

REALM 101

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About REALM

REopening Archives, Libraries, and Museums (REALM) is a research partnership between OCLC, the Institute of Museum and Library Services, and Battelle. Its aim is to conduct research on how long the COVID-19 virus survives on materials that are prevalent in libraries, archives, and museums (LAMs). The REALM project team is using that research to produce authoritative, science-based information on how—or if—materials can be handled to minimize exposure to staff and visitors.

REALM provides science-based information

REALM is not issuing recommendations or guidelines. We're working to create resources that help inform local decision-making. Many LAMs are in conversations with their local and state health departments, as well as other aspects of government, as they seek information on how COVID-19 can be addressed in the workplace. REALM will be taking the results of the REALM project testing, literature reviews, and the suggestions of the project steering committee and working groups to release materials to help support LAM decisions.

What we know about COVID-19

Because SARS-CoV-2 is still emerging, knowledge about it is a work in progress. For COVID-19 prevention and decontamination recommendations, please refer to the **Center for Disease Control's guidelines**.

How the virus spreads

DIRECT TRANSMISSION

Virus-containing droplets are expelled from an infected person and enter the system of an uninfected person.

INDIRECT TRANSMISSION

Objects can harbor the virus for an extended period after being contaminated by an infected person.

Survival of the virus on surfaces

If SARS-CoV-2 is transferred to a physical surface, its survival time appears to vary based on material composition and roughness, before it dies off on its own through natural attenuation. Disinfecting surfaces with the appropriate cleaning agents kills the virus quickly but is not always practical (one would have to wipe down every page of a book, for example). There may also be issues with the cleaning agents possibly damaging delicate materials, so caution will need to be taken.

Quarantining is an option for items that are not practical or possible to disinfect individually. Should you disinfect or quarantine? Check out our decision-making checklist oc.lc/realm-project for tips.

The “known unknowns”

Knowledge about the new coronavirus and COVID-19 is still emerging from the scientific community. Keep the following “known unknowns” in mind when interpreting and applying REALM data.

1**Unknown:**

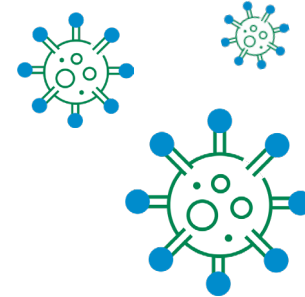
How much virus an infected person will leave on an object

**2****Unknown:**

How much virus someone can pick up from an object

**3****Unknown:**

How much virus is needed to cause infection



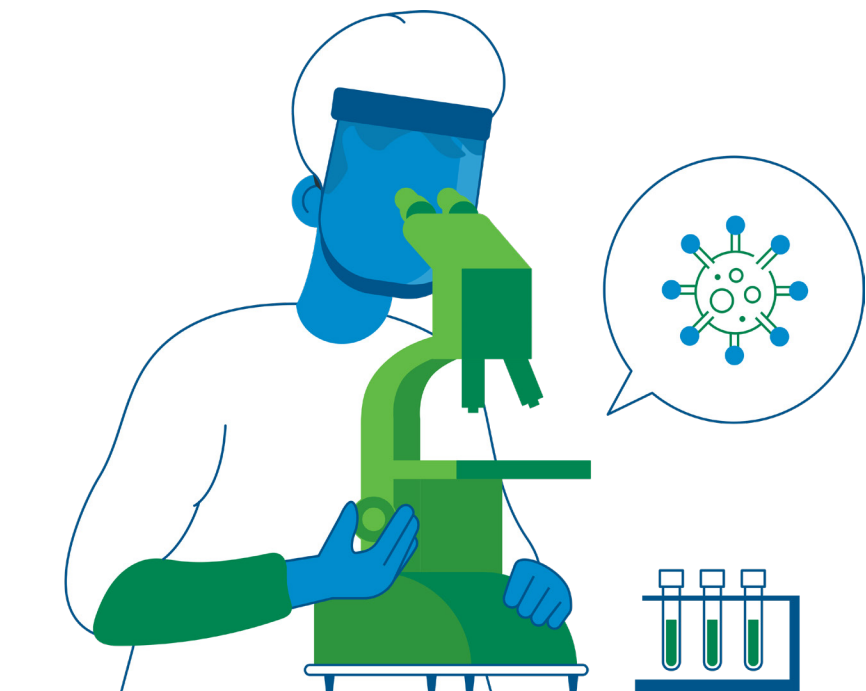
The testing process

The tests have been conducted by applying the virus on materials held at standard room temperature (68°F to 75°F) and relative humidity conditions (30 to 50 percent).

The quantity of viable virus is then measured at selected time points to capture the attenuation, or drop, in total virus. Time points were selected to mimic real-world options, quarantining items for a few days or a week. Time points cannot be adjusted within a test once it is underway, but can be adjusted for future tests based on the results of earlier ones. For most of the materials tested, only a trace amount of virus was detected by the final time point examined.

Visit oc.lc/realm-glossary for a list of commonly used REALM words and terms.

We're releasing project plans and test results as they become available. Visit oc.lc/realm-project for updates.



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This document synthesizes various studies and data; however, the scientific understanding regarding COVID-19 is continuously evolving. This material is being provided for informational purposes only, and readers are encouraged to review federal, state, tribal, territorial, and local guidance. The authors, sponsors, and researchers are not liable for any damages resulting from use, misuse, or reliance upon this information, or any errors or omissions herein.

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