

**COVID-19 supplements to approved procedures  
MEG (AP08; OHBA)**

1. DEPARTMENT/FACILITY DETAILS	
Department:	OHBA/Psychiatry
Facility:	MEG scanner
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Authorised (date):	John Geddes (20/8/2020)
Date (Version)	17/8/2020 (Version 1)
<b>Activity Summary</b> ( <i>Types of activities expected &amp; authorised to take place</i> ):	
<ol style="list-style-type: none"> <li>1. MEG scanning (including simultaneous EEG recording) of human participants</li> <li>2. Questionnaires/instructions/interviews related to the MEG scan (e.g., artefact screening, consent taking)</li> </ol>	

2. CONTROLLING THE NUMBERS AND TYPE OF PEOPLE ENTERING THE FACILITY		
Risk/Issue	Specific Measures Adopted	Outstanding Actions
Ensuring staff/students with Covid-19 symptoms, those that are self-isolating, or those that are clinically vulnerable do not enter OHBA.	<ul style="list-style-type: none"> <li>• Staff or students with Covid-19 symptoms will not conduct research on human participants. The <a href="#">current guidance on symptoms from the NHS</a> is as follows but if symptom guidance changes, we would follow the current advice               <ul style="list-style-type: none"> <li>○ <b>high temperature</b> – this means you feel hot to touch on your chest or back</li> </ul> </li> </ul>	

	<ul style="list-style-type: none"> <li>○ <b>new, continuous cough</b> – this means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours</li> <li>○ <b>new onset loss or change to your sense of smell or taste</b> – this means you've noticed you cannot smell or taste anything, or things smell or taste different to normal</li> <li>● Staff/students that are self-isolating or are clinically vulnerable will not conduct research on human participants.</li> <li>● PIs will be responsible for ensuring that the importance of these measures are understood by their research group and the responsibility on individuals to comply.</li> </ul>	
<p>Ensuring research participants with Covid-19 symptoms do not enter the facility</p>	<ul style="list-style-type: none"> <li>● Researchers will communicate with their research participant (email/phone/letter as appropriate) that they should not travel to the facility if they experience any of the symptoms of Covid-19.</li> <li>● Calpendo booking system will remind researchers, on the day of scanning, to check with their participant that they are asymptomatic.</li> <li>● The researcher will meet the participant outside OHBA where they will be screened for COVID-19 symptoms (including temperature measurement using a non-contact infrared forehead thermometer).</li> </ul>	

	<ul style="list-style-type: none"> <li>Only if the participant has a normal temperature and no reported symptoms will they be admitted to the building.</li> </ul>	
<p>Assessing risk to vulnerable participants (those at a higher risk from Covid-19). People to consider in this category include (but not limited to):</p> <ul style="list-style-type: none"> <li>Those classified by the government as extremely clinically vulnerable</li> <li>Those classified by the government as clinically vulnerable</li> <li>Those aged over 70</li> </ul> <p>And others on the following lists:</p> <ul style="list-style-type: none"> <li><a href="#">NHS list of individuals at a higher risk from coronavirus</a></li> <li><a href="#">UK government guidance on shielding and protecting clinically extremely vulnerable persons</a></li> </ul>	<ul style="list-style-type: none"> <li>Principal investigators will identify whether their participants have a higher risk from Covid-19.</li> <li>Those that are extremely clinically vulnerable will not be included in the study.</li> <li>Those in other vulnerable categories will only be included in the study if it is agreed by the researchers' Head of Department that the benefits of the research merit their inclusion.</li> </ul>	
<p>Minimising the risk of overlap between different users of the facility</p>	<ul style="list-style-type: none"> <li>The Calpendo booking system will be used for all scanning work. Researchers will keep to their booking and vacate the scanner in good time before the end of their session.</li> <li>Additional time will be allocated (without extra charge) for each booking to minimise overlap. Note this additional time is for cleaning only, during which the lab has to be vacated and no scanning is allowed.</li> </ul>	
<p>Minimising the number of staff present</p>	<ul style="list-style-type: none"> <li>All procedures will be reviewed to establish the minimum number of staff needed to <b>safely</b> carry out the scan.</li> <li>Trainee students or observers will only be present if it is essential for the ongoing viability of the study, as agreed by the PI.</li> </ul>	
<p>Minimise the number of visits to the facility by research participants</p>	<ul style="list-style-type: none"> <li>Researchers participants will be screened (artefact control) by the researcher over phone/remotely before the scan. If there</li> </ul>	

	is uncertainty, a member of staff/operator will screen the participants themselves on the day of the scan.	
Minimise the number of additional people visiting the facility	<ul style="list-style-type: none"> <li>• In general, participants will not be permitted to have another person accompany them within the building.</li> <li>• Participant companions will be warned in advance that they will not be allowed to enter OHBA and given suggestions for where they should wait e.g. their car if driving.</li> <li>• Exceptions will be made when the participant is under 18, or if the participant requires care..</li> </ul>	

3. REDUCING THE SPREAD OF COVID-19 (general lab)		
Risk/Issue	Specific Measures Adopted	Outstanding Actions
Spread by airborne particles (cough, sneeze)	<ul style="list-style-type: none"> <li>• Maximum room occupancies for the MEG control room is 3 and 2 for the shielded scan room (MSR). Notices are posted on the doors and these limits will not be exceeded.</li> <li>• 2m distancing between all individuals will be maintained whenever possible.</li> <li>• <b>Whenever</b> this is not possible, a type 2, droplet resistant surgical mask will be worn by everyone in the lab. This applies to all individuals except the research participants, who should wear only a face mask during scan preparation if possible.</li> </ul>	
Spread by airborne particles, recirculated by room ventilation (air conditioning)	<ul style="list-style-type: none"> <li>• The MEG (control room and MSR) air-conditioning unit will be operated in non-recirculation mode (as a precaution). If more than one person is present in a room</li> </ul>	

	with air conditioning turned on then, <b>even if 2m distancing can be achieved</b> , a type 2, droplet resistant surgical mask will be worn.	
Use of face masks or PPE	<ul style="list-style-type: none"> <li>All staff/students who need to wear face masks will be trained in the correct use, donning and doffing of face masks, which will be recorded (Appendix 1).</li> <li>Surgical face masks will be disposed of in the clinical waste bins in the facility.</li> </ul>	
Spread by contact with contaminated surfaces	<ul style="list-style-type: none"> <li>On entering OHBA and the MEG lab, all researchers and participants will sanitize their hands using the wall mounted units.</li> <li>Researchers will wash their hands or sanitize at regular intervals. Signs will remind them of this.</li> </ul>	
Spread by contact with contaminated objects	<ul style="list-style-type: none"> <li>Wherever possible pens will not be shared. If pens are shared, then they will be wiped with disposable wipes before and after use.</li> <li>Wherever possible, forms should be provided as single sheets and not attached to clipboards or contained in folders.</li> </ul>	
Movement around the building increasing risk of spread	<ul style="list-style-type: none"> <li>Rooms used by researchers or participants will be limited, so that it is easy to identify which surfaces need cleaning.</li> <li>Upon arrival, the participant will be taken directly to the MEG lab.</li> <li>Participants will be advised to wait in their car, or outside the building if they are early for their scan.</li> <li>Additional time will be allowed for each booking to ensure that there is no need for any participant to wait in the building for their scan (accommodating for delays)</li> <li>The participant will use a designated changing area/room, and this area will not</li> </ul>	

	be used by anyone else without being cleaned (see below)	
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<b>4. REDUCING THE SPREAD OF COVID-19 (MEG specific)</b>		
<b>Risk/Issue</b>	<b>Specific Measures Adopted</b>	<b>Outstanding Actions</b>
Spread by food stuff	<ul style="list-style-type: none"> <li>• No food and/or drink in the lab except:               <ul style="list-style-type: none"> <li>○ water to quell thirst/prevent dehydration</li> <li>○ glucose bar to treat hypoglycaemia, etc</li> </ul> </li> </ul>	
Spread by contact with contaminated objects (ancillary)	<ul style="list-style-type: none"> <li>• Blankets, cushions and scrubs will not be reused without washing.</li> <li>• MEG compatible glasses will be disinfected after use.</li> </ul>	
Spread by contact with contaminated objects (measurement related)	<ul style="list-style-type: none"> <li>• Make sure HPI coils do not come in contact with the skin.</li> <li>• Wherever possible, re-use of HPI coils, EEG caps and MEG compatible electrodes on the same day should be avoided.</li> <li>• Participants should wash their hair on site before an EEG cap is fitted in order to reduce contact time during electrode preparation (see Appendix 2)</li> </ul>	

<b>5. ENHANCED CLEANING</b>		
<b>Risk/Issue</b>	<b>Specific Measures Adopted</b>	<b>Outstanding Actions</b>
Cleaning of the MEG scanner	<ul style="list-style-type: none"> <li>• At the end of the scan the researcher/operator will wipe down the scanner using the wipes available in the control room.</li> </ul>	

	<ul style="list-style-type: none"> <li>• The cleaning checklist (Appendix 3) will be followed and the initialled copy left in the MEG control room for filing by the appropriate person</li> <li>• After cleaning, the researcher/operator will wash their hands</li> </ul>	
Cleaning of control room and other areas occupied by the participant or researchers	<ul style="list-style-type: none"> <li>• After each scanning participant has left the researcher/operator will wipe down surfaces using wipes available in the MEG control room.</li> <li>• This will include: <ul style="list-style-type: none"> <li>○ Control room</li> <li>○ Changing room (next to MSR)</li> <li>○ Staff/visitor Toilet (if used)</li> </ul> </li> <li>• The cleaning checklist (Appendix 3) will be followed and the initialled copy left in the control room for filing by the radiography team</li> <li>• After cleaning, the researcher will wash their hands</li> </ul>	

6. PROCEDURE IF KNOWN/SUSPECTED COVID-19 INFECTED PERSON IN BUILDING		
Risk/Issue	Specific Measures Adopted	Outstanding Actions
Person develops a coughing fit or other symptoms of Covid-19 whilst in the building	<ul style="list-style-type: none"> <li>• If someone develops a coughing fit whilst in the building then they will be asked to stay in the same room until the fit had subsided, and then they will leave and go home.</li> <li>• If anyone develops any symptoms of Covid-19 whilst in the building they will leave, go home, self-isolate, and contact the NHS helpline.</li> <li>• If this occurs, we will do a thorough clean of the scanner room and all rooms that the person was in, following <a href="#">latest university guidelines</a></li> </ul>	
An individual who has been involved in the study (participant, researcher) tests positive for Covid-19 and were possibly infections while in the building.	<ul style="list-style-type: none"> <li>• We will perform a thorough clean of the scanner room and all rooms that the person was in, following <a href="#">latest university guidelines</a></li> </ul>	

Ability to track who has potentially been in contact with someone who tests positive for covid-19.	<ul style="list-style-type: none"><li>• The Calpendo scan registration page for MEG scans will record the researcher and investigator and research participant. If there was anyone else who had close contact with that person their name would be entered in the comments section of the scan registration page.</li></ul>	



**Appendix 1: Training Record**

Name	Read risk assessment (Date)	PPE training (Date)

[OxSTaR PPE training](#)

## **Appendix 2: Hair washing**

This process can reduce electrode application time by 20 minutes plus by considerably lowering initial scalp impedances, thereby reducing contact time between researchers and participants.

1. Participant should wash their own hair (the researcher should not be present) using baby shampoo and warm water; care should be taken to massage the scalp and rinse well afterwards.
2. The participant should towel dry their hair then comb it through to remove tangles. Note the use of a hairdryer is prohibited.
3. The room should then be cleaned by one of the researchers.

Please note it is not essential for the participant to wash their hair after the experiment; excess gel can be removed using a clean towel.

**Appendix 3: Cleaning Protocol and Checklist**

Recommended disinfectants

- 70% isopropyl with a lint free, disposable wipe (I)
- Germicidal disposable wipe (W)
- 100pp hypochlorite or equivalent solution (S; 30 minutes)

**Reusable items**

	Cleaning
HPI Coils	remove double-sided (and other) tape; I or W
Polhemus stylus	I or W
Polhemus receiver frame	I or W; strap: S
Electrodes	remove washer; rinse off gel (use toothbrush); S
Electrode wires	Remove tape (if used); W
EEG Caps	rinse off gel (carefully use toothbrush if needed); S
Glasses	Dry wipe then S

**MSR: after each scan session (= 1 participant); I or W, allow X minutes for cleaning)**

	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials
Response devices (button box, etc.)						
Eye tracker						
MEG helmet						
Table						
Chair (seating pads, hand-rails)						
Chair adjustment (panel, controls)						
Screen						

**HPI equipment: after each scan session (= 1 participant); I or W, allow X minutes for cleaning)**

	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials
Stylus						
Receiver frame						
Polhemus box						
Wooden chair (seat, back + arm rests)						

**Control desk: after each scan session<sup>1</sup> (= 1 participant); I or W, allow X minutes for cleaning)**

	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials
Stimulus PC						
Intercom						
DACQ computer (front panel)						
Eye tracker computer						
All keyboards + mice						

<sup>1</sup>At the end of day if used by the same people throughout the day.

**Changing room: after each scan session (= 1 participant); I or W, allow X minutes for cleaning)**

	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials
Bed						
Locker						

**Toilet: after each scan session (= 1 participant); I or W, allow X minutes for cleaning)**

	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials	Time & Initials
Flush						
Seat and button						
Handwash dispenser						
Sink taps						
Door handles (both sides)						

**All of MEG lab: end of week cleaning<sup>2</sup>**

	Date & Initial	Date & Initials	Date & Initials	Date & Initials	Date & Initials	Date & Initials
Sweep floor						
Mop floor						

<sup>2</sup>Increase frequency if needed.