

**COVID-19 INFECTION CONTROL AND PREVENTION IN OPHTHALMOLOGY OFFICES**  
**PRE- APPROVED TEMPLATE**

**Title:** Office Measures Taken to Protect Patients, Staff, and the Public from Exposure to COVID-19

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<b>Project Description</b>	The COVID-19 pandemic has affected the medical and surgical practice of ophthalmology. This project will outline the office measures taken to attempt to minimize the spread of COVID-19 to patients and staff while continuing to provide high quality ophthalmic care.
<b>Background Information</b>	Based on the recommendations of the AAO, CDC, and WHO, I stopped seeing patients and performing elective surgery on March 19, 2020. I am an ophthalmologist in Miami, Florida, an area with a high prevalence of COVID-19. I plan to reopen my office when the AAO, public health officials, and medical experts determine that it is safe. I have initiated practical educational and physical safeguards so that I and my office staff can continue to provide high quality care to our patients while minimizing both patient and staff exposure to COVID-19.
<b>Project Setting</b>	Solo Practice
<b>Study Population</b>	<ol style="list-style-type: none"> <li>1. Patient Education: <ul style="list-style-type: none"> <li>● Website, Facebook, and mailed letter describing our newly adapted protocol for providing patient care.</li> <li>● Oral description of newly adapted protocol during appointment confirmation phone call.</li> </ul> </li> <li>2. Employee training: <ul style="list-style-type: none"> <li>● Phone screening</li> <li>● Patient arrival protocol.</li> <li>● Waiting room changes.</li> <li>● Screening questions.</li> <li>● Sanitation habits.</li> <li>● Disinfection protocol.</li> <li>● Use of PPEs.</li> <li>● Use of barriers</li> </ul> </li> </ol>

<p><b>Quality Measures</b></p>	<p>The intent of this project is to minimize the spread of COVID-19 to patients and staff while continuing to provide high quality ophthalmic care. I did not have educational materials about COVID-19 for my patients nor a staff protocol for treating potential and known COVID-19 patients prior to the COVID-19 pandemic. I will describe incorporating COVID-19 patient educational materials and the adaptation and adherence by myself and my staff to my new COVID-19 protocol in comparison to the pre COVID-19 era.</p>
<p><b>Project Interventions and Improvement Period</b></p>	<p>Improvement Period: Beginning when I reopen my office through when Public Health Officials and Medical Experts advise that COVID-19 protocol can be relaxed.</p> <p>Quality Improvement Interventions:</p> <ol style="list-style-type: none"> <li>1. Patient Education: notify patients via my Website, Facebook, and mailed letter describing our newly adapted protocol for providing patient care: screening questions; wear a mask to office visit; temperature taken by infrared thermometer; alcohol based hand sanitizer when enter office and in other exam areas when indicated; magazines removed; limited seating with 6 foot social distancing; patients scheduled at intervals to maximize social distancing; remain in car if patient prefers and call and/or text when it is their turn to be examined; preferably no one accompanies patient to appointment (one person if absolutely necessary.)</li> <li>2. Employee Training       <ol style="list-style-type: none"> <li>a. Phone screening: Oral description to patients of newly adapted protocol/expectations during appointment confirmation phone call.</li> <li>b. Patient arrival protocol: check in with social distancing. Plexiglass barriers will be present at check in window. Hand sanitizer dispenser will be present near check in window.</li> <li>c. Waiting room changes: no magazines. Seats located 6 feet apart.</li> <li>d. Screening questions: assess if patient has/had COVID-19. Ask questions relevant to COVID-19 exposure and symptoms.</li> <li>e. Infrared thermometer to take patient's temperature.</li> <li>f. Sanitation habits: all employees will wash hands with soap and water for at least 20 seconds when arrive in the morning and at periodic intervals throughout the day. Alcohol based sanitizer will be available in every room in my office.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>• Disinfection protocol: approved sanitation wipes will be available in every room in my office. All clinical working surfaces will be cleaned before and after every patient.</li> <li>g. Splash guards are present on all slit lamps and will be cleaned before and after every patient.</li> <li>h. Use of PPEs by all staff, including N95 or similar face masks, gloves, and protective eye wear.</li> <li>i. Use of protective plexiglass at check in window and check out area.</li> <li>j. Patient will be kept in one exam room. If testing is necessary and the patient is moved to another room, their exam room will be closed, and movement kept to a minimum.</li> <li>k. Phone calls will be screened, and a determination will be made if a virtual visit/telemedicine visit can appropriately treat the patient. This screening will optimally minimize the number of patients that will physically come to the office.</li> </ul>
<b>Project Team</b>	<p>I am the head of the quality improvement project. My office staff will incorporate my newly established COVID-19 protocol.</p>

**COVID-19 Infection and Prevention in Ophthalmology Offices**  
**Section 2. Project Evaluation**

<b>PROJECT SUMMARY</b>	<b>Review the effect and adjustment of implementing the policy changes after a minimum of 30 days and in the following sections, please prepare a brief summary of the project highlighting the data collected, effectiveness of the measurement approach, interventions and the overall impact of the project.</b>
<b>BASELINE DATA</b>	<p>Quality improvement Interventions:</p> <ol style="list-style-type: none"> <li>1. Patient Education specific to Covid-19: notify patients via my Website, Facebook, and mailed letter describing our newly adapted protocol for providing patient care: screening questions; wear a mask to office visit; temperature taken by infrared thermometer; alcohol based hand sanitizer when enter office and in other exam areas when indicated; magazines removed; limited seating with 6 foot social distancing; patients scheduled at intervals to maximize social distancing; remain in car if patient prefers and call and/or text when it is their turn to be examined; preferably no one accompanies patient to appointment (one person if absolutely necessary.)</li> <li>2. Employee training             <ol style="list-style-type: none"> <li>a. Phone screening: Oral description to patients of newly adapted protocol/expectations during appointment confirmation phone call.</li> <li>b. Patient arrival protocol: check in with social distancing. Plexiglass barriers will be present at check in window. Hand sanitizer dispenser will be present near check in window.</li> <li>c. Waiting room changes: no magazines. Seats located 6 feet apart.</li> <li>d. Screening questions: assess if patient has/had COVID-19. Ask questions relevant to COVID-19 exposure and symptoms.</li> <li>e. Infrared thermometer to take patient's temperature.</li> <li>f. Sanitation habits: all employees will wash hands with soap and water for at least 20 seconds when arrive in the morning and at periodic intervals throughout the day. Alcohol based sanitizer will be available in every room in my office.                 <ul style="list-style-type: none"> <li>• Disinfection protocol: approved sanitation wipes will be available in every room in my office. All clinical working surfaces will be cleaned before and after every patient.</li> </ul> </li> <li>g. Splash guards are present on all slit lamps and will be cleaned before and after every patient.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>h. Use of PPEs by all staff, including N95 or similar face masks, gloves, and protective eye wear.</li> <li>i. Use of protective plexiglass at check in window and check out area.</li> <li>j. Patient will be kept in one exam room. If testing is necessary and the patient is moved to another room, their exam room will be closed, and movement kept to a minimum.</li> <li>k. Phone calls will be screened, and a determination will be made if a virtual visit/telemedicine visit can appropriately treat the patient.  This screening will optimally minimize the number of patients that will physically come to the office.</li> </ul>
<p><b>FOLLOW-UP DATA</b></p>	<p>Quality Improvement Interventions:</p> <ol style="list-style-type: none"> <li>1. Patient Education: notify patients via my Website, Facebook, and mailed letter describing our newly adapted protocol for providing patient care: screening questions; wear a mask to office visit; temperature taken by infrared thermometer; alcohol based hand sanitizer when enter office and in other exam areas when indicated; magazines removed; limited seating with 6 foot social distancing; patients scheduled at intervals to maximize social distancing; remain in car if patient prefers and call and/or text when it is their turn to be examined; preferably no one accompanies patient to appointment (one person if absolutely necessary.)</li> <li>2. Employee training       <ol style="list-style-type: none"> <li>a. Phone screening: Oral description to patients of newly adapted protocol/expectations during appointment confirmation phone call.</li> <li>b. Patient arrival protocol: check in with social distancing. Plexiglass barriers will be present at check in window. Hand sanitizer dispenser will be present near check in window.</li> <li>c. Waiting room changes: no magazines. Seats located 6 feet apart.</li> <li>d. Screening questions: assess if patient has/had COVID-19. Ask questions relevant to COVID-19 exposure and symptoms.</li> <li>e. Infrared thermometer to take patient's temperature.</li> <li>f. Sanitation habits: all employees will wash hands with soap and water for at least 20 seconds when arrive in the morning and at periodic intervals throughout the day. Alcohol based sanitizer will be available in every room in my office.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>• Disinfection protocol: approved sanitation wipes will be available in every room in my office. All clinical working surfaces will be cleaned before and after every patient.</li> </ul> <p>g. Splash guards are present on all slit lamps and will be cleaned before and after every patient.</p> <p>h. Use of PPEs by all staff, including N95 or similar face masks, gloves, and protective eye wear.</p> <p>i. Use of protective plexiglass at check in window and check out area.</p> <p>j. Patient will be kept in one exam room. If testing is necessary and the patient is moved to another room, their exam room will be closed, and movement kept to a minimum.</p> <p>k. Phone calls will be screened, and a determination will be made if a virtual visit/telemedicine visit can appropriately treat the patient.</p> <p>This screening will optimally minimize the number of patients that will physically come to the office.</p>
<p><b>PROJECT IMPACT</b></p>	<p>Quality improvement Interventions:  <b>Quantifying the impact:</b></p> <ol style="list-style-type: none"> <li>1. Patient Education: notify patients via my Website, Facebook, and mailed letter describing our newly adapted protocol for providing patient care: screening questions; wear a mask to office visit; temperature taken by infrared thermometer; alcohol based hand sanitizer when enter office and in other exam areas when indicated; magazines removed; limited seating with 6 foot social distancing; patients scheduled at intervals to maximize social distancing; remain in car if patient prefers and call and/or text when it is their turn to be examined; preferably no one accompanies patient to appointment (one person if absolutely necessary.)</li> </ol> <p>These measures are very well received by patients and staff. In particular, patients tell me how safe they feel visiting my office. They appreciate being notified prior to their office visit about measures taken to address COVID-19. They are pleased to learn when they arrive at my office that our newly adapted protocol for providing patient care is indeed in place.</p> <ol style="list-style-type: none"> <li>2. Employee Training</li> </ol>

a. Phone screening: Oral description to patients of newly adapted protocol/expectations during appointment confirmation phone call.

This phone call is invaluable for patient reassurance and minimizing no shows. More skittish patients are rescheduled but not lost to follow-up.

b. Patient arrival protocol: check in with social distancing. Plexiglass barriers will be present at check in window. Hand sanitizer dispenser will be present near check in window.

An obvious colored line is taped on the floor in front of the check in window to maintain social distancing. Many patients initially ignored this line and presented directly to the check in window. I placed an obvious sign at the check in window that indicates to wait behind the line. This sign is helpful. The plexiglass barrier minimizes face to face contact. The hand sanitizer dispenser is readily accessible.

c. Waiting room changes: no magazines. Seats located 6 feet apart.

Seats were intentionally turned to face the wall to assure that seats were located 6 feet apart. At times, patients turned these seats around so that they could sit in them. I decided to not remove these seats: I want to maintain a physical barrier so that seats cannot be moved together. Seats are now turned to face and lean against the wall. An obvious sign is placed on the back of the seat, instructing patients to not move or sit in the seat. This strategy has been successful.

d. Screening questions: assess if patient has/had COVID-19. Ask questions relevant to COVID-19 exposure and symptoms.

A questionnaire was specifically made for this purpose. A technician asks the questions if a patient does not/cannot readily fill out the questionnaire. All patients are screened.

e. Infrared thermometer to take patient's temperature.

The screening questionnaire contains an area to record temperature, date, time, and technician's initials. All patients have temperatures taken and recorded. All staff members have daily temperatures taken and recorded at the start of each workday.

f. Sanitation habits: all employees will wash hands with soap and water for at least 20 seconds when arrive in the morning and at periodic intervals throughout the day. Alcohol based sanitizer will be available in every room in my office.

All employees wash hands when they arrive in the morning and before and after lunch. Hand washing and/or alcohol-based sanitizing continues throughout the day.

- Disinfection protocol: approved sanitation wipes will be available in every room in my office. All clinical working surfaces will be cleaned before and after every patient.

Rooms are cleaned in front of the patient before entering a room. All surfaces are wiped down with an approved sanitation wipe. Patients are receptive to seeing the room cleaned in front of them.

- g. Splash guards are present on all slit lamps and will be cleaned before and after every patient.

All slit lamps have splash guards that are cleaned in front of the patient. I review my slit lamp exam protocol with every patient prior to an exam: no talking while at the slit lamp. I inform my patient that if instructions are necessary that I will pull away from the slit lamp, give instructions, and then move back to the slit lamp to continue the examination.

Patients are very receptive and express appreciation that this protocol is in place and followed.

- h. Use of PPEs by all staff, including N95 or similar face masks, gloves, and protective eye wear.

Face masks are worn by staff and patients at all times. The patient observes me taking new gloves out from a box in the exam room, putting them on prior to their exam, and removing them immediately after their exam. Patients express their appreciation that I and my staff are taking these safety steps. It is difficult to see well through oculars and the indirect ophthalmoscope while wearing protective eye wear.

- i. Use of protective plexiglass at check in window and check out area.

Protective plexiglass barriers were custom made for this purpose.

- j. Patient will be kept in one exam room. If testing is necessary and the patient is moved to another room, their exam room will be closed, and movement kept to a minimum.

This policy is strictly enforced. Patients are pleased with this streamlined protocol.

- k. Phone calls will be screened, and a determination will be made if a virtual visit/telemedicine visit can appropriately treat the patient. This screening



	<p>will optimally minimize the number of patients that will physically come to the office.</p> <p>Patients prefer to see me when I am physically at my office.</p> <p>Virtual/telemedicine visits have decreased since reopening.</p>
<b>PROJECT REFLECTION</b>	<p>I am pleased with my project and outcomes. As noted above, some of the measures that I implemented were refined when I actually started seeing patients. Importantly, office staff members have told me that they feel safe and comfortable coming to work and providing patient care.</p> <p>Be flexible and open minded to suggestions from staff and patients. This type of project is a work in progress. My protocol has become refined and finessed while my office remains open to take care of my patients. Patients and staff are complimentary about our strict adherence to policy. They have expressed that they are comfortable and feel safe while at my office.</p>