

MEG Core Return to Work Guidelines:

These guidelines have been provided for MEG Core investigators and staff to minimize the risk of spread of SARS-CoV2 as subject/patient scanning resumes during Group B and C of the NIH “return to physical work” framework. These guidelines were adapted from the NMR Center Return to Work guidelines and are similar to NIH CC Radiology Department guidelines for non-COVID-19 patients. These guidelines are intended for scanning of asymptomatic subjects/patients who have been screened by the Clinical Center for symptoms of COVID-19 and recent exposures, or who have tested negative for COVID-19 according to Clinical Center testing guidelines. **Patients with known COVID-19 disease will not be scanned in the MEG Core Facility.** This is a living document and these guidelines will be updated on a regular basis.

NIH COVID Return to Physical Workspaces Guidance (updated July 2020) must be followed.
<https://employees.nih.gov/pages/coronavirus/return-physical-workspaces-guidance.aspx>

Investigators must follow their own Institute specific COVID Return to Workplace Guidance.

Investigators must follow NIH Clinical Center policies related to COVID
http://intranet.cc.nih.gov/hospitalepidemiology/emerging_infectious_diseases.html

The CC encourages all employees with patient contact to get tested weekly for SARS-CoV2. Sign up for testing at <https://clinweb.cc.nih.gov/cct>

General

1. Study teams should consider the risk-benefit tradeoff and receive approval from their Clinical Director or designee for scanning.
2. All staff members should wear CC approved masks at all times and practice hand hygiene.
3. Staff or study team members with more than 5 minutes of face-face interaction should also wear a face shield. Note that preparing a subject for MEG scanning requires more than 5 minutes of face-face interaction and a face shield.
4. All staff members should maintain physical distancing (6 ft) as much as possible.
5. Minimize the number of staff accompanying the patient into the MEG laboratory to two if at all feasible. The MEG Lab does not have sufficient space to accommodate more than two researchers at a time (one to set up the patient in the MSR, one at the control desk to run the MEG acquisition and stimulus programs). If Medical coverage is needed, please have the minimum number of personnel necessary (ideally one), and have them sit by the Lab door if possible (to maximize distance between them and the researchers). A diagram of recommended spacing is provided in Attachment C.
6. Investigators planning to scan off-hours when MEG Core staff is not available must receive approval from MEG Core staff. They must also have an in-person training session with MEG Core staff to learn disinfection procedures before off-hours scanning. The MEG Core will maintain a log of investigators who have been trained and are approved to scan without the MEG Core staff.

7. MEG Core staff or a study team member trained in disinfection procedures must be available to ensure proper infection control and disinfection procedures are followed.
8. In most cases, only MEG-experienced personnel should carry out MEG acquisition, not persons in training. MEG training, in which two persons may be working at a distance less than 3 feet for more than 15 minutes is classified as high risk in the NIH return to work guidance (<https://www.ors.od.nih.gov/Documents/Return-to-Work-Guidance.pdf>), and requires adherence to the recommendation for PPE on page 23, including masks and face shields. Whether to allow training of new fellows or postbacs will be at the discretion of the MEG Core Director.

Procedure for if a study team wants to train new personnel:

- They must first receive approval from the MEG Core Director.
 - They must also propose a plan to minimize risk of transmission during training, and that plan must be approved by the MEG Core Director. These plans should take into account minimizing the number of people in the control room and enhanced protection for persons sitting side-by-side, possibly sharing keyboards and a computer mouse. Remote screen-mirroring options from widely separated workstations, if available, may be a better option for training.
9. Discourage anyone from sitting in the waiting room. The waiting room will be furnished with a few plastic chairs that can be cleaned. The waiting room is only 245 square feet. Persons must sit 6 feet apart.
 10. When scheduling the MEG Lab, allow a minimum of 30 minutes between the departure of each subject and arrival of the next to minimize contact between subjects and allow sufficient time to clean/disinfect the MSR and MEG Lab.
 11. Schedules should be arranged so that persons work on different days or shifts, to prevent the possibility that all members need to quarantine in the event of accidental exposure.
 12. All persons who enter the MEG Lab should be logged to facilitate contact tracing.
 13. In the event that a researcher or scan subject is later found to be SARS-CoV2 positive within 2 days of the scan, Clinical Center guidelines should be followed, which include notifying Hospital Epidemiology Service for testing and follow-up and testing of contacts. Decontamination of scanner rooms should be carried out in consultation with ORF and HES and may include closing the MEG Lab for a period of time.

Investigator guidelines for scanning an individual subject

1. Before scheduling a scan, investigators must contact the facility personnel to arrange a time slot. A list of contact personnel is appended.
2. While MEG Core facility staff will be in Building 10 during scheduled scans, individual laboratories are still expected to perform all scanning procedures independently. In the event that a laboratory does not have adequately trained personnel to perform a scan, investigators may request that MEG Core facility staff assist with data acquisition. Note that MEG Core facility staff will only perform scans if an individual in training is also available to assist during the scan as part of their training.
3. The study team should screen the patient over the phone for COVID-19 symptoms and recent exposures within 48 hours prior to the scan. The phone screening questionnaire is frequently updated and can be downloaded from the Hospital Epidemiology site.

http://intranet.cc.nih.gov/hospitalepidemiology/emerging_infectious_diseases.html

(This is also a good time to reconfirm that patient is eligible for MEG; i.e. does not have implanted metal that may interfere with scanning).

4. Immediately prior to subject arrival at the MEG Lab, investigators should check with MEG Core staff to ensure that cleaning has been completed and the lab is ready to be used.
5. Subjects should not arrive at the MEG Lab or the NMR Center until their scheduled time. They should be met by the research team and taken directly to an exam room or the scanner control room for MRI screening and other paperwork.
6. The study team must ensure that all subjects are wearing masks and keep track of the use of waiting rooms, exam rooms and the changing room.
7. Before entering the MSR for the MEG scan subjects should be handed a clean mask in which the metal strip has been removed. The subject should remove the mask issued by the clinical center, put it in a paper bag or lay it on a clean towel, and replace with the non-metal mask. They should do this in a private place, such as the changing room or exam room. Each patient/subject will be instructed to use hand sanitizer before removing mask and before donning the clean one. Tape can be applied over the nose to keep in place. If the technologist/study team handles or tapes the mask, they should wear gloves. Patients may replace their original mask after the scan, using hand sanitizer before and after.
8. Upon completion of the scan, the study team will notify the MEG Core staff member present in building 10.
9. Study teams will clean/disinfect the MSR and control room under the direction of MEG Core Facility staff. Users should wipe down high touch surfaces of any equipment brought into the control room, such as laptops, keyboards, computer mouse.
10. Log each cleaning/disinfecting of the MEG Lab and MSR using the checklist.
11. Exam, waiting, and changing rooms used must be cleaned after each patient. Housekeeping does not clean the MEG lab; this is the responsibility of MEG Core users under the direction of MEG Core facility staff.
12. Housekeeping will be asked to clean the bathrooms and other common areas frequently.

Researcher guidelines

1. Prior to patient arrival prepare a mask without metal strips to be given to the patient to wear during the MEG scan.
2. At the beginning of the day clean all surfaces in MEG Lab (control desk and the desk where the second researcher sits) and the MSR with Clinical Center-approved hydrogen peroxide wipes or disinfecting spray and paper towels. (see cleaning appendix)
4. When patient comes for the scan
 - a. One person shall be responsible for patient setup, this person should don gloves and a face shield prior to patient setup. The researcher should avoid unnecessary touching of room surfaces while wearing gloves; gloves should be disposed of promptly following patient setup.
 - b. Maintain communication with the patient throughout the scan to ensure that the patient is comfortable.

- c. If the patient finds it difficult to keep the mask on during the recording, the scan must be discontinued. Patients may not be scanned without a mask.¹
- d. Following the scan, the researcher responsible for patient set-up should don a new pair of gloves to remove the fiducial coils from the participant's face.
5. Upon completion of the scan, ask the patient to put on their standard mask and discard the non-metal mask in a burn box.
6. Arrange patient transport back to the CC or escort the subject out of the NMR Center as soon as possible.
7. After each patient, clean all surfaces at the MEG control desk and in the MSR with Clinical Center-approved hydrogen peroxide wipes or disinfecting spray and paper towels. (see cleaning appendix).

If the Brainsight was used, wipe down all surfaces on the Brainsight console (keyboard, operation switches, etc.). Dip the head-mounted tracker and the stylus in hydrogen peroxide and allow to air dry. A receptacle will be provided by the MEG Core facility. Care should be taken not to damage the reflective spheres and other components – DO NOT under any circumstances wipe the reflective spheres; components should be allowed to air dry.
8. Complete the scanner logbook with names of people and times of the scanner use.
9. Dispose all patient care items appropriately.

Cleaning of scanners after used for patients

Use Clinical Center-approved hydrogen peroxide wipes and sprays. (not bleach)

(a) **Areas to be cleaned/wiped the MEG Lab:**

Patient prep table and chair
 Mouse and Keyboards (consider wrapping in saran wrap)
 Projector Remote
 Patient Intercom Controls and Microphone
 Patient Monitor and other Monitor Buttons
 Light Switches
 Door Handles
 Counters
 Chairs
 Phones
 Pens/Pencils
 Clipboards
 Brainsight Equipment (if used)
 Computer accessories like FORP box, Sound system, Eye Tracker, etc. (if used)

(b) **Areas to be cleaned/wiped in the Magnetically Shielded Room (MSR):**

Patient chair (or bed, if used) including armrests
 MEG Helmet, interior and exterior

¹ An exception to the requirement for patients to wear a mask during scanning must be approved the Institute's Clinical Director.

MEG Chair Controls (raising/moving the chair)
 MEG Head Localization Coils (including the lead wires) and HLU box
 Equipment Cabinet and other exposed surfaces
 Pads used for the patient positioning
 Button boxes (if used)
 Auditory Tubes (if used)
 Any other equipment used in the MSR, under the direction of MEG Core facility staff.

**Note: Previously, investigators would replace the chair and armrest covers at the end of each scan. New guidance is to discard the soiled linens appropriately and disinfect the chair as usual. The next group using the MSR will replace the sheets for their own patient.*

Specific suggestions for testing study parameters (no patient) or scanning a phantom.

1. All staff must wear CC-issued masks at all times, practice social distancing and hand hygiene.
2. Confirm scheduling with MEG Core staff.
3. Meet with MEG Core facility staff at or before the first scanning session, to review the disinfection procedures.
4. Minimize the number of people in the MEG Lab, with a maximum of two people.
5. Wear clean gloves to enter the scanner room and handle any equipment. (Wearing gloves will eliminate the need to clean/disinfect the scanner and scan room. Be mindful not to contaminate gloves, and discard upon leaving the scanner room.)
6. After the scan, clean all equipment and surfaces in the MEG laboratory.
7. Complete the scanner logbook with names of researchers present and times of use.
8. Log cleaning/disinfecting the control room after each scan session.

Appendix A- list of contacts for investigators for arranging to schedule a scanner time slot

- Allison Nugent, MEG Core Director
- Anna Namyst, MEG Lab Manager
- Tom Holroyd, Staff Scientist
- Fred Carver, Staff Scientist
- Jeff Stout, Computer Systems Analyst

You can easily reach any member of the MEG Core via our Slack channel or email (individually or at meglab@kurage.nimh.nih.gov) or via the website (<https://kurage.nimh.nih.gov/nih/staff/form.html>), must be on VPN).

Attachment B

Logsheet/checklist to be completed for each cleaning.

Attachment C

Diagrams of recommended work zones for investigators conducting MEG scans.