

Martinos Center for Biomedical Imaging
Guidelines for
Human Subject Imaging Safety in Response to COVID-19

October 21, 2020

HIGHLIGHTS

Guidelines will change, read them in their entirety and review for changes frequently

Current Guidelines can be found on the Martinos website and hard copies are in each of the scanning bays

Staff will attest to having read these guidelines when scheduling scan time

Onsite staff must complete the one-time Onsite Research Attestation

Onsite staff must complete the Daily Symptom Attestation – “Covid Pass”

Informed consent, study questionnaires/paperwork and PET/MR Safety Screening should be completed remotely whenever possible

Remote Covid-19 Screening must occur within 72 hours of scan visit and be repeated upon arrival to the center

Staff and Subject must don fresh surgical masks upon arrival, to be worn continuously

Staff who will be in an enclosed area (a room/bay) with a subject are required to wear MGB approved eye protection. Eye protection is required in open areas (hallways, lobby) if there will be face to face contact with the subject, within 6 feet for 15 minutes or longer.

Staff and subject must frequently sanitize hands: whenever touching own mask/face, touching subject or subject environment, pre/post eating, post using bathroom, etc

Shared/frequently touched surfaces/equipment including anything within the subject environment must be disinfected

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PURPOSE:

To describe safety precautions to be taken during imaging of human subjects to prevent the spread of COVID-19

DESIGNATED AREAS:

- Bays1-8
- MEG Laboratory

LEVEL OF PERSONNEL:

- Martinos Core Staff
- Study Staff

POLICY STATEMENT:

- The spread of COVID-19 is reduced by using appropriate PPE, social distancing, limiting close-proximity interactions, sanitizing equipment/surfaces, avoiding group gatherings and screening people (subjects/staff/visitors) for risk factors. These measures must be taken to reduce the spread of COVID-19 during imaging procedures
- Guidelines will be in line with those issued by MGB

CRITICAL ELEMENTS:

- For the duration of the imaging visit, one staff member will be considered “interactive” and the other will be “passive” The “interactive” staff member will be in contact with the subject and the “passive” staff member shall only have contact with the subject in the case of a medical emergency.
- The interactive staff member is required to wear MGB approved eye protection as well as a mask when in an enclosed space (room/bay) with the subject. Eye protection is required in open areas (hallways, lobby) if there will be face to face contact with the subject, within 6 feet for 15 minutes or longer.

- Two study staff members will be present for the scan
- Scans will be scheduled at least 15 minutes apart to allow for adequate cleaning and to avoid group gatherings and intermingling
- Only indicated PPE provided by the center shall be worn
- Gloves will be worn only for the handling of blood/body fluids

PROCEDURE:

1) Prior to scanning:

- Study Staff will complete Informed Consent with IRB approval, all safety screening and COVID-19 screening (Appendix A) with the subject ***via phone call within 72 hours of the imaging appointment. At which time, the subject will be instructed to contact study staff if any of the symptoms mentioned on the screening questionnaire develop before the scheduled scanning visit.***
- Study Staff will advise subjects to ***arrive at Martinos 15 minutes prior to their scheduled scan time***
- Study Staff will ***advise subjects to come alone*** to the scan unless the subject is a minor or dependent adult in which case one parent, a legal guardian or responsible adult will be allowed to accompany the subject. If friends or family members transport the subject to their appointment, they will be advised to wait in the car and provide a phone number where they can be reached when the scan is completed.

2) Upon subject's arrival:

- The “interactive” staff person will greet the subject at the security desk in the lobby of building 149. If the subject needs assistance walking or requires a wheelchair, they will be met in front of the building or in the parking garage.
- Study staff will make sure subject sanitizes their hands and dons a new surgical mask from the dispenser upon entering the center
- Subject will wear this mask for the duration of the scan visit unless otherwise indicated in this document. ***The subject will also take the paper bag provided at the mask station for mask storage during scanning.***

- Before proceeding to the scanning area, staff will **confirm with the subject by showing them the covid-19 screening questionnaire (located in each scanning bay) that nothing has changed regarding their COVID-19 screening and the scan safety screening since the screening was completed remotely prior to the subject's arrival**

3) Scan preparation:

- After the subject has received the appropriate PPE and attested to the COVID 19 and scan safety screenings, the “interactive” staff member will lead the subject to a changing room, where the subject will change into a hospital gown, pants, robe and slippers while wearing their surgical mask.
- Staff will change the “Ready” signs to “Not Ready” on the changing room and bathroom doors as appropriate
- Staff will take personal items from the subject and store them in a locker for the duration of the scan, sanitizing hands after contact with subject’s belongings
- If needed, the subject will use the bathroom adjacent to the changing room before entering the screening area.
- **Upon entering the scanner/magnet room, staff and subject will again sanitize their hands and staff will be wearing eye protection as well as a surgical mask**
- **The subject will remove their mask and place it in the bag provided by the mask station, leaving it in a designated area in the scanner room so that it can be *donned immediately after scanning is completed. After touching the mask, the subject and staff will sanitize their hands.***
- The subject is placed on the scanning table and provided with ear plugs, back support and extra padding/support as needed for comfort.
- A squeeze ball will be placed next to the subject’s hand, and the subject will be instructed to squeeze the ball should they need to communicate with staff urgently, such as in the case of an emergency
- Staff will place the head coil, adjusting the mirror as needed for visual paradigms.
- Staff will place the button box close to the subject’s hand, if needed and instruct the subject as to its use.

- Staff will move the table into the scanner and confirm that the subject is comfortable.
- **Staff will sanitize their hands again**, either before leaving the scanning room or immediately after leaving the scanning room, upon entering the control area.

4) During scanning:

- The “passive” staff person will start scanning
- Meanwhile, the “interactive” staff person will **sanitize the changing room used by the subject and the bathroom** as needed with the approved sanitizing supplies. Surfaces to be sanitized include doorknobs/handles, light switches, toilet flush handle, sink faucets, locker handles and all other surfaces the subject potentially touched (**see laminated checklist for disinfection in each scanning bay**)
- After cleaning, the “interactive” staff person will **sanitize their hands** and return to the control room to assist with the scan as needed.

5) After the scanning is completed:

- The “interactive” staff person will don eye protection and remove the subject from the scanner
- Upon entering the scanner room, **staff will sanitize their hands**
- The **subject will be instructed to don their mask and sanitize their hands immediately** after getting up from the scanning table
- Staff will escort the subject back to the changing area and retrieve the subject’s belongings from the locker, sanitizing their hands after touching the subject’s belongings
- Staff will wait for the subject to change, and then escort them to the lobby area. If needed the staff person will assist the subject in getting safely to the car.
- Staff will perform hand hygiene after contact with subject’s belongings/subject environment

6) Post Scan Clean-Up:

- The “interactive” staff member will ***again sanitize the changing area and bathroom as needed (see disinfection checklist located in each scanning bay)***
- Staff will change the “Ready” signs on the changing room and bathroom doors as appropriate
- Core staff and study staff will **sanitize the magnet room and the control room:**
 - **Surfaces will be sprayed with approved disinfectant so that the surface remains wet, do not wipe dry**
 - Areas to be sanitized include but are not limited to the following (***see disinfection checklist located in each scanning bay***):

Magnet Room

- Inside the coil
- table mattress
- button box
- foam supports
- squeeze ball
- scanner control buttons on the face of the scanner
- inside the bore -
staff will spray approved disinfectant on a *Swifter Duster* and, using the plastic extension handle provided, wipe the inside of the bore with the duster.
- counter tops
- door handle
- any/all other surfaces touched by staff or subject

Console Area

- Keyboard
- Mouse
- Table/counter/desktop
- Phone as needed
- Arms of the chairs
- Door handle
- Cable connections as needed
- Any/all other surfaces that were touched
- Clean safety goggles with Sani Cloth
- If a face shield was used, clean with Sani Cloth. Staff who used the shield will write their name on it, use the bag provided, and bring it with them for their next scan.

- Staff will **close doors** to the magnet and the control rooms after cleaning is completed

EQUIPMENT:

- Surgical Masks
- Protective goggles, safety glasses and/or face shields
- Cleaning **supplies:**
 - MGH approved disinfectant
 - Sani cloths
 - Virex

DEFINITIONS:

- COVID-19: Coronavirus Disease of 2019
- MEG: Magnetoencephalography
- PPE: Personal Protective Equipment
- IRB: Internal Regulatory Board
- PET: Positron Emission Tomography
- MR: Magnetic Resonance
- IV: Intravenous

REVISION DETAIL:

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Appendix A

COVID-19 Screening Questionnaire

Use this tool to screen your participant *remotely within 72 hours of their scheduled visit and at the time of their arrival.*

Only “essential” visitors may accompany the subject and must also be screened but are exempt from travel restrictions.

If your protocol is **NOT a treatment protocol**, travel restrictions apply:

Ask the subject if they have traveled outside of MA

*not including lower risk states for which travel restrictions do not apply. Refer to <https://www.mass.gov/info-details/covid-19-travel-order> for the current list of lower risk states.

If Yes:

- a. When did you arrive in MA?
- b. Have you had a negative Covid 19 test since arrival in MA or within 72 hours of arrival?

If No:

Cancel visit and reschedule after 14 day quarantine (starting at date of arrival in MA) or negative Covid 19 molecular test

*Subjects participating in treatment protocols and essential visitors are exempt from these travel restrictions. Nonclinical research participants, where no interventional treatment or medical care are part of the protocol are not exempt and must answer this question.

ALL subjects and essential visitors are required to answer the following questions:

1. Have you had a positive Covid 19 test in the past 14 days?
2. Have you spent at least 10-minutes within 6-feet of anyone with confirmed COVID- 19?
(Yes/No/Unknown)

If Yes:

What was the most recent contact date?

3. Are you or a household member currently on home isolation or in quarantine?
(Yes/No)

4. Do you have any of the following **NEW** symptoms?

Fever

Muscle Aches

Cough

Runny nose/nasal congestion

Shortness of breath

Sore throat

Loss of smell or taste

For questions or assistance, contact a Martinos NP: Nursing@nmr.mgh.harvard.edu

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