

MRI SCREENING FOR PARTICIPANTS



Spinoza Centre for Neuroimaging

This document contains instructions for the screening form that is used for the 3T and 7T MRI scanner of the Spinoza Centre for Neuroimaging. The instructions in this document do not cover all questions or doubts you may have. If you have any questions, please contact Minni, Diederick or Wietske. You can also find information in www.mrisafety.com.

The MR operator is ultimately responsible for the screening and safety of the participant.

The instructions in this document apply to users of the Spinoza Centre and are limited to scientific research. In other institutes/hospitals, different rules may apply.

Name: _____

Date of birth: _____ Weight (est.): _____ kg

Information about the participant is required so that when a scan is forwarded to the participant's GP, he or she can identify the participant. The weight estimate is required for SAR calculations. Make sure that these fields and the rest of the form are completely filled out before the start of the scan.

Do you have or do you wear:

- A pacemaker or (old) pacemaker wires? yes / no
Contraindication. Participants that answered 'yes' to this question are not allowed inside the MR system room.
 - A drug pump (e.g. insulin pump)? yes / no
Potential contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient.
 - A neuro-stimulator? yes / no
Contraindication. Participants that answered 'yes' to this question are not allowed inside the MR system room.
 - A hydrocephalus shunt? yes / no
Contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient.
 - External prostheses (e.g. artificial limb)?
Contraindication. It is safe to scan the participant once the prosthesis has been removed.
 - One or multiple piercings? yes / no
Contraindication. All piercings need to be removed, even when they are not located on the participant's head.
- yes / no

- Tattoos or permanent make-up?
It is safe to scan the participant, but the participant needs to be informed that there is a very small chance that the tattoo may heat up and if this is the case, they should immediately notify you by pressing the alarm button. In case of permanent make up, please contact Spinoza staff. yes / no
- Dental constructs (braces, retainers etc.)?
It is safe to scan the participant, although artefacts may occur. The extent of artefact formation is unpredictable. Wires are usually not a problem, but larger constructs in the upper jaw may lead to artefacts. yes / no
- Transdermal patches (nicotine patch, hormone patch etc.)?
Contraindication. All transdermal patches need to be removed due to risk of heating. yes / no
- An intrauterine device (IUD)?
Potential contraindication. With both a hormonal as well as a copper IUD the brain can be scanned safely when it has been at least six weeks since IUD placement. IUDs containing other metals than copper are not prescribed in NL, these cannot be scanned. yes / no
- Dentures?
Contraindication. When the dentures are removed, it is safe to scan the participant. Participants wearing dentures can safely enter the control room yes / no

Have you ever had surgery on:

- The head or neck (e.g. vascular clips, stents or pumps)?
Contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient. yes / no
- The heart (e.g. artificial valves, valve clips, pumps)?
Contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient. yes / no
- The eyes (e.g. implanted lenses)?
Contraindication. When the type and year of placement are known: consult with Spinoza staff. A physician's statement regarding the device's safety is not sufficient. Eye laser surgery (e.g. LASEK) is no problem. yes / no
- The ears (e.g. stapes prosthesis, or cochlear implants)?
Contraindication. Hearing aids need to be removed. When the type and year of placement of a non-removable devices are known, consult with Spinoza staff whether it is safe to scan the participant or not. A physician's statement regarding the device's safety is not sufficient. yes / no
- The bones (in which screws or plates have been used)?
Contraindication. When placed after 2002 and it has been more than 6 weeks since the last surgery, it is safe to scan the participant. All other participants cannot be scanned safely. yes / no
- Other?
yes / no

If so, please specify: _____

Hernia mesh used for surgery on an inguinal hernia is seen frequently, these people may be scanned safely.

Have you ever had a stent or (coronary) angioplasty? yes / no

Conditional. If the participant answered 'yes', he or she can be scanned in some circumstances. Contact Spinoza staff for more information.

Is there a chance of metal splinters in the eyes? yes / no

Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.

Is there a chance of metal splinters in the body (e.g. after an explosion)? yes / no

Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.

Do you or have you ever suffered from: yes / no

- Claustrophobia?

Take your time to discuss this with the participant. In some cases it is advised to first book a test scan in the mock scanner free of charge.

- Tinnitus (ringing in the ears)?

Conditional. Tinnitus is often a sign of (beginning) hearing damage. Because of the small chance of further hearing damage Spinoza advises against scanning of people with tinnitus. If the researcher wants to scan anyway, it is at their risk (and not Spinoza). yes / no

- Shortness of breath (when lying flat on your back)? yes / no

Take your time to discuss this with the participant.

Could you be pregnant? yes / no

Contraindication. If the participant answered 'yes', she cannot be scanned safely.

I hereby attest and certify that the above information provided by me is true and correct to the best of my knowledge.

Date

Signature

Signature of MR Operator