Reports from the Task Force on Regathering Subcommittees

The following reports reflect the recommendations of the various task forces engaged with questions surrounding our gradual in-person regathering in our church buildings. Any guidance that has changed since the issue of "A Time of Challenge and Change: A Plan for Churches during a Pandemic" is indicated by bold text.

Bear in mind these are recommendations; inconsistencies among reports is possible. The reissue of "A Time of Challenge and Change: A Plan for Churches during a Pandemic," available the week of August 9, will reflect bishop's final decisions regarding any updated guidance for churches.

Table of Contents

Recommendations from the Task Force on Buildings and Supplies	2
Recommendations from the Task Force on Direct Services	3
Recommendations from the Task Force on Learnings	5
Recommendations from the Task Force on Newcomer Ministry	6
Recommendations from the Task Force on Pastoral Care	8
Recommendations from the Task Force on Protection/Prevention/Equipment Practices	11
Recommendations from the Task Force on Family Ministry, Children's Ministry and Schools	15
Recommendations of the Task Force on Small and Rural Congregations	17
Recommendations of the Task Force on Worship	18
Appendix A: Building Reopening Checklist	21
Appendix B: Disinfecting Products for use against Human Coronavirus Separate doc	ument
Appendix C: CDC Guidelines for Cleaning and Disinfecting	26
Appendix D: Appendix D: Heating, Ventilation and Air Conditioning (HVAC) System	
Modifications to Improve Air Quality and Combat Airborne Disease	28
Appendix E: Safety Guidelines for Schools and Programs Serving Children 0-12 th grade	33

Recommendations from the Task Force on Buildings and Supplies

Resources for Disinfecting Public Spaces

- This is a CDC link providing guidance for disinfecting community buildings: https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html
- There are several nationally known cleaning services through North Carolina that operate as franchises that specialize in cleaning spaces as it relates to disinfecting spaces for COVID-19
 - o ServiceMaster Raleigh https://www.svmwake.com
 - o Charlotte http://restorationcleanupnc.com
 - o ServPro https://www.servpro.com/coronavirus
 - o Jani-King https://www.janiking.com/coronavirus-disinfection-services/
 - o JanPro https://janproraleigh.com/covid-19-commercial-cleaning-steps-to-reopening/

Resources for Touchless Hand Sanitizing

- The three links below are for various forms of touchless hand sanitation devices ranging from \$275 per unit with a large refillable reservoir to less expensive smaller devices used in restaurant and other public space bathrooms.
 - o https://standupstations.com/shop/
 - o https://www.amazon.com/automatic-hand-sanitizer-dispenser/s?k=automatic+hand+sanitizer+dispenser
 - o https://www.webstaurantstore.com/1011/hand-sanitizer-dispensers-and-stations.html?filter=dispenser-type:automatic

See Appendix A: Building Reopening Checklist, Appendix B: Disinfecting Products for use against Human Coronavirus, Appendix C: CDC Guidelines for Cleaning and Disinfecting, Appendix D: HVAC System Modifications to Improve Air Quality and Combat Airborne Disease for additional information.

Recommendations from the Task Force on Direct Services

Checklist for All Stages

This is a checklist for all direct services leaders and volunteers to utilize for any direct service, onsite or offsite, prior to beginning any direct service.

Universal Checklist of Direct Services: Love God, Love Your Neighbor

- Establish protocol for volunteer symptom check and sign-in for tracing purposes
- Disinfect all surfaces and equipment before and after use
- Require use of cloth face coverings by staff, volunteers and clients
- Secure adequate supplies to support healthy hygiene: frequent hand washing, hand sanitizer, paper towels, cleaning supplies, soap and water.
- Follow guidelines for safe social distancing and modify layouts to ensure social distance and proper ventilation

Stage 1

- Continue with a distribution model, collaborating with local businesses and non-profits to provide essential outreach to the community
- For volunteers and clients on site, follow CDC recommended safety procedures, with outdoor options preferred.

Stage 1B

- Use this time to prepare space and documentation for a limited return to the building in Stage 2
- Put necessary documentation in place: signage in the building; contact tracing measures, such as sign-in sheets; and update all necessary contact information for clients and volunteers
- Prepare documentation, including signage throughout the building, informing volunteers and clients that your direct service is following all safety precautions outlined by the CDC and local health departments
 - o **This is in lieu of a legal waiver**
- If utilizing transportation as a part of your essential services, follow CDC guidelines for spacing, cleaning and protective measures in the vehicle
- Utilize surveys for volunteers and clients about potential return to onsite programming
- Create quarterly meetings for all direct service providers in the Diocese to share best practices, new initiatives and discuss the ever-changing needs and protocols of our programs

Stage 2

- Have all needed supplies for cleaning/disinfecting surfaces and spaces. Have adequate PPE, sanitizer.
- Prepare spaces for CDC distancing guidelines

- Continue with contact tracing for all clients/volunteers who remain onsite for services
- Communicate to clients and volunteers any new applications/safety protocols and survey results that need to be in place prior to their return.
- Reimagine how to rebuild volunteer and community collaborators after so much time away. Maintain collaborative relationships that have formed throughout this process

Recommendations from the Task Force on Learnings

The Task Force on Learnings is at work creating congregational conversation guides for use by congregational leaders. It is our hope that these guides will facilitate two kinds of conversations. First, we hope that they can help congregational leaders capture what they have learned through their experience of guiding a congregation through this time. Second, we hope that these guides can also serve as frameworks for conversations about your congregation's future as we imagine what life may look like after the pandemic and in a more just, more equitable society. The questions facing congregations are significant, but we have deep faith that, through conversation with one another and through the power of the Holy Spirit, we might find faithful ways forward. Congregational conversation guides will be available by All Saints Day.

Recommendations from the Task Force on Newcomer Ministry

"We Will All Be Newcomers"

The Diocesan Task Force on Newcomer Ministry is charged with exploring creative ways to engage and support parishioners, and welcome and retain newcomers who reach out to our churches, during the COVID-19 pandemic. After an initial organizational and brainstorming meeting on June 11, 2020; participation in the "Invite Welcome Connect" Zoom conference and roundtable from Sewanee on June 10 and July 8, 2020; and our meeting on July 27, we have identified both challenges and opportunities, for engagement and growth that are summarized below as observations, findings and recommendations:

Findings

The COVID-19 pandemic has brought hardships, but also blessings and opportunities for parish growth and renewal that could not have been foreseen. Digital resources and programmatic resourcefulness have allowed worship services and formation classes to continue using video streaming, with social media platforms bridging to online events and public service opportunities. Small groups have received comfort and support via remote gatherings. The work of the church has gone on in grace. When the day arrives for a safe return to church buildings, we all will be "newcomers," as re-connections and new connections must be made.

Recommendations

Churches should develop a "road map" to help newcomers, parishioners and clergy find their way and reconnect when worship, formation and other activities resume inside church buildings in more formal ways. Specifically, the road map should explain how parishioners and newcomers can reconnect with church ministries and activities. The road map will help acclimate newcomers to the habits of worship and prayer in community with others beyond the digital context of the pandemic. The road map will help newcomers find a place in the physical space, and support members, in adjusting to the post-COVID 19 church.

The "Invite Welcome Connect" book and webinars, and other similar resources, should be made available now to churches to begin developing the road map and strategies for parish reengagement.

Observations from June 25, 2020 Report

- People enjoy attending church services because of the physicality of our Episcopal style of worship, the holiness and beauty of the church space, and the proximity of others in worship, especially Passing the Peace in fellowship. However, remaining safely distanced and wearing masks are inconsistent with what has traditionally made attending services so fulfilling.
- Churches around the Diocese will need a range of options and suggestions to consider for reaching out to newcomers who called in or watched video streams. There may be a new "digital member." So, for example, efforts could be made to identify those persons who dialed in or watched online for a personalized follow-up.

- Using "home church" hybrids could bring together newcomers and members who social distance and wear masks, etc., allowing for safe worship in small groups.
- Streamed or pre-recorded services or other church events could be viewed together in online "rooms" using Zoom and other remote technologies—similar to a "watch party."
- Awareness of generational preferences is important. Podcasts are popular, especially with younger people and can be used for outreach. Social media is necessary for engaging newcomers and reaching out to members in a meaningful and timely way. (Facebook has a "sign in" function that may be useful.)
- Zoom church meetings and coffee hours have been engaging because people will say things in a
 remote meeting that they might not have been comfortable saying in an in-person meeting.
 Makes for more intimate and creative discussions and opportunities when people relax and
 connect online and through social media. Using a prompt or conversation starter facilitates
 communication.
- The "digital divide" affects older people who do not own cell phones capable of connecting to YouTube or Zoom. To address access issues, a church could collect older, unused smartphones to tune up and distribute to older members and newcomers in need of help with technologies. A device that is not connected for cellular service can be used on home Wi-Fi or at local hot spots.
- Coffee hour has always been important to connecting with newcomers. Having coffee hour outside after church while practicing social distancing in marked areas could be one way to continue these activities during COVID-19.
- Engaging children online, during a Zoom call or at church again will be a challenge. It was noted that formation classes, the nursery, and Sunday morning children and youth ministries may not be safe indoors because spaces used for these activities are often too small for social distancing. Children may be more engaged outside.

Recommendations from the Task Force on Pastoral Care

Pastoral Visitations

Pastoral visits by clergy or lay visitors, outside, each party wearing a mask, and remaining at a physical distance of at least 6 feet, may resume in Stage 1B.

In-home pastoral visits by clergy or lay people with appropriate PPE may resume in Stage 1B. In-home visits must be preceded and followed by thorough hand washing (or use of hand sanitizer if necessary, followed by hand washing as soon as possible.) These visits must be kept to no more than 10 minutes.

Once celebrations of the Holy Eucharist are permitted, a clergy person may take a consecrated wafer to the person being visited. Administration of this wafer will follow the guidelines for the distribution of Holy Communion in worship. (See the Task Force on Pastoral Care's guidelines for distribution of communion.)

All pastoral visits assume that neither the visitor nor the clergy person has any symptoms of COVID-19.

End-of-life care in hospitals, hospices, etc. can be offered as those institutions allow. The clergy person must wear proper PPE and follow the guidelines below for offering unction or baptism.

Pastoral care conversations via telephone and video call are also encouraged. All guidelines concerning confidentiality apply to these conversations as they would to in-person conversations.

The Task Force on Pastoral Care strongly recommends the development of on-line small groups for fellowship, study and prayer in as many congregations as possible. The connections among members of a parish are critical to their spiritual well-being, and the formation of groups to pray, listen and study together can be a key component of maintaining that well-being in this time of pandemic. If at all possible, we would like to see a network of technological support and guidance across the diocese, perhaps including a page of resources and people willing to be contacted for help on the diocesan webpage.

In instances in which the clergy of a congregation are unable to make in-person pastoral visits due to illness or particular vulnerabilities to COVID-19, the Task Force on Pastoral Care requests that the bishop consider authorizing pastoral visits by licensed, trained lay visitors following the guidelines set forth in this report.

The Task Force on Pastoral Care also recommends that the existing pastoral resources page on the diocesan website remain available, with the following modification to the guidelines on Ministration of Last Rites, updated to be sure deacons as well as priests are included:

Ministration of Last Rites

In this time of pandemic, it can be deeply disturbing to both clergy and laypersons alike to realize that priests will not be able to be physically present with their dying parishioners. More than ever before,

Christians are being called upon to trust that the risen Christ, through the power of the Holy Spirit, is very near to those who call upon him; that indeed, he lives and breathes within us, and he is capable of bridging any physical gap between a dying person and those who minister to that person.

Normally, the rite of Ministration at the Time of Death (often called "last rites") is offered in person, like all sacramental rites. As the Church seeks to do our part to slow the spread of the novel coronavirus, such in-person pastoral care may not be possible if, for instance, the dying person is in a hospital or nursing home where a clergy visit is not permitted. As **this recent Episcopal News Service article** shows, however, Spirit-filled care is still possible at a physical distance. The rite may be adapted in the following ways.

- As directed on p. 462 of the Book of Common Prayer, family or friends of the dying person should contact *the minister of their congregation* (or, if their congregation has no priest *or deacon*, their senior warden, who will obtain the services of a *clergy person*).
- Family members who have been living with the dying person (and therefore are not subject to physical distancing rules) should gather around them. If physical distancing and hospital protocols make this impossible, a hospital employee (e.g. chaplain) should be asked for assistance.
- The *minister* leading the Ministration at the Time of Death should telephone the family member, hospital employee or other person present with the dying person, and conduct the rite over speaker phone or video call. Anyone present with the dying person should join in as they are able, whether using a physical BCP or https://bcponline.org/.
- If the *minister* can travel to the building where the dying person is, *they* can *stand* outside that building, in a place visible (e.g. through a window) to those who have gathered around the dying person.
- It is customary to make the sign of the cross on the dying person's forehead at the "commendatory prayer" on p. 465 of the BCP. In these circumstances, someone present with the dying person can do so on the *minister*'s behalf.

When the Bishop directs the church to enter Phase 1B of reopening the church, a clergy person may administer last rites with the following adaptations:

- There may be no more than five people present, wearing masks, and maintaining a distance of at least 6 feet.
- The clergy person may anoint the dying only on the forehead, and must use a cotton ball to administer the oil.
- The clergy person may administer a consecrated wafer to the dying person from reserved sacrament, following the guidelines established regarding the distribution of Holy Communion by the Task Force on worship.
- The clergy person must wash/sanitize hands immediately before and after the rite, and should remain in the room no more than 15 minutes.

In these challenging days, we are being asked to place all our trust in Jesus's assurance that "I will not leave you orphaned; I am coming to you." We are being asked to trust that the loved ones for whom we desire the Ministration at the Time of Death were, in fact, marked as Christ's own forever at their baptism, that the Holy Spirit breathes in them even in their last hours, and that the Triune God will,

indeed, receive them into the arms of his mercy and the blessed rest of everlasting peace, even if a priest cannot be physically present with them as they pass from this life to the next. As all of us, ordained and lay, pray and minister together while doing everything we can to protect our neighbors from harm, your bishops give thanks for all the faithfulness you are showing.

Recommendations from the Task Force on Protection/Prevention/Equipment Practices

- Communion with masks is still a challenge. In Stage 1, we are asking for suggestion and creative proposals from the wider diocese. One permissible option if communion is celebrated is for those present to move outside after the words of Invitation. Once outside, each participant may carefully, and observing physical distancing and using hand sanitizer, receive the bread from the table, move at least 6 feet away, remove their mask to receive the bread, hand sanitize again, then place the mask back on. The service should conclude with the Postcommunion Prayer, Blessings and Dismissal, all outdoors.
 - Understand that people may be placing themselves at higher risk of infection anytime they touch their mask. Sanitizing before and after touching their mask will decrease risk but does not guarantee NO risk.
- A soloist may be recorded in the church following the same restrictions as the preacher: One other person, either instrumentalist or camera operator may be present if wearing a mask and standing at least 20 feet away from the soloist. Wind instruments are strictly prohibited. If there is an instrumentalist present with the soloist, a camera operator may not be present, and the camera should be unattended during the piece. After the filming is concluded, no one else may enter the recording space for **6 hours** in order to give any droplets and **aerosol particles** time to dissipate. https://www.nejm.org/doi/full/10.1056/NEJMc2004973
- If Holy Eucharist is celebrated in this stage, restrictive practices will remain in place. Governance and program committees, Bible studies and formation groups of 15 or fewer people might consider meeting in person while wearing masks if there is sufficient square footage to maintain physical distance. Groups are encouraged to continue gathering online. (See Appendix II: Protection/Prevention/Equipment Practices)

General Worship

- Organists and pianists may participate in live worship services. They may also accompany a soloist during a prerecorded segment of music, if the organist wears a mask and remains 20 feet from the soloist. After the filming is concluded, no one else may enter the recording space for 6 hours in order to give any droplets and aerosol particles time to dissipate. https://www.nejm.org/doi/full/10.1056/NEJMc2004973.
- People should enter the building staying 6 feet apart from anyone not from their own household. Ushers should help guide physical distancing.
- People should sign in and, **only** if required by government and health authorities, have their temperature taken.
- Worship team should not share common vestments. Participants should wear their own vestments or consider not vesting.
- If clergy wear a stole/chasuble/cope, they should hand sanitize and, while masked, remove

- the article of clothing and place it somewhere where it won't be touched for 72 hours and sanitize hands again.
- Clergy could consider placing them in a separate area away from other hanging items to "air out" for 72 hours. Celebrant should consider wearing an alb and stole only if the above recommendations are not feasible.
- Altar Guild are subject to the same physical distancing and masking requirements and guidelines.
- People should bring their own mask and wear it. Churches will provide masks for anyone who does not have one.
- People should be encouraged to bring their own Book of Common Prayer to church **or print from online source or pull up on smartphones**.

Weddings

- Weddings are limited to 25 total participants and guests practicing appropriate physical distancing if space permits, with outdoor weddings being preferable. (See Appendix II: Protection/Prevention/Equipment Practices) (Up to 35 people are allowed to gather if outdoors.) Additional supporters (except legal witnesses) can attend via video conferencing.
- Those being married may stand together, masked, and the minister should be masked with 6 feet of distance to be maintained.
- Consider premarital counseling via video conferencing.

Funerals

• Graveside services are allowed within the guidelines already laid out (i.e. 35 or fewer total people gathered, maintaining physical distancing and wearing masks). If a columbarium is used and is inside, committal should be conducted outside and then ONLY the minister will proceed inside to access the columbarium.

Building Guidelines for Stage 2

- If you become aware of someone in the church or a building user infected with COVID-19, put your communication plan into action and cooperate fully with contact tracers as directed by local county health departments.
- For bathrooms:
 - Only 1 person allowed in restroom at a time.
 - o Masks must be worn in restrooms at all times.
 - Please knock on the main restroom door and stand back to wait for at least 2 minutes
 - Wash hands for 20 seconds (post instructions on mirror) prior to touching stall
 - After using toilet, put toilet seat (where possible) down to flush, wash hands again, use paper towel to dry hands and to turn off water faucet.

- Use Clorox wipe to wipe down stall door handle, flush handle, and any other surface you touched.
- o If you must blow your nose, use a tissue, deposit into trashcan, wash hands as above.
- o Use paper towel to open main restroom door to exit if not propped open.
- o Use hand sanitizer after exiting restroom.

Masks

- Tie mask securely in place to cover your **nose and mouth** with no gaps between your face and the fabric.
 - o If it does not stay or fit securely, do not use it; find one that fits properly instead.

Hand Sanitizers

• Parishes also should provide bottles on individual pews or make them available within the church for use during the service, especially once offering Communion is approved.

Screening

- Because COVID-19 can occur in persons with no symptoms, mild symptoms and severe illness, screening with specific questions can help identify people at risk for unrecognized infection. Symptoms may appear anywhere from 2-14 days after virus exposure. A negative test is no guarantee that a person is not infected, as false negative results vary with the brand and type of test used. Members should self-select to stay home if they have any of the following symptoms to protect others.
- People with the following symptoms/symptom combinations present a risk of COVID-19:
 - o Cough
 - o Shortness of breath or difficulty breathing
- Or two or more of these symptoms:
 - o Fever or chills
 - o Cough
 - Shortness of breath or difficulty breathing
 - Fatigue
 - Muscle pain or body aches
 - Headache/Migraine
 - Sore throat
 - New loss of taste or smell
 - o Congestion or runny nose
 - Nausea or vomiting
 - Diarrhea
- Children may have similar symptoms as adults but generally have milder illness and so they, too, should be screened with questions.
 - o https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children.html#Children

- Screening Guidelines:
 - The PPEP subcommittee recommends screening everyone, including worship team, before entering any church facility.
- Church communications about meetings and activities should make clear that persons answering YES to any of the following questions should NOT physically participate in an activity:
 - o In the past 30 days, have you traveled internationally?
 - o In the past 30 days, have you or anyone in your household had contact with persons with confirmed or suspected Coronavirus exposure or COVID-19?
 - o In the past 30 days, have you or anyone in your household had contact with persons with COVID-19 symptoms?
 - O Do you have any of the following symptoms (even if attributed to another medical problem such as seasonal allergies **or recurrent migraines**): cough, shortness of breath, fever, chills, repeated shaking with chills, muscle pain, headache, **migraine**, sore throat, new loss of taste or smell?¹

Testing, Tracking, Treatment

The PPEP:

- Is NOT advocating temperature checking at entry points to buildings at this time. Not having a fever as a symptom does NOT mean you could not be an asymptomatic shedder of the virus to others. This may give a false sense of security.
- Is recommending active screening (see screening section) of all persons joining groups—including outside groups—and keeping logs to assist tracing contacts of any infected individual.

¹ This list is not all-inclusive. New signs and symptoms are regularly emerging. Please consult your medical provider for any other symptoms that are severe or concerning.

Recommendations from the Task Force on Family Ministry, Children's Ministry and Schools

on the reopening of K-12 schools and early childhood programs affiliated with parishes in the Episcopal Diocese of NC

Introduction from the Bishops

These guidelines and recommendations have been prepared by a team of educators, parents, school officials, a pediatrician and a childcare center operator—all connected with Episcopal churches in our diocese and we endorse them wholeheartedly. Our highest value is to protect the wellbeing of our children, students, faculty and their households. As we all realize, however, wellbeing, safety and risk are large concepts and definitions may vary from situation to situation. Even what is essential to some may seem less so to another. More and more data about COVID-19 and children is accumulating but not necessarily making our determinations any easier. There are risk factors for children who have no safe place or support for staying and learning from home.

Though a variety of perspectives and situations were part of this collaboration, we know there is no one size fits all when it comes to your discernment about when and how to reopen places of learning for children and teenagers. While setting some essential parameters, these guidelines and recommendations give you and your local community room to make some of your own determinations for your own location. If you wish to offer an alternative or customized plan that appears to differ in some significant way from these recommendations, we are more than happy to consult with you. In such a case, please direct your communications to Bishop Hodges-Copple. She and members of the team will be more than happy to work with you and help navigate a mutually acceptable plan.

Thanks be to God for the time and talent, love and wisdom, expertise and research that has been offered by the Working Group of Reopening Schools. God bless each of our school communities with continued wisdom and grace to navigate this unchartered territory.

K-12 SCHOOLS

- K-12 schools may open *only if* the parish's local public school system has also reopened for some form of in-person learning. Re-opening procedures should be consistent with the parish's local public schools; this includes possible A/B day schedules and limitations on numbers of children and adults per classroom.
- Schools MUST also be able to meet the *Diocese of NC Safety Guidelines*, given below. If these safeguards cannot be met, the facility may not open.

AFTER SCHOOL PROGRAMS (for K-12 children)

- After-school programs for this age group should consider opening prior to "Stage 2" only if they provide an essential service. These programs should follow the directives given in the Diocesan Guidelines for Best Practices for Direct Services.
- Essential service programs are defined as programs that meet one of the following criteria:

- Serve a population with special needs (i.e. English as a second language education, disabilities-focused programs, low-income meal programs)
- Programs MUST also be able to meet the *Diocese of NC Safety Guidelines*, given below. If these safeguards cannot be met, the facility may not open.

SAFE SITES FOR ONLINE LEARNING (for K-12 children)

Refer to the Diocese of NC's <u>Best Practices for Buildings and Grounds</u> and <u>Best Practices for Direct Services</u>. Churches should work with their local public school system to determine if providing a Safe Site is feasible and safe.

<u>PART-TIME AND/OR PLAY-BASED EARLY CHILDHOOD PROGRAMS (for children 0-5 years/Pre-K)</u>

• It is not recommended that *part-time or play-based* early childhood programs open until the Diocese of NC reaches Stage 2.

ESSENTIAL SERVICE PROGRAMS (for children 0-5 years/Pre-K)

- Essential service programs *may* open prior to Stage 2. Essential service programs for this age group are defined as programs that meet one of the following criteria:
 - Are a full-time care program and therefore essential to the children's guardians it serves for the purposes of maintaining full-time employment.
 - Serve a population with special needs (i.e. English as a second language education, disabilities focused programs, low-income meal programs)
- Programs MUST also be able to meet the *Diocese of NC Safety Guidelines*, given below. If these safeguards cannot be met, the facility may not open.

STATE-REGULATED CHILD CARE CENTERS

 State-regulated childcare centers operate under the direction of the state's governing board and are exempt from any conflicting recommendations or procedures of the Diocese of North Carolina.

See Appendix E: Safety Guidelines for Schools and Programs Serving Children 0-12th grade for more information.

Recommendations of the Task Force on Small and Rural Congregations

Recognizing that small and rural congregations have immediate (acute) needs that must be met in order to be adequately prepared to transition to Stage 2, as well as on-going (chronic) needs for long-term viability, and recognizing that ministering to vulnerable congregations is a priority of the Diocese, this task force concludes its work by:

- Urging all small, rural and otherwise vulnerable congregations to fill out the forthcoming survey so that their needs will be adequately assessed and conveyed to the diocese;
- Encouraging small congregations to explore NCECF (North Carolina Episcopal Church Foundation) grants, which are being made available through 2020 specifically to help with acute needs in this process;
- Allowing this task force to transition into an affinity group where small and rural congregations can receive ongoing support, exchange of ideas, and connection;
- Supporting creative endeavors to envision and implement new models of clergy and lay leadership among vulnerable congregations, letting go of old wineskins when needed so that the Body of Christ may be manifest in new, Spirit-filled, life-giving ways.

Recommendations of the Task Force on Worship

We recommend a Stage 1B, continuing with current practices of Stage 1, with the following recommendations:

- 1. The principal service is the one that is offered online.
 - For all services, including ones on Zoom:
 - Consider the service that is most clear for your congregation: Morning Prayer, Eucharist
 with or without Spiritual Communion, or Liturgy of the Word (ante communion) without
 Communion.
 - Leaflets may be sent out in pdf form or be posted online; hymns for singing at home may be included.
 - For services livestreamed/recorded from the church:
 - Service is either prerecorded or livestreamed with 10 people or fewer; all participants must sign in.
 - o All participants must wear masks and practice physical distancing.
 - o Instrumentalists in the livestream are fine, but no wind or brass instruments are permitted.
 - O The sermon may be done without a mask ONLY if prerecorded or delivered at the end of the recording session, once all participants except the masked cameraperson leave the space. The cameraperson must remain at least 20 feet away from the preacher. The preacher's mask must be worn before and after the sermon is preached.
 - A soloist may sing, unmasked, at the end of the service ONLY under the same conditions as a preacher delivering a sermon at the end of a recording session.
 Otherwise, singing is not permitted during the service; prerecorded solos are OK.
 - o No one should enter the space for 6 hours after preaching/singing has occurred without a mask; and all should wear masks when they enter the space.
 - o If Communion is to be received, see recommended practices below.
 - We encourage churches with clergy at low risk for the COVID-19 virus to share clergy for in-person worship with those churches whose clergy are at risk.
- 2. Allow and encourage more outdoor worship early or late on Sundays or other days of the week.
 - Numbers of participants will be determined by the amount of safe distancing space (at least 6 feet apart) available at each location, but keeping them equal to or less than what the bishops direct.
 - All participants must pre-register and answer pre-screening questions.
 - All participants must sign in with an usher or staff member checking off names on a registration list.
 - Masks and hand sanitizer need to be available, even outdoors.
 - All participants must wear masks and practice physical distancing.
 - Consider the use of an outdoor speaker system.
 - If Eucharist is allowed, see practices for set up and distribution below.

- Indoor and outdoor services of weddings, baptisms and funerals are possible ONLY with permission of bishops with numbers of participants to be determined by the amount of safe distancing space (at least 6 feet apart) available at each location, but keeping them equal to or less than what the bishops direct.
- No group singing is allowed indoors or outdoors.
- A soloist may sing masked or unmasked at a distance of 20 feet.

3. No indoor public worship until Stage 2.

- Outdoor Eucharist is allowed in Stage 1B if it is administered (bread only) in such a way in which contacts between the distributor and the recipient are minimalized.
 - o All participants preregister and answer prescreening questions; usher or staff member checks off names on a registration list; all wear masks and practice physical distancing.
 - See set up and distribution practices below.
 - o Communion is to be offered in one kind, bread only, and should be administered by the celebrant alone—with as minimal contact as possible.
 - o Physical distancing to be maintained between members of different households.
- Possible procedure for set up and distribution for services of Holy Eucharist (partly based on set-up/distribution for the recent ordinations)
 - o Set-up
 - Note: "Bread" can mean priest host, wafers, real bread, or tortillas.
 - Set up done by one person with sanitized hands and wearing mask.
 - Wash/sanitize hands before getting everything out in the sacristy.
 - Clean the sacristy counter with a Clorox (or similar) wipe.
 - Clean the vessels needed (depending on number allowed in the service).
 - Prepare one paten for priest host, number of wafers needed in covered ciborium or breadbox, and clean Ziploc bag (or bread/tortillas wrapped in plastic).
 - Please remember your parish's gluten-free provisions and practices.
 - Purificator for chalice, corporal to be placed on altar/table before the service (or in stack with veil and burse and pall).
 - Sanitize hands before putting priest host (bread/tortilla) into Ziploc on paten and wafers from packages into ciborium, then cover.
 - Pour needed amount of wine and water into each cruet/pitcher.
 - Carry everything out to credence table or designated spot outdoors.
 - Wash/sanitize hands to place on credence or altar/table or other spot.
 - At the offertory
 - If there is a deacon present, they sanitize their hands and set things out on altar/table. (Otherwise the celebrant does this, sanitizing hands first.)
 - The deacon follows the same rules as the other communicants, sanitizing hands, wearing masks, returning to seats, etc, after communion.
 - Celebrant sanitizes hands and begins Eucharistic Prayer.
 - Sanitizing of hands must be very visible.
 - Celebrant lifts up or touches ONLY the priest host (bread/tortilla) and extends hands over ciborium/other container. Celebrant touches or lifts up the chalice.

- In lieu of the ciborium and separate wafers, the Celebrant can break one large host, bread or tortilla into small pieces to distribute, as long a hand sanitation happens throughout and is evident.
- All continue to wear masks and deacon, if present, stands 6 feet away from the celebrant.

Distribution

- After the invitation to communion, the celebrant, still wearing a mask, leaves the broken priest host on the paten on the altar, sanitizes hands, and brings the ciborium to the place of distribution.
- People approach standing communion station with physical distancing in line between members of different households.
- Celebrant drops bread, with fingers or by tongs, into each person's outstretched palms without touching the receiver's hands, OR by distributing with each piece of the host in separate containers set out and picked up individually.
- If touching accidentally occurs, celebrant should re-sanitize their hands and continue.
- People return to their seat with bread, and **lift** mask to consume the bread, replacing mask over mouth and nose when finished.
- Ideally, there is sanitizer available at places outside (or indoors in the pews).
- Celebrant keeps mask on during distribution and then returns to altar/table to take bread (and wine) after sanitizing their hands.
- Celebrant (or deacon) clears communion from the altar/table as per parish custom.

Clean up

• After the service, bread and wine are reverently disposed of, vessels cleaned, and linens put away to be cleaned in accordance with safe practices outlined elsewhere in the task force report and with customs of the particular church setting.

4. Vestments

- Do not share vestments.
- When possible, minimize vestment use.

5. Other matters discussed by round 2 worship group

- We understand that our diocese includes a wide spectrum of churches and clergy.
- We do not want any congregation to feel pressured into offerings that are not suitable to their circumstance.
- We are looking for guidance for increasing the evangelical aspects of online worship.
- We encourage churches with land to share their land with churches that are landlocked.
- We recommend that the Diocese continue to make available resources for how and why spiritual communion is a viable option and why online communion is not allowed/considered.

Appendix A: Building Reopening Checklist

This document may serve as a template for churches who are developing their Phase 2 reopening plans, or for use as a model for churches who have existing plans to update.

Phase 2 Reopening Plan

Approved by the	, Au	igust	, 2020

Pre-opening

- Announcement to Parish of Reopening with a limit of 25 Participants in Worship
 - o Electronic newsletters
 - Website
 - Sunday Announcements
 - Social Media
 - o Possible letter/postcard?
 - Phone calls
- Content of information communicated to the parish should include:
 - o Specify who is included in the maximum of 25 people in worship
 - Registration Process
 - Can be accomplished online using Constant Contact, or other available software (Doodle Poll), to register for Sunday services, which will allow registration up to a maximum number of attendees.
 - Each parishioner desiring to attend one of the Sunday services will contact the Parish Administrator by the Friday of the week before the service, specifying the names of those attending, and which service desired (indoor or outdoor, Nave or Parish Hall, etc.). This information will be kept confidential, and is only to be used for contact tracing if necessary. Newcomers are welcome and encouraged! ... but will need to follow the same pre-service signup.
- Requirements for attendance
 - Prescreening questionnaire No fever or chills, cough, sore throat, congestion or runny nose, headache, new loss of taste or smell, shortness of breath or difficulty breathing, muscle pain, fatigue, nausea or vomiting, diarrhea or recent exposure to a Coronavirus patient
 - o No outside food or drink allowed in any building, nor will any be served
 - Masks are required
 - o Risk categories considered
- Details for services
 - o Arrival times will be assigned up to 20 minutes prior to the scheduled service to permit check-in upon arrival to allow for prescreening
 - o Distancing measures in place, including specific seating arrangements
 - o Print and bring your own bulletin or device, no BCPs or bulletins will be in pews

Development of Signage, Preparation and Posting

- Appropriate staff will work with lay committee on the creation, printing, and lamination of signage.
- Create attendance sheet for all in attendance (including staff, parishioners, volunteers and clergy) to include registered name, working phone number and email and that the attendee has passed the prescreening test.
- Create/place signs:
 - o "Masks Required"
 - o "Entrance" on Entry doors
 - o "Exit Only" on Exit doors
 - Poster board stating Pre-screening Requirements: no cough, no fever, etc. (to be placed at sign-in desk)
 - Seat markers in sanctuary
 - o "No food or drink in church"
 - o ALL bathrooms being used
 - Water fountains: "No Water"

Mark Traffic Flow, Waiting and Seating

- Exterior doors should be propped open, weather permitting
- Traffic flow: Entrance and egress points
- Traffic flow: Bathrooms
- Queuing: Social Distancing markers outside church to guide members as they wait for prescreening
- Seating: Place markers for placement of each family in pews (6 feet apart)

Training for Reopening Leaders

- Practice Scripts for:
 - O Those who won't wear masks cannot enter church
 - o Those who won't answer questionnaire cannot enter church
 - o Those who came but weren't assigned to come this Sunday –
- Prescreening Stations
 - Set up Table
 - How to mark attendance
 - Alcohol
 - Sanitizing wipes
 - o Extra Masks
 - Hand sanitizing station, if using (motion activated station can be used elsewhere during the week)
 - Gloves for Reopening Leaders
 - Trash Cans
- Additional Information and steps
 - o Removal of prayer books and hymnals and placed in storage
 - o Place basket of small bottled water for emergency use only with cloth on top

- Hand sanitizer* placed in pews where worshipers are seated
- Full ventilation and dehumidification will be on 12 hours before the service (with MERV- 13 filters, if installed)
- Water fountains need to be turned off

Opening Day

- Reopening Leaders may not be attending the service; therefore, they will not count in the total of 25. Leaders need to be stationed at all doors to guide attendees.
- All 25 in attendance, including clergy, staff and parishioners should enter through the
 _____ doors and go through the prescreening process. If anyone is unwilling to go
 through prescreening process, they will be denied entry.

Reopening Leader Checklist - Prior to the service

- Prop open Entrance doors (weather permitting)
- Check for/Place Signage:
 - o "Entrance" on entry door
 - o "Exit" on inside of church by light panel being used during service
 - o Sign/Poster stating Pre-screening Requirements: no cough, no fever, etc.
 - o "No food or drink in church"
 - Sign for routing to bathrooms
- Check to see if traffic flow has been marked
- Check to see if traffic flow to bathrooms is marked
- Check on marking of 6' spots while waiting outdoors for pre-screening and in waiting lines for bathroom
- Check for pew marker for placement of each family (6 feet apart); families sitting together
- Pre-screening Station:
 - Set up prescreening station
 - o Tables and chairs for stations
 - Supplies for stations
 - o Attendance Sheet check-off names of those registered
 - Trash Can
 - o Thermometers (if using), alcohol, wipes
 - Extra Masks
 - Hand sanitizing (pump or motion sensor)
 - o Gloves for Reopening Leaders
 - List of volunteers with tasks assigned
 - o Pen and clipboard for Leader's use for attendance sheet
 - Provide collection plate/box for Church Offering. Offering will be collected at the pre-screening table and moved to a secure location to remain untouched for 72 hours before counting and depositing.
- Clean high touch surfaces
- Prop open bathroom doors (where practical). Have trashcans near bathroom doors.

Reopening Leader Checklist - After the Service

- Pre-screening Station supplies, including tables and exterior signage, are to be placed in the ______room to be untouched for 72 hours.
- Indoor signage and other markings can remain in place. Carefully remove any adhesive from building and store outdoor signage with screening supplies in the
- Assigned Leaders will make sure that all markings remain in place unless there is another service that will be held before the next Sunday including:
 - Traffic flow markings
 - Traffic flow markings to bathrooms
 - Check on marking of 6' spots while waiting for pre-screening and outside bathrooms
 - o Pew markers remain on pew backs.
- Clean high touch surfaces

Staff Office/Program Ministries

- Masks required in the church building except when you are alone in your own office
- 6' physical distancing required from others
- All staff and volunteers will enter and exit through the main _____doors; keeping all other doors locked at all times
- Spaces that will remain closed during Stage 2:
- Open Meeting Spaces during Stage 2. Any groups using this space must observe Maximum Capacity Limits

	1 2
0	Parish Hall – Maximum Capacity ()
0	– Maximum Capacity ()
0	– Maximum Capacity ()
0	— Maximum Capacity ()
0	– Maximum Capacity (
0	Church Library – Maximum Capacity ()
0	- Maximum Capacity (

- Cleaning should be taking place as appropriate to COVID-19 guidelines.

 Approved cleaners should be used to wipe down surfaces. Parish Sexton/Facility

 Managers will continue to take trash out and wipe the following down daily:
 - o banisters in all stairwells
 - door handles
 - o bathrooms
- Staff members are responsible for cleaning and disinfecting their own offices. Sanitizing products will be supplied for offices, staff kitchen and bathrooms. Staff is asked also asked to clean bathrooms and staff kitchen after use.
- Hand sanitizing stations will be located inside the exterior doors, outside of each elevator stop and at stairwell doors on each floor.
- Signage Needed:
- "No Entry at this Time" On spaces that are closed in Stage 2
 - o "No Water" Cut off water in water fountains

- o "Please use each time you pass for everyone's safety" At each hand sanitizing station reminding everyone to disinfect
- "Please take a moment to sanitize any surfaces you have touched" Placed in each bathroom
- "Please remember to sanitize each surface you have touched" Staff Kitchen,
- o "Maximum Capacity____" for each of the ____open meeting rooms. Number of people allowed to be filled in with erasable marker.

GUIDANCE FOR CLEANING & DISINFECTING



SCAN HERE FOR MORE INFORMATION

PUBLIC SPACES, WORKPLACES, BUSINESSES, SCHOOLS, AND HOMES

$1\,$ develop your plan

DETERMINE WHAT NEEDS TO BE CLEANED.

Areas unoccupied for 7 or more days need only routine cleaning. Maintain existing cleaning practices for outdoor areas.

DETERMINE HOW AREAS WILL BE DISINFECTED. Consider the type of surface and how often the surface is touched. Prioritize disinfecting frequently touched surfaces.

CONSIDER THE RESOURCES AND EQUIPMENT NEEDED. Keep in mind the availability of cleaning products and personal protective equipment (PPE) appropriate for cleaners and disinfectants.

Follow guidance from state, tribal, local, and territorial authorities.

2 IMPLEMENT

CLEAN VISIBLY DIRTY SURFACES WITH SOAP AND WATER prior to disinfection.

USE THE APPROPRIATE CLEANING OR DISINFECTANT PRODUCT. Use an EPA-approved disinfectant against COVID-19, and read the label to make sure it meets your needs.

ALWAYS FOLLOW THE DIRECTIONS ON THE LABEL. The label will include safety information and application instructions. Keep disinfectants out of the reach of children.

3 MAINTAIN AND REVISE

CONTINUE ROUTINE CLEANING AND DISINFECTION.

Continue or revise your plan based upon appropriate disinfectant and PPE availability. Dirty surfaces should be cleaned with soap and water prior to disinfection. Routinely disinfect frequently touched surfaces at least daily.

MAINTAIN SAFE PRACTICES such as frequent handwashing, using cloth face coverings, and staying home if you are sick.

CONTINUE PRACTICES THAT REDUCE THE POTENTIAL FOR EXPOSURE. Maintain social distancing, staying six feet away from others. Reduce sharing of common spaces and frequently touched objects.





MAKING YOUR PLAN TO CLEAN AND DISINFECT

Cleaning with soap and water removes germs, dirt, and impurities from surfaces. It lowers the risk of spreading infection.

Disinfecting kills germs on surfaces. By killing germs on a surface after cleaning, it can further lower the risk of spreading infection.



Is the area indoors?





Maintain existing cleaning practices.

Coronaviruses naturally die in hours to days in typical indoor and outdoor environments. Viruses are killed more quickly by warmer temperatures and sunlight.

Has the area been occupied within the last 7 days?



Yes, the area has been occupied within the last 7 days.



The area has been unoccupied within the last 7 days.

The area will need only routine cleaning.





Is it a frequently touched surface or object?



Yes, it is a frequently touched surface or object.



Thoroughly clean these materials.

Consider setting a schedule for routine cleaning and disinfection, as appropriate.



Hard and non-porous materials like glass, metal, or plastic.

Visibly dirty surfaces should be cleaned prior to disinfection.

Consult EPA's list of disinfectants for use against COVID-19, specifically for use on hard, non-porous surfaces and for your specific application need. More frequent cleaning and disinfection is necessary to reduce exposure.

Soft and porous materials like carpet, rugs, or material in seating areas.

Thoroughly clean or launder materials.

Consider removing soft and porous materials in high traffic areas. Disinfect materials if appropriate products are available.



Appendix D: Heating, Ventilation and Air Conditioning (HVAC) System Modifications to Improve Air Quality and Combat Airborne Disease

Disclaimers

This report is not an endorsement, recommendation or criticism of any product described, either by the authors, the Buildings and Supplies Working Group of the Diocesan Task Force on Reopening, or the Episcopal Diocese of North Carolina. The authors claim no technical, medical or other expertise relating to HVAC systems generally, or indoor air purification specifically. This report was prepared as general information, based on consultations with an indoor environmental consulting firm, two HVAC contractors, an architect, and information from the internet. There are other systems on the market besides those discussed in this report, which focuses on systems with which those consulted were most familiar.

As of the date of this report, COVID-19 has been around for less than one year, and there is little independent research on the effectiveness of any air cleaning system to combat it. There is some information, referenced herein, as to the effectiveness of some systems against COVID-19 and other organisms in some circumstances (mostly from tests or studies commissioned by the respective manufacturers), and against the previous SARS-CoV-2 (2002) virus which is from the same RNA coronavirus group as COVID-19.

Initial Steps to Improve Air Quality

The authors consulted with Dan Whittaker, Vice President and Senior Indoor Environmental Professional at Environmental Services Group in Greensboro, go-esg.com/dan-whittaker/. Mr. Whittaker also edited a draft of this report. This section describes the approach he recommends to any non-residential property owner looking to improve indoor air quality, including virus protection.

With or without HVAC modifications, indoor virus protection requires proper surface cleaning and personal protection equipment such as masks, topics covered in a separate part of the Buildings and Supplies Working Group report.

Regarding HVAC equipment, combatting COVID-19 also combats other air quality issues. Mr. Whittaker recommends a four-step process BEFORE considering installing any additional treatment such as ultraviolet (UV) radiation or bipolar ionization. In combination, these four steps, especially adding HEPA filtration, will increase protection from COVID-19. If an additional system such as UV or bipolar ionization is installed thereafter, HEPA filtration will greatly increase that system's effectiveness against COVID-19.

1. Equipment Inspection and Load Calculation

Have an HVAC contractor perform an inspection of the system to determine the presence of any hazardous conditions such as mold, and then make a load calculation. The load calculation includes the size of the space, and the number of BTU's and other requirements for effective heating, cooling, humidity and air flow. It also includes consideration of any changes made to the space since the time the HVAC system was installed, such as an addition to the building or wall modifications. The property owner should inform the contractor if planning to add High Energy Particulate Air (HEPA) filtration,

because it affects air flow and load on the blower motor. Most contractors make this calculation at no cost before undertaking any HVAC modifications. A load calculation without equipment modifications might cost about \$400.

2. High Energy Particle Air (HEPA) Filtration

If not already part of the HVAC system, add appropriate HEPA filtration. This can be done either by having a contractor install a HEPA filter in place of a non-HEPA filter within the air handler cabinet of the HVAC system, or by placing in the worship space one or more separate stand-alone units, which have multiple filters and a fan to push air through the unit. With either method, the goal is to filter or change all the air in the space. The number of ideal total air changes per hour for the HVAC system may be determined by an HVAC contractor. When using stand-alone filtration units, four air changes per hour is ideal.

Within the HVAC system, Mr. Whittaker recommends a 4-inch to 6-inch thick HEPA filter with a Minimum Efficiency Reporting Value (MERV) rating of 11 to 13, as sufficient to improve air quality without impeding airflow through a non-HEPA system. The filter and initial installation typically cost about \$300-600, and is replaced about every six months. The filter and service every 6 months is typically considerably less than \$400.

As a stand-alone HEPA unit, Mr. Whittaker recommends the Phoenix Guardian Air Scrubber model 4024808, which costs about \$2,400 not installed. The fan in a stand-alone unit may be too loud, in which case the unit could be installed in a closet or enclosed area within the space with an intake from and vent to the space. The filters in the unit are replaced about every six months. Stand-alone filtration units are not necessary in all buildings or situations, but can be very helpful for promoting healthy air quality, especially in buildings with heavy activity or large amounts of occupants.

[AUTHORS' NOTE: The diameter of an average COVID-19 particle is variously reported as in the range of .06 to .125 micron. A micron is one millionth of a meter. Most MERV ratings for HEPA filtration of particles by diameter do not show statistics for particle capture below .3 micron, which is larger than the average COVID-19 particle. However, there is some evidence that some HEPA filters trap particles as small as .01 micron.

HEPA filters have a very thick and tight membrane. Neither HVAC contractor consulted recommended installing HEPA filtration in an existing non-HEPA HVAC system, claiming most existing HVAC systems (including blower motor and ductwork) were not designed for HEPA filtration, so the filter puts a heavy strain on the system to move air. One of the bipolar ionization system manufacturers discussed below claims HEPA filters can act as a breeding ground for bacteria, mold and fungus.]

3. Air Flow and Humidity

Improve airflow by installing a thermostat with a fan circulation mode as well as the usual auto and on modes. A system which runs too often or all the time may result in excess humidity (optimally 50%, and always within the 40 to 60% range) in the space, which in turn may cause mold on surfaces or rust metal. Mr. Whittaker recommends the Ecobee SmartThermostat model EB-STATE5-01, cost about \$200 not installed, which includes a humidistat or hygrometer to monitor humidity. Or add a humidistat

or hygrometer if not included in the thermostat. As a separate unit to monitor humidity levels, Mr. Whittaker recommends the ThermoPro TP50, cost about \$11.

4. Fresh Air and Carbon Dioxide

Provide sufficient fresh air to the space and monitor the level of carbon dioxide (not monoxide). To deter COVID-19, provide as much fresh air as possible; fresh air dilutes and displaces contamination in indoor air. Open windows if possible. Generally, high ceilings improve air quality. Run (or install) ceiling fans that pull air upwards. Install one or more carbon dioxide (not monoxide) detectors, to show how much fresh air is in the space. The normal carbon monoxide level in outdoor air is about 400 parts per million (ppm). Indoors, it should be about 600-700 ppm, and never above 1,000 ppm. A detector costs about \$30, and should be mounted at eye level in the central areas of the sanctuary and nave. If necessary, add a fresh air input and damper to the HVAC system.

After completing these four steps, installation of an additional treatment system, such as ultraviolet (UV) light or bipolar ionization discussed below, may be considered.

Treatment with Ultraviolet Light

UV energy has been known to destroy microorganisms for about 100 years, and has been used in water treatment for decades. It inactivates such organisms so they are unable to replicate. While direct exposure UV light is harmful to people at the level necessary to purify air, the UV treatment discussed here occurs entirely within the HVAC system so there is no exposure.

APCO-X Air Purification System

This system uses ultraviolet (UV) irradiation, specifically UV-C light, to sanitize air. The unit installs directly into the HVAC system air handler (the box containing the blower motor that pushes air into ductwork) or into the ductwork adjacent to the air handler. It claims to destroy effectively bacteria, viruses, mold, and fungus in the air and on the interior surfaces of the HVAC equipment.

In past years, studies have defined the lethal UV-C light dosage for SARS-CoV-1 (2004). In July 2020, the manufacturer claimed tests demonstrate that generally UV-C at the proper dosage is 99.9% effective against SARS CoV-2 (COVID-19). However, these tests were not on the APCO-X system specifically.

A competitor whose device does not use UV light claims UV light may produce ozone. The manufacturer of APCO-X claims it is ozone-free. A competitor also claims UV light sources weaken or fade over time.

A church may have multiple HVAC systems for the church itself, and additional systems for a parish hall or other buildings. To be effective, an APCO-X unit is required in each HVAC system, and for maximum effect the blower motor on each system should run all the time.

One HVAC contractor quoted about \$1,000 per APCO-X unit installed, including labor and materials. The APCO-X hardware has a lifetime warranty. The UV-C light source has a three-year warranty. Beyond warranty, a replacement light was quoted at about \$200 installed.

Bipolar Ionization

RGF Environmental Group REME HALO Air Purification System Global Plasma Solutions Auto-Cleaning Needlepoint System

These two systems, from competing manufacturers, generate ionized hydro-peroxide particles (positive and negative ions produced by electronic charge) which attach to and destroy airborne particles. The manufacturers claim the systems clean not only within the HVAC system but also in the air and on surfaces throughout the treated area, to destroy odors, pollutants, mold, bacteria and viruses.

In April 2020, Global Plasma Solutions (GPS) reported a test showed its Auto-Cleaning Needlepoint Bipolar Ionization System demonstrated a 99.4% reduction rate on a SARS-CoV-2 (COVID-19) surface strain within 30 minutes, in conditions simulating those within a commercial aircraft fuselage.

Both manufacturers claim their air cleaning systems are ozone-free. However, there are claims that the systems produce ozone, which may be within recognized standards. The REME HALO manufacturer says its system also may produce an aroma for a while after installation, which will go away; and that the HVAC system does not need to run constantly to be effective. Global Plasma Solutions says its system is odor-free, self-cleaning and maintenance-free.

For either system, one unit is required in each HVAC system. A contractor quoted about \$1,300 per Global Plasma Solutions unit installed, with a one-year manufacturer's warranty. GPS claims the expected life of the cell that produces ionization is about two years.

The REME HALO unit standard installation cost is quoted online as about \$1,100. REME HALO has a limited five-year warranty on some components and a limited two-year warranty on the cell which produces ionization. Cell replacement cost is about \$270 not installed. The manufacturer recommends the HVAC fan run constantly, as on/off recycling may decrease cell life. The manufacturer also has a new product, HALO LED, which uses LED light to produce ionization and claims to be ozone-free.

Selected Resources

General information:

How to Make Indoor Air Safer, July 20, 2020 – https://fivethirtyeight.com/features/how-to-make-indoor-air-safer/

From the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):

ASHRAE Position Document on Infectious Aerosols, April 2020 – https://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf

ASHRAE Position Document on Filtration and Air Cleaning, 2015, updated 2018 – https://www.ashrae.org/file%20library/about/position%20documents/filtration-and-air-cleaning-pd.pdf

Systems Referenced and COVID-19:

APCO-X - https://www.freshaireuv.com/coronavirus-update/

HEPA - https://www.nytimes.com/wirecutter/blog/can-hepa-air-purifiers-capture-coronavirus/

 $\label{local-plasma} Global \ Plasma \ Solutions - \underline{https://www.businesswire.com/news/home/20200610005784/en/Global-Plasma-Solutions-Virtually-Eliminates-Static-SARS-CoV-2$

 $REME\ HALO\ -\ \underline{https://www.rgf.com/rgf-phi-cell-and-reme-halo-technology-impact-on-novel-\underline{coronavirus-covid-19/}$

Manufacturer websites:

APCO-X: freshaireuv.com Global Plasma Solutions – globalplasmasolutions.com REME HALO – rgf.com END

Appendix E: Safety Guidelines for Schools and Programs Serving Children 0-12th grade

Facilities and Personnel

- Allow 42-54 square feet of space for each child or adult in a classroom (per the recommendations from the American Pediatric Association and CDC) to maintain healthy distancing and space.
- Teachers should stay with their assigned class to avoid possible exposure between classroom groups. There should be as little introduction of additional adults as possible. Limit people in the facility to staff/teachers necessary to keep ratios, especially during the instructional day.
- Children must stay in their classrooms except to go to the playground-no changing classrooms.

Cloth Face Coverings (CFC)

- Children 2 years old and older and adults are to wear a CFC in all public/shared spaces and classrooms.
- All people entering the building must wear a CFC.
- Teachers/staff are expected to comply with the state mandate to wear a CFC while in *any* public space.

Daily Arrival and Departure

- Drop-off and pick-up times should be staggered to ensure physical distancing is possible and to prevent "bottlenecking".
- Guardians should not enter the main school area (classrooms). Children should be dropped off in a designated area for check-in and daily health screenings (see details below).
- "Know Your Ws" poster should be posted in the check-in area. See below.
- Floor markings should be used in the designated check-in space to mark 6 ft. of distance between families as they await their screening.

Daily Health Screening Details

- A staff member (not a high-risk person) should greet and screen children wearing a cloth face covering (CFC)
- Masks should be available for those who "forget" their mask.
- Each child's temperature should be checked with touchless thermometer. Staff documents the reading.
- All health screening questions (see "Symptoms of COVID-19") must be asked of the child's guardian.
- A designated staff person takes the child to the classroom
- Hands are washed immediately after entering the classroom

Additional Daily Procedures

• "Symptoms of COVID-19" poster should be posted on each door in the facility.

- After initial morning screening, teachers should be extra observant about any developing symptoms and document those symptoms accordingly. Children who develop a fever, new cough, new congestion etc. throughout the day should be isolated in a designated area with one staff member supervising; a parent/guardian must pick up the child ASAP.
- Staff should familiarize themselves with <u>this daily health check</u> from the NC Department of Health and Human Services.

Preventing Spread in the Classroom

- Use floor markers to indicate where children should sit.
- Use outstretched arms to model the "don't touch" distance.
- Post signage to remind teachers and children of keeping the distance—change the location of the signage periodically to enforce reminders.
- Remove items that are generally shared. Examples: water toys, sand, sensory play (rice, beans, Play-Doh). No shared stuffed animals or other objects that cannot be sanitized.
- Assign scissors and other frequently used materials to children (one per child, do not share)
- Use only prepackaged food in individual servings.
- Use disposable dishes unless appropriate dishwashing equipment is present.
- Check ventilation systems to ensure that air conditioning works and filters are clean. Open windows/doors if possible and not dangerous for children.
- All toys, surfaces, door handles, etc. must be cleaned (see instructions below) after each child's use whenever possible.
- Singing is strongly discouraged as it causes a higher transmission rate of COVID-19.

Cleaning and Hygiene

- Classroom items/toys must be cleaned/sanitized at the end of each day (spray/wipe down, air dry if possible)
 - o Sanitizing and disinfection solution: bleach/water solution to be made daily
 - Sanitizer 50 100 ppm
 - Disinfectant 700 1000 ppm (That's strong stuff!!!)
 - Calculate amount of bleach needed in water
- Mouthed toys are washed in sanitizing solution and left to air dry
- All tables and surfaces should be disinfected (let dry if possible)
- Floors should be mopped with bleach solution twice a week (every day in the eating area)
- All frequently touched surfaces (railings, door handles, light switches etc.) are cleaned/disinfected twice a day
- Proper handwashing must be enforced.
 - o Post http://healthychildcare.unc.edu/resources/posters/ at every sink
 - Handwashing should take place: when entering room, after sneezing/coughing, after blowing nose, after use of toilet, before eating, after eating, before going home, when hands are visibly dirty
- Cough/sneeze into the elbow (when long sleeves) or into the shirt (when short sleeves), or cover with tissue. NOT into the hand!
- Routinely refill hand soap, paper towel, hand sanitizer

Combat Misinformation

- Share reliable resources with parents: NCDHHS and CDC are the best sources
 - o Additional resources:
 - StrongSchoolsNC Public Health Tool Kit.
 - Interim Guidance for Child Care Settings
 - Guidelines from the National Association of Episcopal Schools