



National Institute of Environmental Health Sciences

Your Environment. Your Health.

How to Use MUSTID

MUSTID

Material Upload and Search Tool for Infectious Disease

- **Need:** A centralized location to **organize** and **store science-based resources and training tools** that can be easily accessed by WTP awardees to **inform worker safety during the current COVID-19 outbreak** (and other future disease outbreaks)
- **Solution:** The Clearinghouse has developed an easy-to-use tool call **MUSTID (the Material Upload and Search Tool for Infectious Disease)** to house these resources and serve as a data sharing platform for WTP grant administrators and awardees via the **Data Management System (DMS)**.

MUSTID Content

- **Origin of Resources:** MUSTID contains resources shared by WTP and the Clearinghouse including resources shared on the Protecting Workers Listserv.
- **Topic:** Resources relevant to COVID-19, other coronaviruses (SARS, MERS), and influenza, and the health and safety of workers.
 - **New:** Also includes materials on transitioning to online training and back to the classroom/in-person training.

Information is easily found because resources are tagged with keywords

- **Resource Type** describes the type of resource e.g., clinical guidance, FAQ, or research article
- **Format** describes the physical format of the resource e.g., PDF, Audio/Video, website
- **Language** describes the language of the resource e.g., English or Spanish
- **Infectious Disease** describes the infectious disease addressed in the resource e.g., COVID-19, SARS, or Influenza
- **Topics Covered** are tags addressing a variety of topics relevant to protecting workers during infectious disease outbreaks (e.g., Airborne/ Aerosol Transmission or Respiratory Protection).
- **Industry** describes the area of industry that the resources applies to (e.g., Healthcare/Public Health/Human Services).
- **Country** describes the country where the resource or scientific study is specific to.

Information is easily found because resources are tagged with keywords

Infectious Disease Category

HINT: Hover over the purple  icon to see the Tool Tip for that term.

- ▼ Infectious Disease
 - COVID-19 
 - Ebola Virus Disease
 - General Infectious Disease 
 - Hepatitis 
 - HIV (Human Immunodeficiency Virus)
 - Influenza 
 - MRSA (Methicillin-resistant Staphylococcus aureus)
 - MERS (Middle East Respiratory Syndrome)
 - Norovirus
 - General Respiratory Illness 
 - SARS (Severe Acute Respiratory Syndrome)
 - Tuberculosis
 - Zika
 - Other Infectious Diseases

Information is easily found because resources are tagged with keywords

Topics Covered

Exposure / Transmission

- Airborne/ Aerosol Transmission ⓘ
- Dermal/ Surface Transmission ⓘ
- Risk of Transmission
- Symptoms / Clinical Characteristics
 - Incubation Period
 - Other Symptoms / Clinical Characteristics
- Vulnerable / At-Risk Populations
- Epidemiology

Intervention

- Clinical Trial
- Efficacy
- Vaccine
- Other Intervention

Education and Training

- Community Education and Training
- Family Education and Training
- Management and Leadership Training ⓘ
- Train-the-Trainer
- Worker Training
- Other Training

Transition to Online Training/e-Learning ⓘ

- Online Training/e-Learning Platforms/Tools ⓘ
- Online Training /e-Learning Methods/Best Practices
- Online Course Development
- Return to In-person Training/Classes
- In-person Classroom Safety Measures

Information is easily found because resources are tagged with keywords

Topics Covered

Hierarchy of Controls

- Administrative Controls ⓘ
- Engineering Controls ⓘ
- Early Identification and Isolation

Cleaning, Disinfection and Decontamination

- Environmental Cleaning
- Hand Washing
- Laundering
- Sterilization
- Other Cleaning, Disinfection, Decontamination

Personal Protective Equipment (PPE) ⓘ

- General PPE
- Eye Protection
- Gloves
- Gowns
- Respiratory Protection ⓘ
- Other PPE

Screening and Surveillance

- Medical Screening/Surveillance
- Workplace Screening/Surveillance
- Contact Tracing
- Other Screening and Surveillance

Waste Management ⓘ

- Health Care Waste
- Municipal Waste
- Other Waste
- Mental Health / Resiliency
- Physical Distancing

Preparedness

- National Preparedness
- State Preparedness
- Community Preparedness
- Workplace Preparedness

Response

- National Response
- State Response
- Community Response
- Workplace Response

Workplace

- Access to Information
- Essential Services
- Workers Compensation
- Workplace Assistance Programs ⓘ
- Other Workplace Concerns

MUSTID is Still a Work in Progress

- We are in the process of uploading and cataloging the more than 400 resources that have been collected so far.
- 246 resources in MUSTID
- 54 have been approved (and therefore are available to be searched)
- 81 have been tagged and are awaiting qc/approval
- The rest will be coded soon!

Using MUSTID

WETCIS DMS

- Awardee Info
- Dashboard
- Curricula Catalog >
- Data Entry >
- Progress Reports >
- Reports >
- MUSTID >**
- Admin Functions >
- Administrative Reports >
- Help and Docs >
- Admin Pages >



WETCIS DMS

- Awardee Info
- Dashboard
- Curricula Catalog >
- Data Entry >
- Progress Reports >
- Reports >
- MUSTID** ▾
 - Welcome
 - Add a New Resource
 - View Resource Listing
 - Search the Portal
- Admin Functions >
- Administrative Reports >
- Help and Docs >
- Admin Pages >

Welcome Page

[Home](#) [Add a New Resource](#) [View Resource Listing](#) [Search the Portal](#)

MUSTID

Welcome to the **Material Upload and Search Tool for Infectious Disease (MUSTID)** Resource Portal. MUSTID is a searchable resource portal that provides easy access to resources shared by and relevant to WTP on the topic of infectious disease and worker safety. The current focus of this curated collection is COVID-19 and other related diseases such as SARS, MERS and influenza.

MUSTID contains a variety of resources including guidance documents (e.g., Clinical or Operational Guidelines, Policies/Regulations, Executive Orders), FAQs, Infographics, and scientific articles including research articles, reviews, and commentaries/editorials.

Resources shared by WTP have been curated and tagged with keywords to enhance findability. MUSTID provides detailed references, with links to full text (e.g., attached file or full text online).

Please see our [Quick Tips user Guide](#) for help getting started



[Add a New Resource](#)

Search The Portal

[Search Tips](#)



Search... Multiple Keywords Must Be Separated By Commas. E.g. COVID, influenza, factsheet

Search

Clear

(AND Query Modifier optional): Check to use the "AND" query modifier with the Keyword Search. Default is OR. [i](#)

Searching Tips

Search The Portal

▶ Search Tips

Search... Multiple Keywords Must Be Separated By Commas. E.g. COVID, influenza, factsheet

Search

Clear

(AND Query Modifier optional): Check to use the "AND" query modifier with the Keyword Search. Default is OR. ⓘ

- The search function searches for keywords in the following text fields: **title**, **description**, **source (organization)**, **abstract**, **topic tags**, and the **full-text of attached documents**, if available.
- **Separate multiple search terms with commas** (e.g., COVID, respirator).
 - The default operator is OR so searching with multiple search terms separated by commas will retrieve resources containing **at least one** of the terms in any of the text fields or the full-text file.
 - **Check the AND button** to narrow your search. Results will contain both of your search terms.

Searching Tips (Example)

OR search results in 39 resources, each resulting resource will have at least one of the search terms

Search interface showing an OR search for "covid, respirator".

Search input: covid, respirator | Search Clear

(AND Query Modifier optional): Check to use the "AND" query modifier with the Keyword Search. Default is OR. [i](#)

AND search results in 6 resources, each resulting resource is about both COVID-19 AND respirators

Search interface showing an AND search for "covid, respirator".

Search input: covid, respirator | Search Clear

(AND Query Modifier optional): Check to use the "AND" query modifier with the Keyword Search. Default is OR. [i](#)

Search Results

- Returned search terms will be highlighted in yellow in the search result display. If a search term was found in the full-text PDF, then the PDF link will be highlighted yellow.

[Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China](#)

Description:

This study reports the clinical characteristics of 138 hospitalized patients with 2019 Novel Coronavirus Infected Pneumonia in Wuhan, China.

Published Date: 02-07-2020

Author(s): Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, Wang B, Xiang H, Cheng Z, Xiong Y, Zhao Y, Li Y, Wang X, Peng Z.

Resource Description:

- **Format:** PDF
- **Resource Type:** Research Article
- **Infectious Disease:** COVID-19
- **Topics Covered:** Epidemiology, Symptoms / Clinical Characteristics
- **Language:** English
- **Country:** China

▶ **Abstract:**

Citation: Wang D, Hu B, Hu C, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus-Infected Pneumonia in Wuhan, China [published online ahead of print, 2020 Feb 7]. JAMA. 2020;323(11):1061-1069. doi:10.1001/jama.2020.1585

Download PDF: [Wang 2020 JAMA clinical characteristics of COVID patients Wuhan China.pdf](#) 

Information Provided about each Resource

Title of resource, linked to full-text or abstract



[Coronavirus survival on healthcare personal protective equipment](#)

Short **description** of resource



Description:

This research brief examined the survival and inactivation of coronaviruses on PPE and found that Coronavirus survival on PPE items varies by material, but infectious virus was detectable on all materials for at least 4 hours. The potential long term survival of viruses on PPE is an important factor when formulating recommendations for removal and handling of used PPE and reuse of PPE in the pandemic setting.

Published date and **Authors** and/or **Source** (Agency/Institution)



Published Date: 05-31-2010

Author(s): Casanova L, Rutala WA, Weber DJ, Sobsey MD

Resource Description:

- **Format:** PDF
- **Resource Type:** Research Article
- **Infectious Disease:** SARS (Severe Acute Respiratory Syndrome)
- **Topics Covered:** Dermal/ Surface **Transmission**, General PPE, Gloves, Gowns, Respiratory Protection, Risk of **Transmission**
- **Industry:** Healthcare/Public Health/Human Services
- **Language:** English

Click the arrow to open the **abstract** if available



▶ **Abstract:**

Resource citation



Citation: Casanova L, Rutala WA, Weber DJ, Sobsey MD. Coronavirus survival on healthcare personal protective equipment. Infect Control Hosp Epidemiol. 2010;31(5):560-561. doi:10.1086/652452

File attachment



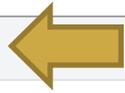
Download PDF: [Casanova 2010 coronavirus-survival-on-healthcare-personal-protective-equipment-div.pdf](#) 

Results Display Features

Filter your results

▼ **Resource Type**

- Research Article (5)
- Factsheet (5)
- FAQ (1)
- Procedure, Protocol, or Checklist (3)
- News Article/ Newsletter (1)
- Clinical Guideline (3)
- Other Guidance (7)
- Other Resource Type (1)
- Executive Order (1) ⓘ
- Report/ White Paper (1) ⓘ
- Toolbox (1)
- Operational Guideline (1)



respirator, mask Search Clear

AND Query Modifier: Check to use the "AND" query modifier with the keyword search. Default is **OR**. ⓘ

▶ **Search Tips**

[First](#)
[Previous](#)
[1](#)
[2](#)
[3](#)
[Next](#)
[Last](#)
 Results/Page Sort



ⓘ Due to the rapidly changing nature of COVID-19, links to resources may change. We will do our best to keep all links up-to-date.

[Download as PDF](#) [Download as Excel](#)

22 Results



Results/Page

- 10
- 10**
- 25
- 50
- 100

Sort

- Relevance
- Relevance**
- Published Date

Exporting Results

Export results in either PDF or Excel format

respirator, mask Search Clear

AND Query Modifier: Check to use the "AND" query modifier with the keyword search. Default is OR. [i](#)

▶ **Search Tips**

[First](#) [Previous](#) **1** [2](#) [3](#) [Next](#) [Last](#) Results/Page 10 Sort Relevance

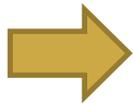
i Due to the rapidly changing nature of COVID-19, links to resources may change. We will do our best to keep all links up-to-date.

[Download as PDF](#) [Download as Excel](#)

22 Results

[Advice on the use of **mask**s in the context of COVID-19](#)

Description:
This document provides advice on the use of **mask**s in communities, during home care, and in health care settings in areas that have reported cases of COVID-19. It is intended for individuals in the community, public health and infection prevention and control professionals, health care managers, health care workers, and community health workers. This updated version includes a section on advice to decision makers on the use of **mask**s for healthy people in community settings.





Live Demo

- <https://connect.niehs.nih.gov/wetcis/mustid/>

How to Add Resources to MUSTID

You have two options to add a resource to MUSTID.

1. Upload individual resource directly to MUSTID using the **New Resource Upload Form** accessed by clicking on the [Add a New Resource](#) link.
2. Email resources to Lesley Skalla (lskalla@michaeldbaker.com) either as single item or as a list of resources in Excel. Please include the following information: resource title, URL, and the full-text if available. Any other info is appreciated.

Either way is perfectly acceptable, it is your preference!

To Upload a Resource Directly to MUSTID

Start on
the **Add
New
Resource**
page

The screenshot shows the MUSTID portal homepage. At the top, there is a navigation bar with links for 'Home', 'Add a New Resource', 'View Resource Listing', and 'Search the Portal'. The 'Add a New Resource' link is highlighted with a red box. Below the navigation bar, the title 'MUSTID' is displayed. The main content area contains a welcome message, a description of the portal's focus on COVID-19 and related diseases, and a list of resource types. A second 'Add a New Resource' link is also highlighted with a red box. Below this, there is a search section titled 'Search the Portal' with a 'Search Tips' link. A search input field contains the placeholder text 'Search... Multiple Keywords Must Be Separated By Commas. E.g. COVID, influenza, factsheet' and has 'Search' and 'Clear' buttons. Below the search field, there is a checkbox for 'AND Query Modifier' with a help icon.

Provide Metadata

Fill in basic information about the resource using **the text fields on the right-hand side** of the upload form.

Home [Add a New Resource](#) View Resource Listing Search the Portal

MUSTID New Resource Upload Form

Welcome to the MUSTID New Resource Upload Form. The upload process is simple. Fill in all required text fields on the right-hand side (Title, Description, and URL link) and any optional fields you like. Files are uploaded at the bottom of the page.

You are welcome to add resource tags using the check boxes on the left to describe the resource but this is optional. Clearinghouse staff will make sure topic tags are applied. When you are done adding information to the form, click the Submit button and you are done! If you need to make any changes to the record, you can access the record from the MUSTID [Resource Listing](#) page within 20 minutes of upload.

▶ [How to Upload a New Resource](#)

Resource Type

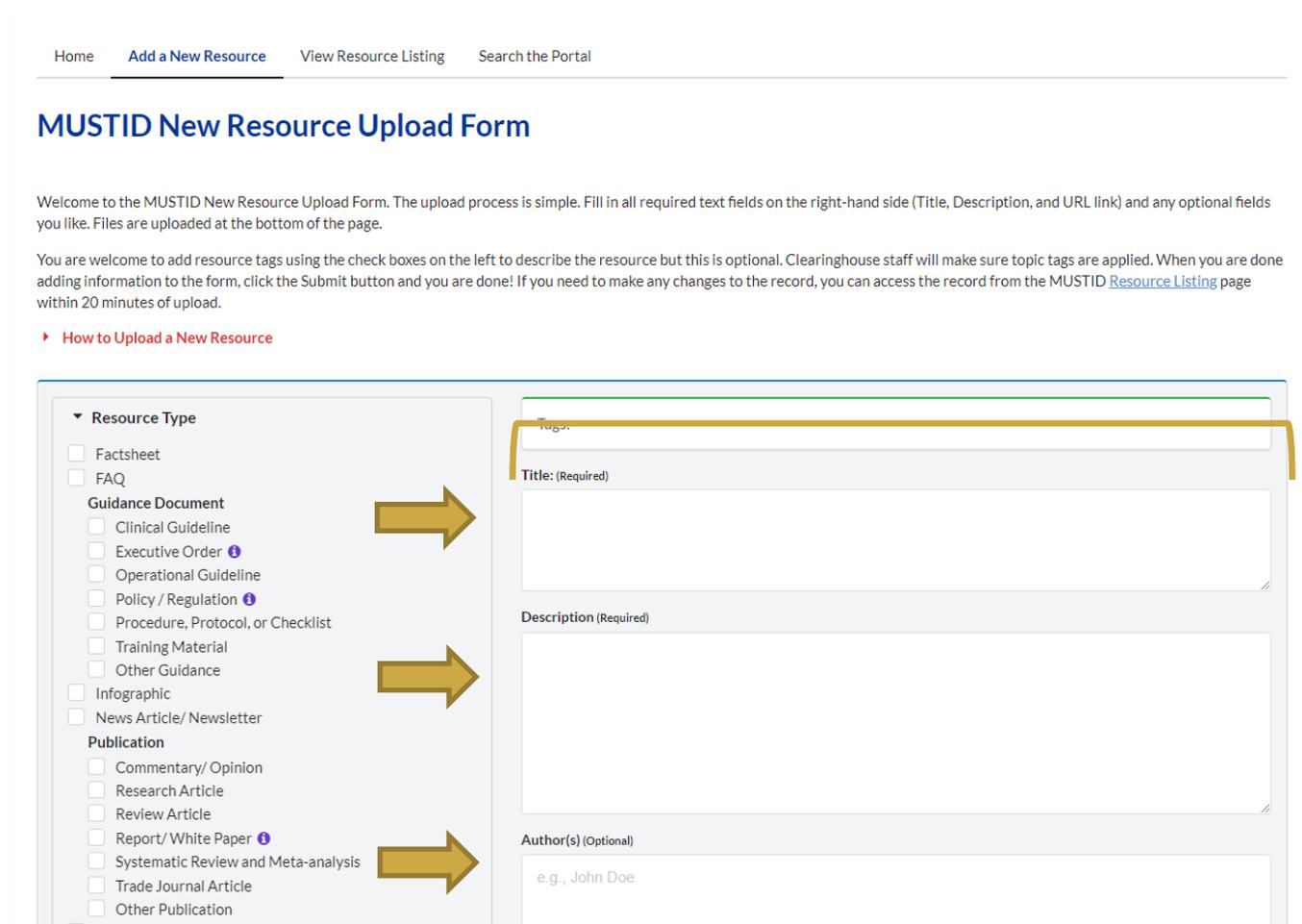
- Factsheet
- FAQ
- Guidance Document**
 - Clinical Guideline
 - Executive Order ⓘ
 - Operational Guideline
 - Policy / Regulation ⓘ
 - Procedure, Protocol, or Checklist
 - Training Material
 - Other Guidance
- Infographic
- News Article/ Newsletter
- Publication**
 - Commentary/ Opinion
 - Research Article
 - Review Article
 - Report/ White Paper ⓘ
 - Systematic Review and Meta-analysis
 - Trade Journal Article
 - Other Publication

Tags

Title: (Required)

Description (Required)

Author(s) (Optional)
e.g., John Doe



Fill out the Text Boxes

The
MINIMUM
required
information
includes:



Title (Required)

Description (Required)

Author(s) (Optional)
e.g., John Doe

Source (Optional)
e.g., Centers for Disease Control and Prevention (CDC)

URL to Resource (Required)
e.g., www.example.com

Required but
autofilled!



Coding Status (Required)

Submitted

Add Category Tags (optional)

Click on the arrow to reveal the available category tags.

- ▶ Resource Type
- ▶ Format
- ▶ Language
- ▶ Infectious Disease
- ▶ Topics Covered
- ▶ Industry
- ▶ Country



- ▼ Resource Type
 - Factsheet
 - FAQ
 - Guidance Document**
 - Clinical Guideline
 - Executive Order [i](#)
 - Operational Guideline
 - Policy / Regulation [i](#)
 - Procedure, Protocol, or Checklist
 - Training Material
 - Other Guidance
 - Infographic
 - News Article/ Newsletter
 - Publication**
 - Commentary/ Opinion
 - Research Article
 - Review Article
 - Report/ White Paper [i](#)
 - Systematic Review and Meta-analysis
 - Trade Journal Article
 - Other Publication
 - Toolbox
 - Other Resource Type

Add Category Tags (optional)

Click the box to select the tag. The selected tag will appear in the Tags box on top of the Upload Form. You can **remove tags** by either **clicking the “x” on the tag** in the tag box, or by **unclicking the check box** next to the tag on the left-hand panel.

Tag Box

The screenshot displays the 'Resource Type' panel on the left and the 'Tag Box' on the right. In the 'Resource Type' panel, the 'Procedure, Protocol, or Checklist' checkbox is checked and highlighted with a green box and a yellow arrow. The 'Tag Box' contains a grid of blue tags, each with an 'x' icon for removal. The 'Risk of Transmission' tag is highlighted with a yellow box and a yellow arrow. Below the tag box, the 'Title: (Required)' field contains the text 'Safe return to work: ten action points'.

Resource Type

- Factsheet
- FAQ
- Guidance Document**
 - Clinical Guideline
 - Executive Order ⓘ
 - Operational Guideline
 - Policy / Regulation ⓘ
 - Procedure, Protocol, or Checklist
 - Training Material
 - Other Guidance

Tags:

- Procedure, Protocol, or Checklist ✕
- PDF ✕
- English ✕
- COVID-19 ✕
- Risk of Transmission ✕
- Administrative Controls ✕
- Engineering Controls ✕
- Environmental Cleaning ✕
- Hand Washing ✕
- General PPE ✕
- Workplace Screening/Surveillance ✕
- Mental Health / Resiliency ✕
- Physical Distancing ✕
- Workplace Preparedness ✕
- Workplace Response ✕
- Other Workplace Concerns ✕
- Global ✕

Title: (Required)

Safe return to work: ten action points

To Attach the File and Submit your Resource

To **upload a file**, scroll down to the bottom of the New Resource Upload Form and click the **Choose File** button.

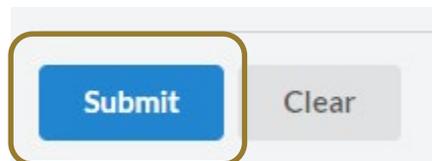


Upload files

Do you have any files to share? File formats allowed: PDF, Word, Excel, and PowerPoint files.

Choose File No file chosen

Then you are ready to upload the record! Click the **Submit button**. Clearinghouse staff will review your submission, add any needed metadata or topic tags, standardize formatting, and then approve the record for inclusion in MUSTID.



Submit Clear