

This document reflects the UAB Eye Care Advanced Precautionary Protocols for COVID-19 Detection and Prevention, however could be applied to any potential future global pandemic.

UAB Eye Care will follow the UAB Health System guidelines for ambulatory care, with appropriate modifications based on eye care-specific procedures. UAB—along with the Centers for Disease Control and Prevention and the Alabama Department of Public Health — are closely monitoring the ongoing situation. Learn more at www.uab.edu/coronavirus.

PHASED OPERATIONS APPROACH:

PHASE	Risk	Operations	Student Exposure
RED	<p>High</p> <ul style="list-style-type: none"> Statewide stay-at-home guidance in place. CDC discourages routine eyecare. University requiring essential personnel only. 	<p>On-call providers handling medically necessary care only. Staff available electronically.</p> <ul style="list-style-type: none"> Telemedicine where appropriate Patient/personnel screening Standard and Advanced Precautions (Universal Masking, Hand Hygiene, PPEs) 	<p>No</p> <ul style="list-style-type: none"> Virtual patient activities Observation/participation in on-call care Observation/participation in telemedicine care
ORANGE	<p>Moderate</p> <ul style="list-style-type: none"> Statewide stay-at-home guidance allows for Optometry to open. CDC allows for routine eyecare. University guidance allows for ambulatory clinics to open. 	<p>Faculty and resident care only. Necessary staffing as indicated.</p> <ul style="list-style-type: none"> (RED), plus: Prioritized scheduling Social distancing 	<p>No</p> <ul style="list-style-type: none"> (RED), plus: Observation/participation in faculty/resident patient encounters
YELLOW	<p>Moderate</p> <ul style="list-style-type: none"> (ORANGE), plus: University guidance allows for students to return to patient care. 	<p>Interns performing faculty-supervised care</p> <ul style="list-style-type: none"> (same as ORANGE) 	<p>Yes</p> <ul style="list-style-type: none"> (ORANGE, as needed for supplementation), plus: Student participation in accordance with UAB guidance (e.g. screening, avoidance of high risk scenarios, PPEs)
GREEN	<p>Low: Equivalent to pre-pandemic, pending any CDC and University guidance</p>	<p>Interns performing faculty-supervised care</p> <p>Standard Precautions</p>	<p>Yes: Equivalent pre-pandemic, pending any CDC and University guidance</p>

EDUCATION AND TRAINING

- All clinic personnel will be regularly updated with changes in protocol and new information regarding the global pandemic.
- Training
 - All clinic personnel were required to take periodic refresher trainings in Infection Control
 - Before initial entry and/or any re-entry to clinic, an updated training program specific to the pandemic will be required for all clinic personnel, to include duty-specific guidance for the following:
 - Patient screening and identification of patients
 - Appropriate reporting and referrals
 - Appropriate wear, removal and disposal of PPEs
 - Optometry-exam specific practices for limited patient contact, PPEs and instrument disinfection

STRATEGIES FOR SCREENING, SCHEDULING, OPERATIONS

Using current CDC and university-wide guidance for health care providers, UAB Eye Care will focus on the following highlighted areas.

Communications

- Communications to our patients (e.g. newsletters, 4PatientCare, voicemail message, website, social media) should be consistent, highlight available services, and focus on precautions we are taking to keep them safe.
- Signage outside clinic can be used to reiterate screening process, required masking, safety protocols, as well as coughing/sneezing etiquette.
- Signage inside the facility can be used to mark/identify screened patients/staff and disinfected areas

Offer telemedicine where appropriate

- AmWell platform utilized to connect with patients where appropriate care or triaging can be provided by telemedicine
- Electronic patient messaging offering telehealth services

Prioritized Scheduling

- Provider-based recommendations on follow up urgency
- Appointment time-based electronic recall messaging
- ICD-10-based queries for high risk patients to guide recall process

- Reduce volume as appropriate and staggering patient arrival times to ensure social distancing practices

Social Distancing

- Patient and staff flow should be directed to ensure social distancing
- Signage used to direct traffic.
- At check-in (and check-out), every effort should be made to reduce physical patient contact
 - Gather information ahead of time as possible
 - Plastic barriers were installed at front desk
 - Patient can verbally consent vs. written signatures
 - Mail or email receipt vs. handing paper receipt
 - Receptacle for “dirty” pens vs. “clean”
- Hand sanitizer, tissues and no touch waste receptacles should be available for patients in common areas.
- Waiting areas should be used sparingly. Chairs in all waiting areas will be 3-6 feet apart. Patients should be escorted from each phase to the next to ensure social distancing is maintained.
- Restroom and water fountain use will be limited and monitored, with disinfecting measures in place.
- Clinic visitors should be limited and logged
- Personnel should maintain masking and appropriate social distance from one another while at work

Patient Screening

- Prior to arrival:
 - Electronic reminders 2-3 days prior to appointment will alert patients of the screening process and other expectations, as well as instruct patients with symptoms or known exposure to stay home or call ahead regarding any ocular urgency.
 - Patients are asked to wear a mask.
 - Patients are asked to arrive alone unless a care partner is required.
 - Patients are informed that a screening process involving temperature measurement will be conducted upon arrival
- At arrival: Patients will check in via Clear Wave on their mobile phones (as able), and asked to meet staff person at front desk.
 - Information including patient history can be gathered over the phone.
 - Clear Wave or staff will prompt patient when it is appropriate to enter.
 - Designated staff will greet patient outside the door for the screening process.
 - Those arriving without one should be offered a facemask as supplies allow, which should be worn while they are in the facility (if tolerated). Facemasks should not be placed on young children under age 2, anyone who has trouble breathing, or anyone incapacitated or otherwise unable to remove the mask without assistance. Patients should be instructed to use appropriate hand washing techniques after touching.

Patients should also be instructed that they may remove their mask when in exam rooms alone but should put them back on when leaving the room or when others (e.g., clinicians, visitors) enter the room.

- Patient and care partner will be asked screening questions (if not by Clear Wave) and have temperature measured.
 - Those with negative screening results will be asked to wear a sticker designating the date.
 - Those with a positive screening result will be asked to report home or referred to a testing center.

Personnel Screening

- Personnel at high risk should discuss with HR.
- Staff, providers and interns will be directed to enter the clinic from the 7th Avenue side (elevator or stairwell), and to avoid the main entrance. All clinic personnel will be screened daily using the UAB Healthcheck and follow guidance from the screening process and/or employee health for exposures or symptoms.

Standard Precautions

See Clinic Manual for current infection control protocols.

Hand Hygiene

- Perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.
 - Before/after instilling drops
 - Before/after performing procedure that requires any patient contact
 - Before/after removing/inserting contact lenses
 - Hand care
- Perform hand hygiene by using ABHR with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR.

Expanded Precautions

Strict Hand Hygiene

- Personnel are asked to perform strict hand hygiene, regularly and between all possible patient contact, with either ABHR with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR.

Universal masking – all personnel and providers wear mask at all times, when directed by CDC and university-wide guidance.

- Patients and care providers are provided with a surgical mask if needed.
- N95 masks may be required for special populations or under designated circumstances.

Dress Code: Clinic staff, providers and interns will wear scrubs, which should be laundered each day; White coats and neck ties should be avoided as indicated

PPEs

- The need for supplies will be calculated based on anticipated patient volume. Inventory and ordering of PPEs will be centralized and tracked.
- PPEs should be used sparingly, and reused properly as able
- Reusable PPEs should be disinfected properly between each patient
- Used PPEs should be discarded in trash receptacles immediately upon removal
- Distribution of PPEs will be individualized in a manner to avoid unnecessary contact, and to preserve.
- Red biohazard bags should be reserved for items exposed to blood or non-intact skin

Facemasks	Personnel involved in direct patient contact should be facemasks at all times.
Respirator	N95 masks should be used during aerosol generating procedure or when patient with high risk is being examined.
Eye Protection	Eye protection (i.e., goggles or a disposable face shield) should be worn during close contact with patients, particularly in droplet or aerosol generating procedures or when patient with high risk is being examined. Personal eyeglasses and contact lenses are NOT considered adequate eye protection. Reusable eye protection (e.g., goggles, face shields) must be cleaned with soap and water or disinfected according to manufacturer’s instructions prior to re-use.
Gloves	Gloves should be used with direct patient contact with blood, non-intact skin, mucous membrane, or other high risk situation. Remove and discard gloves when leaving the patient room or care area, and immediately perform hand hygiene.
Gowns	Gowns should be worn during droplet or aerosol generating procedures, when patients with high risk. Gowns will be worn by doctors when examining children who are less than 2 years old, or who have special needs.

Environment Surface Disinfection

- EPA-based disinfectants will be used for all surfaces, based on EPA guidelines.
- Deep cleaning of clinic space and surfaces will occur as indicated. All counter spaces will be cleared of items that could be touched, reducing the need for cleaning.

- University cleaning staff will clean floors and counters as indicated, and based on their frequency, UAB Eye Care personnel will clean surfaces as indicated. Door knobs, light switches, counter tops in all areas should be disinfected regularly by universal Environmental Services.
- Exam rooms and other clinic surfaces should be cleared of all items on counters that could be contacted by patient or would need disinfecting between patients using EPA-approved disinfectants for the recommended contact time
 - Lysol or an equivalent disinfectant spray is appropriate for cloth surfaces (e.g. waiting area chairs) and should be used after each patient. Front desk, optical and clinic coordinator staff will be responsible.
 - 1% hydrogen peroxide solutions, commercial disinfectant sprays or wipes are acceptable for other surfaces (e.g. counters, arm rests, tables, door knobs, light switches)
- A marking system will be used to identify disinfected areas, including exam rooms.

Exam Room/Patient Care Items

- Avoidance of patient contact should be utilized when possible (e.g. cotton-tipped applicator utilized to manipulate lid control, patient hand vs. occlude for VA).
- Strict hand hygiene should be used, and gloves, additional PPE when indicated.
 - Risk of aerosolized particles (e.g. algerbrush, BlephEx)
 - Risk of sprays, droplets, bodily fluids (e.g. copious discharge, blood/non-intact skin, FB removal, corneal debridement, use of lid speculum, amniotic membrane placement, wound burb)
- Imaging devices should be reserved for medical necessity, and disinfected based on exposure and manufacturer/CDC guidelines when necessary.
- Large plastic breath shields will be mounted to all slit lamps and phoropters.
- Patient care items should be disinfected based on exposure and manufacturer/CDC guidelines when necessary.
 - Alcohol prep pads/solutions are acceptable for plastic patient care items (e.g. occluder, chin/forehead rests). Care should be taken to include tables, handles, and adjacent areas potentially contacted (e.g. slit lamp, phoropter)
 - 1% hydrogen peroxide solutions or disinfectant wipes are acceptable for other patient surfaces (e.g. chair, stand, tables, counters)
 - Hot soap and water or 1% hydrogen peroxide can be used for lensed surfaces with limited patient contact (e.g. 20D)
 - Patient care items contacting mucous membranes should continue to be cleaned with soap and water, dried, then disinfected using the proper high-level procedure (e.g. 3% hydrogen peroxide for tonometer tips, 2.5% glutaraldehyde for gonioscopy lenses and FB instruments). Autoclave for sterilization can be used when indicated.
- Eye drop instillation should be performed as medically necessary and with profound caution to avoid bottle contamination (e.g. firm eyelid control with cotton-tipped applicators, gloves when indicated), and bottle tips should be wiped with alcohol prep pad before and after instillation). Potentially contaminated dropper bottles should be discarded.
- Instrumentation, services and techniques which limit exposure should be prioritized (e.g. BIO vs. precorneal exam; iCare tonometer vs. Goldmann)
- Disposables used when indicated (e.g. tonometry, gonioscopy)

- Reusable PPEs (eye goggles, face shields) should be washed with soap and water after each use

Contact Lenses

- Insertion and Removal will be performed by the patient when able. New patients can watch a video and try insertion and removal on their own, and can be given assistance when indicated.
- Recommended patient care regimens and wearing scheduled as indicated by current standards.
- Disinfection of reusable lenses in accordance with current standards.
- Strict hand hygiene and gloves are used as indicated.

Optical

- Scheduled appointments for all patients, allowing for social distancing
- All surfaces will be disinfected after each dispensing.
- Frames tried on during frame selection will be disinfected before placing back on the frame board.
- All fitting tools will be disinfected immediately after use.

Vision Therapy

- Patient care items should disinfected based on exposure and manufacturer/CDC guidelines when necessary.
 - Alcohol prep pads/solutions are acceptable for plastic patient care items (e.g. occluder, chin/forehead rests). Care should be taken to include tables, handles, and adjacent areas potentially contacted (e.g. slit lamp, phoropter)
 - 1% hydrogen peroxide solutions or disinfectant wipes are acceptable for other patient surfaces (e.g. chair, stand, tables, counters)
- Telemedicine services will be offered when appropriate

Pediatrics

- Gowns will be worn by doctors when examining children who are less than 2 years old, who have special needs, or who are at risk of severe illness if infected, based on CDC guidance
- Masks will be worn by all children who are older than 2 years old. N95 masks may be required in some cases.

Imaging and Specialty Equipment

- Reserved for medical necessity
- Disinfected after each patient use, per manufacturer guidelines
- Special attention to tables, adjacent surfaces, keyboards, joysticks

Device	Methods	Link
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Zeiss HVA	<ul style="list-style-type: none"> 70% isopropyl alcohol (diluted to liquid lens) Do not wipe inside of bowl If necessary, can spray bowl with 70% isopropyl alcohol and let dry (soft cloth at bottom to catch drips) 	https://www.zeiss.com/content/dam/med/ref_international/corona/pdfs/ifu-cleaning-excerpt-hfa3.pdf
Zeiss Cirrus OCT	<ul style="list-style-type: none"> 70% isopropyl alcohol for chin/forehead rest acetone for lens (evaporates faster) 	https://www.zeiss.com/content/dam/med/ref_international/corona/pdfs/ifu-cleaning-excerpt-cirrus-5000-500.pdf
Canon Fundus Camera	<ul style="list-style-type: none"> 70% isopropyl alcohol for chin/forehead rest 70% isopropyl alcohol for other surfaces sprayed onto a non-linting cloth (not directly onto camera, etc) non-linting cloth without harsh chemicals for lens 	https://www.usa.canon.com/internet/portal/us/home/about/to-our-customers/fsc-walk-in#cam-clean
Haag-Streit Ant Seg SL Camera	70% disposable ethanol disinfectant wipes. Surface friendly disinfectants containing aldehyde or aldehyde free are also permitted such as Kohrsolin FF	https://www.haag-streit.com/fileadmin/Haag-Streit_Diagnostics/_ALLGEMEINE_BILDER_UND_ICONS/Corona/PDFs/Cleaning_Imaging_Modules.pdf
Optos Daytona	<ul style="list-style-type: none"> 70% isopropyl alcohol for chin/forehead remove face shield between patients for cleaning with hot soap and water, followed by 70% isopropyl alcohol careful attention to handles and adjacent surfaces 	https://www.optos.com/globalassets/www.optos.com/cleaning-declaration-the-global-pandemic.pdf
Lipiview	Prior to each use, clean the chinrest and forehead rest with 70% isopropyl alcohol	https://www.injvisionpro.com/products/lipiview-ii-ocular-surface-interferometer
Oculus Keratograph	Before use, clean the forehead rest and chinrest with rubbing alcohol.	https://www.oculus.de/us/products/topography/keratograph-5m/oculus-keratograph-5m/
Nidek OPD	Before and after each use and before every patient, clean the forehead rest and chinrest with rubbing alcohol. If chinrest paper is used, remove after each patient.	https://revolutionehr.com/pms/resources/RevHelp/Nidek-OPD-Scan3-Refractor-MultiFunction-OperatorsManual.pdf
Haag-Streit Lens Star	Prior to every measurement procedure, the tip of the T-Cone should be cleaned with a lint-free cloth soaked in 70% alcohol.	https://www.haag-streit.com/fileadmin/Haag-Streit_Diagnostics/_ALLGEMEINE_BILDER_UND_ICONS/Corona/PDFs/Cleaning_Biometer_Lenstar_LS_900.pdf
Accutome B Scan	<p>The probe should be cleaned with an FDA cleared high level disinfectant. The probe must be cleaned between patients.</p> <p>Do not autoclave or immerse probe in tap water (fluoride can damage the crystal)</p>	https://www.manualslib.com/manual/1294519/Accutome-B-Scan-Plus.html?page=17#manual/Disinfection

Marco Wave Front Refractors (CL area)	Before and after each use, wipe the face plates with 70% isopropyl alcohol	https://marco.com/product-category/subjective-refractors/
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