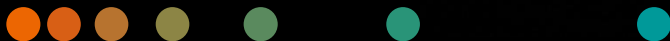
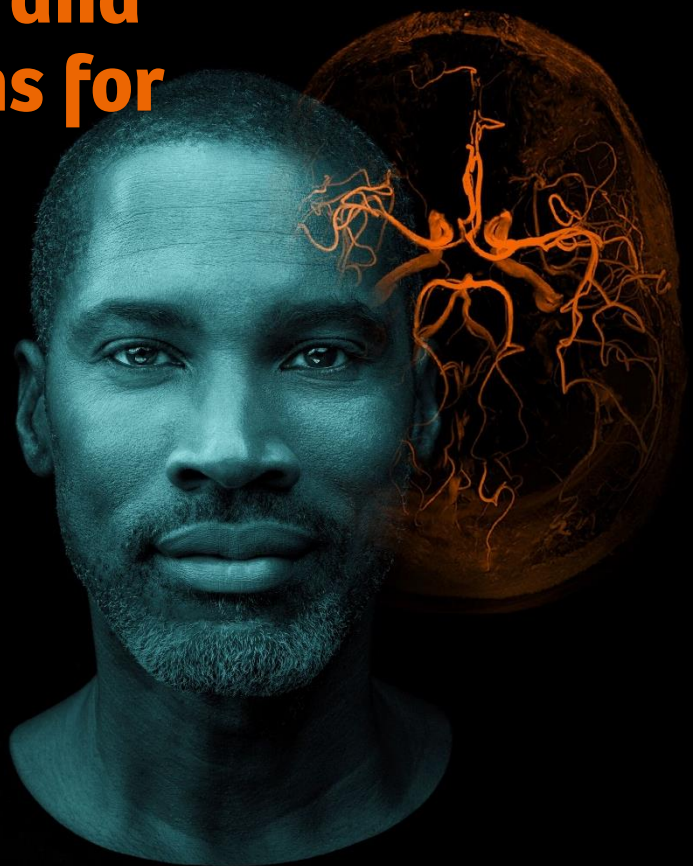


COVID-19 infection caused from medical devices

Risk assessment and recommendations for MRI scanners

siemens-healthineers.com/covid-19



The [WHO](#) COVID-19 information center explains: "People can catch COVID-19 from others who have the virus. The disease can spread from person to person through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales. These droplets land on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets."¹

Handling devices or parts of devices that could have come into or were in direct contact with patients

Recommendations:

In general, use disinfectants that are effective against the SARS-CoV-2 virus. Check the list of [disinfectants](#) that meet the EPA's² criteria for use against SARS-CoV-2 and their labels for specific instructions on inactivation. Follow the label instructions for product use. (For countries that do not follow EPA recommendations, the recommendations of local environmental protection agencies apply).

- All parts of objects that could potentially come into contact with patients or users have to be disinfected.
- All local hygiene instructions (hospital) must be followed. These should meet at least recommendations of Siemens Healthineers.
- Please follow the cleaning instructions provided in the operator's manual.

In general, the following provisions apply: The respective risk assessment has to be checked and/or amended to determine to what extent it includes biological hazards and what respective actions have been taken to reduce said hazards. Check the [disinfectant](#) and its label for specific instructions on inactivation. Follow label instructions for product use.

Disinfection of MRI systems

The following classes of active agents in specific concentrations have been tested and are approved for cleaning of all surfaces of a MAGNETOM System, including computer monitor, keyboards etc.

- Aldehydes
- Guanidine derivatives
- Peroxide compounds

- Pyridine derivatives
- Chloro derivatives
- Alcohol solution min. 60% ABV (only for coils and their accessories)

Please refer to the specific user manuals for systems and components for a detailed list of approved and non-approved cleaning substances and further instructions.

Do not pour cleaning fluid onto surfaces and do not spray fluids directly - always use a damp cloth for cleaning.

Important information

The aim of this document is to answer potential questions you may have about cleaning and disinfecting equipment from Siemens Healthineers. This document refers to the following equipment:

1.5T MRI Scanners:

- MAGNETOM Altea
- MAGNETOM Sola
- MAGNETOM Amira – A BioMatrix System
- MAGNETOM Sempra
- MAGNETOM Avanto
- MAGNETOM Sola Cardiovascular Edition
- MAGNETOM Aera
- MAGNETOM Espree
- MAGNETOM Symphony
- MAGNETOM ESSENZA
- MAGNETOM C! (0.35T)

3T MRI Scanners:

- MAGNETOM Lumina
- MAGNETOM Vida
- MAGNETOM Prisma
- MAGNETOM Spectra
- MAGNETOM Trio
- MAGNETOM Verio
- MAGNETOM Skyra

7T MRI Scanner:

- MAGNETOM Terra

MR-PET Scanner:

- Biograph mMR

MAGNETOM Upgrades:

- MAGNETOM Sola Fit
- MAGNETOM Vida Fit
- MAGNETOM Avanto^{fit}
- MAGNETOM Skyra^{fit}
- MAGNETOM Prisma^{fit}

MRI in Therapy Scanners:

- MAGNETOM RT Pro edition
- nexaris MR
- nexaris Angio-MR
- nexaris Angio-MR-CT

The content described in the following requires a thorough understanding of the equipment. Any procedures mentioned herein may only be performed by qualified personnel who have been specially trained for the described procedures.

This document does not claim to be complete and is not intended to replace the Instructions for Use (IFU) of your equipment. The IFU may contain further relevant information and explanations related to cleaning and disinfecting, particularly related to (third-party) accessories. In any case of doubt, please refer to the IFU of your equipment.

¹⁾ See Q&A on coronaviruses (COVID-19),

<https://www.who.int/newsroom/q-a-detail/q-a-coronaviruses>, 26th March 2020

²⁾ United States Environmental Protection Agency, <https://www.epa.gov/>, 30th April 2020

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
 Henkestr. 127
 91052 Erlangen, Germany
 Phone: +49 9131 84-0
 siemens-healthineers.com