

Musical instruments and CoViD-19

QUARANTINE TIME

As part of the study conducted with the "Unité des virus Émergents" (UVE) of Aix-Marseille University (AMU) on the disinfection of musical instruments, a module was devoted to quarantine.

The purpose of this module was to evaluate the time during which the virus is active on different surfaces (materials and coatings) frequently used in instrumental making. The principle is simple: deposit a small quantity of active virus particles at a given concentration on these surfaces and evaluate the evolution over time.

As a reminder, if the quarantine of instruments is not possible, it is possible to disinfect them effectively against SARS-CoV-2 by following the protocols recommended in our good practices guides, available on the websites of the CSFI and the ITEMM.

GENERAL QUARANTINE TIME RECOMMENDATION

Following values given in this document which were determined by our experimental work, we observe an inactivation time of the virus which depends on the surface and can extend up to 4 days. This time may vary depending on the surrounding conditions, the initial concentration, or the amount of virus deposited. Nevertheless, given that instruments are often made of different materials and surface treatments, we recommend a 5 days quarantine period for all instruments.

In addition, more specific surfaces were tested, including wind instruments reeds as well as papers (ordinary or music scores):

For reeds, the time for the virus inactivation is 6 days.

The work done on paper shows that after 6 days some active virus can still be found on it. In consequence we recommend a quarantine period of 7 days for music sheets

For musical instruments - recommended quarantine period : 5 days

For reeds - recommended quarantine period : 6 days

For paper sheets/music score - recommended quarantine period : 7 days

VIRUS INACTIVATION TIMES BY SURFACE TYPE

The **duration required for the inactivation of virus**, defined as the reduction of the viral dose equivalent to disinfection, was determined experimentally and is given in the following table.

For information, the tests were performed under normal temperature and humidity conditions, namely between 19 and 21 °C and between 50 and 60 % humidity, and were carried out at 3 measurement points for each surface.



Material	Minimum duration (hours)
METALS AND ALLOYS	
Brass	72
Nickel silver	72
Silver plating	72
Nickel plating	72
Gold plating	96
Varnish	
Polyurethane	48
Nitrocellulose	72
Linseed oil	96
Shellac	96
Epoxy resin	96
OTHER	
Ebonite	96
ABS (polymer)	48

Notes :

Due to technical issues, the minimum duration on unvarnished / untreated wood surfaces could not be assessed. Specific work on the potential of different woods to absorb the viruses and the possibility of virus release is underway and will be the subject of a future study.

Materials and coatings obviously vary depending on the makers and models. If you want to know which materials are present in your instrument, you can refer to the above-mentioned guides or contact a professional if you are unable to find this information.

DESIGN AND MANAGEMENT OF THE RESEARCH PROGRAM: BUFFET CRAMPON AND ITEMM



