back into the same cup

**Rubber dam...if well inverted and no saliva is seen is the risk or infectious aerosol as high or even worrisome?**

Rubber dam is an excellent isolation protocol. Just wear a head covering that can be disposed or washed at the end of the day.

**Disinfecting Blood Pressure cuffs?**

Yes

**How about suctioning the pre-procedural rinse? Instead of spitting it out?**

could be a viable option

**Is there a difference between True HEPA and H13 air purifiers?**

H13 is a True Hepa

**why did they not like the IQ Air?**

It's a great machine, I have one, but it's cfm is just a little shy of the criteria we established. It also does have the UVGI for those particles that escaped the filters.

**do loupes with side shields count as proper eye protection?**

Ken a shield covering the whole face would be better but it is not mandatory

**also i got the hydrogen peroxide rinse by colgate , should i not use it?**

It is ok to use

**Can you mention again the pros and downs of using rubber dam because it was a little contradictory between what the doctor say and what the article they show mention.**

The aerosol seems to bounce off the dam and move upward into hair. Wearing a cap will minimize this risk.

**If you have open window ventilation and cross ventilation is that good or not?**

If you have a system to pull the air out to the open, that is good.

<https://www.koiscenter.com/support-material/covid-19/>

**What is the recommended PH for the fog?**

different studies suggest different things, but 5 and above is safe and 6.5 and below is effective

**Is fogging for the room recommended between each patient**

the recommendation is to fog at end of day, but it is certainly an option between patients if the solution is odorless or nearly and not too noisy or disruptive

**Would it be best to use an isolite vs a high speed suction tip**

Yes, just make sure the cfm can accommodate that.

**I think i missed the point on rubber dams - essential or not for aerosol procedures?**

**Did I hear correctly they increase risk ?**

Rubber Dam best for isolation not aerosol management

**does a lower ph HOCl solution (2.5 ish) have any negative effects?**

Yes, if the pH gets below 4 then the risk of odor and chlorine gas generation

**I didn't understand when you said it affects heating and cooling , can you elaborate please.**

Some furnaces control both humidity and temperature and depending on your climate you may overwhelm the system

**How do we maintain the HEPA filters?**

the HEPA would need to be replaced 2-5 yrs depending on the units.

**Thank you so Much. This was the best informative webinar since march. The brown bag storage method, do we use mask in a ziplock bag sealed and then store it , or else the whole area where all the bags are stored together may transmit more Virus to another**

It is preferred to have a breathable bag

**I bought 5 Austin air health pro units - 1 for each op is that not sufficient**

Austin Air is a good machine, they have a carbon clothes used by the military. You will need to calculate the CFM.

**If planning for a new office build, would it be better to incorporate HEPA filters centrally into the HVAC or would it still be better to have in-operatory units?**

Look in the PCO that Dave talked about. Elston. Remember your HVAC is not on all the time.

**Will a list of the product recommendations be available in the documents?**

In the handout documents

**thanks so much! I can't find the fogger recommendations on your website support materials.**

It will be in the handouts

**Is an air purifier with a H13 hepa filter ok? Medify units are significantly cheaper than Jade units**

Surgically Clean Air products are MERV 20. Highest we have seen

**can we put something in our coolant rinse in high speed and ultrasonic like H2O2 1% so the aerosol would be sterile?**

No that is not possible

**Is John back to seeing regular dental procedures at this time as well as the other advisory members or still doing only emergencies?**

washington is not yet back. emergencies only at this point

**Does HOCL react to certain surface disinfectants or anything else?**

there could be reactions with certain chemicals, so we are recommending to wait 10 min then fog with HOCl

**Is there a preferred sourcing/pricing for the CTX4 product?**

Carifree has a KoisBuyers Group discount

**Can we eat lunch in the team room if we can keep a door closed? Or is it truly masks 100% everywhere**

I will be eating with my team but try to maintain social distance

**For open op style practices, should these ops be closed off?**

No it wont be possible

**Disinfection of appliances can be done with HOCl?**

yes

**Ryobi sprayer fir the acid?**

it is an option

**Does the HOCl leave a residue? Will it effect equipment or furniture?**

We have not seen that to be an issue yet