24 November 2020

REALM project

Supporting the reopening of archives, libraries, and museums

CERL Consortium of European Research Libraries
OCLC RLP Research Library Partnership

CERL
Consortium of European Research Libraries

Marian Lefferts, Executive Manager





Consortium of European Research Libraries

CERL Services

Heritage of the Printed Book database	1997-
CERL Thesaurus	2000-
CERL Portal for Manuscripts and Early Printed Books	2005-2020
Can-you-help? database	2006-2016
Material Evidence in Incunabula (MEI)	2010-
Hosting 3rd party databases	2016-
CERL Provenance Digital Archive	2018-

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CERL Network

- HPB, CERL Thesaurus, Manuscripts and Incunabula Working Groups
- Engagement and Promotion Working Group
- Provenance Working Group
- Digital Humanities Working Group
- Book Binding Working Group
- Security Network Working Group

- About to be launched: Cultural Property Working Group

CERL (and members') News

- Website: www.cerl.org
- Blog posts: cerlblog.wordpress.com
- Mailing list: cerl_information@lists.gbv.de
- Twitter: CERL_org



Thank you

www.cerl.org
marian.lefferts@cerl.org (@MRL57)



Poll #1 results: Where are you joining from today?





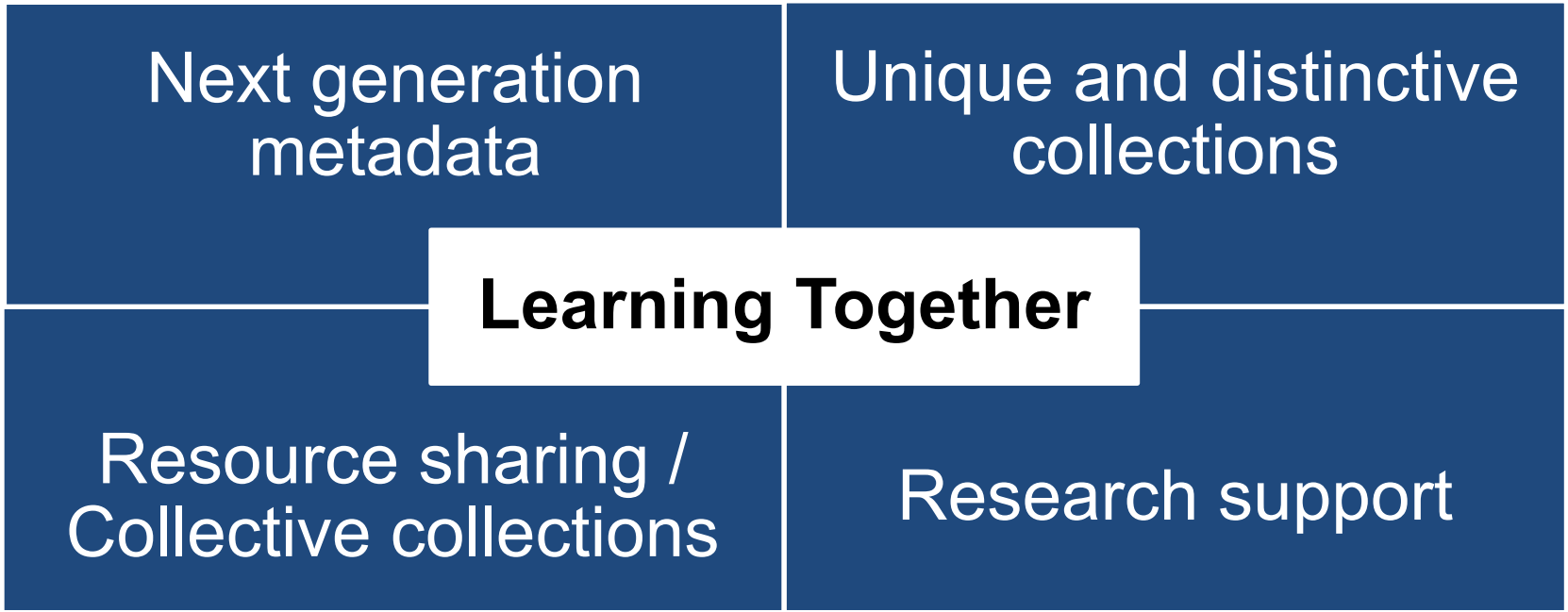
Chela Scott Weber

Sr. Program Officer,
OCLC Research Library Partnership

OCLC Research Library Partnership

- Transnational network of research libraries (130+)
- Supported by partnership dues and co-investment from OCLC
- The RLP supports libraries as they evolve to meet 21st century challenges, providing the *connections*, *knowledge*, and *resources* to *plan with confidence* in a complex, rapidly changing ecosystem
- Sharing Tacit Knowledge / Creating Common Practice

OCLC RLP Activities



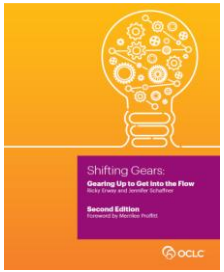
Our Work in Archives, Special, and Distinctive Collections:

Metadata is the Interface: Better Description for Better Discovery of Archives and Special Collections (2009)

Taking Stock and Making Hay: Archival Collections Assessment (2011)

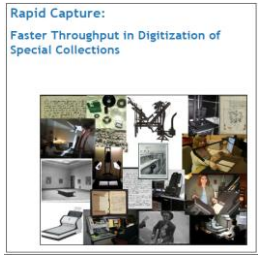


Demystifying Born Digital Series (2012-2017)



Shifting Gears: Gearing Up to Get into the Flow (2017)

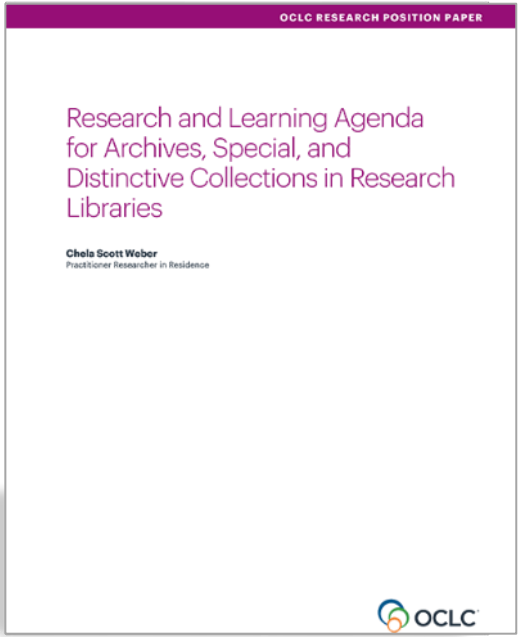
2009 — 2011 — 2012 — 2015 — 2017



Rapid Capture: Faster Throughput in Digitization of Special Collections (2011)

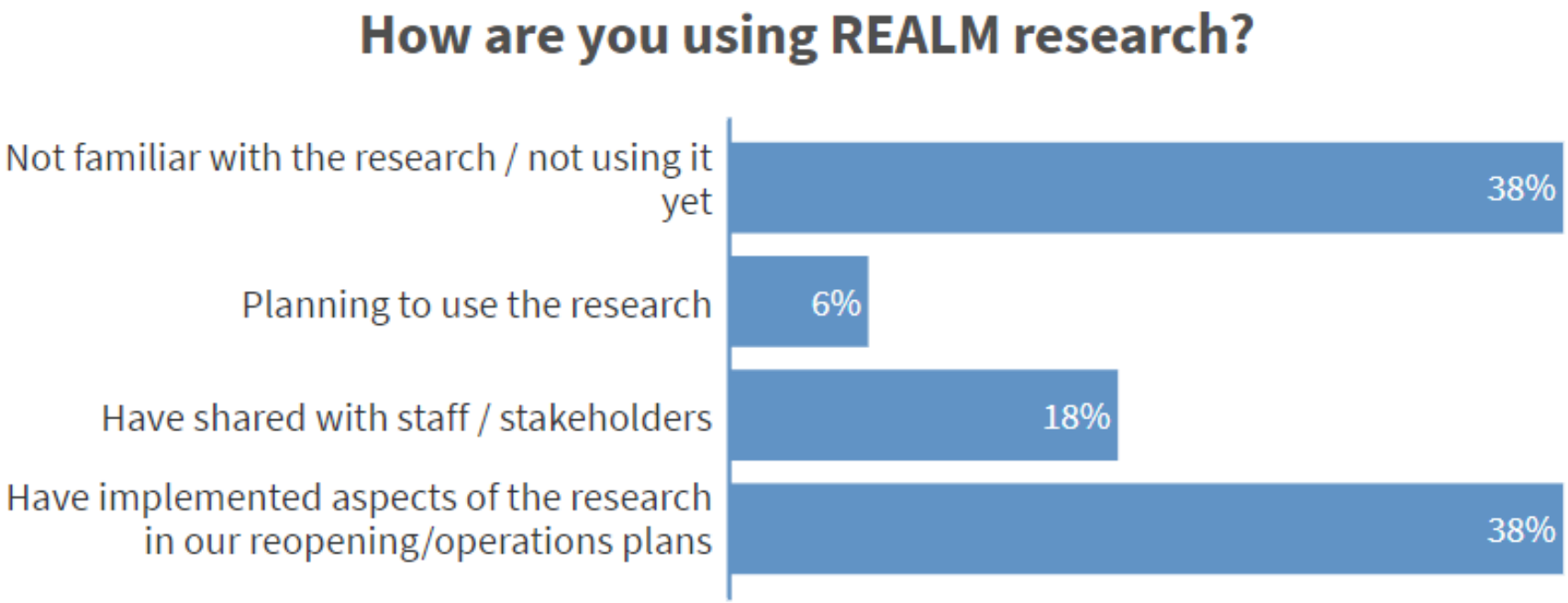
The Archival Advantage: Integrating Archival Expertise into Management of Born-digital Library Materials (2015)





oc.lc/rlp-agenda

Poll #2 results



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REopening Archives, Libraries, and Museums

oc.lc/realm-project

#REALMproject





Kendra Morgan

Senior Program Manager
OCLC

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IMLS

- Project funder
- Consult on project goals and activities
- Convenes steering committee and working groups

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- Conduct literature review
- Conduct research on materials

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- Lead and manage execution of project deliverables
- Collect, synthesize stakeholder input to inform decisions
- Publish and distribute research and information to the archives, libraries and museums communities

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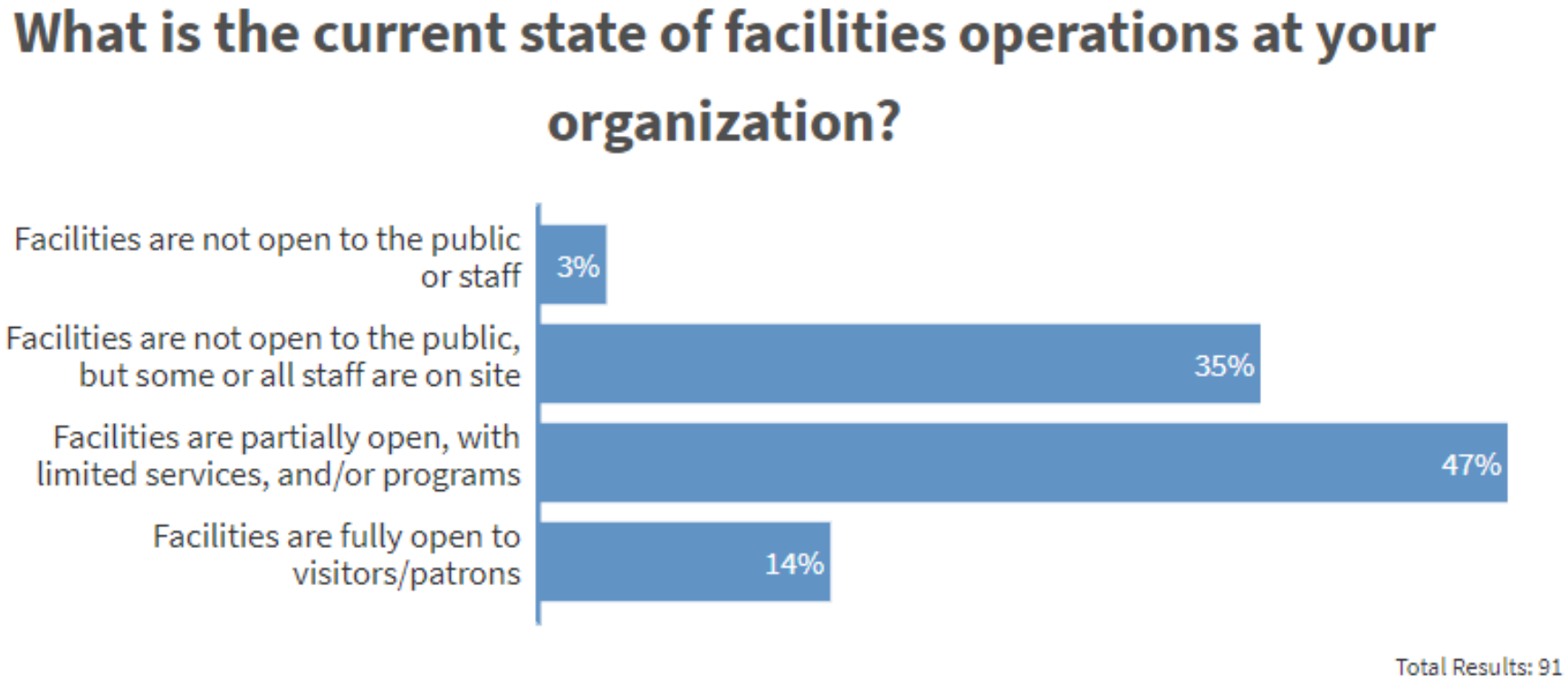
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Project activities

- Review and summarize relevant authoritative research
- Ongoing engagement with representatives and subject matter experts from archives, libraries, and museums
- Laboratory testing of materials
- Synthesize the above inputs into toolkit resources
- Share project information and toolkit resources
- Currently in Phase 3 – project began in May

Poll #3 results



REALM project research

... is providing data that helps us better understand the virus. You can use that data to inform your practices and policies.

The project is NOT making recommendations. Every institution is different and will need to develop policies that work for them and their community.



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STATUS OF COVID-19 RESEARCH

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Literature research questions



How might the virus spread through general operations?



How long does the virus survive on material surfaces through environmental attenuation? (Virus dying naturally, without intervention.)



How effective are various prevention and decontamination measures available in the near term? (Cleaning agents, PPE, shields, etc.)

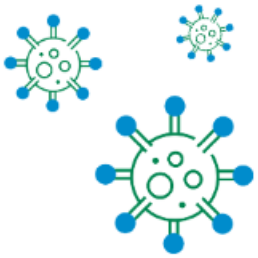
Known unknowns



1 **Unknown:** how many virus cells an infected person will leave on an object.



2 **Unknown:** how many virus cells someone can pick up from an object.



3 **Unknown:** how many virus cells are needed to cause infection.

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Key points in the findings

- The human infectious dose is still unknown. Studies of other viruses (e.g. SARS-CoV, MERS, influenza) have shown a wide range.
- Other areas that require more exploration are aerosol particle transmission and human matter (in solid and aerosol)
- Environmental factors such as humidity, temperature, ventilation/air flow, and air conditioning may also affect the spread of SARS-CoV-2

How the virus spreads

Most likely

- Direct contact between people
- Droplets passed between people

Possibly

- Aerosol particles
- Contaminated objects (*fomites*)
- Other body fluids, excretions



Photo by Blake Cheek on Unsplash

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Environmental conditions are a factor

- Temperature
- Relative humidity
- Air quality
- Air flow



Photo by Phil Hearing on Unsplash

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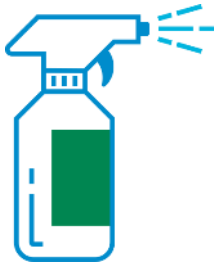
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Prevention and decontamination tactics

- Social distancing
- Hand washing and toilet hygiene
- Masks/PPE
- Fresh air and open spaces
- Surface cleaners and disinfectants*
- UVA/UVC treatment*

NEDCC



LAB TESTING

How long does the virus remain active on materials commonly found in libraries, archives, and museums?



Active…*viable*...*infectious*…"*alive*"

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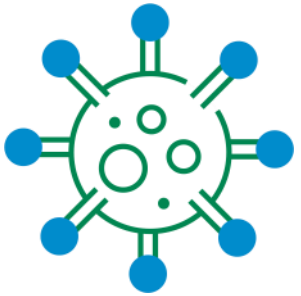
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Testing overview

Objectives

- Determine the effect of ambient environmental conditions on the SARS-CoV-2 virus when applied to common materials found in libraries, archives, and museums
- Provide data to consider for selecting potential quarantine durations before materials can return to public circulation



Experimental design

- 10 test rounds (6 completed), 5 material types per round
- Droplets of live virus applied to material surface via ‘fake spit’
- Materials stored in stacked or unstacked configurations
- Measure quantity of viable virus at selected time points to capture the attenuation (drop) in total virus

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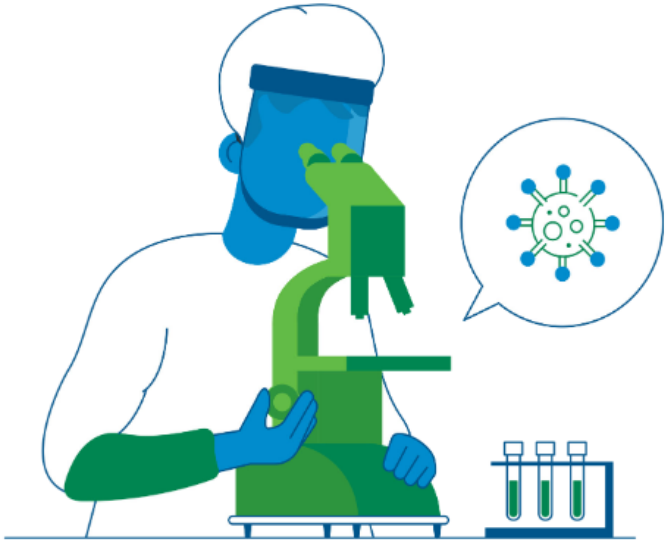
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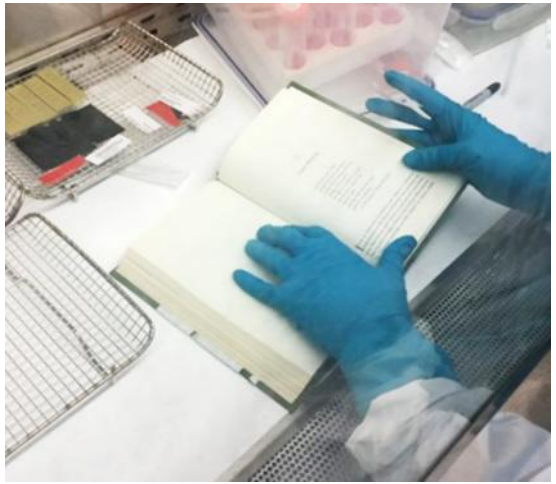
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Testing: TCID50 cell-based assay

- Starting virus amount
  - Log scale (e.g., 5 Log = 100,000 virus particles)
- Limit of quantitation (LOQ): Only presence/absence of virus per coupon
- Limit of detection (LOD): Cannot find virus on any coupon









Photos courtesy of Battelle

Stacked books

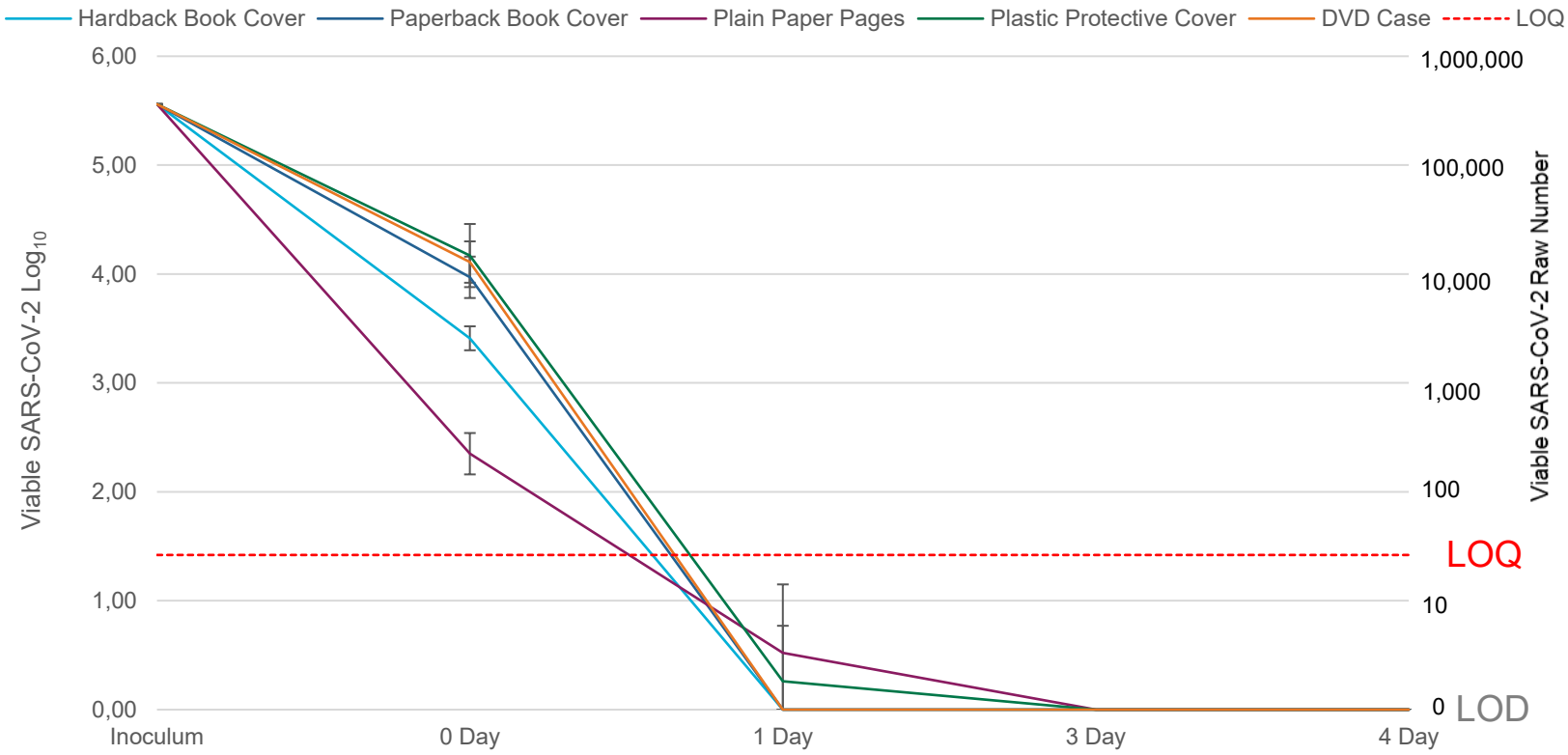
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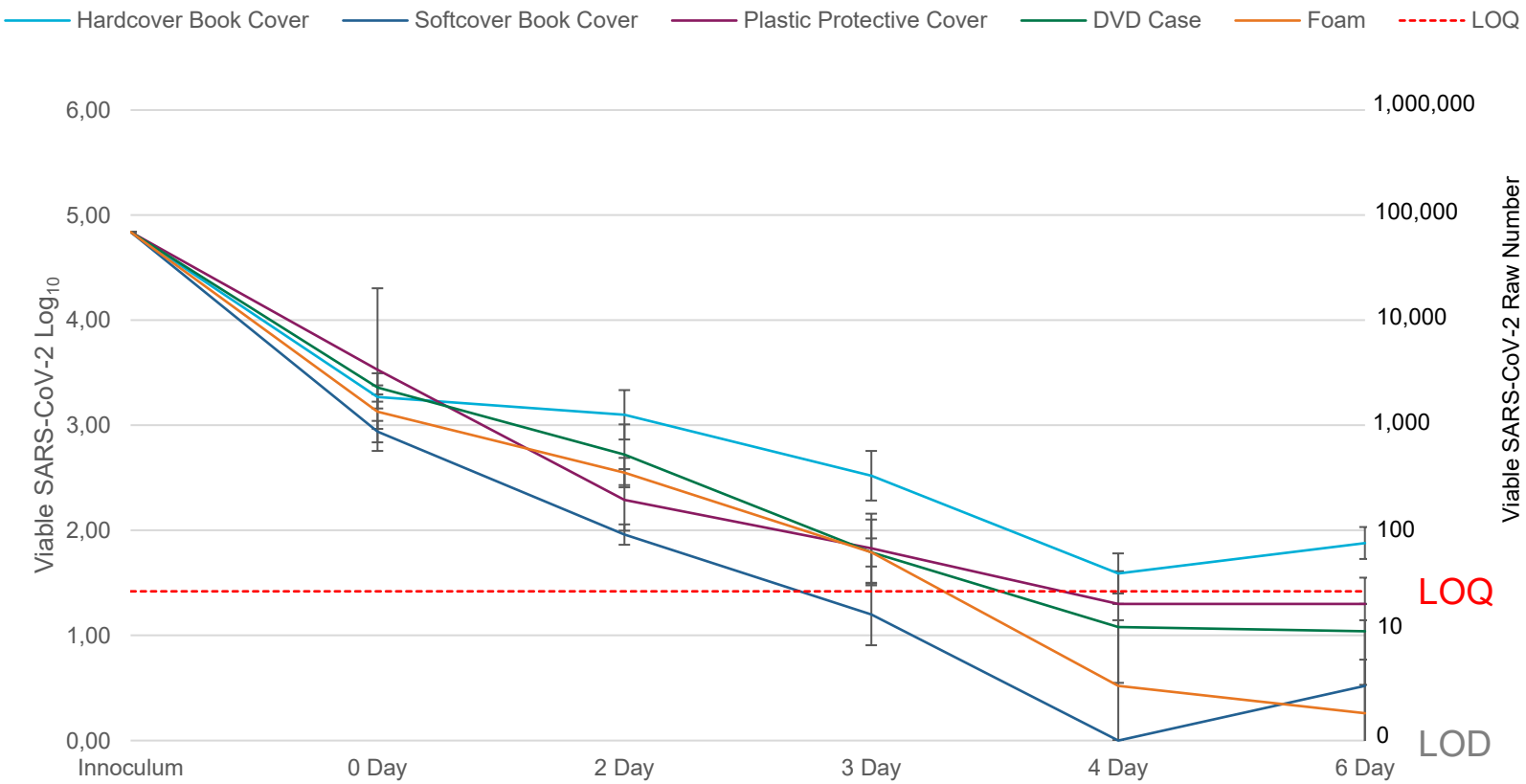
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Test 1 Unstacked library materials



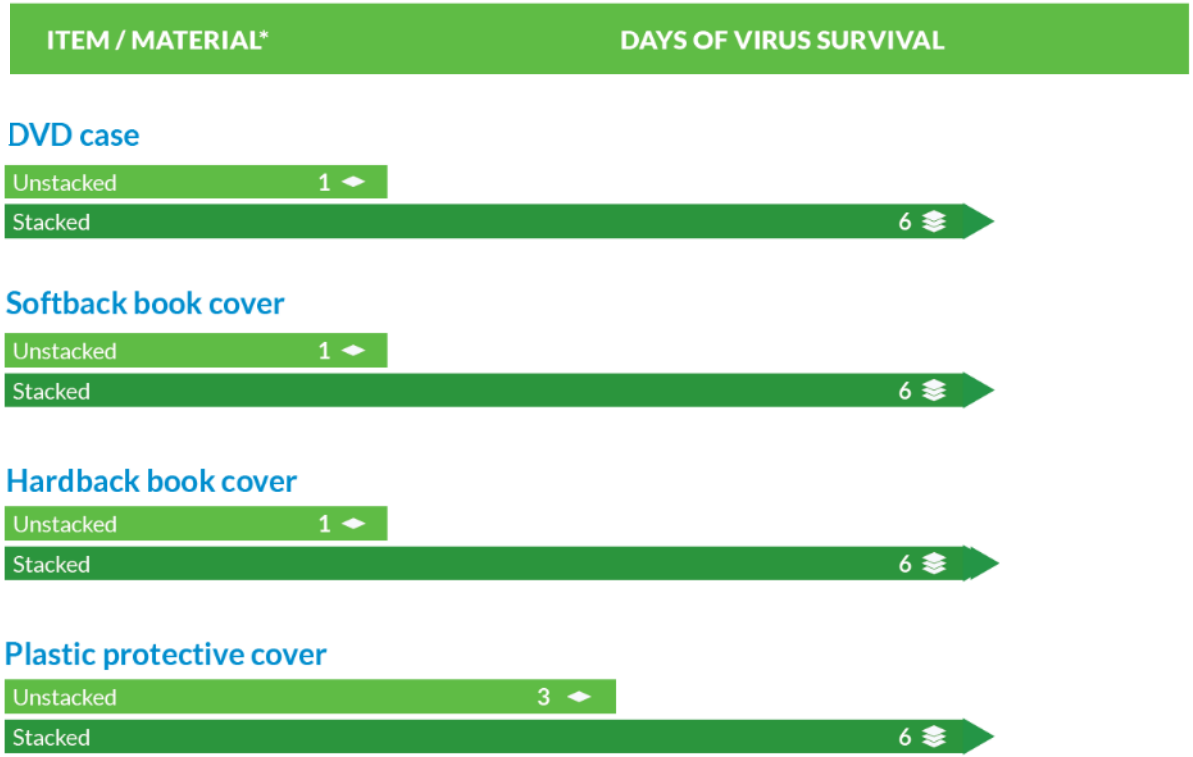
Test 4 Stacked library materials



How long the virus survives on commonly used library, archive, and museum materials

- Item tested in a **stacked** configuration.
- Item tested in an **unstacked** configuration.
- Item showed **trace amount** of virus after testing.
- Item was **above LOQ** after testing.

Stacked vs unstacked comparison



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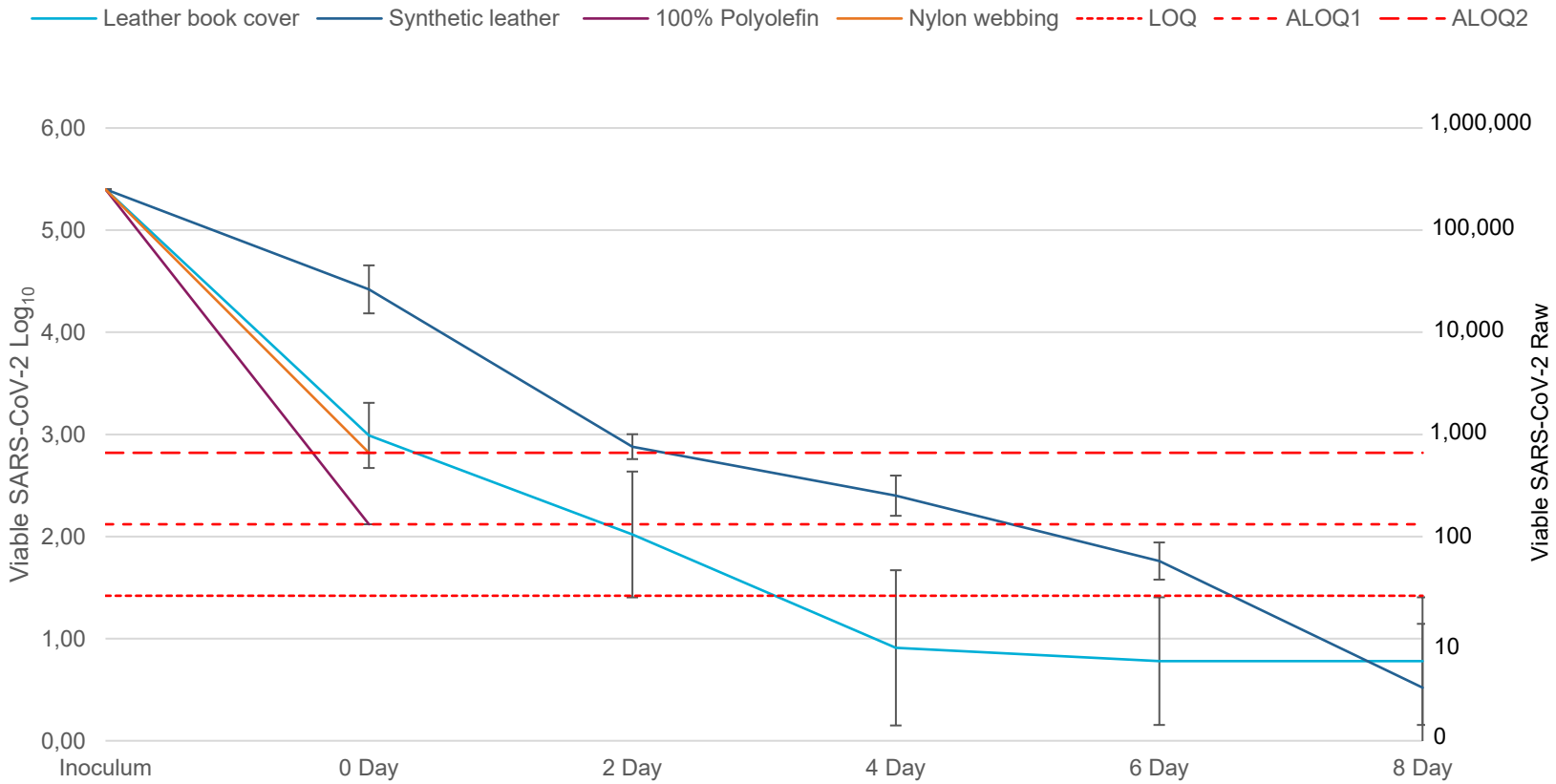
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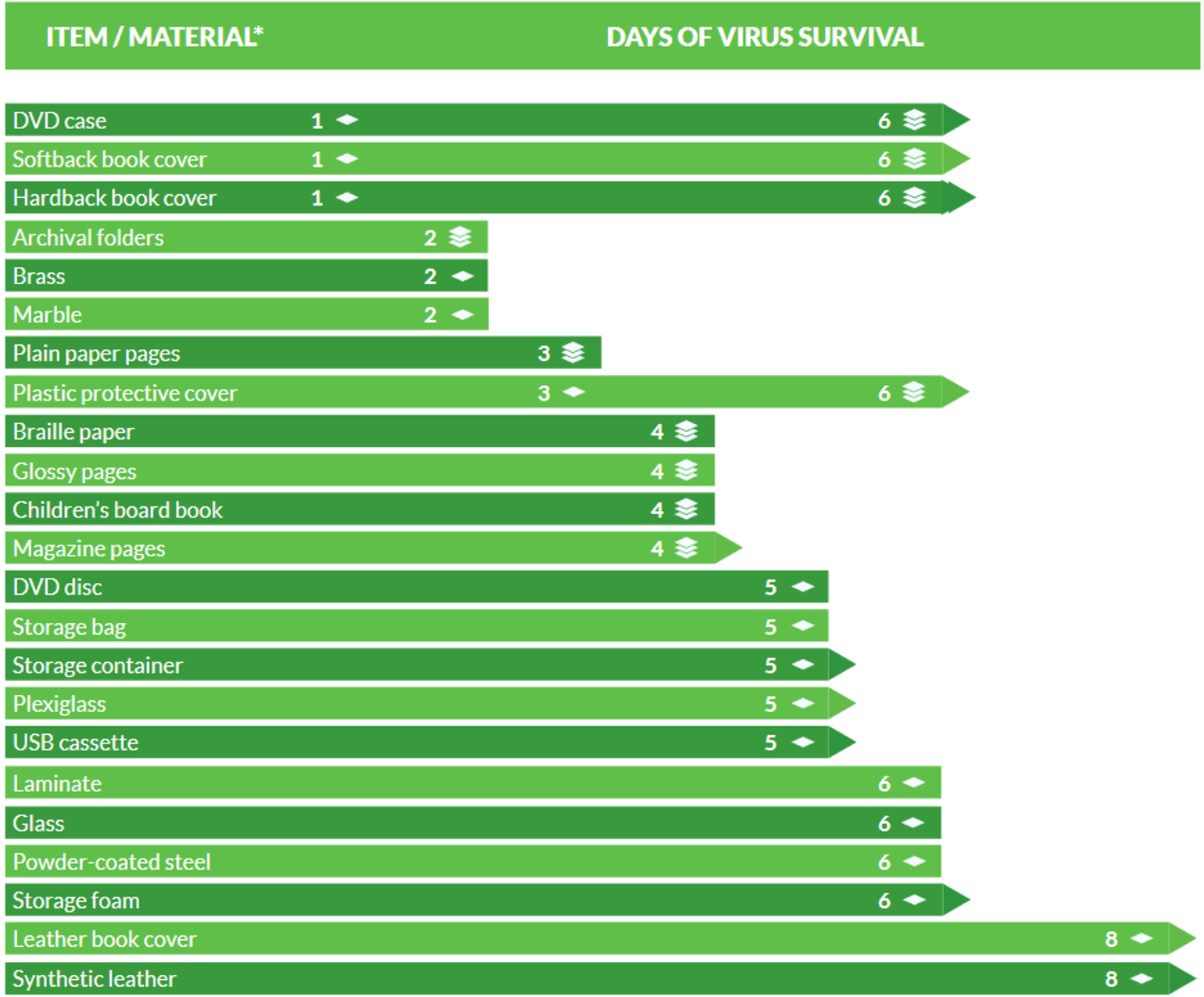
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Test 5 materials



How long the virus survives on commonly used library, archive, and museum materials

- Item tested in a **stacked** configuration.
- Item tested in an **unstacked** configuration.
- Item showed **trace amount** of virus after testing.
- Item was **above LOQ** after testing.



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For more information

Visit project website **oclc.org/realm:**

- Toolkit resources
- Project research, test results
- Frequently Asked Questions
- Submit a question to the project team
- Sign up for email updates



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Questions?



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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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