

Reportable Conditions Knowledge Management System

RCKMS AUTHORIZING TOOL USER GUIDE

RCKMS Module Information

ABOUT RCKMS

The Reportable Conditions Knowledge Management System (RCKMS) is a real-time portal to enhance and provide comprehensive information on public health reporting criteria. The tool provides public health "who, what, when, where, and how" of reporting.

RCKMS is developed by CSTE in partnership with the CDC and HLN Consulting, LLC.

[Watch the Video](#)

THE NEED FOR RCKMS

Accurate, timely and complete reporting of reportable conditions depends on reporters having correct and current information about reporting specifications. Currently, there is no single place where reporting specifications can be accessed by healthcare reporters. Reporting criteria differ across state and local jurisdictions, and the information is often difficult for users to locate and navigate. Additionally, the information is usually not in a format suitable for machine-processing.

Fall 2023 | Version 4.0

For Jurisdiction Administrators

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Disclaimer: Images in this document may not be exact matches to the current version of the Authoring Tool based on release dates.

1 Introduction

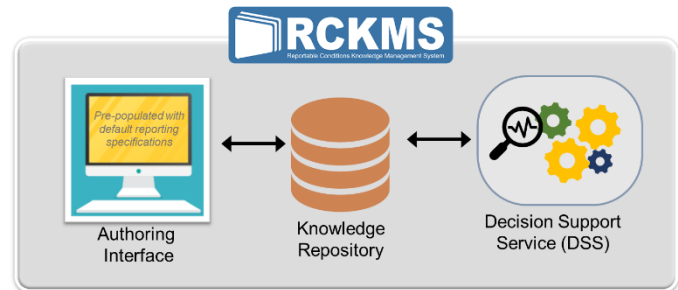
The user guide documents the procedures for using [RCKMS](#). The intended audiences are [Jurisdiction Administrators](#) and other [Public Health Agency](#) (PHA) stakeholders interested in working with the application. This user guide is intended to be used with the [production environment](#) of the RCKMS Authoring Tool.

1.1 What is R-C-K-M-S?

RCKMS is a tool developed to enhance surveillance by providing comprehensive information to clinicians, labs, and reporters about the “who, what, where, when, and how” of case reporting, with the aim of delivering information about potential cases from providers to state and local public health as a service of the broader infrastructure for [electronic case reporting](#) (eCR). RCKMS is designed to improve the timeliness and accuracy of case reports received by public health, reduce the burden of reporting on providers, and help facilitate a move toward eCR.

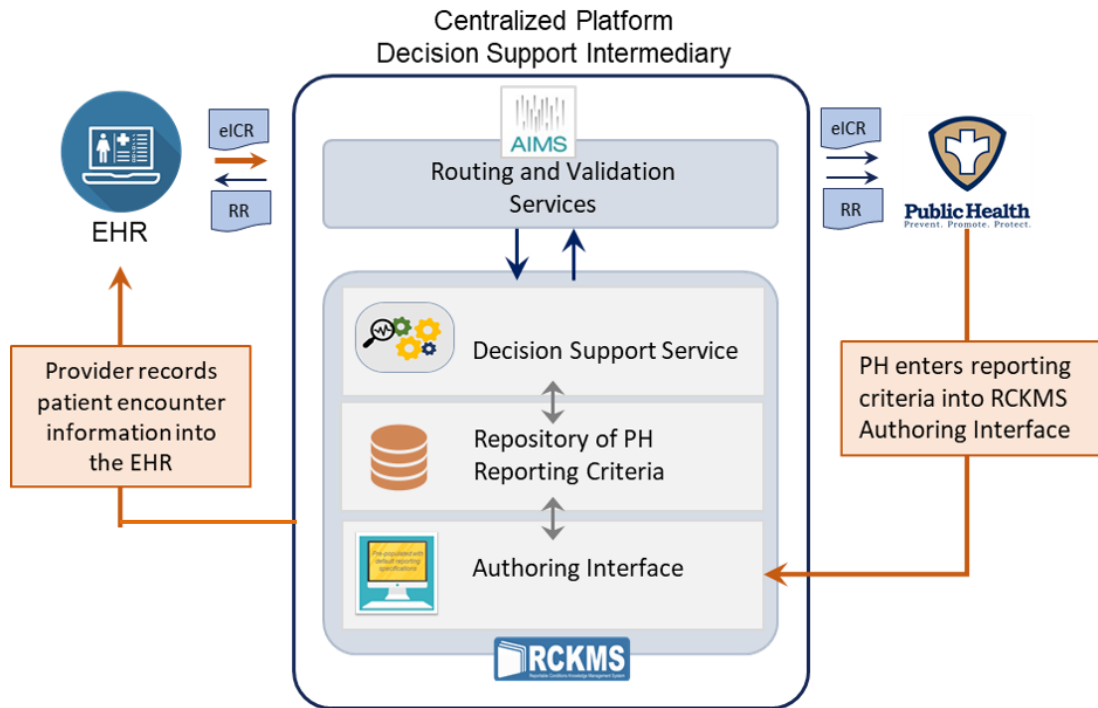
1.2 Components of RCKMS

RCKMS is made up of the [Authoring Interface](#), [Knowledge Repository](#), and [Decision Support Service](#) (DSS). At a very high level, these three components work together to transform the cumbersome workflow of manual case reporting to a more automated and efficient workflow.



RCKMS has three components, as follows:

Authoring Interface	The Authoring Interface, also referred to as the Authoring Tool, is the centralized web portal that PHAs use to input, edit, and manage reporting criteria for their jurisdiction . To ease the burden of entering the criteria, the Authoring Interface comes pre-populated with reporting specifications , also referred to as “ default content .” PHAs can either use these defaults, which are based on the CSTE position statements , or change them to meet their jurisdiction’s reporting needs.
Knowledge Repository	The Knowledge Repository is a database containing all the data related to reporting specifications, both the default content and any customizations made by a PHA. When a PHA authors in the Authoring Interface, that information is stored here to be deployed to the Decision Support Service.
Decision Support Service	Providers can query the DSS to determine if a case should be reported and, if so, to which jurisdiction(s). It is linked to a provider's electronic health record (EHR). After the patient visits the provider, encounter information is recorded in the EHR. If the EHR detects information that suggests a potential case, the EHR will call the RCKMS DSS, which will then provide the determination of reportability .



The above diagram shows the flow of data from an EHR through RCKMS to the PHA. The steps are:

1. When information in a patient's record in the provider EHR matches a [Reportable Conditions Trigger Code](#) (RCTC), an [electronic initial case report](#) (eICR) is automatically generated to begin the process of reporting to Public Health.
2. The eICR is sent to the DSS to determine reportability. This is done in two steps:
 - The DSS validates the RCTC and examines jurisdiction-specific reporting specifications.
 - Then, the DSS examines **jurisdiction-specific** reporting specifications to determine reportability.
3. When a match is found, the [APHL Informatics Messaging Service](#) (AIMS) routes the eICR and a [Reportability Response](#) (RR) to the PHA or agencies of interest. The RR is also sent back to the EHR.

2 Getting Started With Authoring



Getting started with navigating [RCKMS](#) can be facilitated by reviewing some introductory information. Review this section for an overview of RCKMS, as well as directions on how to access, log in, and navigate through the RCKMS [Authoring Interface](#).

2.1 Requesting Access

The first step to getting started is obtaining access to the RCKMS Authoring Tool. To obtain access to the RCKMS Authoring Tool, [submit](#) a [ticket](#) to request a user account. In the ticket details, provide the following for each new user:

- Full name
- Email address
- Public health [jurisdiction](#)

Note: In RCKMS, a user is referred to as a [Jurisdiction Administrator](#). In this role, the user can view and edit information for their assigned jurisdiction.

Once a user account has been created for you in the [training](#) or [production environments](#), you will receive separate emails for each environment with your username and login instructions. You will have 48 hours to log in and create a new password.



User Access Tip

No word from RCKMS on your user credential and login instructions? – Check your spam folder.

2.2 Supported Browsers



We recommend using Google Chrome or Mozilla Firefox to access RCKMS. Microsoft browsers like Internet Explorer and Microsoft Edge are not fully supported at this time.

2.3 RCKMS Authoring Environments: Training and Production

There are two different environments of RCKMS that users can access, as follows:



Training Environment: Use the training environment of the RCKMS Authoring Interface to familiarize yourself with the tool and the authoring process. Keep the following in mind:

- There is no expectation to author every condition in the training environment. Feel free to select a few conditions to author as practice.
- The training environment is not intended to have the latest version, and it will have only a few conditions.

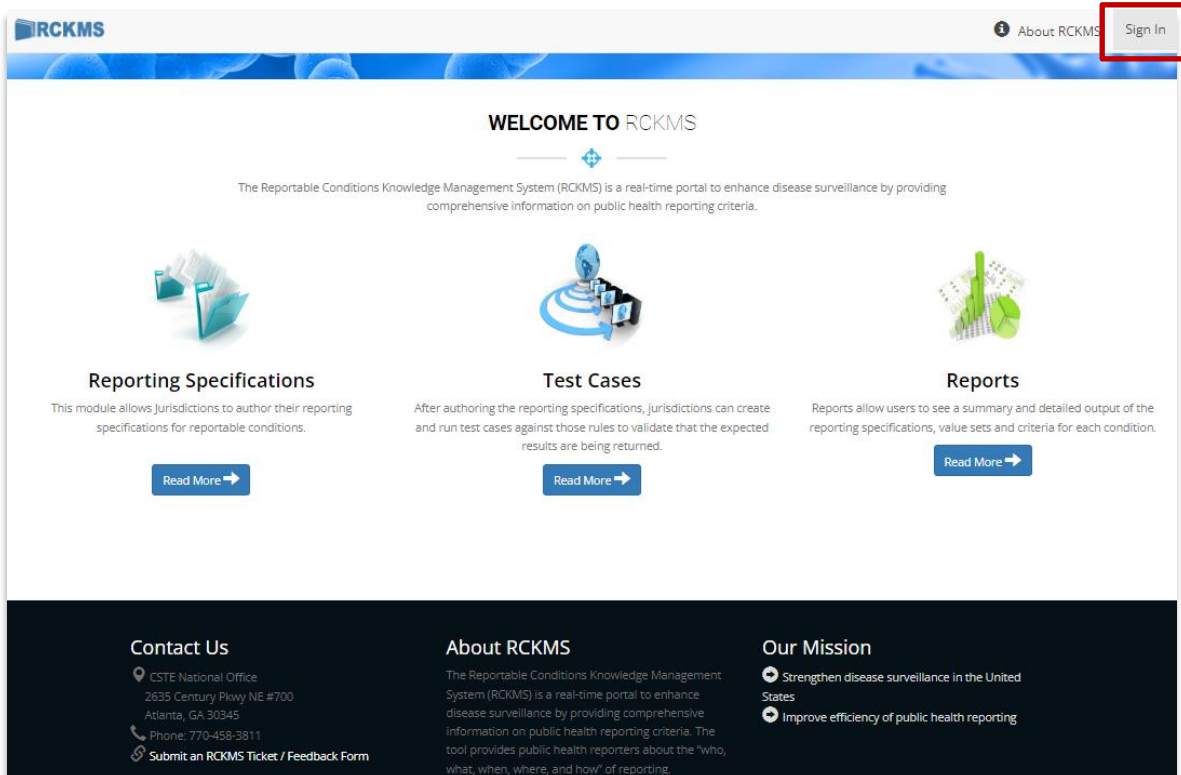


Production Environment: Use the production environment to author jurisdiction-specific reporting rules for conditions, test those rules, and publish them for [eCR](#) production use. The information published in the production environment populates the Knowledge Repository, and, therefore, must reflect your PHA's reporting rules.

2.4 Signing in and Navigating the RCKMS Application

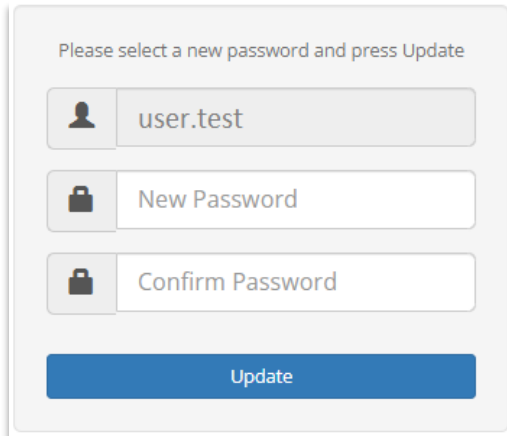
To access the RCKMS production environment, visit <https://rckms-prod-authoring.aimsplatform.com/index.html>. You will see the *Welcome to RCKMS* page, as shown below.

The page displays links to pages with additional information about RCKMS and the *Sign In* page. To sign into the RCKMS application, click the **Sign In** link at the top right of the page.



After you click **Sign In**, you will be taken to the *Sign In* page. To sign in:

1. Enter the username provided to you by the [RCKMS Administrator](#) and your password. Click **Sign in**.
2. New user? The first time you sign in, you will be required to create a new password. RCKMS displays the Password Reset page. Enter your new password using the requirements below. Click **Update**.



Password must include:

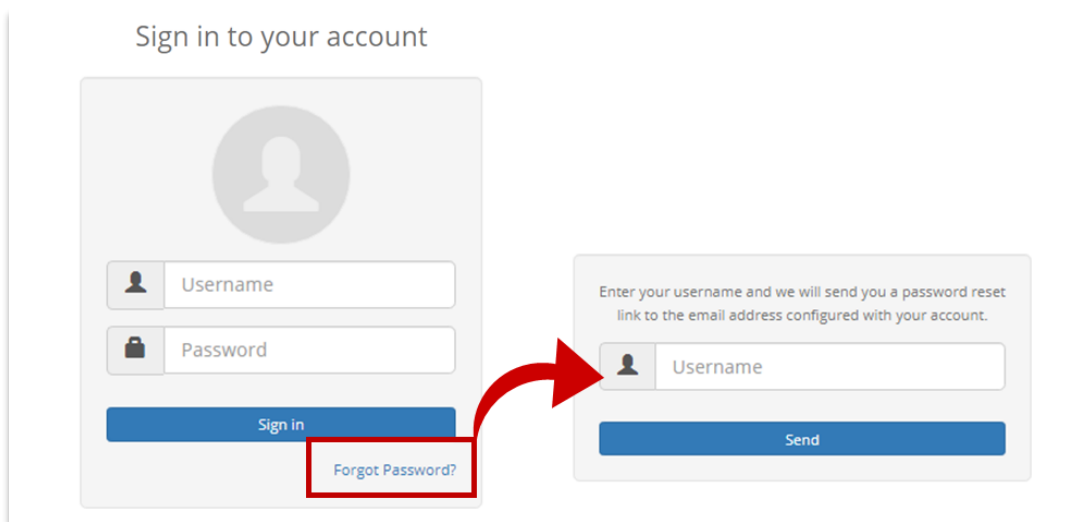
- At least eight characters
- At least one uppercase letter (A-Z)
- At least one lowercase letter (a-z)
- At least one numeric digit (0-9)
- At least one special character

3. Once you successfully sign into RCKMS, the *Home* page displays.

2.4.1 Password Reset

If you forget your password, to set a new password:

1. Click the **Forgot Password?** link below the **Sign in** button on the *Sign In* page.
2. When prompted, enter your username and click **Send**.
3. RCKMS will send an email with a link and instructions to reset your password. You will have 48 hours to log in and create a new password before the reset link expires.

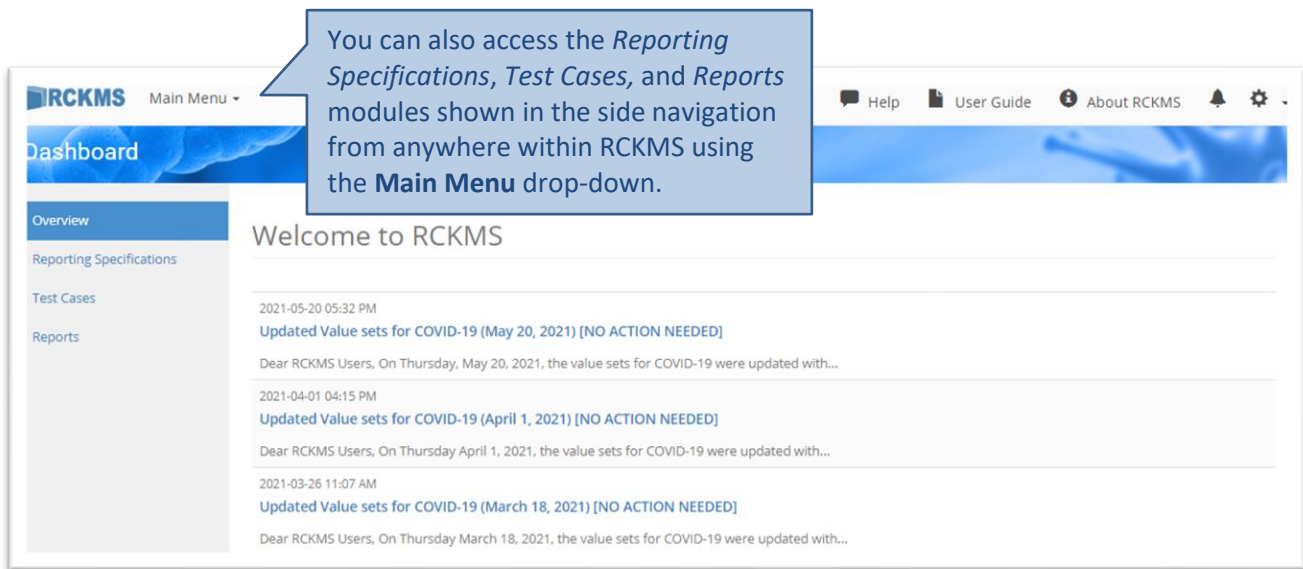


2.4.2 Home Page







The *Home* page, also referred to as the Dashboard, is the RCKMS landing page following successful sign in.

Use the *Home* page to:

- View notifications sent from the RCKMS Administrator
- Navigate to different modules in the RCKMS tool via the links in the side navigation menu.
- Access additional functionality by selecting options on the top navigation pane or the **Main Menu** drop-down.



The icons in the following table represent the navigation options located on the page.

Item	Description
RCKMS logo	Click to display the <i>Welcome to RCKMS</i> page. This page contains a brief overview of the Reporting Specifications, Test Cases, and Reports modules, along with links to where you can find more information.
Main Menu	Drop-down that displays the options for Jurisdiction Administrator tasks.
 Home	Click to be taken to the <i>Home</i> page.
 Help	Click to open the RCKMS Ticket form.
 User Guide	Click to open the RCKMS Authoring Tool User Guide.
 About RCKMS	Click to display the <i>About RCKMS</i> page and general information about the RCKMS application.
 Notification Bell	Click to display a detailed view of any messages from the RCKMS Administrator.
 Cogwheel	Click to display information about the current session, view your user profile editor, change password, view jurisdiction inbox, and to sign out of the application.
Overview	Header for side navigation menu options.
Reporting Specifications	Click to display the Reporting Specification page.
Test Cases	Click to display the Test Cases page.
Reports	Click to display the Reports page.

2.5 Submitting a Ticket

The RCKMS team is always available to provide support. Submit a ticket for any of the following:

- If you have general inquiries
- Training and authoring support, should you encounter any issues when working in any environment of the Authoring Tool, training modules, or the RCKMS website
- If you have feedback on the [default content](#) available in the Authoring Tool, or to request changes or additions to content before the next Content Release

You can access this form in three ways:

1. Authoring Tool
(Bottom Navigation)



2. RCKMS Website
(www.rckms.org)



3. Ticketing Portal
(Website URL)



Authoring Tool: Locate and click on the Feedback Form in the footer of the Authoring Tool.

<p>Contact Us</p> <p> CSTE National Office 2635 Century Pkwy NE #700 Atlanta, GA 30345 Phone: 770-160-3344 </p> <p> Submit an RCKMS Ticket / Feedback Form </p>	<p>About RCKMS</p> <p>The Reportable Conditions Knowledge Management System (RCKMS) is a real-time portal to enhance disease surveillance by providing comprehensive information on public health reporting criteria. The tool provides public health reporters about the "who, what, when, where, and how" of reporting.</p>	<p>Our Mission</p> <ul style="list-style-type: none"> Strengthen disease surveillance in the United States Improve efficiency of public health reporting
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RCKMS Website (www.rckms.org): Locate the **Submit a ticket** link on the Right side of the RCKMS website.

The screenshot shows the RCKMS website with a blue header and a white main content area. On the right side, under the 'Links' section, the 'Submit a ticket' link is highlighted with a red rectangular box. Other links listed include 'RCKMS New User Toolkit', 'RCKMS Authoring Support Team', 'Training Modules on CSTE Learn', 'Authoring Interface', 'Conditions available in RCKMS', 'RCKMS Office Hours', 'Content Repository', and 'RCKMS Content and RCTC Release Plan'.

Ticketing Portal: Access the ticketing portal directly by entering the URL into your browser or by clicking on the link: <https://redcap.vanderbilt.edu/surveys/?s=NAN8HMNACE>.

Please complete the ticket below for content feedback, training and authoring support and any general inquiry, request, comment or feedback related to RCKMS.

RCKMS Ticket

Submitter Information

1. Date of submission M-D-Y
* must provide value

2. Submitter name
* must provide value

3. Submitter jurisdiction
* must provide value

4. Submitter email
* must provide value

Ticket

5. Short description
* must provide value

6. Details
* must provide value

File Attachments

7. Do you have any files to attach?
IMPORTANT: Please do not attach documents with Personally Identifiable Information (PII)
 reset
* must provide value

3 Viewing and Editing Jurisdiction Information



Review this section to learn how to view, manage, and edit your [jurisdiction's](#) information using the [Jurisdictions module](#). Information in this module generates the narrative in the [RR](#), which is sent back to the reporter.

When you log into [RCKMS](#) for the first time, you should review and edit your jurisdiction information, as the information included here is important to ensuring that [eICRs](#) and RRs are routed correctly. In the *Jurisdictions* module, you can:

- Work with details and contact information for your [PHA](#)
- Review a list of RCKMS users within your jurisdiction
- View the status of authored conditions and [reporting specifications](#) for your jurisdiction
- View zip codes and users assigned to your jurisdiction



To access the *Jurisdictions* module, click **Main Menu** in the top navigation bar from any page and choose **Jurisdictions**.

3.1 *Jurisdictions* Page

The *Jurisdictions* page displays basic information about your jurisdiction. The screenshot below shows jurisdiction information for a user from the New York City jurisdiction.


Jurisdictions				
Show <input type="text" value="10"/> entries		Search: <input type="text"/>		
PHA Name	State	PHA Type	Administrators	Last Updated
New York City Department of Health and Mental Hygiene	New York	City	Happy Author, France Liberty, John Manhattan, Jane Brooklyn	2019-06-19 02:22 PM
PHA Name	State	PHA Type	Administrators	Last Updated
				Previous 1 Next

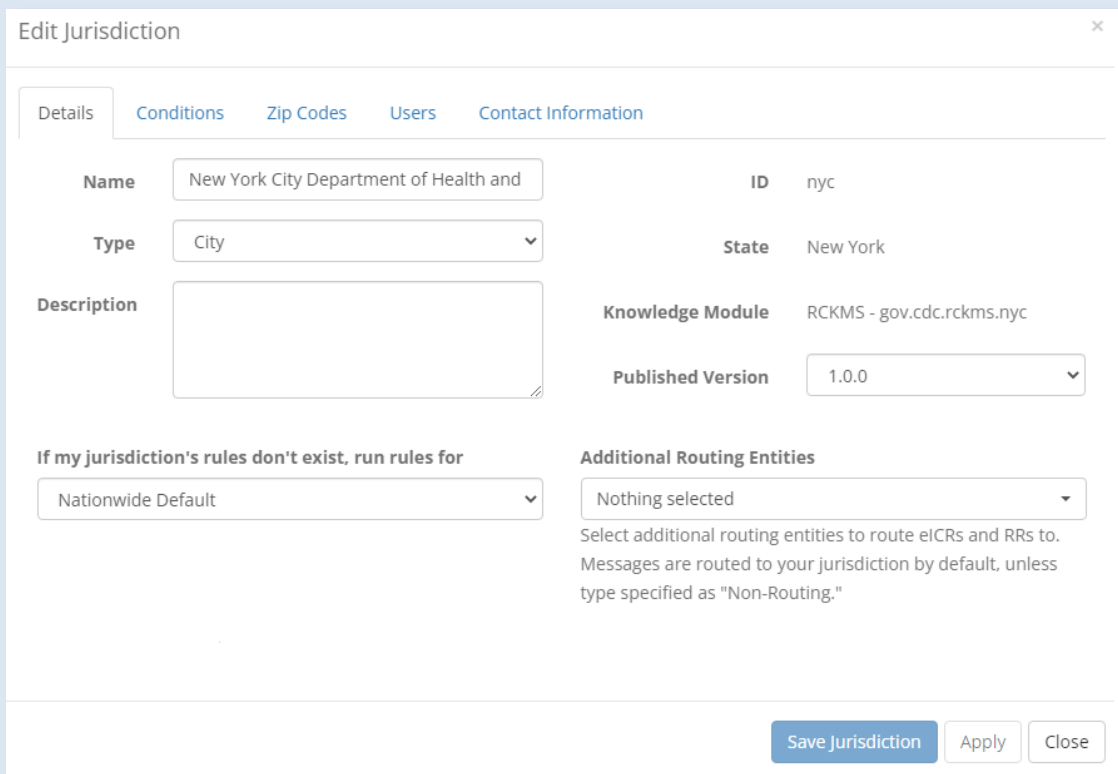
The following table details the options on the *Jurisdictions* page.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
PHA Name	The formal name of the jurisdiction/PHA.
State	The state of the jurisdiction/PHA.
PHA Type	The type of PHA. Options include State, Parish, District, County, City, and Borough, Local Health Department Non-Routing, Routing Entity, State Non-Routing, Tribal.
Administrators	The users' assigned Jurisdiction Administrator rights.
Last Update	The date and time the information in the module was last updated.
 Edit	Click to view or edit jurisdiction information.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
 Sort	Click to sort the information in a column.

3.1.1 Edit Jurisdiction Window

To view and edit your jurisdiction information, complete the following:

1. Click the  **Edit** icon next to your jurisdiction. RCKMS displays the *Edit Jurisdiction* window and the contents of the *Public Health Agency Details* tab.



The screenshot shows the 'Edit Jurisdiction' window with the 'Details' tab selected. The window contains the following fields and options:

- Name:** New York City Department of Health and
- ID:** nyc
- Type:** City (dropdown menu)
- State:** New York
- Description:** (text area)
- Knowledge Module:** RCKMS - gov.cdc.rckms.nyc
- Published Version:** 1.0.0 (dropdown menu)
- If my jurisdiction's rules don't exist, run rules for:** Nationwide Default (dropdown menu)
- Additional Routing Entities:** Nothing selected (dropdown menu)

Below the 'Additional Routing Entities' dropdown, there is explanatory text: "Select additional routing entities to route eICRs and RRs to. Messages are routed to your jurisdiction by default, unless type specified as 'Non-Routing.'"

At the bottom right of the window are three buttons: 'Save Jurisdiction', 'Apply', and 'Close'.

From this window, you can work on any of the following:

Tab	Description
Public Health Agency Details	View and edit the PHA details. Options include PHA Name, Type (e.g., State, City, County, etc.), description, and version information, as well as options for running alternate rules in the event rules don't exist for a selected condition and options for alternate routing of eICR and RR information. Currently, the "If my jurisdiction's rules don't exist, run rules for" field is not functional. Note: <i>Most of the fields on this screen will be populated for you by the RCKMS Administrator, but you should still review this tab for accuracy.</i>
Conditions	View the conditions associated with your jurisdiction, the name of the conditions, and the authoring status. While authoring reporting specifications occurs in a different module, this tab allows you to see a quick snapshot of all the conditions that your jurisdiction is working to author and their associated status. For more information on statuses, see Section 4.6, Reporting Specification Details tab .
Zip Codes	View or add zip codes included within your jurisdiction. Options include Zip Code, City, County, and State. This tab is especially important for jurisdictions whose zip codes may overlap each other, such as a state and city PHA. Section 3.1.2, Zip Codes provides additional details about populating this tab.
Users	View the users within your jurisdiction. This tab is for informational purposes only and provides a snapshot of the username, role, and email addresses for users in your jurisdiction. If you need to edit the list of users in your jurisdiction, please contact the RCKMS Administrator.
Contact Information	Add contact information for your jurisdiction. The reporter and PHA will be notified with this contact information via the RR. Section 3.1.3, Contact Information provides additional details about populating this tab.

2. After adding or editing information in any of the tabs in the *Edit Jurisdiction* window, do one of the following:

- Click **Save Jurisdiction**. RCKMS displays the *Jurisdictions* page and the date and time of the last update.
- Click **Apply**. RCKMS saves your changes and keeps the window open.
- Click **Close** to close the page if you have not made any changes.

3.1.2 Zip Codes

For local PHAs, use the *Zip Codes* tab to add zip codes that are included in your jurisdiction. RCKMS uses zip codes to identify cities or local jurisdictions and state codes to identify states to narrow down whose rules should be run. The Zip Codes tab provides the additional detail for matching the address fields in an eICR and

the address associated with a jurisdiction to determine which jurisdiction rules to run. If no zip codes are entered or a zip code does not match, then the jurisdiction's state code will run. Therefore, local PHAs should consider authoring zip codes as an important step when authoring your rules. If a case is legally reportable to a jurisdiction, but no zip codes were entered, then the state PHA's rules will be run.

If states or other local jurisdictions also wish to have cases from those zip codes evaluated against their rules, they can list those zip codes in their respective PHA *Zip Codes* tab. Multiple jurisdictions can list the same zip code. The routing of the report to a jurisdiction is based on the Routing Entity defined in the *Public Health Agency Details* tab.

Note: In most cases, *ONLY local jurisdictions will need to input their zip codes. State jurisdictions do not need to input all zip codes for their state. For zip codes that overlap in multiple jurisdictions (e.g., state and local, etc.), then both jurisdictions should input the overlapping zip codes. To learn more about zip code use for your case, please [submit](#) a ticket.*

Disclaimer: RCKMS Administrators and the CSTE RCKMS team cannot advise on zip code determination. If applicable, consult your state/local laws and regulations to identify zip codes.

To add a new zip code, complete the following:

1. From the *Zip Codes* tab, click the **Add Jurisdiction Zip Code** button. RCKMS displays the *New Jurisdiction Zip Code* window.

2. Enter the zip code, city, county, and state.
3. After entering information in each field, do one of the following:
 - Click **Save Jurisdiction Zip Code**. RCKMS displays the *Zip Codes* tab and the newly added zip code.
 - Click **Apply**. RCKMS saves your changes and keeps the window open.
 - Click **Close** to close the page if you have not made any changes.

The following table details the options in the *New Jurisdiction Zip Code* window.

Item	Description
Zip Code	Type the zip code for the designated area.
City	Enter a city for the selected zip code.
County	Enter a county for the selected zip code.
State	Select a state from the drop-down for the selected zip code.
Save Jurisdiction Zip Code	Click to save the jurisdiction zip code.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

3.1.3 Contact Information

Use the Contact Information window to author contact information for your PHA. You can add information for the [Rules Authoring Agency](#), [Responsible Agency](#), and/or [Routing Entity](#). The Contact Information is populated in the RR.

Rules Authoring Agency	PHA that enters the reporting rules into RCKMS. An Authoring Agency could author rules on behalf of another agency (e.g., a state authoring rules for a local agency).
Responsible Agency	PHA to which reporting is required based on the patient's address or where the care was provided.
Routing Entity	PHA that receives the eICR and RR. The Routing Entity is defined when you set up your PHA details on the <i>Edit Jurisdiction</i> page using the "Route eICR and Reportability Response to" field (see Section 3.1.1, Edit Jurisdiction window).

To add new contact information, complete the following:

1. From the *Contact Information* tab, click the **Add Contact Information** button. RCKMS displays the *New Contact Information* window.

New Contact Information

Use for

- ☐ Rules Authoring Agency
- ☐ Responsible Agency
- ☐ Routing Entity

The same contact information can be used for multiple entities.

Description

Street Address

City

State

Zip Code

Phone Number

Email

Fax Number

Save Contact Information Apply Close

2. Select which contact information you would like to add for the Rules Authoring Agency, Responsible Agency, and/or Routing Entity.
3. Enter a description of the agency, such as name or type.
4. Enter the street address, city, state, zip code, phone number, email, and/or fax number for the agency.
5. After entering information in each field, do one of the following:
 - Click **Save Contact Information**. RCKMS displays the *Contact Information* tab and the newly added contact information.
 - Click **Apply**. RCKMS saves your changes and keeps the window open.
 - Click **Close** to close the page if you have not made any changes.

The following table details the options in the *New Contact Information* window.

Item	Description
Use For	Click the box next to Rules Authoring Agency, Responsible Agency, and/or Routing Entity to assign contact information to that agency. The contact information can be assigned to one or more of these agencies.
Description	Type a description for the contact information.
Street Address	Enter the street address for the selected agency.
City	Enter a city for the selected agency.
State	Select a state from the drop-down for the selected agency.
Zip Code	Enter a zip code for the selected agency.
Phone Number	Enter a phone number for the selected agency.
Email	Enter an email address for the selected agency.
Fax Number	Enter a fax number for the selected agency.
Save Contact Information	Click to save the contact information.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

4 Reporting Specifications



Review this section to learn how to import and author [reporting specifications](#) for your [jurisdiction](#) using the *Reporting Specifications* module. The information in this module is stored in the Knowledge Repository and used by the [DSS](#) to determine what is reportable in your jurisdiction.

The [RCKMS](#) tool is pre-populated with default reporting specifications. These are developed by the RCKMS Content Team, made up of experienced epidemiologists and terminologists, and are largely based on reporting [criteria](#) in the [CSTE Position Statements](#). Jurisdictions may adopt a default reporting specification as-is or customize it to meet any of their unique reporting requirements.

The RCKMS Content Team works with the [RCKMS Administrators](#) to release new conditions for authoring in the tool, or update existing conditions with new content. As you prepare to author reporting specifications, you may want to review the documents supporting the current content release. These can be found in the [RCKMS Content Repository](#), a collection of condition-specific reference materials for the conditions you may be authoring. The [Content Repository](#) includes default reporting specification documents, [Value Sets](#), and a link to the [RCTC](#).

When a jurisdiction publishes reporting specifications in the [Authoring Interface](#), that information is stored in the Knowledge Repository. When an [eICR](#) is received, the DSS examines the jurisdiction-specific rules in the Knowledge Repository to determine if the case is reportable.

4.1 Working With Reporting Specifications

You can manage the set of reporting specifications for the conditions supported in your jurisdiction using the *Reporting Specifications* module.

In the *Reporting Specifications* module, you can:

- Search for and display reporting specifications
- Import and edit reporting specifications, including:
 - Details about the condition
 - Reporting criteria, [logic set](#) information, [timeboxing](#) and reporting time frame information
 - Internal links and reference information
 - [External reference](#) information
- Delete an existing reporting specification
- Save changes to reporting specifications
- Publish reporting specifications

4.2 Searching for Reporting Specifications

The *Reporting Specification* page displays all conditions imported by your [PHA](#).

Specification Added?	Nationally Notifiable?	Specification Name	Version	Category	Status	Last Updated	Last Published
	N	Acute Flaccid Myelitis (AFM)		Neurological Diseases	In Progress	2023-05-17 02:51 PM	
	N	Acute Flaccid Myelitis (AFM)		Neurological Diseases	In Progress	2023-05-17 02:49 PM	
	N	Agricultural Chemicals (Fertilizer) Poisoning		Toxic Effects of Non-Medicinal Substances	Published to Test	2023-07-27 01:45 AM	2023-07-27 01:45 AM
	N	Baylisascariasis	1.0 Release 20230203	Zoonotic Diseases	Published to Production	2023-07-26 09:40 PM	2023-07-26 09:40 PM
	Y	Chlamydia	1.0	Sexually Transmitted Diseases	Published to Production	2023-07-26 09:40 PM	2023-07-26 09:40 PM
	Y	COVID-19	10.0 Release 20210203	Respiratory Conditions (Infectious)	Published to Production	2023-07-26 09:40 PM	2023-07-26 09:40 PM
	Y	COVID-19	13.0 Release 20230619	Respiratory Conditions (Infectious)	Published to Test	2023-07-27 01:45 AM	2023-07-27 01:45 AM
	Y	Gonorrhea	1.0	Sexually Transmitted Diseases	Published to Production	2023-07-26 09:40 PM	2023-07-26 09:40 PM
	Y	Gonorrhea	6.0 Release 20230619	Sexually Transmitted Diseases	Published to Test	2023-07-27 01:45 AM	2023-07-27 01:45 AM
	Y	Hepatitis A Virus Infection	5.0 Release 20220128	Enteric Diseases	In Progress	2023-07-08 04:23 PM	

Previous 1 2 Next

+ Add Reporting Specification + Publish Reporting Specifications

To view and search for an already imported reporting specification, perform the following steps:

- Do one of the following:
 - Click **Reporting Specifications** in the left navigation menu on the *Home* page. The *Reporting Specification* page displays all conditions identified as reportable by your PHA.
 - Click **Main Menu** in the menu bar at the top of the page and choose **Reporting Specifications**. The *Reporting Specification* page displays all conditions identified as reportable by your PHA.
- Click **Search** and type the text you want. As you enter text in the **Search** box, the table updates to display items matching your query. You can also clear any existing text in the *Search* text box to reset the search results and run your search again.

The Search function works for any column in the table. For example, you can search based on a category or status, as well as a condition.

This shows the results of a search for reporting specifications in the Enteric Diseases category.






Specification Added?	Nationally Notifiable?	Specification Name	Version	Category	Status	Last Updated
✓	Y	Campylobacteriosis	2.0 Release 20200110	Enteric Diseases	In Progress	2020-02-21 02:40 PM
✓	Y	Campylobacteriosis	1.0 Release 20190630	Enteric Diseases	Published to Production	2019-11-20 05:52 PM
✓	Y	Cholera	2.0 Release 20200110	Enteric Diseases	In Progress	2020-02-21 01:22 PM
✓	Y	Cholera	1.0 Release 20190630	Enteric Diseases	Published to Production	2019-10-31 12:57 PM
✓	Y	Cryptosporidiosis	2.0 Release 20200110	Enteric Diseases	In Progress	2020-02-21 01:22 PM
✓	Y	Cryptosporidiosis	1.0 Release 20190630	Enteric Diseases	Published to Production	2019-10-31 12:57 PM
✓	Y	Cyclosporiasis	2.0 Release 20200110	Enteric Diseases	In Progress	2020-02-21 01:58 PM
✓	Y	Cyclosporiasis	1.1 Release 20190630	Enteric Diseases	Published to Production	2019-11-20 05:47 PM
✓	Y	Cyclosporiasis	1.0 Release 20190630	Enteric Diseases	Retired from Production	2019-10-24 11:55 AM
✓	Y	Giardiasis	2.0 Release 20200110	Enteric Diseases	In Progress	2020-02-21 02:28 PM

Previous 1 2 3 4 Next

+ Add Reporting Specification Publish Reporting Specifications

The following table details the options on the *Reporting Specification* page.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Filters	Click to filter the list of reporting specifications by status or whether the condition is nationally notifiable. By default, reporting specifications with a status of In Progress, Ready for Test, Published to Test, Ready to Retire from Test, Ready for Production Use, Published to Production, and Ready to Retire from Production are visible.
Search	Type the text you want and the search results display in the table. Clear existing text to reset the search results.
Specification Added?	Indicates if the reporting specification logic sets and criteria have been added for the condition.
Nationally Notifiable?	Indicates whether the condition is nationally notifiable.
Specification Name	The name of the reporting specification.
Version	The version of the reporting specification.

Item	Description
Category	The disease category organizing the condition options. Options include Birth Defects and Congenital Anomalies, Bloodborne Diseases, Cancer, Enteric Diseases, Healthcare-Associated Events, Injuries NEC, Neurological Diseases, Parasitic Diseases, Respiratory Conditions (infectious), Respiratory Conditions (non-infectious), Sexually Transmitted Diseases, Streptococcal Diseases, Systemic Conditions, Toxic Effects of Non-Medicinal Substances, Vaccine Preventable Diseases, Vectorborne Diseases, Waterborne (not enteric), and Zoonotic Diseases.
Status	The status of the reporting specification for the selected condition. Options include: Condition Details Only, In Progress, Assigned for Review, Ready for Test, Published to Test, Ready to Retire from Test, Retired from Test, Ready for Production Use, Published to Production, Ready to Retire from Production, and Retired from Production.
Last Updated	The last update date indicating the date and time the item was last saved.
Last Published	The last published date indicating the date and time the item was last published to either test or production.
 Edit	Click to edit the selected item.
 View	Indicates that the selected item has been published to production or retired from production and is in View-Only Mode.
 Delete	Click to delete the selected item.
 Clone Specification	Click to clone the selected item.
 Sort	Click to sort the information in each column.
Add Reporting Specification	Click to display the <i>Details</i> tab on the <i>New Reporting Specification</i> page and add a reporting specification.
Publish Reporting Specification	Click to publish the reporting specification and make it “live” and available to engage provider data and decision support logic for delivery of RRs . You can publish to Test or Production.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.

From here, you can add a new reporting specification, clone a reporting specification, edit an existing reporting specification, or delete the specification you want.

- To add a new reporting specification, refer to [Section 4.3, Adding Reporting Specifications](#).
- To clone a reporting specification, refer to [Section 4.4, Cloning Reporting Specifications](#).
- To delete a reporting specification, refer to [Section 4.5, Deleting Reporting Specifications](#).
- To edit an existing reporting specification, refer to [Section 4.6, Reporting Specification Details tab](#).

4.3 Adding Reporting Specifications

You can import a reporting specification for a new condition, or for a new version of a condition that you have already authored.

Use the **Add Reporting Specification** button under the table of search results in the *Reporting Specification* page to add a reporting specification for the condition you want.



Authoring Tip

Some Content Releases include new content for existing conditions. To utilize this new content, you will need to import the new version of the reporting specification.

To import a new reporting specification, perform the following steps:

1. Do one of the following:
 - Click **Reporting Specifications** in the left navigation menu on the *Home* page. The *Reporting Specification* page displays.
 - Click **Main Menu** in the menu bar at the top of the page and choose **Reporting Specifications**. The *Reporting Specification* page will display.
2. Click the **Add Reporting Specification** button. RCKMS displays the *Import Reporting Specifications* pane.
3. Do one of the following:
 - a. Remain on the *Default* tab to import a default reporting specification.
 - b. Select the *Jurisdiction* tab to import a reporting specification from another jurisdiction.
4. (On the *Jurisdiction* tab only) Click **Jurisdiction** and choose the jurisdiction whose reporting specification you want to import.

5. Click the **“Display reporting specifications previously imported”** checkbox.
6. Click **Reporting Specification** and choose the reporting specification that you want.
 - a. On the *Default* tab, all reporting specifications, including those that have already been imported, populate.

- b. On the *Jurisdiction* tab, reporting specifications that have been Published to Test or Published to Production populate.
7. The **Assign a Version** field automatically populates with the release version and date of the reporting specification. You may edit this field with a version number defined by your jurisdiction. The version number must be unique.

8. Click **Save Reporting Specification** and the *Details* tab of the *Edit Reporting Specification* page will display.


4.4 Cloning Reporting Specifications

You can create a new version of an existing reporting specification using the **Clone** button. This clone will be an exact copy of the reporting specification that was previously authored. Cloning can also be used to make updates to reporting specifications that are in view-only mode (i.e., they have been published to production or retired from production).

Authoring Tip

Cloning can be helpful if you already have a reporting specification published to production but want to work with rules (such as to test) without disturbing the [eCR](#) workflow or without committing to the changes.

To clone a reporting specification, perform the following steps:

1. Click the  **Clone** button next to the reporting specification that you would like to clone. The *Clone Reporting Specifications* window will appear.


2. **Reporting Specification** is populated during the cloning process and is not editable. It consists of the name of the reporting specification and the original version number.
3. The **Assign a Version** field is editable and can be changed to adhere to the naming convention defined by your jurisdiction to track new versions of reporting specifications. Each version number for a reporting specification must be unique.
4. Click **Clone Reporting Specification**. The new copy of the reporting specification will be saved to your condition list.

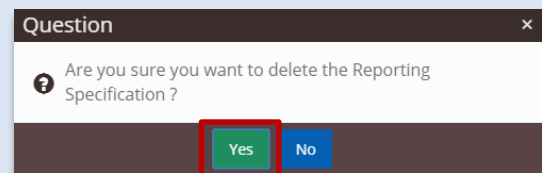
Authoring Tip

Only one version of a given reporting specification can be published to production at a time. When a new version is published to production, the previous version will be automatically retired.

4.5 Deleting Reporting Specifications

To delete an existing reporting specification, perform the following steps:

1. Do one of the following:
 - Click **Reporting Specifications** in the left navigation menu on the *Home* page. The *Reporting Specification* page displays.
 - Click **Main Menu** in the menu bar at the top of the page and choose **Reporting Specifications**. The *Reporting Specification* page displays.
2. Click the  **Delete** icon for the item you want. The application deletes the selected item and displays a confirmation message.
3. Click **Yes** when the display question appears “Are you sure you want to delete the Reporting Specification?” The application deletes the selected item and displays a confirmation message.



Once you delete the reporting specification, the item is permanently removed and cannot be restored without re-importing.

4.6 Reporting Specification *Details* Tab

The *Details* tab displays basic information about the reporting specification for the selected condition. If the reporting specification has been published to production or retired from production, there will be a note at the top of this page that the reporting specification is in view-only mode, as shown in the screenshot below.

Edit Reporting Specification

This Reporting Specification is in VIEW-ONLY Mode. To make changes to the published rules for this condition, clone the Reporting Specification, re-author and re-publish.

Details Criteria / Logic Sets Specifications Internal References External References

Name: Rabies_2_TEST Status: Published to Production

Condition Code: 14168008 - Rabies (disorder) Version: TEST Version 3.0

Category: Zoonotic Diseases Start Date: End Date:

NNC Code: 10460, 10340 Assigned To: Select an Option

Description: Rabies for regression testing only. Edited. Responsible Agency: American Samoa DOH

Last Updated: 2023-07-26 09:40 PM Source Version: Default - TEST Version

Last Published: 2023-07-26 09:40 PM Cloned From: American Samoa DOH - TEST Version 2.0

Created By: johna.peterson

Specifications apply when

☒ Care is provided in this jurisdiction

☐ Lab is located in this jurisdiction



☒ Patient is a resident of this jurisdiction

Specimen Submission

☐ Laboratory Required to Submit a Specimen


Save Reporting Specification Apply Close

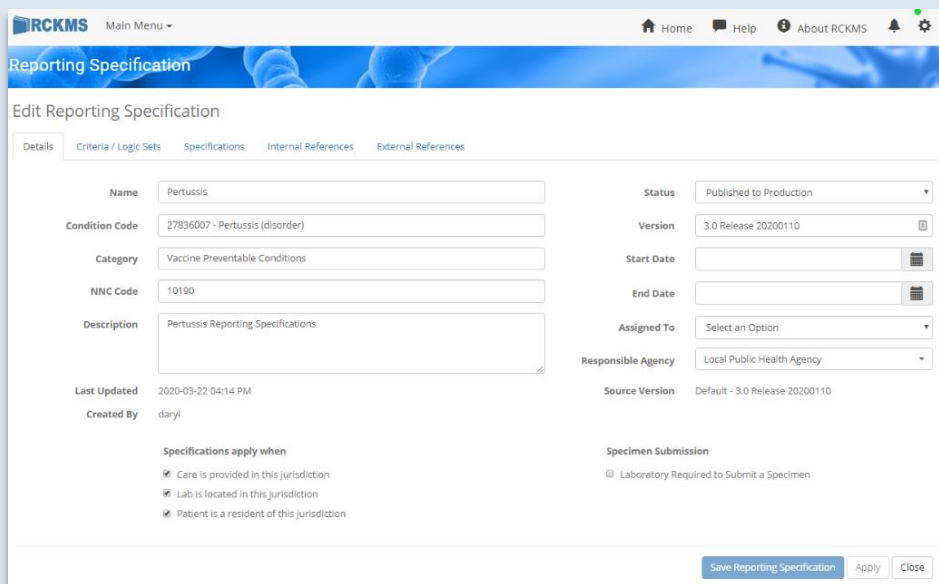
The following table details the options on the *Details* tab.

Item Name	Description
Name	The descriptive name of the condition.
Condition Code	The SNOMED code and name pertaining to the condition.
Category	The disease category organizing the condition options. Options include Birth Defects and Congenital Anomalies, Bloodborne Diseases, Cancer, Enteric Diseases, Healthcare-Associated Events, Injuries NEC, Neurological Diseases, Parasitic Diseases, Respiratory Conditions (infectious), Respiratory Conditions (non-infectious), Sexually Transmitted Diseases, Streptococcal Diseases, Systemic Conditions, Toxic Effects of Non-Medicinal Substances, Vaccine Preventable Diseases, Vectorborne Diseases, Waterborne (not enteric), and Zoonotic Diseases.
NNC Code	The nationally notifiable event code associated with the condition. This is applicable only if the condition is nationally notifiable.
Description	The description of the reporting specification for the selected condition.
Status	The status of the reporting specification for the selected condition. Options include: Conditions Details Only, In Progress, Assigned for Review, Ready for Test, Published to Test, Retired from Test, Ready for Production Use, Published to Production, and Retired from Production
Version	The version number assigned to the reporting specification.
Start Date	The start date on which the reporting specification for the selected condition is in effect. Click the  Calendar button to display a calendar and choose the date you want.
End Date	The end date on which the reporting specification for the selected condition is in effect. Click the  Calendar button to display a calendar and choose the date you want.
Assigned To	The jurisdictional author to whom the reporting specification for the selected condition is assigned for review. This is optional.

Item Name	Description
Responsible Agency	Responsible Agency is the PHA to which reporting is legally required based on the patient's residence or where care was delivered.
Last Updated	Date of last save.
Last Published	Date of last publication.
Created By	User name of reporting specification creator.
Source Version	The version of the source of the reporting specification. The source can be default or another jurisdiction.
Cloned From	The jurisdiction and version that the reporting specification was cloned from. This field is only visible if the reporting specification is a clone of another.
Specifications apply when	Care provided in this jurisdiction Click to receive report for events where care is provided in your jurisdiction.
	Lab is located in this jurisdiction Click to receive report for events where laboratory testing is performed in your jurisdiction.
	Patient resident of this jurisdiction Click to receive report for events where the patient resides in your jurisdiction.
Specimen Submission	Laboratory required to submit a specimen Click to indicate the laboratory is required to submit a specimen.
Save Reporting Specification	Click to save the reporting specification and display the previous page.
Apply	Click to save your changes and keep the window open.
Close	Click to close and display the previous page.

To view and edit details about the condition, perform the following steps:

1. Click the  **Edit** icon for the reporting specification that you wish to view or edit. The *Details* tab of the *Edit Reporting Specification* window appears.



The **Name**, **Condition Code**, **Category**, and **NNC Code** fields are defined by the RCKMS Team and are automatically populated during the import process.

2. Click **Description** and type the description you want.

3. For the **Specifications Apply When** field, do one or more of the following, depending on your PHA's reporting requirements:

Care is provided in this jurisdiction

Select to receive reports for events where care is provided in your jurisdiction. This means that if the facility address in the eICR matches your PHA's jurisdiction, and your rules are met, then you will receive the report.

Lab is located in this jurisdiction

Select to receive reports for events where laboratory testing is performed in your jurisdiction. This is currently not implemented, as the laboratory address is not included in the eICR.

Patient is a resident of this jurisdiction

Select to receive reports for events where the patient resides in your jurisdiction. This means that if the patient address in the eICR matches your PHA's jurisdiction, and your rules are met, then you will receive the report.

DID YOU KNOW?

When an eICR is received, the DSS searches the Knowledge Repository for an address match by:

- Checking the eICR to see if the zip code in the patient address field or the facility address field matches a zip code associated with a PHA in RCKMS. If one is found, it runs that PHA's rules. If more than one PHA have the same zip code associated, then rules for all PHAs that are found will be run. If the zip code does not match, then the eICR will be checked for the state code.
- If the state code in the patient address field or the facility address field matches the state code associated with a PHA in RCKMS, then that PHA's rules will be run.

4. Click **Status** and choose the option you want. When a condition is imported, the default Status is "In Progress," meaning authoring of the condition is in progress. The status options are dependent upon where the reporting specification is in the workflow. The table below shows the available statuses and their descriptions:

Status	Description
New reporting specifications	
In Progress	The default status upon importing a new reporting specification.
Assigned for Review	Used to indicate when a condition is under review before publishing to the next step. This status is for internal jurisdiction reference only and the user will not be notified of their assignment.
Ready for Test	Use this status to designate that the reporting specification is ready to be published to test.

Retired from Test	This status is automatically applied when a newer version of the reporting specification is imported.
Reporting specifications that have been published to test	
Published to Test	This is the default status upon publishing to test.
Ready for Production	Use this status to designate that the reporting specification is ready to be published to production.
Retired from Test	This status is automatically applied when a newer version of the reporting specification is imported.
Reporting specifications that have been published to production	
Published to Production	This is the default status upon publishing to production.
Retired from Production	This status is automatically applied when a newer version of the reporting specification is imported.

5. Click **Version** to change the version number. The initial version number is defined by the RCKMS Administrator, but you can change this to follow your jurisdiction's naming convention.
6. Click **Start Date** and type the date you want. Note that the *Start Date* must be greater than the date the condition is published.
7. Click **End Date** and type the date you want.
8. Click **Assigned To** and choose the option you want.
9. Click **Responsible Agency** and choose the PHA that you want. It defaults to your jurisdiction. The Responsible Agency is the PHA to which reporting is **legally required** based on the patient's residence or where care was provided. The Responsible Agency is included in the RR. If the jurisdiction selects "Local Agency" as the Responsible Agency, this indicates that reporting to the Local Agency is required to meet legal mandates for reporting. RCKMS will include "Local Agency" in the RR, but derivation of the Local Agency is outside the scope of the RCKMS tool.
10. Click **Laboratory Required to Submit a Specimen** to indicate the laboratory is required to submit specimen information. Currently, this feature is purely informational. When selected, an External Reference should be included to provider reporters with specimen submission instructions for their laboratories. The reference will be included in the RR.
11. To continue authoring the reporting specification, do one of the following:
 - a. Click the **Criteria/Logic Sets** tab to edit and add logic set and criteria information. To work with criteria and logic set information, refer to [Section 4.8, Adding and Editing Logic Set Information](#) and [Section 4.9, Activating and Inactivating Criteria Information](#).

Authoring Tip

The Start Date and End Date fields are optional and for informational use only. Jurisdictions may use these fields to convey information about the reporting specification to other authors.

Assigned To fields are optional and for internal use only. Users will not be automatically notified when they are assigned to a condition.

- b. Click the **Specifications** tab to edit and add reporting time frame and reporting criteria information. To work with reporting time frame and decision logic information, refer to [Section 4.7, Adding and Editing Specification Information](#).
- c. Click the **Internal References** tab to edit and add internal links and reference information. To work with [internal reference](#) information, refer to [Section 4.10, Internal References tab](#).
- d. Click the **External References** tab to edit and add external links and reference information. To work with external reference information, refer to [Section 4.11, External References tab](#).

Authoring Tip

Once you have entered the information in the *Details tab*, you can work through the remaining tabs on the *Reporting Specification* page and enter criteria and logic set information, as well as any internal and external references you want.

12. Do one of the following:

- a. Click **Save Reporting Specification**. RCKMS displays the *Reporting Specification* page and the date and time of the last update.
- b. Click **Apply**. RCKMS saves your changes and keeps the window open.
- c. Click **Close** to close the page if you have made no changes.

Save Reporting Specification

Apply

Close

4.7 Adding and Editing Specification Information

The *Specifications* tab displays the criteria and logic sets rendered as a grid. The grid follows a similar format to the snapshot of logic translated from the reporting specifications Word document and the CSTE Position Statements, with rows for criteria and columns for logic sets. Use the *Specifications* tab of the *Edit Reporting Specification* page to add and edit the reporting time frame for each logic set and indicate if the criteria in a logic set is [Sufficient](#), [Necessary](#), or [Optional](#) for reporting to your jurisdiction.

The reporting rules indicate the following:

Notation	Description	Example
Sufficient "S"	Presence of this criterion alone indicates sufficient requirement for reporting.	Three criteria each indicate <i>Sufficient</i> . If any one of the three criteria is met, then the user must report.
Necessary "N"	Presence of this criterion with other criteria (either <i>Necessary</i> or <i>Optional</i>) is needed to meet the requirement for reporting.	Three criteria each indicate <i>Necessary</i> . If all three criteria are met, then the user must report. If only one or two criteria are met, then the user does not report.
Optional "O"	Presence of one or more <i>Optional</i> criteria paired with a <i>Necessary</i> criterion is needed to meet the requirement for reporting.	Criterion 1 is <i>Necessary</i> and criteria 2 and 3 are <i>Optional</i> . If criterion 1 is met, AND either criterion 2 or 3 (or both) is met, then the user must report. If only criteria 2 and 3 are met, then the user does not report.

In short, *Sufficient* means that the criterion alone makes this reportable to the PHA. *Necessary* and *Optional* typically work together, in most instances with all *Necessary* criteria in addition to at least one *Optional* criterion required for reporting.

Perform the following steps to add or edit specification information:

1. Click the **Specifications** tab in the *Edit Reporting Specification* page. RCKMS displays the contents of the *Specifications* tab.

The screenshot shows the 'Edit Reporting Specification' page in RCKMS. The 'Specifications' tab is selected. The page displays a table of reporting specifications. The table has columns for 'Inactivate', 'Lab Reporting (Lab Reporting)', 'Provider/Facility Reporting (DX)', 'Provider/Facility Reporting (LAB)', and 'Vital Records (Not Yet Implem)'. The table lists various COVID-19 related criteria, including Clinical and Laboratory detection methods. The 'Enable Timebox' button is highlighted in red text.

2. Click the **Show Inactive Criteria** button to show criteria that have been marked as Inactive. You can click the checkbox next to each criterion to inactivate it directly from the specification grid. To learn more about activating and inactivating criteria, refer to [Section 4.9, Activating and Inactivating Criteria Information](#).
3. If available, click the **Enable Timebox** button to enable timeboxing for the relevant criteria.
 - a. Click the red text to open the *Edit Duration* window.
 - b. Enter the desired timebox duration and click **Save Duration**. RCKMS saves the timebox duration information and displays the *Edit Reporting Specification* page.

Edit Duration

Public Health Agencies can set a timebox duration to reduce the number of eICR messages that are determined to be reportable based on diagnosis and problem list entries that may not be related to the current instance of disease.

This is accomplished by evaluating the duration between the date that the eICR message was sent and the effective date of the diagnosis/problem.

To set a timebox duration for the criteria listed below, input a value and select a unit. The RCKMS tool does not allow the user to set a timebox duration value shorter than 3 days.

Set Timebox Duration For:

The following Criteria are Timebox Eligible

- COVID-19 (as a diagnosis or active problem)

Authoring Tip

For more information and educational materials about Timeboxing, please visit <https://www.rckms.org/rckms-timeboxing/>.

4. Enter the Reporting Time Frame as defined by your jurisdiction's reporting rules. This field is informational only and is included in the reportability response back to providers. If you leave the reporting time frame blank, it will default to "immediate".
 - a. Click the *number* text box and type or choose the number you want for the logic set you want.
 - b. Click the *unit* text box and choose the option you want from the drop-down.
5. For each logic set, select the appropriate reporting rules option for each criterion. When you import a reporting specification, the criteria and logic sets will be populated based on the default reporting specification. You may edit these if they differ from your jurisdiction's reporting rules.
 - a. Click the drop-down corresponding to the criterion and logic set you want and choose the option you want: *Sufficient*, *Necessary*, or *Optional*.

The following table details the options on the *Specifications* tab.

Item	Description
Criteria	On the left-hand side of the window, the criteria needed for reporting are arranged by category, such as Clinical and Laboratory. The criteria represent the narrative descriptions determining whether a case should be reported to Public Health.
Logic Sets	On the right are the logic set columns indicating when the indicated type of reporter, such as a lab or provider, would report and what is required for reporting using the Sufficient, Necessary, and Optional notations.
Show Inactive Criteria	Click the checkbox to show any inactive criteria in the specifications grid.
Enable Timebox	Click the checkbox to enable timeboxing for the specified criteria.

Item	Description
Reporting Time Frame	The time required for reporting. If you leave this field blank, it will default to “immediate”. Click the <i>number</i> text box and type or choose the number you want for the logic set you want. Click the <i>unit</i> text box and choose the option you want. Number refers to the count and unit refers to the time element, such as days, weeks etc.
Reporting Rules	Click the reporting rules drop-down corresponding to the criterion and logic set you want and choose the option you want. You can choose Sufficient, Necessary, or Optional.
Save Reporting Specification	Click to save the reporting specification and display the previous page.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

4.8 Adding and Editing Logic Set Information

You can add and edit the reporting specification’s logic set and criteria information using the *Criteria/Logic Sets* tab in the *Edit Reporting Specification* page.

Logic sets are sets of statements that indicate:

- The type of reporter, such as a lab or provider
- When the reporter is expected to report
- What is required of them for reporting

A logic set is translated into [rules logic](#) for use in determining reportability. Used in combination with reporting criteria, logic sets express logical statements in machine-processable language following the [S, N, O notation](#) used in the Position Statements:

- “S” indicates the criterion is SUFFICIENT by itself to qualify the case for reporting
- “N” indicates that all “N” criteria in the same column are NECESSARY to report a case
- “O” indicates that presence of one or more “O” criteria paired with a “N” criterion is needed to meet the requirement for reporting

For more information on the S, N, O notation, refer to [Section 4.7, Adding and Editing Specification Information](#). For more information on reporting criteria, refer to [Section 4.9, Activating and Inactivating Criteria Information](#).

To add or edit criteria and logic sets, perform the following steps:

1. Click the **Criteria/Logic Sets** tab in the *Edit Reporting Specification* page. RCKMS displays the contents of the *Criteria/Logic Sets* tab.

Reporting Specification

Edit Reporting Specification

Details Criteria / Logic Sets Specifications Internal References External References

Add criteria and logic sets that will be used in your reporting specifications. Click an item to add it to the specification (either criteria or logic set).

Logic Sets

Show 10 entries

Name	Reporter Type	
CLIN+EPI 1	Provider/Facility Reporting	
CLIN+EPI 2	Provider/Facility Reporting	
DX	Provider/Facility Reporting	
LAB	Provider/Facility Reporting	
Lab Reporting	Lab Reporting	
Not Yet Implemented	Vital Records	

Previous 1 Next

+ New Logic Set

Criteria

Show 10 entries Search:

Label	Inactivate	Type	
Abdominal cramping	No	Clinical	
Campylobacteriosis (as a diagnosis or active problem)	No	Clinical	

2. To edit a logic set's name, reporter type, or description, click the **Edit** icon for the logic set you want in the *Logic Sets* section. RCKMS displays the *Edit Logic Set* window.
 - a. Click **Logic Set Name** and type the name you want.
 - b. Click **Reporter Type** and choose the reporter type you want.
 - c. Click **Description** and type the description you want.
 - d. Click the **Save Logic Set** button. RCKMS saves the logic set information and displays the *Logic Sets* section of the *Criteria/Logic Set* tab.

Edit Logic Set

Enter the details for the logic set.

Logic Set Name

Dx

Reporter Type

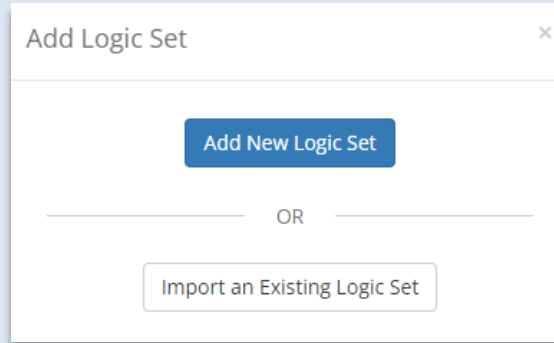
Provider/Facility Reporting

Description

Enter up to a 500 character description

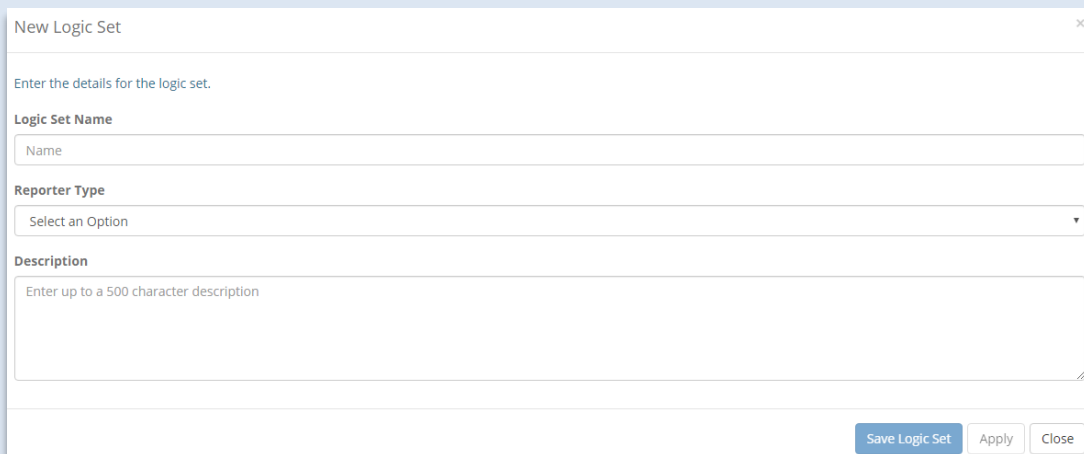
Save Logic Set Apply Close

3. To add a logic set, click the **New Logic Set** button in the *Logic Sets* section. RCKMS displays the *Add Logic Set* window. Do one of the following:



A dialog box titled "Add Logic Set" with a close button (X) in the top right corner. It contains two main options: "Add New Logic Set" (a blue button) and "Import an Existing Logic Set" (a white button with a blue border). The options are separated by a horizontal line with the word "OR" in the center.

- a. Click the **Add New Logic Set** button to add a new logic set. You may want to add a new logic set if your jurisdiction's reporting rules are different from the default.
 - i. Click **Logic Set Name** and type the name you want.
 - ii. Click **Reporter Type** and choose the reporter type you want.
 - iii. Click **Description** and type the description you want.
 - iv. Click the **Save Logic Sets** button. RCKMS saves the logic set information and displays the *Logic Sets* section of the *Criteria/Logic Set* tab.

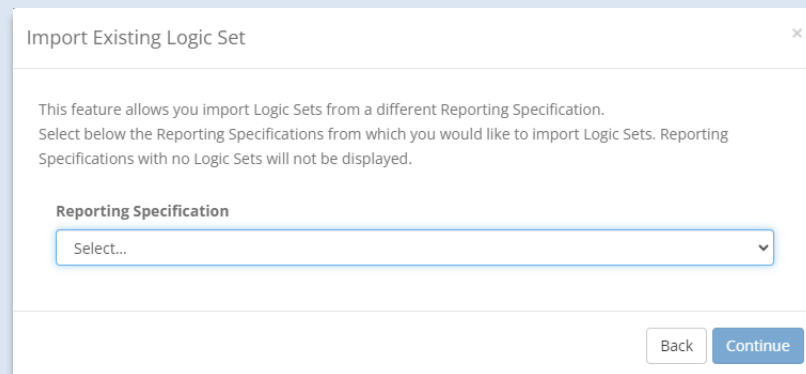


A form titled "New Logic Set" with a close button (X) in the top right corner. It contains the following fields:

- Logic Set Name:** A text input field with a placeholder "Name".
- Reporter Type:** A dropdown menu with a placeholder "Select an Option".
- Description:** A text area with a placeholder "Enter up to a 500 character description".

 At the bottom right, there are three buttons: "Save Logic Set" (blue), "Apply" (white), and "Close" (white).

- b. Click the **Import an Existing Logic Set** button to import a logic set from a different reporting specification.



A dialog box titled "Import Existing Logic Set" with a close button (X) in the top right corner. It contains the following text:

This feature allows you import Logic Sets from a different Reporting Specification. Select below the Reporting Specifications from which you would like to import Logic Sets. Reporting Specifications with no Logic Sets will not be displayed.

 Below this text is a dropdown menu labeled "Reporting Specification" with a placeholder "Select...". At the bottom right, there are two buttons: "Back" (white) and "Continue" (blue).

- i. Select a reporting specification from the drop-down and click **Continue**. RCKMS displays the logic sets available for import.

Import Existing Logic Sets

0 of 2 available logic sets selected for import:

Name:	CLIN + EPI 1	
Type:	Provider/Facility Reporting	
Name:	CLIN + EPI 2	
Type:	Provider/Facility Reporting	
Name:	DX	IMPORTED
Type:	Provider/Facility Reporting	
Name:	LAB	IMPORTED
Type:	Provider/Facility Reporting	
Name:	Lab Reporting	IMPORTED
Type:	Lab Reporting	
Name:	Not Yet Implemented	IMPORTED
Type:	Vital Records	

Back Import

- ii. Click on the logic set(s) you wish to import and click the **Import** button. RCKMS saves the logic set information and displays the *Logic Sets* section of the *Criteria/Logic Set* tab.

You can also delete a logic set by clicking the **Delete** icon for the logic set you want. When you delete a logic set, the logic set and the criteria it organizes no longer display in the *Specifications* tab.

As you add, edit, and delete logic set information on the *Criteria/Logic Sets* tab, that information is updated in the *Specifications* tab. To work with logic sets and criteria in the *Specifications* tab, refer to [Section 4.7, Adding and Editing Specification Information](#).

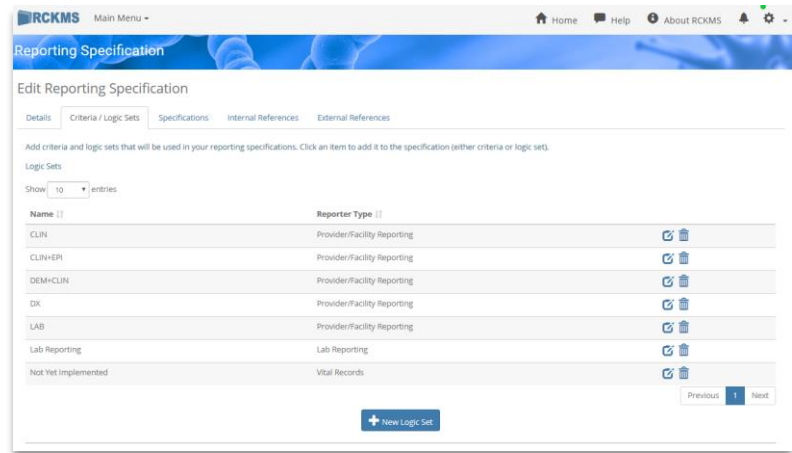
Authoring Tip

Once you delete a logic set, it cannot be recovered.

4.8.1 Criteria/Logic Sets Tab – Logic Sets Section

The *Logic Sets* section in the *Criteria/Logic Sets* tab in the *Reporting Specification* page displays the reporting specification's logic set information.

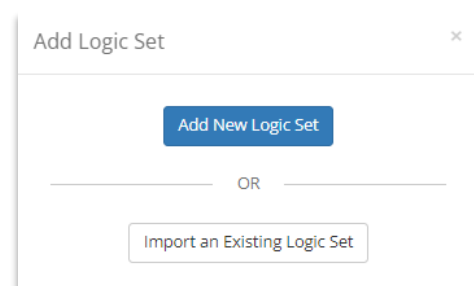
The following table details the logic set options on the *Criteria/Logic Sets* tab.



Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Name	The logic set name.
Reporter Type	The reporter type associated with the logic set.
Edit	Click to edit the selected item.
Delete	Click to delete the selected item.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
New Logic Set	Click to add a new logic set and display the <i>Add Logic Set</i> window.
Sort	Click to sort the information in each column.

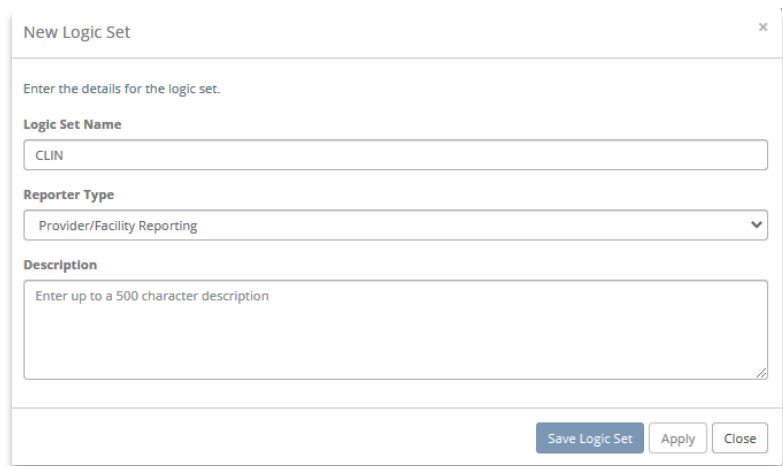
4.8.2 Add Logic Set Window

The *Add Logic Set* window displays two options for adding a new logic set. You can add a new logic set from scratch or import an existing logic set from a different reporting specification.



4.8.3 New Logic Set Window

The *New Logic Set* window displays the options for adding and editing logic set information. You can add new logic sets or edit existing logic sets. For example, if your jurisdiction's reporting rules differ from the default, you may want to add a new logic set.



The following table details the options on the *New Logic Set* window.

Item	Description
Logic Set Name	The logic set name. This should be descriptive of the criteria that are included in the logic set. For example, a logic set that contains both Clinical and Epidemiologic criteria may be named "CLIN+EPI."
Reporter Type	<p>The reporter type associated with the logic set. Options include Lab Reporting, Provider/Facility Reporting, and Vital Records.</p> <ul style="list-style-type: none"> Lab Reporting focuses on information received from standalone labs (e.g., Quest, LabCorp etc.). Currently, Lab Reporting is not functional in RCKMS. Because RCKMS is not receiving information from these labs, the data entered under this Reporter Type will not trigger a case to be reportable. This is planned for a future release. Provider/Facility Reporting refers to information received from lab tests or results from hospitals or doctors' offices. Provider/Facility Reporting is functional. RCKMS will receive information from Provider/Facility EHRs and will run the rules authored under this Reporter Type to determine if a case is reportable to your jurisdiction.
Description	The description of the logic set.
Save Logic Set	Click to save the logic set.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

4.8.4 Import Existing Logic Set Window

The *Import Existing Logic Set* window displays a drop-down to select a different reporting specification from which to import one or more logic sets.

Import Existing Logic Set

This feature allows you import Logic Sets from a different Reporting Specification.
Select below the Reporting Specifications from which you would like to import Logic Sets. Reporting Specifications with no Logic Sets will not be displayed.

Reporting Specification

Select...

Back Continue

Selecting a reporting specification from the drop-down displays a list of the logic sets available for import.

Import Existing Logic Sets

0 of 2 available logic sets selected for import:

Name:	CLIN + EPI 1	
Type:	Provider/Facility Reporting	
Name:	CLIN + EPI 2	
Type:	Provider/Facility Reporting	
Name:	DX	IMPORTED
Type:	Provider/Facility Reporting	
Name:	LAB	IMPORTED
Type:	Provider/Facility Reporting	
Name:	Lab Reporting	IMPORTED
Type:	Lab Reporting	
Name:	Not Yet Implemented	IMPORTED
Type:	Vital Records	

Back Import

4.9 Activating and Inactivating Criteria Information

The *Criteria* section of the *Criteria/Logic Sets* tab shows all criteria associated with a reportable condition, as defined by the CSTE Position Statement and the default reporting specification. By default, all criteria associated with a condition are set to active, which means they are displayed in the *Specifications* tab.

You can activate and inactivate criteria information using the *Criteria* section of the *Criteria/Logic Sets* tab in the *Edit Reporting Specification* page. As you activate and inactivate criteria information on the *Criteria/Logic Sets* tab, that information is updated in the *Specifications* tab. If you do not use certain criteria in your jurisdiction, you may want to inactivate those criteria, making the list of criteria in the *Specifications* tab more


manageable and relevant to your jurisdiction. To work with criteria and logic sets in the *Specifications* tab, refer to [Section 4.7, Adding and Editing Specification Information](#).

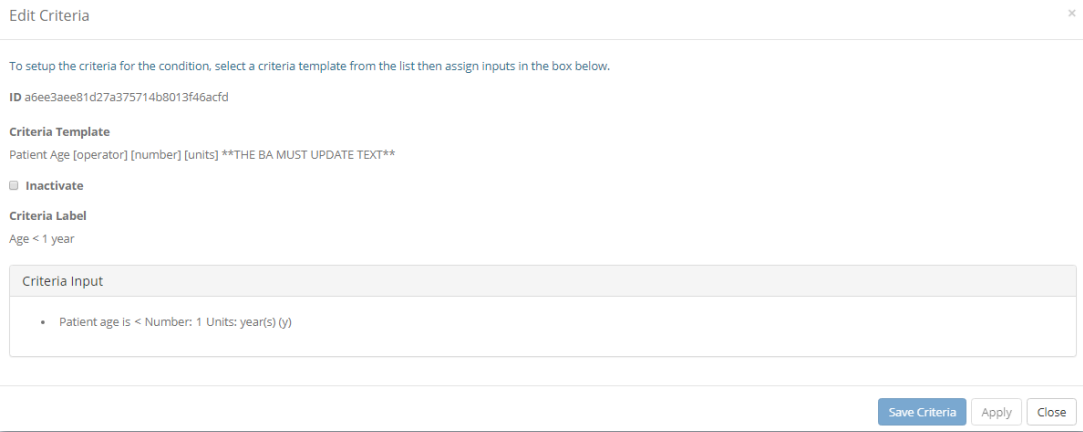
You use the criteria options to capture information, such as a diagnosis, that can be input in a diagnosis field or captured in an active problem list. Each criterion is tied to logic that is supported by value sets. These are represented by means of [criteria templates](#) that provide pre-populated options used to create jurisdiction-specific criteria using the options on the *Criteria* window. For more detail on logic sets, refer to [Section 4.8, Adding and Editing Logic Set Information](#).

Authoring Tip

To request a new criterion for a particular condition, submit a ticket to the RCKMS Team.

To activate or inactivate criteria, perform the following steps:

1. Scroll down in the *Criteria/Logic Sets* tab in the *Reporting Specification* page to display the *Criteria* section.
2. Click the  **Edit** icon for the criterion you wish to activate or inactivate. The *Edit Criteria* window appears.





3. Click the **Inactivate** checkbox to inactivate the criterion. Inactivating removes criteria from display in the *Specifications* tab, while keeping the information in the *Criteria/Logic Sets* tab for you to restore later. You can click the **Show Inactive Criteria** button in the *Specifications* tab to show any previously inactivated criteria.
4. Click the **Save Criteria** button. RCKMS saves the criterion information and displays the *Criteria* section of the *Criteria/Logic Sets* tab in the *Reporting Specification* page.

4.9.1 Criteria/Logic Sets Tab – Criteria Section

The *Criteria* section in the *Criteria/Logic Sets* tab in the *Edit Reporting Specification* page displays the reporting specification's criteria information.

The screenshot displays the RCKMS interface for the Criteria/Logic Sets Tab. The 'Criteria' section is active, showing a table of criteria. The table has three main columns: 'Label', 'Inactivate', and 'Type'. The 'Label' column lists various criteria, including 'Contact of a person with Pertussis (not currently implemented)', 'Age < 18 months', 'Age < 1 year', 'Member of a risk group as defined by public health authorities during an outbreak (not currently implemented)', 'Detection of Bordetella pertussis toxin antibody by any method in a clinical specimen', 'Pertussis (as diagnosis or active problem)', 'Inspiratory Whoop', 'Detection of Bordetella pertussis antigen by any method in a clinical specimen', 'Detection of Bordetella pertussis nucleic acid by any method in a clinical specimen', and 'Identification of Bordetella pertussis by culture method in a clinical specimen, including identification tests performed on an isolate'. The 'Inactivate' column shows 'No' or 'Yes' for each criterion. The 'Type' column shows 'Epidemiologic', 'Demographic', 'Laboratory', or 'Clinical'. At the bottom of the table, there are navigation buttons: 'Previous', '1', '2', '3', and 'Next'. Below the table, there are three buttons: 'Save Reporting Specification', 'Apply', and 'Close'.

The following table details the criteria options on the *Criteria label* page.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Label	The criteria label.
Type	The criteria type. Options include Laboratory, Clinical, Epidemiologic, and Demographic.
Inactivate	Indicates if the criteria are active or inactive.
 Edit	Click to edit the selected item.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
Save Reporting Specification	Click to save the reporting specification.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.
 Sort	Click to sort the information in each column.

4.9.2 Criteria Window

The *Criteria* window displays the options for activating and inactivating reporting criteria information.

The following table details the options on the *Edit Criteria* window.

Item	Description
ID	A system-assigned unique identifier for the criterion. This field is read-only.
Criteria Template	The template of pre-populated options upon which the criteria are based. The <i>Criteria Template</i> options are <i>read-only</i> when you are signed in as a Jurisdiction Administrator or when editing existing criteria.
Inactivate	Click to inactivate the selected criterion.
Criteria Label	The label identifying the criterion name. The <i>Criteria Label</i> options are <i>read-only</i> when you are signed in as a Jurisdiction Administrator.
Criteria Input	The values, standard codes , and operators comprising the logic for the criterion. The <i>Criteria Input</i> options are read-only when you are signed in as a Jurisdiction Administrator.
Save Criteria	Click to save criteria information.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

4.10 Internal References Tab

The *Internal References* tab displays information, such as text, links to websites, documents, and other modes of information for use by the PHA. This could be used to share specific information with an internal department within the PHA, such as the HIV department or Infectious Diseases team.

Authoring Tip

Internal References are not sent to the reporter in the RR.

Reporting Specification

Edit Reporting Specification

Details Criteria / Logic Sets Specifications Internal References External References

Add Internal Links and References to be used by the PHA (not sent to the Reporter)

Show 10 entries

Search:

Name	Description	URL	Excerpt	File(s)
MDHHS	Whooping Cough (Pertussis) in Michigan	http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914-240419--00.html	Pertussis is a respiratory illness that is easily spread by coughing and sneezing. The disease starts like the common cold, with runny nose or congestion, sneezing, and mild cough or fever.	

Previous 1 Next

+ Add Internal Reference

Save Reporting Specification Apply Cancel

The following table details the options on the *Internal References* page.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Search	Type the text you want and the search results display in the table. Clear existing text to reset the search results.
Name	The name of the internal reference.
Description	The description of the internal reference.
URL	The URL for the internal reference.
Excerpt	An excerpt from the internal reference.
Files	The “paperclip” icon indicates a file is attached to the internal reference. It can be downloaded from the Edit Internal Reference screen.
Edit	Click to edit the selected item.
Delete	Click to delete the selected item.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
Add Internal Reference	Click to add a new internal reference and display the <i>New Reference</i> window.
Save Reporting Specification	Click to save the reference information and return to previous page.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.
Sort	Click to sort the information in each column.

4.10.1 Edit Reference Window

The *Edit Reference* window displays the details of the selected reference item, including name, URL, priority, and category. You use the *Edit Reference* window to add and edit reference information.

The screenshot shows the 'Edit Reference: Disease reporting' window. It has a title bar with a close button. The form includes the following fields:

- Name:** Disease reporting
- URL:** http://www.cdc.gov/disease-reporting
- Priority:** Select an Option (dropdown menu)
- Category:** Select an Option (dropdown menu)
- Description:** Disease reporting
- Excerpt:** Enabling public health

Below the form is a section titled 'Add Reference Files' containing a table with three columns: File Name, File Type, and Download. The table currently shows 'No data available in table'. Below the table is a blue button labeled '+ Add Reference File'.

At the bottom right of the window are three buttons: 'Save Condition Reference' (blue), 'Apply' (grey), and 'Close' (grey).

The following table details the options on the *Edit Reference* window.

Item	Description
Name	The name of the reference.
URL	The URL for the reference.
Priority	The priority of the internal reference. Options include Immediate action required, Immediate action requested, Action required, Action requested, Information only.
Category	The category of the reference. Options include Outbreak- or Cluster related, Additional reporting needs, Additional detection and/or laboratory testing needs, Treatment and/or prevention, PHA Contact Information, Additional Resources.
Description	The description of the reference.
Excerpt	An excerpt from the reference.
Add Reference Files	The fields related to an internal reference file.
File Name	The name of the reference file attached.
File Type	The format of the reference file attached.
Download	The arrow icon can be clicked to download the attached reference file.
Edit	Click to edit the selected item.
Delete	Click to delete the selected item.
Add Reference File	The button used to add additional internal reference files.
Save Condition Reference	Click to save the reference information.
Apply	Click to save your changes and keep the window open.
Cancel/Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.


4.10.2 Adding and Editing Internal References

To add and edit Internal References, perform the following steps:

1. Click the **Internal References** tab in the *Edit Reporting Specification* page. RCKMS displays the contents of the *Internal References* tab.

The screenshot shows the 'Edit Reporting Specification' page in RCKMS. The 'Internal References' tab is selected. The page displays a table of internal references. The table has columns: Name, Description, URL, Excerpt, and File(s). A sample entry is shown: 'CDC Reference Guide for Pertussis' with a description of the disease and a URL. Below the table is a button to 'Add Internal Reference'. At the bottom of the page are buttons for 'Save Reporting Specification', 'Apply', and 'Close'.

Name	Description	URL	Excerpt	File(s)
CDC Reference Guide for Pertussis	CDC Reference Guide for Pertussis	http://www.cdc.gov/pertussis	Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium Bordetella pertussis. Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with pertussis often needs to take deep breaths which result in a "whooping" sound. Pertussis can affect people of all ages, but can be very serious, even deadly, for babies less than a year old.	

2. To edit existing internal reference information, click the  **Edit** icon for the item you want. RCKMS displays the *Edit Reference* window.
 - a. Click **Name** and type the name you want.
 - b. Click **URL** and type the URL you want.
 - c. Click **Priority** and choose the option you want from the drop-down list.
 - d. Click **Category** and choose the option you want from the drop-down list.
 - e. Click **Description** and type the description you want.
 - f. Click **Excerpt** and type the excerpt you want.
 - g. Optional – Click **Add Reference File** and use **Chose File** button to upload a New Reference File. Click the **Save Reference File** button to return to the previous screen. Or use **Apply** to stay on the New Reference File screen.
 - h. Click the **Save Condition Reference** button. RCKMS saves your changes and displays the *Internal References* tab. Or click **Apply** and remain on the Edit Reference screen.

Edit Reference: CDC Reference Guide for Pertussis

Name: CDC Reference Guide for Pertussis

URL: http://www.cdc.gov/pertussis

Priority: Information only

Category: Additional Resources

Description: CDC Reference Guide for Pertussis

Excerpt: Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium Bordetella pertussis. Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with pertussis often needs to take deep breaths which result in a "whooping" sound. Pertussis can affect people of all ages, but can be very serious, even deadly, for babies less than a year old.

Add Reference Files

File Name	File Type	Download
No data available in table		
File Name	File Type	Download

+ Add Reference File

Save Condition Reference Apply Close

3. To add new internal reference information, click **Add Internal Reference** button. RCKMS displays the *Add Internal Reference* window. Do one of the following:

Add Internal Reference

Add New Internal Reference

OR

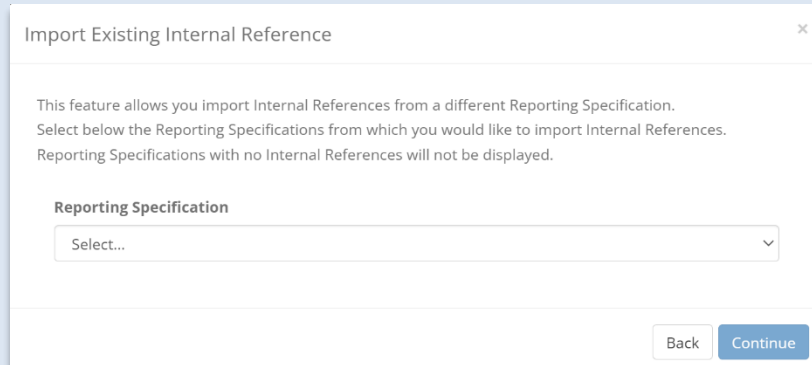
Import an Existing Reference

- a. Click the **Add New Internal Reference** button to add a new internal reference. This opens the *New Reference* window, which has the same fields as the *Edit Reference* window described above.
- Click **Name** and type the name you want.
 - Click **URL** and type the URL you want.
 - Click **Priority** and choose the option you want from the drop-down list.
 - Click **Category** and choose the option you want from the drop-down list.
 - Click **Description** and type the description you want.
 - Click **Excerpt** and type the excerpt you want.
 - Optional – Click **Add Reference File** and use **Chose File** button to upload a New Reference File. Click the **Save Reference File** button to return to the previous screen. Or use **Apply** to stay on the New Reference File screen.
 - Click the **Save Condition Reference** button. RCKMS saves your changes and displays the *Internal References* tab. Or click **Apply** and remain on the Edit Reference screen.

Authoring Tip

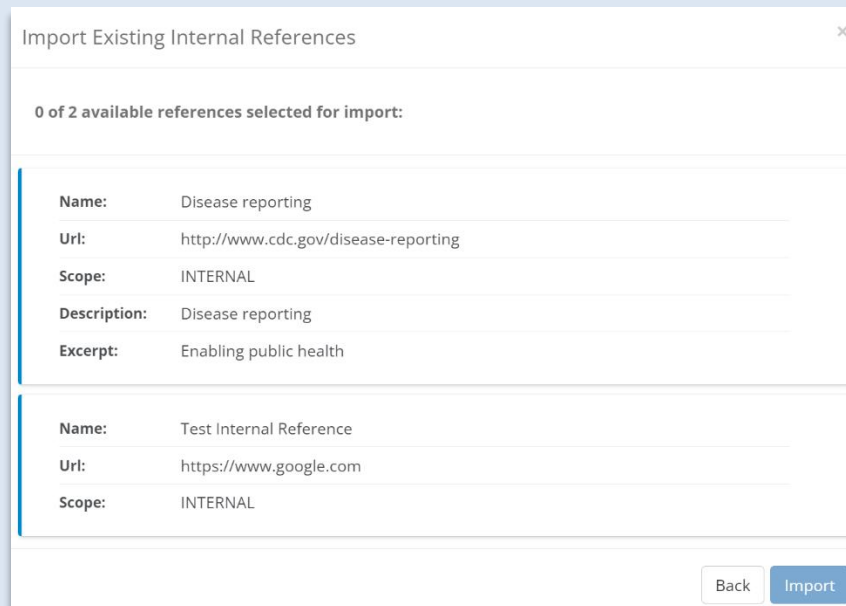
Internal reference items should be unique within the reporting specification.

- b. Click the **Import an Existing Reference** button to import an existing internal reference from a different reporting specification. This opens the *Import Existing Internal Reference* window.




The window titled "Import Existing Internal Reference" contains the following text: "This feature allows you import Internal References from a different Reporting Specification. Select below the Reporting Specifications from which you would like to import Internal References. Reporting Specifications with no Internal References will not be displayed." Below this is a "Reporting Specification" label and a dropdown menu with "Select..." and a downward arrow. At the bottom right are "Back" and "Continue" buttons.

- i. Select a reporting specification from the drop-down and click **Continue**. RCKMS displays the internal references available for import.



The window titled "Import Existing Internal References" shows "0 of 2 available references selected for import:". It contains two reference cards. The first card has fields: Name: Disease reporting, Url: http://www.cdc.gov/disease-reporting, Scope: INTERNAL, Description: Disease reporting, and Excerpt: Enabling public health. The second card has fields: Name: Test Internal Reference, Url: https://www.google.com, and Scope: INTERNAL. At the bottom right are "Back" and "Import" buttons.

- ii. Click on the internal reference(s) you wish to import and click the **Import** button. RCKMS saves the internal references and displays the *Internal References* tab.

You can also delete an internal reference by clicking the  **Delete** icon for the internal reference you want to delete.

4.11 External References Tab

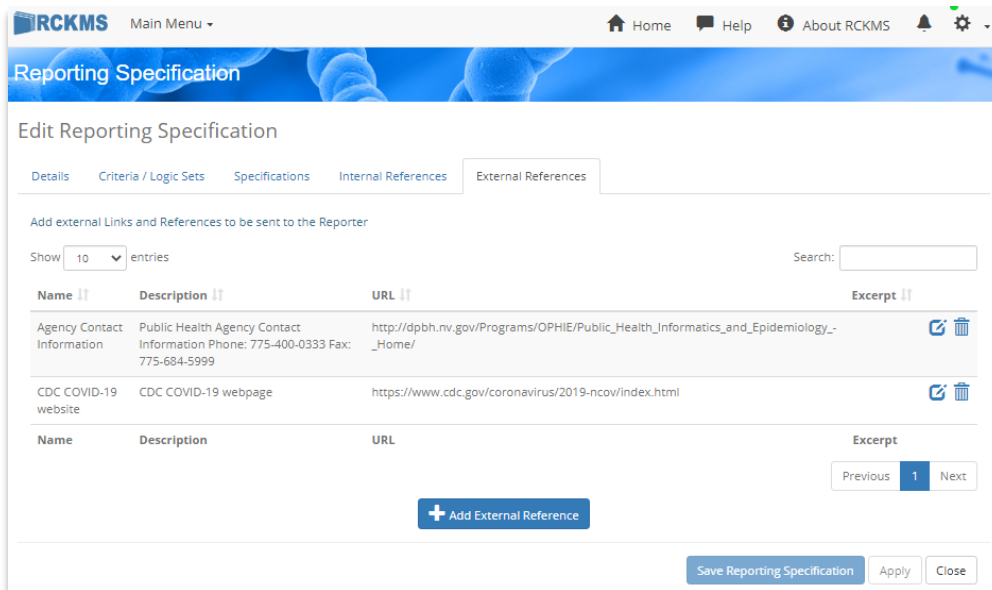
The *External References* tab displays information, such as text, links to web sites, documents, and other modes of information that the PHA wants available to reporters. For example, in the screenshot below, the author has included contact information for the public health agency along with a link to the COVID-19 page on the CDC website. Some common uses for External References are:

- Links to the condition on the CDC website or on the PHA website
- Contact information for the PHA
- Treatment recommendations
- Additional reporting requirements to local health departments

Authoring Tip

External references are sent back to the reporter in the RR.

At a minimum, jurisdictions should add condition-specific contact information



RCKMS Main Menu ▾ Home ▾ Help ▾ About RCKMS ▾





Reporting Specification

Edit Reporting Specification

Details Criteria / Logic Sets Specifications Internal References External References

Add external Links and References to be sent to the Reporter

Show 10 ▾ entries Search:



Name	Description	URL	Excerpt
Agency Contact Information	Public Health Agency Contact Information Phone: 775-400-0333 Fax: 775-684-5999	http://dphh.nv.gov/Programs/OPHIE/Public_Health_Informatics_and_Epidemiology_-_Home/	 
CDC COVID-19 website	CDC COVID-19 webpage	https://www.cdc.gov/coronavirus/2019-ncov/index.html	 


+ Add External Reference

Previous 1 Next

Save Reporting Specification Apply Close

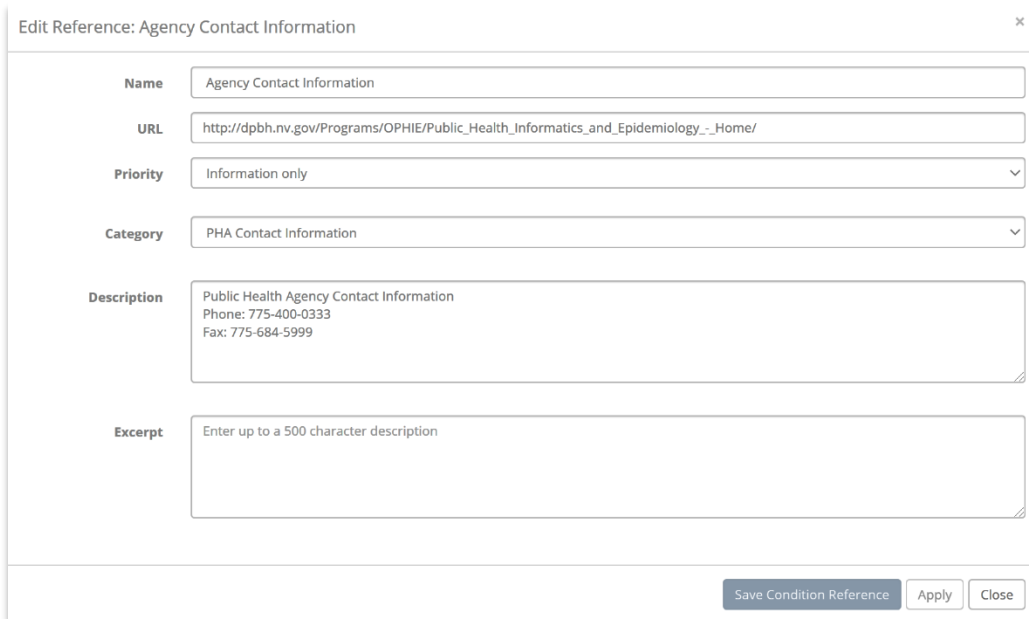
The following table details the options on the *External References* tab.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Search	Type the text you want and the search results display in the table. Clear existing text to reset the search results.
Name	The name of the external reference.
Description	The description of the external reference.
URL	The URL for the external reference.
Excerpt	An excerpt from the external reference.
 Edit	Click to edit the selected item.
 Delete	Click to delete the selected item.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
Add External Reference	Click to add a new external reference and display the <i>New Reference</i> window.

Item	Description
Save Reporting Specification	Click to save the reporting specification.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.
 Sort	Click to sort the information in each column.

4.11.1 Edit Reference Window

The *Edit Reference* window displays the details of the selected reference item, including name, description, and URL. Use the *Reference* window to add and edit reference information, which is sent back to the reporter in the RR.



Edit Reference: Agency Contact Information

Name: Agency Contact Information

URL: http://dpbh.nv.gov/Programs/OPHIE/Public_Health_Informatics_and_Epidemiology_-_Home/

Priority: Information only

Category: PHA Contact Information

Description: Public Health Agency Contact Information
Phone: 775-400-0333
Fax: 775-684-5999

Excerpt: Enter up to a 500 character description

Save Condition Reference Apply Close

The following table details the options on the *Edit Reference* window.

Item	Description
Name	The name of the reference.
URL	The URL for the reference.
Priority	The priority of the URL for the reference. Options include Immediate Action Required, Immediate Action Requested, Action Required, Action Requested, Information Only.
Category	The category organizing the reference. Options include Outbreak- or Cluster related, Additional reporting needs, Additional detection and/or laboratory testing needs, Treatment and/or prevention, PHA Contact Information, and Additional Resources. The <i>Category</i> option orders the display of reference information in the RR.
Description	The description of the reference.
Excerpt	An excerpt from the reference. Excerpts are not included in the RR.

Item	Description
Save Condition Reference	Click to save the reference information.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

4.11.2 Adding and Editing External Reference Information

To add or edit an External Reference, perform the following steps:

1. Click the **External References** tab in the *Edit Reporting Specification* page. RCKMS displays the contents of the *External References* tab.

PHA Contact information

Name	Description	URL	Excerpt
Agency Contact Information	Public Health Agency Contact Information Phone: 775-400-0333 Fax: 775-684-5999	http://dpbh.nv.gov/Programs/OPHIE/Public_Health_Informatics_and_Epidemiology_-_Home/	
CDC COVID-19 website	CDC COVID-19 webpage	https://www.cdc.gov/coronavirus/2019-ncov/index.html	

+ Add External Reference

Save Reporting Specification Apply Cancel

2. To edit existing external reference information, click the **Edit** icon for the item you want. RCKMS displays the *Edit Reference* window.
 - a. Click **Name** and type the name you want.
 - b. Click **URL** and type the URL you want.
 - c. Click **Priority** and choose the option you want. The Priority options indicate the urgency of the information or any expected actions.
 - d. Click **Category** and choose the option you want. The Category option orders the display of reference information on the RR.
 - e. Click **Description** and type the description you want.
 - f. Click **Excerpt** and type the excerpt you want.



Authoring Tip

External reference items should be unique within the reporting specification.

- g. Click the **Save Condition Reference** button. RCKMS saves your changes and the *External References* tab.

Edit Reference: Local Health Office Directory

Name: Local Health Office Directory

URL: <https://www.cdc.gov/std/chlamydia/default.htm>

Priority: Information only

Category: Additional Resources

Description: Local Health Department Contact Information

Excerpt: Please contact your local health office for additional reporting requirements. According to the California regulations reporting is required with seven calendar days of identification. Reporting to the Public Health Agency is based on the patient home address.

Save Condition Reference Apply Close

3. To add new external reference information, click **Add External Reference** button. RCKMS displays the *Add External Reference* window. Do one of the following:

Add External Reference

Add New External Reference

OR

Import an Existing Reference

- a. Click the **Add New External Reference** button to add a new external reference. This opens the *New Reference* window, which has the same fields as the *Edit Reference* window described above.
- Click **Name** and type the name you want.
 - Click **URL** and type the URL you want.
 - Click **Priority** and choose the option you want. The Priority options indicate the urgency of the information or any expected actions.
 - Click **Category** and choose the option you want. The Category option orders the display of reference information on the RR.
 - Click **Description** and type the description you want.
 - Click **Excerpt** and type the excerpt you want.
- vii. Click the **Save Condition Reference** button. RCKMS saves your changes and the *External References* tab.
- b. Click the **Import an Existing Reference** button to import an existing external reference from a different reporting specification. This opens the *Import Existing External Reference* window.

Import Existing External Reference

This feature allows you import External References from a different Reporting Specification. Select below the Reporting Specifications from which you would like to import External References. Reporting Specifications with no External References will not be displayed.

Reporting Specification

Select...

Back Continue

- i. Select a reporting specification from the drop-down and click **Continue**. RCKMS displays the external references available for import.

Import Existing External References


0 of 1 available references selected for import:

Name:	Public Health Agency Contact Information
Url:	https://dchealth.dc.gov/
Scope:	EXTERNAL
Description:	Public Health Agency Contact Information

Name:	CDC COVID-19 website	IMPORTED
Url:	https://www.cdc.gov/coronavirus/2019-ncov/index.html	
Scope:	EXTERNAL	
Description:	CDC COVID-19 webpage	

Back Import

- ii. Click on the external reference(s) you wish to import and click the **Import** button. RCKMS saves the external references and displays the *External References* tab.

You can also delete an external reference by clicking the  **Delete** icon for the external reference you want to delete.

4.12 Saving Changes to the Reporting Specification

Although RCKMS saves your changes within a working session, to save information permanently and update the database, you must save the entire reporting specification. To do so:

1. When you are finished entering reporting specification information in the various tabs, click the **Save Reporting Specification** button.

2. RCKMS saves your changes. You will see the *Reporting Specification* page with the date and time of the last update.


Note: RCKMS displays unsaved information using red text to indicate that you must save the reporting specification to preserve your changes.

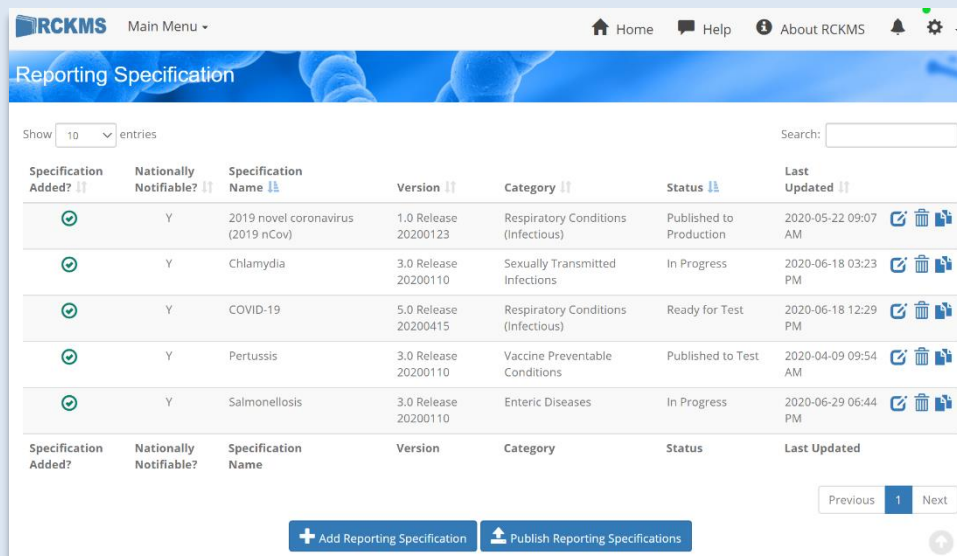
4.13 Publishing the Reporting Specification

Once you finalize and save your work on the reporting specification, you must [publish](#) it to the DSS rules engine for RCKMS to run the reporting specifications rules logic and respond on receipt of a record if it is reportable. Authoring rules to final production status is a two-step process. After the rules have been authored for a condition, the tool requires the rules to be first published to the testing environment and then to production status. Publishing to test is a necessary step even if you decide not to test your authored condition.

4.13.1 Steps to Publish to Test

To publish to test, complete the following steps:

1. Do one of the following:
 - From the *Home* page, click **Reporting Specifications** in the left navigation menu. The *Reporting Specification* page displays.
 - From any page in the tool, click **Main Menu** in the menu bar at the top of the page and choose **Reporting Specifications**. The *Reporting Specification* page displays.
2. Click the  **Edit** icon for the condition you want to publish on the *Reporting Specification* page. RCKMS displays the *Edit Reporting Specification* page and the contents of the *Details* tab.



Specification Added?	Nationally Notifiable?	Specification Name	Version	Category	Status	Last Updated
	Y	2019 novel coronavirus (2019 nCov)	1.0 Release 20200123	Respiratory Conditions (Infectious)	Published to Production	2020-05-22 09:07 AM
	Y	Chlamydia	3.0 Release 20200110	Sexually Transmitted Infections	In Progress	2020-06-18 03:23 PM
	Y	COVID-19	5.0 Release 20200415	Respiratory Conditions (Infectious)	Ready for Test	2020-06-18 12:29 PM
	Y	Pertussis	3.0 Release 20200110	Vaccine Preventable Conditions	Published to Test	2020-04-09 09:54 AM
	Y	Salmonellosis	3.0 Release 20200110	Enteric Diseases	In Progress	2020-06-29 06:44 PM

Specification Added? Nationally Notifiable? Specification Name Version Category Status Last Updated

Previous 1 Next

+ Add Reporting Specification Publish Reporting Specifications

3. This is a good time to review all tabs for completeness and accuracy.

Click through the tabs to verify the following:

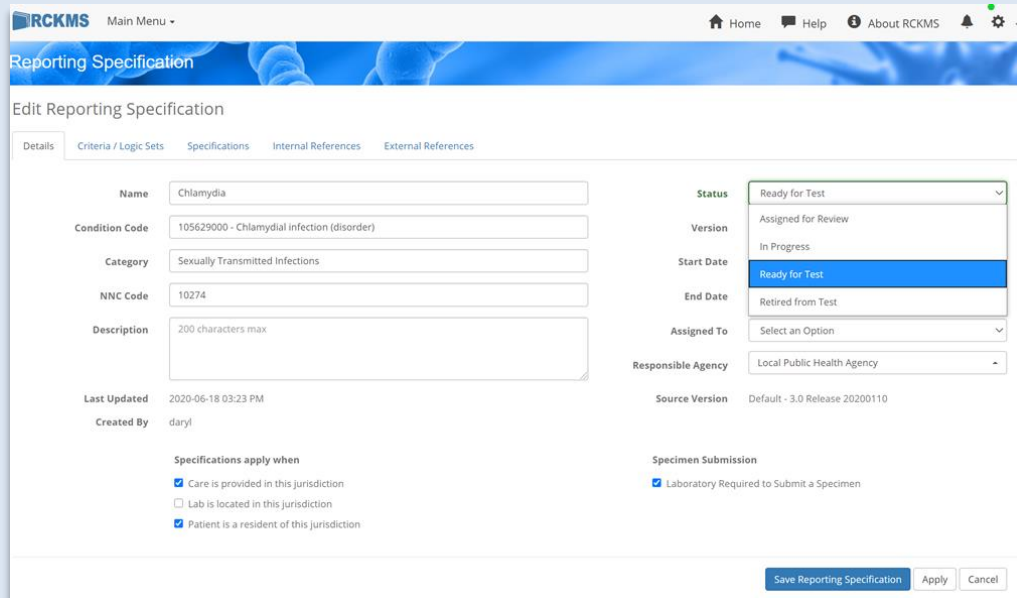
- Click **Criteria/Logic Sets** to edit and add logic set and criteria information. For more information, refer to [Section 4.8, Adding and Editing Logic Set Information](#) and [Section 4.9, Activating and Inactivating Criteria Information](#).
- Click **Specifications** to edit and add reporting time frame and decision logic information. For more information, refer to [Section 4.7, Adding and Editing Specification Information](#).
- Click **Internal References** to edit and add internal links and reference information. For more information, refer to [Section 4.10, Internal References tab](#).
- Click **External References** to edit and add external links and reference information. For more information, refer to [Section 4.11, External References tab](#).
- Click **Details** to edit and add reporting specification detail information. For more information, refer to [Section 4.6, Reporting Specification Details tab](#).

Authoring Tip

Publishing to test allows users to run [test cases](#) against their authored rules to verify that test cases return the expected results before publishing to production.

4. Click the **Status** drop-down in the *Details* tab and choose **Ready for Test**.

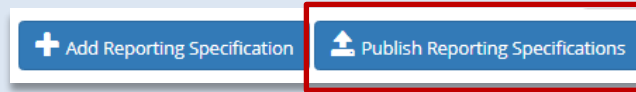
Note: You can change the status to **Assigned for Review** prior to publishing to test to indicate that the condition needs further review before publishing to the next step. This status is for internal jurisdiction reference only.



5. Click **Save Reporting Specification**. RCKMS displays the *Reporting Specification* page and the date and time of the last update. The status is also updated to **Ready for Test**.

Note: Keep in mind that for your changes to take effect, you must still publish the reporting specification.

6. Click the **Publish Reporting Specifications** button. RCKMS displays the *Reporting Specification Publishing Confirmation* window.



7. Click the **Test** radio button. There will be three sections to review in the confirmation window:
- Reporting Specifications to be Re-published
 - Reporting Specifications Ready to be Published
 - Reporting Specifications to be Retired

Please review all three sections to confirm the reporting specifications that will be Re-published, Published, and Retired.

Note: Any specification in a “Published” status will also be “Re-published” during the publishing to test process, unless there is a new version of a specification that is already published to test.

Reporting Specification Publishing Confirmation

Knowledge Module: [RCKMS.gov.cdc.rckms.tx](https://rckms.gov.cdc.rckms.tx)

Publishing to: ☒ Test ☐ Production

Note when publishing to Test: Reporting specifications with status of “Published to Production” may be published to Test if no other version of that condition’s reporting specification is being published. This prevents reporting specifications for specific conditions from being completely removed from the Test Instance.

Reporting Specifications to be Re-published:

Salmonellosis (302231008) - 1.0	Publishing Status: Published to Production Description: Salmonellosis Reporting Specifications
Pertussis (27836007) - 1.0	Publishing Status: Published to Test Description: Pertussis Reporting Specifications
Gonorrhea (15628003) - 1.0	Publishing Status: Published to Production Description: Gonorrhea Reporting Specifications
Zika (50223) - 1.0	Publishing Status: Published to Production Description: Zika Reporting Specifications

Reporting Specifications Ready to be Published:

Chlamydia (105629000) - 1.0	Publishing Status: Ready for Test Description: Chlamydia Reporting Specifications
-----------------------------	--

Reporting Specifications to be Retired:

Confirm Publishing **Cancel**

8. Click the **Confirm Publishing** button to publish all listed reporting specifications.
- When you click on the **Confirm Publishing** button, you will be returned to the *Reporting Specification* page. You will see an orange pop-up indicating that your reporting specification

has been queued for publishing. You may remain here, exit, or continue working in the tool while the reporting specification is being published.

Almost there...



The Reporting Specifications were successfully queued to publish to TEST. You will receive a notification when they are published.

- A green pop-up appears when the reporting specification has finished publishing and you refresh the page or move to another screen. You will also see that the Status has changed to “Published to Test.”

Success



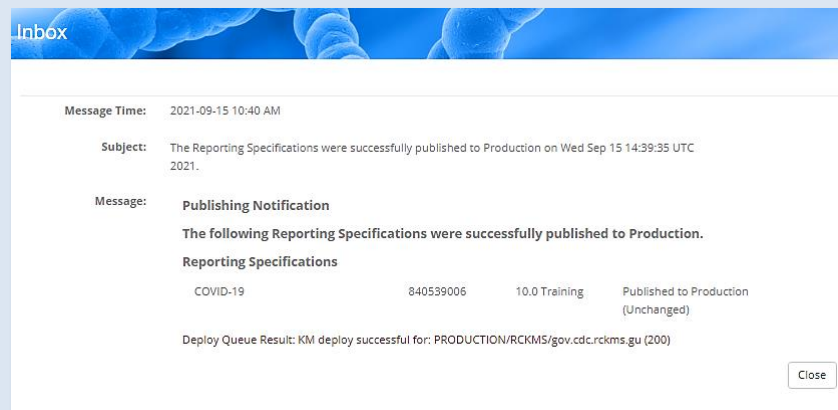
The Reporting Specifications were successfully published to Test on Fri Aug 13 20:03:44 UTC 2021. Click here to review the system notification.

- In rare instances, you may see a red pop-up, like the one shown below, indicating that the reporting specification could not be queued for publication or could not be published. You can click on the error to see additional details. If you encounter this error when working in the tool, submit a ticket to the RCKMS team with a screenshot of the detailed error message.

Error

The Reporting Specifications were not able to be queued for publication or published to Test due to an error. Click to review the system notification.


9. Confirm that the reporting specification has finished publishing by clicking the **Notification Bell** icon at the top right of the screen.
 - Click the **Edit** icon to view a detailed list of the Condition Name, Condition Code, Version, and Status Update for the condition(s) that were published.



Note: Refer to [Section 5, Testing Options](#) for an overview of testing options and instructions on how to test your published reporting specifications.

4.13.2 Steps to Publish to Production

To publish to production, complete the following steps:

1. To start to navigate to publish to production, you need to access the *Reporting Specification* page. If you have just published reporting specifications to test, you are already in the correct place. If not, you can do so via either of these two options:
 - From the *Home* page, click **Reporting Specifications** in the left navigation menu. The *Reporting Specification* page displays.
 - From any page in the tool, click **Main Menu** in the menu bar at the top of the page and choose **Reporting Specifications**. The *Reporting Specification* page displays.
2. Click the  **Edit** icon for the condition you want on the *Reporting Specification* page. RCKMS displays the *Edit Reporting Specification* page and the contents of the *Details* tab.
3. If you have not done so already, this is a good time to review all tabs for completeness and accuracy. Click through the tabs to verify the following:
 - Click **Criteria/Logic Sets** to edit and add logic set and criteria information. For more information, refer to [Section 4.8, Adding and Editing Logic Set Information](#) and [Section 4.9, Activating and Inactivating Criteria Information](#).
 - Click **Specifications** to edit and add reporting time frame and decision logic information. For more information, refer to [Section 4.7, Adding and Editing Specification Information](#).
 - Click **Internal References** to edit and add internal links and reference information. For more information, refer to [Section 4.10, Internal References tab](#).
 - Click **External References** to edit and add external links and reference information. For more information, refer to [Section 4.11, External References tab](#).
 - Click **Details** to edit and add reporting specification detail information. For more information, refer to [Section 4.6, Reporting Specification Details tab](#).
4. Click the **Status** drop-down in the *Details* tab and choose Ready for Production Use. This option will be available only after you have published the reporting specification to test.

Reporting Specification

Edit Reporting Specification

Details | Criteria / Logic Sets | Specifications | Internal References | External References

Name: Chlamydia

Condition Code: 105629000 - Chlamydial infection (disorder)

Category: Sexually Transmitted Infections

NNC Code: 10274

Description: 200 characters max

Last Updated: 2020-06-30 10:40 PM

Created By: daryl

Specifications apply when

- ☒ Care is provided in this jurisdiction
- ☐ Lab is located in this jurisdiction
- ☒ Patient is a resident of this jurisdiction

Status: Published to Test

Version: Published to Test

Start Date: Ready for Production Use

End Date: Retired from Test

Assigned To: Select an Option

Responsible Agency: Local Public Health Agency

Source Version: Default - 3.0 Release 20200110

Specimen Submission

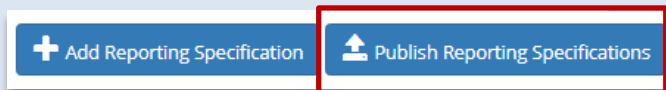
- ☒ Laboratory Required to Submit a Specimen

Save Reporting Specification | Apply | Close

5. Click **Save Reporting Specification**. RCKMS displays the *Reporting Specification* page and the date and time of the last update. The status will be updated to Ready for Production Use.

Note: Keep in mind that for your changes to take effect, you must still publish the reporting specification.

6. Click the **Publish Reporting Specifications** button. RCKMS prompts you to confirm the publishing. There will be three sections on this confirmation:
- Reporting Specifications to be Re-published
 - Reporting Specifications Ready to be Published
 - Reporting Specifications to be Retired



7. Click the **Production** radio button. Please review all three sections to confirm the reporting specifications that will be Re-published, Published, and Retired.

Note: Any specification in a “Published” status that may have been modified will be “Re-published” with the new changes during the publishing process.

Authoring Tip

Reporting specifications can be published either to test or production. Conditions with a status of *Ready for Production Use* should be published to production. This signifies the readiness of your reporting specifications to be used for eCR activities.

Reporting Specification Publishing Confirmation

Knowledge Module: [RCKMS^gov.cdc.rckms.gu](#)

Publishing to ☐ Test ☒ Production

Reporting Specifications to be Re-published:

2019 novel coronavirus (2019 nCov) (186747009) - 1.0 Release 20200123
 Publishing Status: Published to Production
 Description:

Reporting Specifications Ready to be Published:

Chlamydia (105629000) - 3.0 Release 20200110
 Publishing Status: Ready for Production Use
 Description:


Reporting Specifications to be Retired:

[Confirm Publishing](#) [Cancel](#)

The Chlamydia reporting specification has a status of "Ready for Production Use" and will be published to production for the first time.


8. Click the **Confirm Publishing** button to publish all listed reporting specifications.
- When you click on the **Confirm Publishing** button, you will be returned to the *Reporting Specification* page. You will see an orange pop-up indicating that your reporting specification has been queued for publishing. You may remain here, exit, or continue working in the tool while the reporting specification is being published.

Almost there... ×

 The Reporting Specifications were successfully queued to publish to Production. You will receive a notification when they are published.

- A green pop-up appears when the reporting specification has finished publishing and you refresh the page or move to another screen. You will also see that the Status has changed to "Published to Production."



Success ×

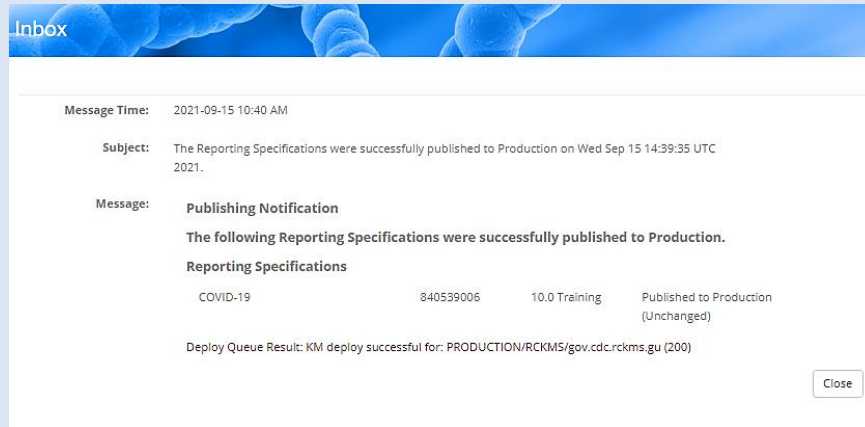
 The Reporting Specifications were successfully published to Production on Fri Aug 13 20:03:44 UTC 2021. Click here to review the system notification.

- In rare instances, you may see a red pop-up, like the one shown below, indicating that the reporting specification could not be queued for publication or could not be published. You can click on the error to see additional details. If you encounter this error when working in the tool, submit a ticket to the RCKMS team with a screenshot of the detailed error message.

Error

The Reporting Specifications were not able to be queued for publication or published to Test due to an error. Click to review the system notification.

9. Confirm that the reporting specification has finished publishing by clicking the  **Notification Bell** icon at the top right of the screen.
 - Click the  **Edit** icon to view a detailed list of the Condition Name, Condition Code, Version, and Status Update for the conditions that were published.



Once you save and publish the reporting specification, you can work with the following modules:

- Use one of the available testing options to run test cases and validate the criteria and rules logic. For details, refer to [Section 5, Testing Options](#).
- Use the *Reports* module to run queries and display informational reports. For details, refer to [Section 6, Reports Module](#).
- Manage jurisdiction detail information using the [Jurisdictions module](#). For details, refer to [Section 3, Viewing and Editing Jurisdiction Information](#).

5 Testing Options



There are two tools available in [RCKMS](#) for testing your reporting rules: The Test Case Manager and Shared Service Submission Tool. Review this section to learn about the differences between the tools, how to add and edit [test cases](#) in each tool, and how to run test cases and interpret results in each tool.

You can use both the Test Case Manager and Shared Service Submission Tool as a quality assurance measure to verify that your authored rules are working correctly and that RCKMS returns the expected reportability outcome. There are, however, several important differences between these two tools, as described below. An example follows for additional context.

Testing Tip

It is best practice to test your rules before publishing to production. However, if you publish your rules and later need to test, you can do so in the production instance.

Test Case Manager

- Tests [rules logic](#) only for your [jurisdiction](#). Does not test which jurisdiction's rules are being used.
- Supports both [criteria](#)-based test cases and [eICR](#) files.
- Test cases are saved, creating a test case bank that can be rerun over time.

Shared Service Submission Tool

- Tests rules logic and will determine which jurisdiction's rules should be used, based on address.
- Supports eICR files.
- Test cases are not saved.

5.1 Test Case Manager

You can run a test case and view its results using the *Test Cases* page. Keep in mind the following:

- The test cases defined here are saved for reuse. However, the results of the testing are not saved within RCKMS.
- Test cases are attached to a specific condition and version. When a condition is updated to a new version, test cases from previous versions do not carry over.
- When you run a test case, the application simulates receipt of a report and moves that information through the logic chain defined for your jurisdiction [reporting specification's](#) criteria, [logic sets](#), and rules options. For more detail on reporting criteria, refer to [Section 4.9, Activating and Inactivating Criteria Information](#).
- A successful test case provides you with confirmation that the criteria authored as [Sufficient](#), [Necessary](#), and [Optional](#) and the rules for a given reporter type provide the expected results. For more details on the Sufficient, Necessary, and Optional notations, refer to [Section 4.7, Adding and Editing Specification Information](#).
- Test cases run through the Test Case Manager always execute against your jurisdiction's reporting specifications, regardless of the patient or provider address.

What are test cases?

A set of scripted instructions made-up of a combination of various scenarios (or criteria and logic rules) that, when executed, verify expected results.

You can use the Test Case Manager to test specific criterion, such as diagnosis or positive lab results, or whole files, such as a sample eICR or [Virtual Medical Record](#) (vMR) file.

Note: For some conditions, the RCKMS tool has pre-populated test cases. Some of the default test cases may be out of date due to reporting specification version updates. You can still run these test cases, but the reportability outcome may vary. Default test cases can be executed as-is or customized to account for any jurisdiction-specific reporting requirements.

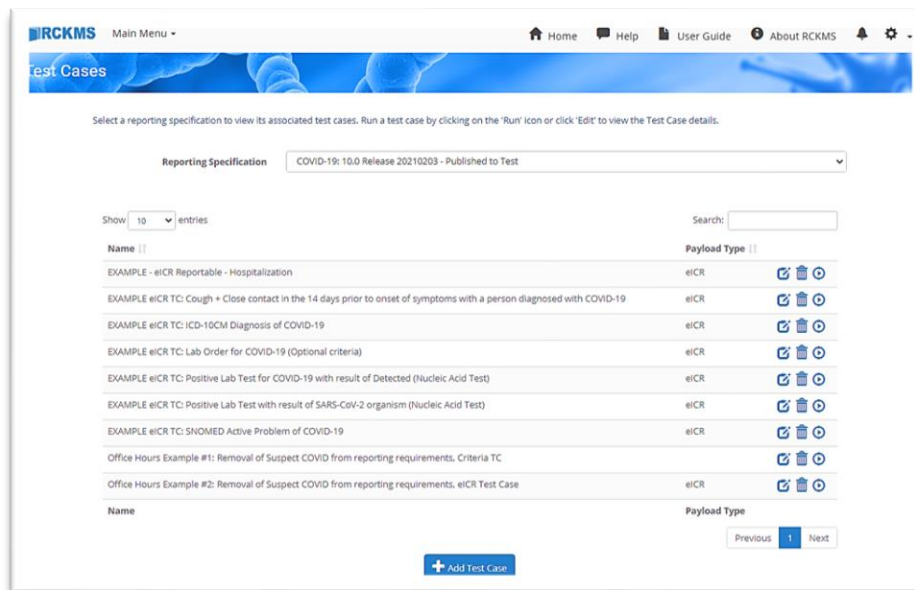


Testing Tip





To learn how to add new test cases, see [Section 5.3, Adding and Editing Test Cases in Test Case Manager](#).

5.1.1 Test Cases Page

The *Test Cases* page shows the list of available test cases for a given reporting specification. The Test Case Manager comes pre-populated with default test cases for some conditions. Any customized test cases that you have created can also be found on the *Test Cases* page.



The following table details the options on the *Test Cases* page.

Item	Description
Show entries	Click drop-down and choose the number of items to display in the grid.
Name	The name of the test case.
Payload Type	The type of test file used. If Payload Type is blank, there is no eICR or vMR test file associated with the test case.
 Edit	Click to edit the selected test case.
 Delete	Click to delete the selected test case.
 Run Test	Click to run the test case as-is.
Previous	Click to navigate back through the list of items available.
Next	Click to navigate forward through the list of items available.
 Sort	Click to sort the information in each column.

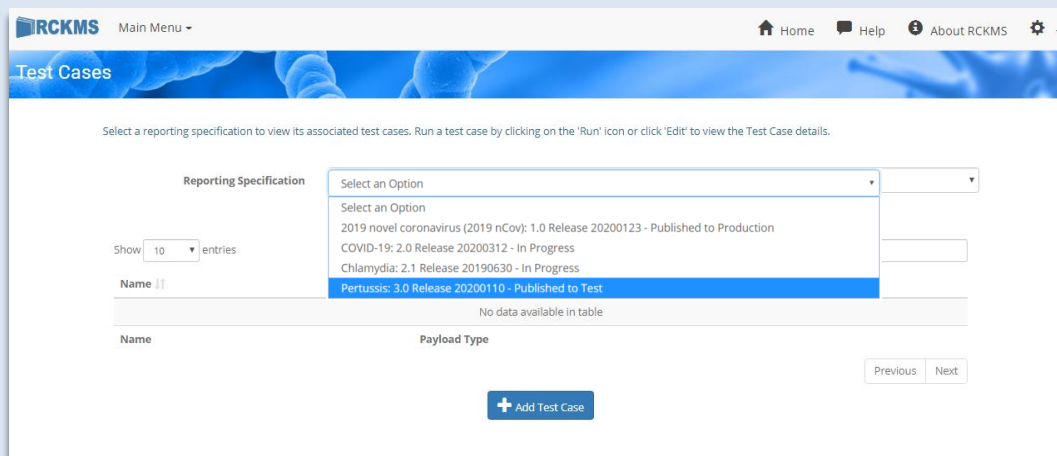
5.2 Running a Default Test Case in Test Case Manager

To run a test case and view the results, perform the following steps:

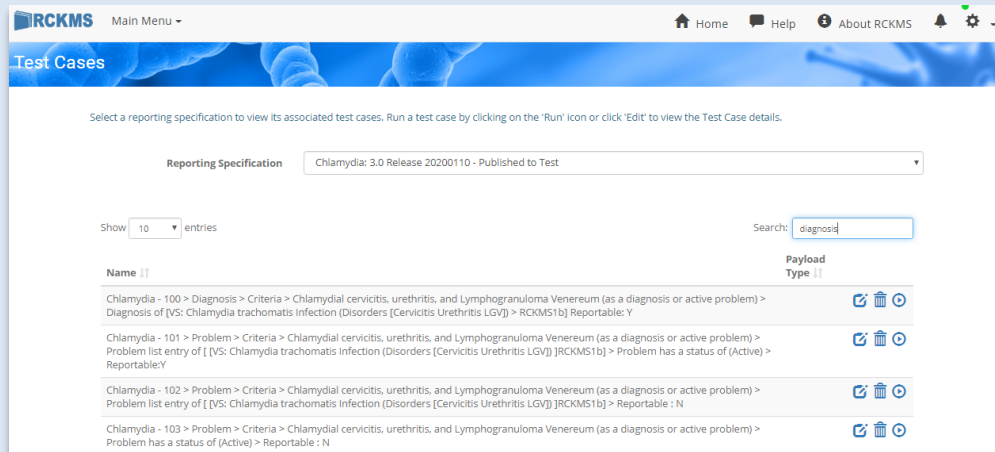
1. Access the [Test Cases module](#) via one of the following:
 - From the *Home* page, click **Test Cases** in the left navigation menu. RCKMS displays the *Test Cases* page.
 - From any page in the tool, click **Main Menu** in the menu bar at the top of the page and choose **Test Cases**. RCKMS displays the *Test Cases* page.




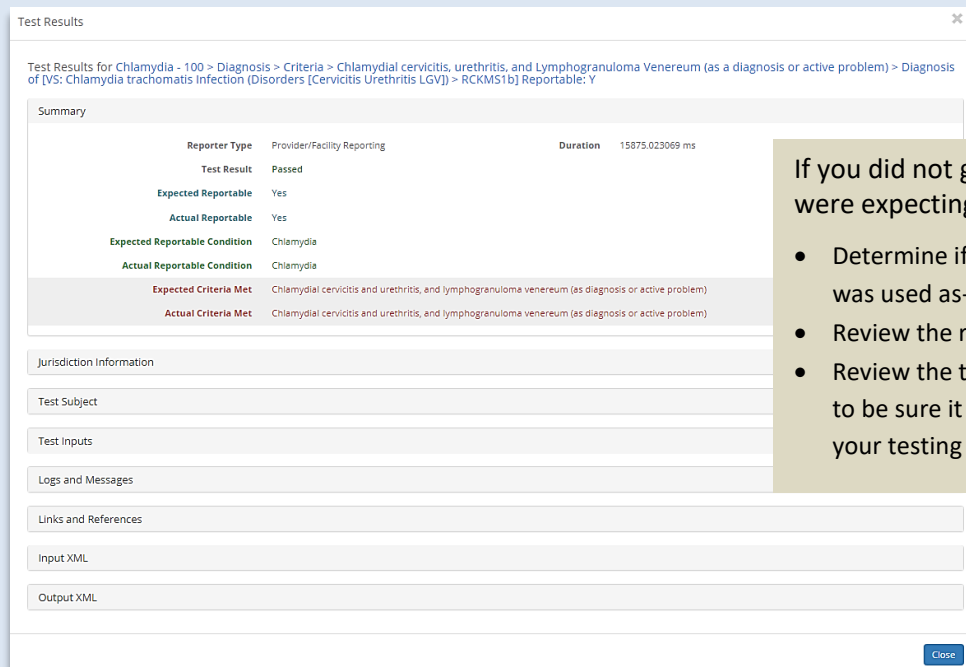
2. Click the **Reporting Specification** drop-down and choose the condition you want to test. The reporting specification for the condition you want to test must have a status of “Published to Test” or “Published to Production”. RCKMS displays a list of the available test cases, if any. See [Section 5.3, Adding and Editing Test Cases in Test Case Manager](#) for instructions on adding new test cases.



Note: You can use the Search text box in the Test Cases page to search for the test case you want. Click Search and type the text you want. The search results display in the table. You can also clear any existing text in the Search text box to reset the search results and run your search again.



- Click the  **Run Test** icon for the test case you want to run. RCKMS runs the test case and displays the *Test Results* page, with the summary results at the top of the page.
- Optionally, review the results in the *Test Results* page by clicking the links for the test result detail information you want. These include *Jurisdiction Information*, *Test Subject*, *Test Inputs*, *Logs and Messages*, *Links and References*, *Input XML*, and *Output XML*.



If you did not get the result you were expecting:


- Determine if the default content was used as-is or customized
- Review the reporting specification
- Review the test case you selected to be sure it is the best option for your testing needs

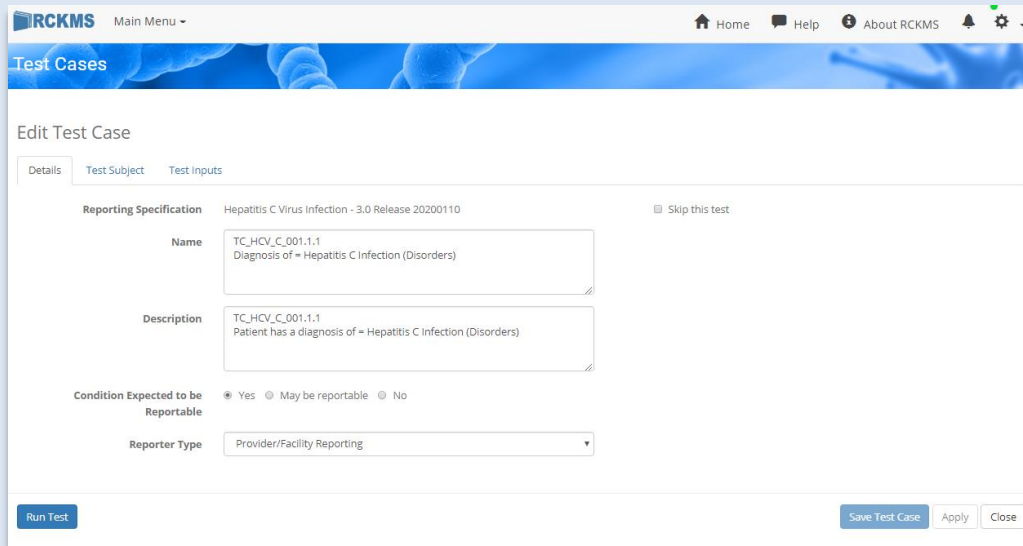
- When you are finished reviewing the results, click the Close button. RCKMS returns to the *Test Cases* page.

5.3 Adding and Editing Test Cases in Test Case Manager

If the pre-populated test cases do not meet your needs, you may add a new test case or edit an existing one. This section describes the steps necessary for adding and editing test cases.

To add new test cases and edit existing test cases, perform the following steps:

1. Add or edit test case details information.
 - a. Do one of the following:
 - Click the  **Edit** icon for the test case you want to edit. RCKMS displays the *Edit Test Case* page and the contents of the *Details* tab.
 - Click the **Add Test Case** button to add a new test case. RCKMS displays the *New Test Case* page and the contents of the *Details* tab.



- b. Click **Reporting Specifications** and choose the condition you want. The reporting specification for the condition you want to test must have a status of “Published to Test” or “Published to Production”. Note that the *Reporting Specification* field is active only when you create a new test case. This field is read-only when editing an existing test case.
- c. Click **Name** and type the name you want. This should follow naming conventions established by your organization for new test cases. For example, you may want to include the condition name, test case number, criteria being tested and the expected outcome.
- d. Click **Description** and type the description you want.
- e. Click a **Condition Expected to be Reportable** radio button to indicate that the test case is expected to return one of the following results:
 - Reportable – **Yes** radio button
 - [May be Reportable](#) – **May be reportable** radio button
 - Not Reportable – **No** radio button

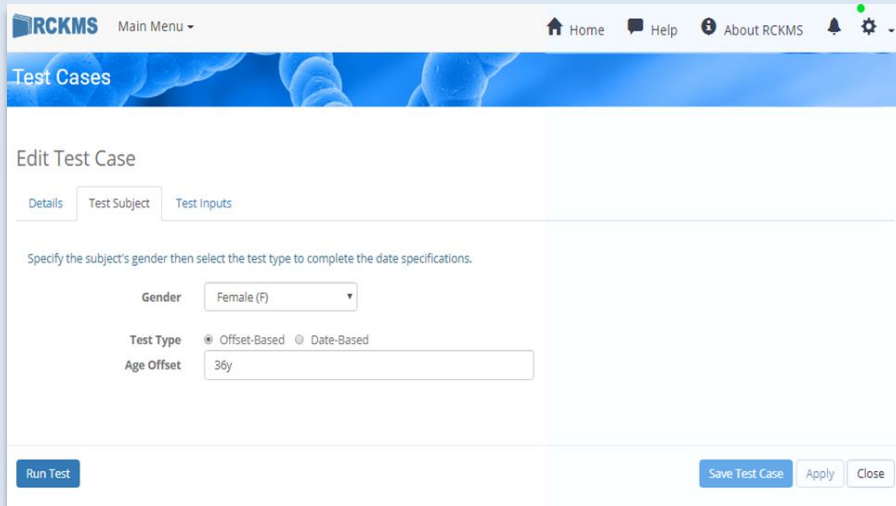
- f. Click **Reporter Type** and choose the reporter type that matches the criteria you want to test. For example, if you are testing a diagnosis, the Reporter Type would be Provider/Facility Reporting. For lab criteria, the Reporter Type would be Lab Reporting.
- g. Click the **Skip this test** checkbox to skip the test case execution.

Note: This checkbox is not functional at this time.

Testing Tip

May be reportable refers to age-related cases where the age criterion is missing. Without the age information, RCKMS cannot determine whether the case is reportable or not, so it returns a "May be Reportable" response with the reason included.

2. Add or edit Test Subject information.
 - a. Click the **Test Subject** tab. RCKMS displays the contents of the *Test Subject* tab.



- b. Click **Gender** and choose the gender you want. Options include male, female, and undifferentiated.
- c. Do one of the following:
 - Click the **Offset-Based** radio button to indicate the age offset information. RCKMS displays the *Age Offset* field. Then, type the offset you want in years, months, or days. The format for the age offset must be a number followed by a unit of y for years, m for months, w for weeks, or d for days, with no space between the number and unit.
 - Click the **Date-Based** radio button to enter birthdate and execution date information. You can click **Date of Birth** and type or choose the date you want. Click **Execution Date** and type or choose the date you want. The *Age at Execution* option is read-only and updates based on your entry.

Testing Tip

Offset-based: Allows you to enter an exact age for the test subject.

Date-based: Calculates the subject age based on the date of birth and the date the test case is executed.

3. Add or edit Test Inputs information.

- a. Click the **Test Inputs** tab. RCKMS displays the contents of the *Test Inputs* tab. There are two types of test inputs: Criteria-based and file-based.
 - Criteria-based: Tests a specific criterion or multiple criteria that you authored in the reporting specification.
 - File-based: If you have a sample eICR with the information that you want to test, you can upload it using the file-based option.
- b. To work with *criteria-based* test case inputs, do the following:
 - i. Click the **Criteria** radio button to specify the input source for the test case as criteria-based. RCKMS displays the criteria options in the *Test Case Inputs* section.

RCKMS Main Menu ▾ Home Help About RCKMS

Test Cases

Edit Test Case

Details Test Subject **Test Inputs**

Specify the input source for the test case (criteria or file), then either add the appropriate inputs from a criteria template or upload a file from your computer containing the same information.

Select a Test Source ☒ Criteria ☐ File

Test Case Inputs

Label	Criteria Type	Method
Hepatitis C Infection (as a diagnosis or active problem)	TESTCASE	DIAGNOSIS

+ Add Test Case Input

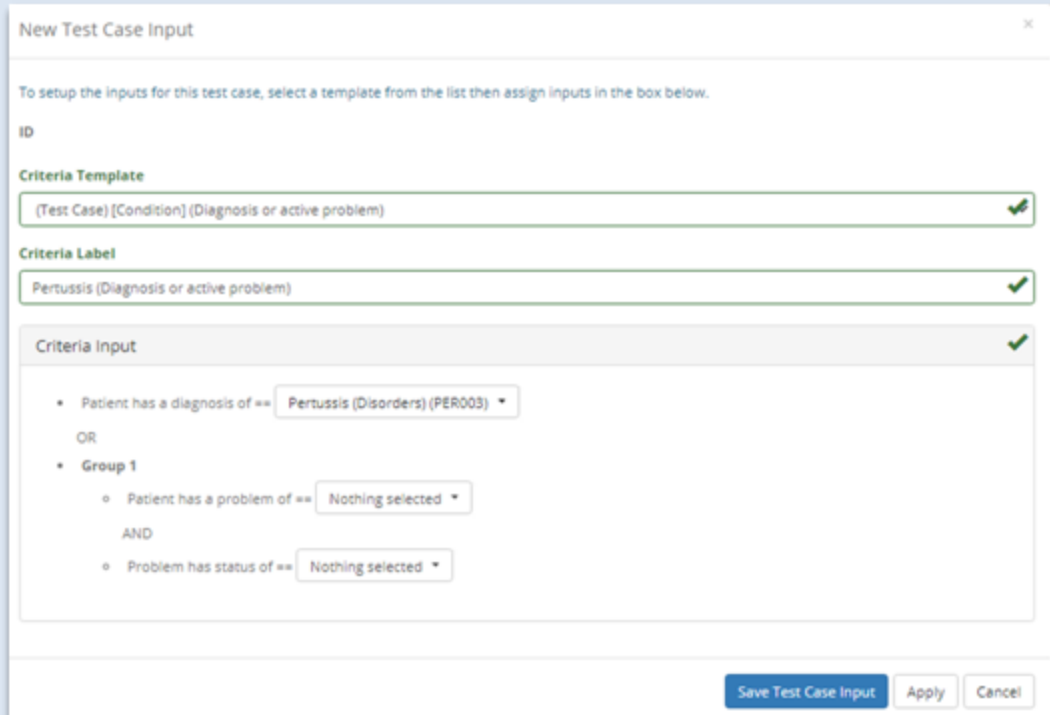
Expected Criteria

Label
Hepatitis C Virus Infection (as a diagnosis or active problem)

+ Add Expected Criteria

Run Test **Save Test Case** **Apply** **Close**

- ii. Complete one of the following:
 1. To edit criteria-based test case input, click the **Edit** icon for the criterion you want in the *Test Case Inputs* section. RCKMS displays the *Edit Criteria* window.
 2. To add a new criterion, click the **Add Test Case Input** button in the *Test Case Inputs* section. RCKMS displays the *New Test Case Input* page.



New Test Case Input

To setup the inputs for this test case, select a template from the list then assign inputs in the box below.

ID

Criteria Template

(Test Case) [Condition] (Diagnosis or active problem)

Criteria Label

Pertussis (Diagnosis or active problem)

Criteria Input

- Patient has a diagnosis of == Pertussis (Disorders) (PER003) ▼

OR


- Group 1
 - Patient has a problem of == Nothing selected ▼

AND

- Problem has status of == Nothing selected ▼

Save Test Case Input Apply Cancel

- iii. Click **Criteria Template** and choose the option you want. RCKMS displays the *Criteria Input* options at the bottom of the window. The Criteria Template refers to the type of criteria you are intending to test (e.g., Diagnosis, Lab Test Results). Note that the Criteria Template options are read-only when editing existing criteria.
 - iv. Click **Criteria Label** and type the label you want. Note that, on selection of the *Criteria Template* option, RCKMS displays sample text in the *Criteria Label* field. The label will be used in the Test Results window.
 - v. Add or edit the *Criteria Input* information you want.
 1. To add or edit *Criteria Input* information, click the drop-down for the criteria input (also known as “criteria predicates”) you want and choose the option you want.
 2. You can also type the name you want in the text box to display and choose the input information.
 - vi. Click the **Save Test Case Input** button. RCKMS saves the criteria information and displays the *Test Case Inputs* section of the *Test Inputs* tab.
- c. To work with *file-based* test case input, do the following:
- i. Click the **File** radio button to specify the input source for the test as file-based. RCKMS displays *Payload Type* options.

- ii. Click the **eICR** radio button to work with an eICR file-based input.
- iii. Click the **vMR** radio button to work with a vMR file-based input.
- iv. Click the **Choose File** button and choose the file you want to upload from your computer.
- d. Optionally, add or edit *Expected Criteria* information. The *Expected Criteria* are those criteria expected to yield a reportable result based on your reporting rules. They do no impact the outcome of the test case, but can be used to double check that the test case passes based on the criteria that you expect.
 - i. Do one of the following:
 - To edit expected criteria, click the  **Edit** icon for the criterion you want in the *Expected Criteria* section. RCKMS displays the *Edit Expected Criteria* window.
 - To add a new expected criterion, click the **New Expected Criteria** button in the *Expected Criteria* section. RCKMS displays the *New Expected Criteria* window.
 - ii. Click *Criteria Template* and choose the option you want.
 - iii. Click **Save Expected Criteria**. RCKMS saves the expected criteria and displays the *Expected Criteria* section on the *Test Inputs* tab.
- e. Click the **Save Test Case** button. RCKMS saves the test case and displays the *Test Cases* page.

Testing Tip

For file options, we recommend that users test with eICR files. If you are interested in learning more about vMR testing tools, please submit a ticket.

5.3.1 Details Tab

The *Details* tab of the *New Test Case* page is where you add or edit basic details about the test case.

The screenshot shows the 'New Test Case' page in the RCKMS application. The 'Details' tab is selected. The form includes the following fields and controls:

- Reporting Specification:** A dropdown menu showing 'Pertussis - 3.0 Release 20200110'.
- Name:** A text input field containing 'Pertussis -Test PHA Diagnosis = Pertussis, Patient Age <1'.
- Description:** A text input field containing 'Patient has a diagnosis = Pertussis'.
- Condition Expected to be Reportable:** Radio buttons for 'Yes' (selected), 'May be reportable', and 'No'.
- Reporter Type:** A dropdown menu showing 'Provider/Facility Reporting'.
- Skip this test:** An unchecked checkbox.
- Buttons:** 'Save Test Case' (blue), 'Apply' (grey), and 'Cancel' (grey).

The following table details the options on the *Details* tab.

Item	Description
Reporting Specification	The reporting specification for the condition you want to test. The reporting specification must have a status of “Published to Test” or “Published to Production”.
Name	The name of the test case.
Description	The description and details of the test case.
Condition Expected to be Reportable	The reportability outcome for the customized test case.
Reporter Type	The type of reporter the test case applies to.
Skip this test	This button is not functional at this time.
Save Test Case	Click to save the test case information.
Apply	Click to save your changes and keep the window open.
Cancel	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.2 Test Subject Tab

The *Test Subject* tab is where you specify test subject information, including gender and age.

The screenshot shows the 'Edit Test Case' window in RCKMS, specifically the 'Test Subject' tab. The window has a header with the RCKMS logo and a 'Main Menu' dropdown. Below the header, there's a 'Test Cases' banner. The main content area is divided into two sections. On the left, under 'Edit Test Case', there are three tabs: 'Details', 'Test Subject' (selected), and 'Test Inputs'. Below the tabs, a instruction says 'Specify the subject's gender then select the test type to complete the date specifications.' There are two rows of input fields: 'Gender' with a dropdown menu showing 'Female (F)', and 'Test Type' with radio buttons for 'Offset-Based' (selected) and 'Date-Based'. Below these is an 'Age Offset' text input field containing '36y'. On the right side of the window, there are three rows of input fields: 'Date of Birth' with a date picker showing '08/01/2019', 'Execution Date' with a date picker showing '04/01/2020', and 'Age at Execution' with a text input field showing '8 months'. At the bottom of the window, there are four buttons: 'Run Test', 'Save Test Case', 'Apply', and 'Close'.

The following table details the options on the *Test Subject* tab.

Item	Description
Gender	The gender of the test subject.
Test Type	The type of the test, either offset-based or date-based.
Age Offset	The exact age of the test subject.
Date of Birth	The date of birth of the test subject.
Execution Date	The date the test case is executed.
Age at Execution	The age of the test subject at the date of execution. This is calculated based on the Date of Birth and the Execution Date.
Save Test Case	Click to save the test case information.
Apply	Click to save your changes and keep the window open.
Cancel	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.3 Test Inputs Tab – Criteria Test Source

The *Test Inputs* tab is where you specify the test source of interest, either criteria-based or file-based.

The following table details the options on the *Test Inputs* tab for a criteria-based test case.

Item	Description
Select a Test Source	The source of the test, either criteria-based or file-based.
Test Case Inputs	A summary of the test case inputs for the test case, with the label, criteria type, and method of each input. You can add a new test case input, or edit or delete an existing test case input.
Add Test Case Input	Click to open the <i>Test Case Input</i> window.
Expected Criteria	Those criteria that are expected to yield a reportable result based on the reporting rules. You can add, edit or delete expected criteria.
Edit	Click to edit the selected test case input or expected criterion.
Delete	Click to delete the selected test case input or expected criterion.
Add Expected Criteria	Click to open the <i>Expected Criteria</i> window.
Run Test	Click to run the test case using the inputs you have entered.
Save Test Case	Click to save the test case information.
Apply	Click to save your changes and keep the window open.
Cancel	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.4 Test Inputs Tab – File Test Source

The options for editing test inputs are slightly different if you select File as the Test Source. Instead of the Test Case Inputs section, you now have the option to select a Payload Type and Upload a File.

RCKMS Main Menu ▾ Home Help User Guide About RCKMS

Test Cases

Edit Test Case

Details Test Subject **Test Inputs**

Specify the input source for the test case (criteria or file), then either add the appropriate inputs from a criteria template or upload a file from your computer containing the same information.

Select a Test Source ☐ Criteria ☒ File

Payload Type ☒ eICR ☐ vMR

Upload a File **Choose File** No file chosen
Select a file to upload from your computer.

Expected Criteria

Label

No data available in table

Label

+ Add Expected Criteria

Run Test **Save Test Case** **Apply** **Cancel**

The following table details the options on the *Test Inputs* tab for a file-based test case.

Item	Description
Select a Test Source	The source of the test, either criteria-based or file-based.
Payload Type	The type of file you will upload. Options are eICR or vMR.
Upload a File	Click Choose File to navigate to the test file on your computer.
Expected Criteria	Those criteria that are expected to yield a reportable result based on the reporting rules. You can add, edit, or delete expected criteria.
Add Expected Criteria	Click to open the <i>Expected Criteria</i> window.
Run Test	Click to run the test case using the inputs you have entered.
Save Test Case	Click to save the test case information.
Apply	Click to save your changes and keep the window open.
Cancel	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.5 Test Case Input Window

The *Test Case Input* window opens when you click the **Add New Test Case Input** button or the **Edit** button for an existing input. Use this window to add or edit the reporting criteria information that you want to test.

The following table details the options in the *Test Case Input* window.

Item	Description
ID	An auto-generated ID for the test case input. This field will be blank if you are adding a new test case input, as the ID is assigned when you save the test case.
Criteria Template	A drop-down list of the available criteria templates for the given condition.
Criteria Label	Auto-populated with the text from the criteria template. Update the criteria label to specify what you are testing.
Criteria Input	Displays the criteria as logic statements. Populate the statements with the criteria you are testing.
Save Test Case Input	Click to save the test case input information.
Apply	Click to save your changes and keep the window open.
Cancel	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.6 Expected Criteria Window

The *Expected Criteria* window opens when you click the **Add Expected Criteria** button or the **Edit** button for an existing criterion. The Expected Criteria are those criteria that are expected to yield a reportable result based on the reporting rules.

The following table details the options in the *Expected Criteria* window.

Item	Description
Criteria Template	A drop-down list of the available criteria templates for the given condition.
Save Expected Criteria	Click to save the expected criteria information.
Apply	Click to save your changes and keep the window open.
Close	Click to cancel your changes, or close if you have not made any changes and display the previous page.

5.3.7 Test Results Page

The *Test Results* page:

- Displays a summary of result information at the top of the page, followed by details on *Jurisdiction Information*, *Test Subject* and *Inputs*, *Logs and Messages*, and *Links and References* information. You can hover your mouse over these options for more details.
- Provides options for viewing and downloading the input and output XML files structuring the input and output data. You can click the link to expand the section you want and view its details. Click **Close** to close the *Test Results* page.

The test results display what you chose as the criteria expected to be reportable and the criteria that is found to actually be reportable:

- You indicate the *Expected Reportable* information using the *Condition Expected to be Reportable* options in the test case.
- The *Actual Reportable* information indicates if the test case resulted in a [determination of reportability](#).

The results also display the:

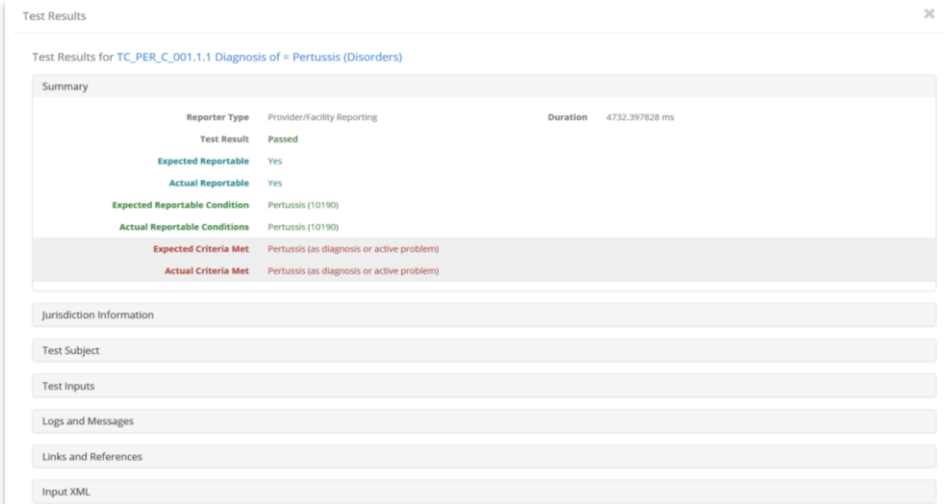
- Expected Reportable Condition*, which is set by selecting a condition under the *Reporting Specification* field in the test case.
- The results return the *Actual Reportable Conditions*, representing one or more conditions that are found to be reportable based on running the test input through all of a [PHA's](#) reporting specifications.

In addition, the test results display the:

- *Expected Criteria Met*, which are set by selecting one or more criteria under *Expected Criteria* in the test case.
- The *Actual Criteria Met* represents one or more criteria that are met based on running the test input through all of a PHA's reporting specifications. It may or may not match the criteria *Expected to be met*. If the *expected and actual* do not match, then the reporting specifications should be examined to determine the reason for the mismatch and if the mismatch can be explained.

Testing Tip

The *Expected Criteria Met* and the *Actual Criteria Met* are informational only and do not affect the test result outcome.



Test Results

Test Results for TC_PER_C_001.1.1 Diagnosis of = Pertussis (Disorders)

Summary	
Reporter Type	Provider/Facility Reporting
Test Result	Passed
Duration	4732.397828 ms
Expected Reportable	Yes
Actual Reportable	Yes
Expected Reportable Condition	Pertussis (10190)
Actual Reportable Conditions	Pertussis (10190)
Expected Criteria Met	Pertussis (as diagnosis or active problem)
Actual Criteria Met	Pertussis (as diagnosis or active problem)

Jurisdiction Information

Test Subject

Test Inputs

Logs and Messages

Links and References

Input XML

The following table details the options on the *Test Results* window.

Item	Description
Reporter Type	The reporter type associated with the test case.
Test Result	The test result. The test result compares the <i>Expected Reportable</i> information to that you indicate as <i>Actual Reportable</i> .
Expected Reportable	This specifies if the test case is expected to be reportable. You indicate the <i>Expected Reportable</i> information using the <i>Condition Expected to be Reportable</i> option in the test case.
Actual Reportable	The test case evaluation of actual reportability. It represents the determination of whether the <i>Expected Reportable</i> Condition is reportable based on exercising the test input through all of a PHA's reporting specifications.
Expected Reportable Condition	The reportable condition that was expected to be found. You indicate the <i>Expected Reportable Condition</i> by selecting a condition under the <i>Reporting Specification</i> field in the test case.
Actual Reportable Condition	The actual reportable condition met. It represents one or more conditions that are found to be reportable based on running the test input through all of a PHA's reporting specifications.
Expected Criteria Met	The criteria that was expected to be met. The <i>Expected Criteria Met</i> does not affect the test result outcome. It is the criteria you expect to be met when the test case is run.

Item	Description
Actual Criteria Met	The actual criteria that is met. It represents one or more criteria that are met based on running the test input through all of a PHA's reporting specifications. The <i>Actual Criteria Met</i> does not affect the test result outcome.
Duration	The test case execution time in milliseconds.
Jurisdiction Information	Click to display jurisdiction and routing information.
Test Subject	Click to display demographic information about the test subject.
Test Inputs	Click to display test source and expected criteria information.
Logs and Messages	Click to display messages generated during test case execution indicating reportability outcome following test case execution.
Links and References	Click to display any internal and external references associated with the authored condition.
Input XML	Click to display vMR XML input file contents representing the information and options submitted in the test case.
Output XML	Click to display vMR XML output file contents representing the information and options resulting from the test case execution.
Close	Click to close and display the previous page.

5.4 Testing Using the Shared Service Submission Tool

Similar to the file testing capability in the Test Case Manager tool, the Shared Service Submission Tool allows you to test reporting specifications with an input file. Keep in mind the following:

- When you run the Shared Service Submission Tool, the application simulates receipt of a report and moves that information through the logic chain defined for the reporting specification's criteria, logic sets, and rules options, as determined by the routing information in the uploaded test file.
- A successful test case provides you with confirmation that the criteria and rules for a given reporter type provide the expected results.
- When a test case file is run using the Shared Service Submission Tool, it assesses the address information in the file to determine the jurisdiction whose rules should be run.

You can use the Shared Service Submission Tool to confirm the reporting criteria as Sufficient, Necessary, and Optional based on rules for the applicable reporter type, as displayed in the *Specifications* tab. When you run a test case, you are testing the logic set and rules for the reporting criteria associated with the applicable reporter type. You can run the test cases to account for any jurisdiction-specific information contained in the uploaded file. The Shared Service Submission Tool:

- Matches the patient address zip code in the eICR to zip codes associated with PHAs in RCKMS. If a match is found, that jurisdiction's rules are run. If no match is found, the patient address state code is used to do the match.
- Matches the facility address zip code in the eICR to zip codes associated with PHAs in RCKMS. If a match is found, that jurisdiction's rules are run. If no match is found, the facility address state code is used to do the match.

Authoring Tip

See [Section 3.1.2, Zip Codes](#) for additional details on how the match between eICR address fields and the zip codes associated with a jurisdiction are used to determine the jurisdictional rules to be run.

- If a condition is identified when the jurisdiction's rules are run, then the Shared Service Submission Tool checks the *Specifications Apply When* settings associated with the reporting specification for the condition.
 - If the patient's address was in the jurisdiction and *Specifications Apply When* setting was to report if the *Patient is a Resident of the Jurisdiction*, then the report would be sent to the jurisdiction.
 - If the facility address was in the jurisdiction and the *Specifications Apply When* setting was to report if *Care was Provided in the Jurisdiction*, then the report would be sent to the jurisdiction.

You can find example eICR files on the [eCR website](#) or by submitting a ticket to the RCKMS team. You can view and edit these files using an XML editor program or Notepad++. Modify the test file to include the condition, criteria, and patient and facility addresses you want to test, but make sure to replace all personally identifiable information (PII) with dummy data. For assistance modifying test eICR files to meet your jurisdiction's testing needs, contact the eCR Team at eCR-Info@aimsplatform.org.

To run a test case using the Shared Service Submission Tool, perform the following steps:

1. Click **Main Menu** drop-down in the menu bar at the top of the page and choose **Shared Service Submission Tool**. RCKMS displays the *Shared Service Submission Tool* page.

2. Select an **Environment** radio button and choose the environment you want. When testing an eICR for a reporting specification, you should always select the [production environment](#).
3. Select a **Payload Type** radio button and choose the type of file you will be uploading. RCKMS allows you to pick either **vMR** or **eICR** payload types. To evaluate an eICR, be sure to select the eICR payload type.
4. Select the **Submission Time** you would like the file to be run through the Shared Service Submission Tool. RCKMS allows you to enter a date, but the file will still be run when you click **Run Message**.

Testing Tip


We recommend that users test with eICR files. If you are interested in learning more about vMR testing tools, please submit a ticket.

5. Click the **Choose File** button to select a file to upload. RCKMS allows you to upload a vMR or eICR file. The file you upload should correspond to the Payload Type that you selected.
6. When finished, click the **Run Message** button. RCKMS displays the *Shared Service Results* page.

5.4.1 Shared Service Submission Tool Page

The *Shared Service Submission Tool* page is where you upload a test file to the Shared Service Submission Tool to confirm that the criteria and logic rules authored in the Specifications Grid return the expected results.

The following table details the options on the *Shared Service Submission Tool* page.

Item	Description
Environment	The environment you want to test in, either production or test. <ul style="list-style-type: none"> Select Production if you want the test to evaluate against the live version of your rules. Select Test if you want the test to evaluate the draft version of your rules before you publish to production.
Payload Type	The type of file you want to test with. We recommend testing with an eICR.
Submission Time	Provides the option to click the  Calendar button to schedule the submission to run for a future time or select today's date to run on demand. This does not impact when the tool will run. The test file will still run when you select Run Message .
Upload a File	Select Choose File to upload a test file. Browse for the test file on your computer and upload it to the tool.
Run Message	Click this button to execute the test.

5.5 Shared Service Results

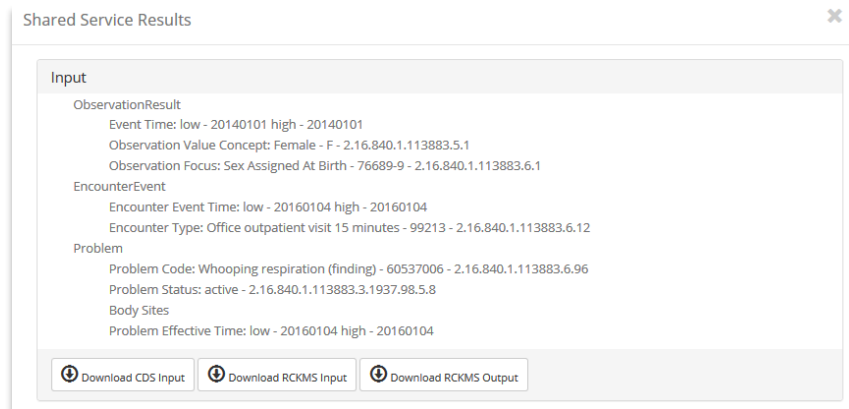
When you click **Run Message** in the Shared Service Submission Tool, RCKMS processes the message and displays the *Shared Service Results* page. There are three sections on the *Shared Service Results* page: *Input* section, *Response Details* section, and the *Jurisdiction Information* section. Each section is described in detail below.

5.5.1 Input Section

The *Input* section of the *Shared Service Results* page lists information about the Observation, Encounter, and Problem, which is pulled from the input file. A sample input is shown in the screenshot below, but the fields may vary depending on what is included in the input file.

There are buttons at the bottom of the section to download three files:

- **CDS Input:** The sample eICR used for testing
- **RCKMS Input:** Primarily used for internal testing by the RCKMS Team
- **RCKMS Output:** Contains the determination of reportability from RCKMS and is used to generate the [RR](#). Most of this information is also displayed in the *Shared Service Results* window.



5.5.2 Response Details Section

The *Response Details* section displays information about the message processing. Keep in mind the following:

- This section alerts you if the [DSS](#) ran successfully and which jurisdiction's reporting specifications were run.
- The Response Code is displayed and the value of "200" indicates the message was successfully processed. If you see any other code, you should open a ticket to get help from the [RCKMS Administrator](#). The Request Date indicates the date the message was submitted to run.

Response Details	
Messages	<ul style="list-style-type: none"> • OpenCDS invocation ran successfully for knowledge module RCKMS^gov.cdc.rckms.nyc^1.0.0. • Condition code Pertussis (disorder) (27836007) was reportable for jurisdiction New York City Department of Health and Mental Hygiene because reportPatientResident flag was checked. • Service request completed successfully.
Response Code	200
Request Date	2020-06-22Z

5.5.3 Jurisdiction Information Section

The *Jurisdiction Information* section has a summary area and five additional sections, which are described in more detail below:

- Reportable Conditions
- Logic Sets
- Criteria
- Links and References
- Output

Jurisdiction Information	
Rules run for	New York City Department of Health and Mental Hygiene (nyc)
Service Response Code	200
Message	Jurisdiction request completed successfully for nyc
Location Relevance	Both patient home address and provider facility address (RRVS7)
Authoring Agency	New York City Department of Health and Mental Hygiene (nyc)
Routing Entity	New York City Department of Health and Mental Hygiene (nyc)

In the summary area at the top of the *Jurisdiction Information* section, the following fields are displayed:

Field	Description
Rules run for	Jurisdiction whose rules were run.
Service Response Code	A response code of “200” indicates that the message was successfully processed.
Message	Whether the test ran successfully, and for which jurisdiction.
Location Relevance	Identifies which address or addresses (patient and/or provider) matched to the jurisdiction.
Authoring Agency	Agency that authored the rules that were run. An Authoring Agency could have authored rules on behalf of another agency (e.g., a state authoring rules for a local agency).

Field	Description
Routing Entity	Agency that receives the eICR and RR. This is defined during setup, on the <i>Edit Jurisdiction</i> page using the Route eICR and Reportability Response to field.

5.5.3.1 Reportable Conditions

Reportable Conditions

Condition Name	Pertussis
Condition Code	27836007 - Pertussis (disorder) - 2.16.840.1.113883.6.96
NNC	10190
Reporting Time Frame	24 Hour(s)
Specification ID	7aabd1919b802f522f0a4f39b6728d3e
Reportable	Yes
Responsible Agency	New York City Department of Health and Mental Hygiene (nyc)

The Reportable Conditions area lists:

Field	Description
Condition Name	Name of the reportable condition
Condition Code	SNOMED code for the reportable condition
NNC Number	Nationally Notifiable Condition number. A unique five-digit numerical code assigned to each notifiable disease or condition. This field will be blank for conditions that are not nationally notifiable.
Reporting Time Frame	Reporting time frame authored in the <i>Specifications</i> tab of the Reporting Specification
Specification ID	Auto-generated ID for the authored Reporting Specification
Reportable	Specifies whether the case was Reportable or May Be Reportable
Responsible Agency	PHA to which reporting is legally required

5.5.3.2 Logic Sets

Logic Sets

ID	fc6bb4365b4a1cd5d93600606f1714f1
Name	DX
Reporter Type	Provider/Facility Reporting
Reporting Time Frame	24 Hour(s)

ID	111ad08f2c76a8be159a125bf80466fd
Name	Lab Positive (Provider)
Reporter Type	Provider/Facility Reporting
Reporting Time Frame	24 Hour(s)

For the logic set that determined reportability for the condition listed in the Reportable Conditions area, the Logic Sets area lists:

Field	Description
ID	Auto-generated ID for the applicable logic set
Name	Name of the logic set that determined reportability
Reporter Type	Reporter type for the logic set authored in the <i>Specifications</i> tab of the Reporting Specification
Reporting Time Frame	Reporting time frame authored in the <i>Specifications</i> tab of the Reporting Specification

5.5.3.3 Criteria

Criteria

Relationship ID	9ef2756b1dbec1bf14265966902c9222
Criteria ID	9ef2756b1dbec1bf14265966902c9222
Name	Pertussis (as diagnosis or active problem)
Criteria Type	Clinical

For the criteria used to determine reportability of the condition listed in the Reportable Conditions area, the Criteria area lists:

Field	Description
Relationship ID	Auto-generated ID for the relationship between the reportable condition and the criteria
Criteria ID	Auto-generated ID for the criterion
Name	Name of the criterion that determined reportability
Criteria Type	Type (e.g., Clinical, Laboratory, Demographic) of criteria that determined reportability

5.5.3.4 Links and References

For the reporting specification for a condition, the Links and References area lists the following fields. The ID is an auto-generated field for the reference. All other fields are defined by the author in the [External References](#) tab of the Reporting Specification.

- ID
- Name
- Description
- URL
- Priority
- Category
- Excerpts of Internal and External References

Authoring Tip

External References are also included in the RR. The Name and Excerpt fields are for internal use only and will not appear in the RR. Multiple references are ordered by Category.

<u>Links and References</u>	
ID	eb5b50988fbb549de12430332a61dfd1
Name	CDC
Description	CDC Reference Guide for Pertussis
URL	http://www.cdc.gov/pertussis/
Priority	Information only
Category	Additional resources
Excerpt	Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium <i>Bordetella pertussis</i> . Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with pertussis often needs to take deep breaths which result in a "whooping" sound. Pertussis can affect people of all ages, but can be very serious, even deadly, for babies less than a year old.

5.5.3.5 Output

The Output area shows more details about Observation Results, including:

- Logic Sets
- Criteria
- Diagnosis (if applicable)

[Output](#)

Download CDS Output

```

ObservationResult
  Event Time: low - 20151225000000.000+0000 high - 20151225000000.000+0000
  Observation Value Concept: Female - F - 2.16.840.1.113883.5.1
  Observation Focus: Sex Assigned At Birth - 76689-9 - 2.16.840.1.113883.6.1
ObservationResult
  Observation Value Concept: Sales - 159606005 - 2.16.840.1.113883.6.96
  Observation Focus: Employment detail - 364703007 - 2.16.840.1.113883.6.96
EncounterEvent
  Encounter Event Time: low - 20160104000000.000+0000 high - 20160104000000.000+0000
  Encounter Type: Office outpatient visit 15 minutes - 99213 - 2.16.840.1.113883.6.12
ObservationResult
  Observation Focus: PH_DischargeDisposition_HL7_2x - 2.16.840.1.113883.3.1829.11.4.3.12
EncounterEvent
  Encounter Event Time: low - 20160104000000.000+0000 high - 20160104000000.000+0000
  Encounter Type: Office outpatient visit 15 minutes - 99213 - 2.16.840.1.113883.6.12
Problem
  Problem Code: Coronavirus infection, unspecified - B34.2 - 2.16.840.1.113883.6.90
  Problem Status: completed - 2.16.840.1.113883.3.1937.98.5.8
  Body Sites
  Diagnostic Event Time: low - 20160104000000.000+0000
  Problem Effective Time: low - 20160104000000.000+0000 high - 20160104000000.000+0000

Rules run for      Georgia Department of Public Health (ga)
Service Response Code 200
Message           Jurisdiction request completed successfully for ga
Location Relevance Patient home address (RRV55)
Authoring Agency   Georgia Department of Public Health (ga)
Routing Entity     Georgia Department of Public Health (ga)
  
```

Testing Tip

We recommend downloading the CDS Output only if you are familiar with vMR files.

It also displays a button that enables you to download the CDS Output, the vMR output from the DSS that gets transformed into the RCKMS Output.

Within the RCKMS Output, there is a field labeled Location Relevance. Location Relevance describes which location's rules (facility address, patient address, lab address) were used to determine that the case was reportable. [Jurisdiction Administrators](#) can set where they would like to receive reports from in the Condition Details tab. For more information, refer to [Section 4.6, Reporting Specification Details tab](#).

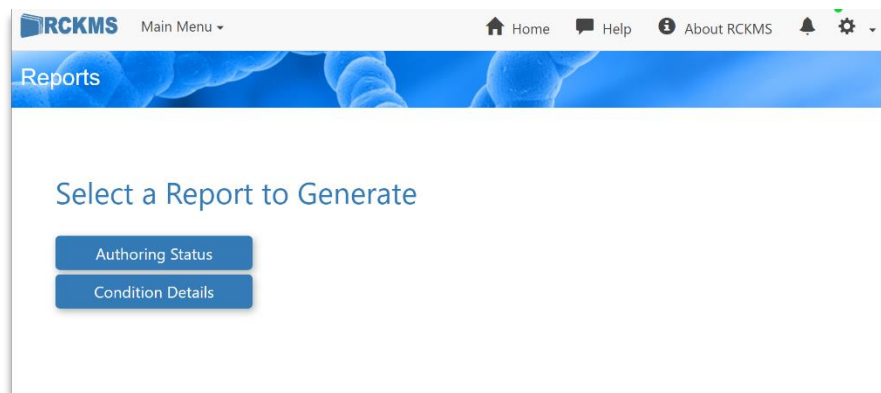
6 Reports Module



There are two reports currently available in [RCKMS](#) for viewing information related to [jurisdictions](#) and [reporting specifications](#): The [Authoring Status report](#) and the [Condition Details report](#). Review this section to learn about the information provided in each report and how to run the reports.

You can enter queries and generate reports using the *Reports* module. The *Reports* module provides a printable report or electronic file that contains information about the jurisdiction details and reporting specifications that were entered through the [Authoring Interface](#).

The *Reports* module displays options for available reports. You can hover over the name of the report to see what the report includes. Clicking on a report allows you to enter queries, view the report, and export the report.



The Authoring Status report is a Jurisdiction Report containing:

- Public Health Agency Details
- Condition List
- Zip Codes
- Contact Information
- [Responsible Agency](#) by Condition
- External Links and References by Condition

The Condition Details report is available for both Default and Jurisdiction Reporting Specifications. It includes:

- Condition Details
- Reporting Specification Status
- Reporting Preferences
- Links and References
- [Logic Set](#) Details
- [Criteria](#) List
- Concept and [Value Sets](#)

6.1 Authoring Status Report

The Authoring Status Report displays a summary output of all information related to your jurisdiction. You may want to run this report to see a summary of the conditions your jurisdiction is authoring and their status, users in your jurisdiction, jurisdiction contact information, and [External References](#) for each condition.

To run the Authoring Status report, perform the following steps:

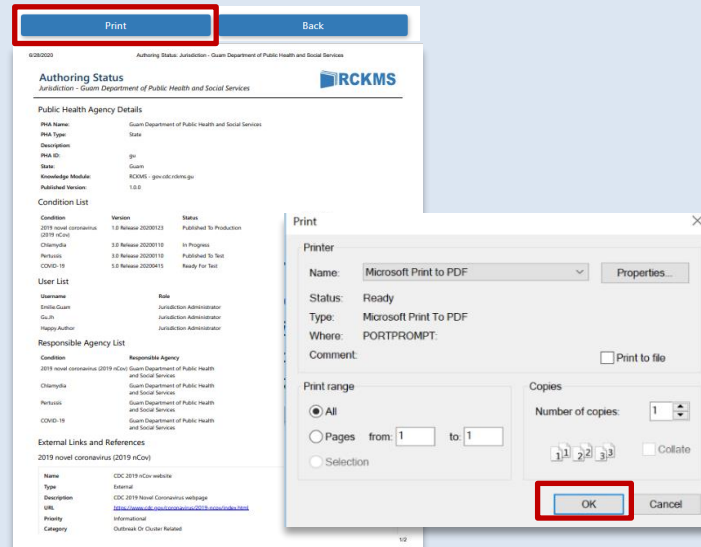
1. Access the *Reports* module by doing one of the following:
 - Click **Reports** in the left navigation menu on the *Home* page. RCKMS displays the *Reports* page.
 - Click the **Main Menu** drop-down at the top of the page and choose Reports. RCKMS displays the *Reports* page.
2. Click the **Authoring Status** button. The report will run automatically for your jurisdiction.



3. Click the **Export Report** button to generate a document that can be printed or saved as a PDF.



- To save, click **Print** and the *Print* window will open. Change the printer name to the Microsoft Print to PDF option. Click **OK**.



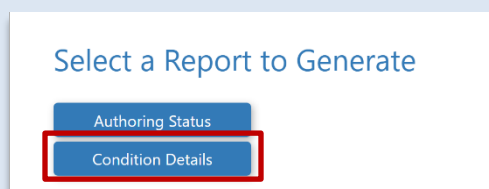
6.2 Condition Details Report

The Condition Details Report displays a detailed output of the reporting specification for the jurisdiction and condition you select, and listings of the [Sufficient](#), [Necessary](#), and [Optional](#) reporting rules. You may run this report for the default or for any jurisdiction that has authored in RCKMS. This report is useful for:

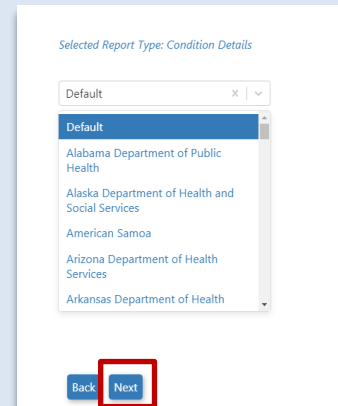
- Reviewing the default reporting specification
- Seeing a summary of your jurisdiction's reporting specifications
- Viewing how other jurisdictions have authored conditions

To run the Condition Details report, perform the following steps:

- Access the *Reports* module by doing one of the following:
 - Click **Reports** in the left navigation menu on the *Home* page. RCKMS displays the *Reports* page.
 - Click the **Main Menu** drop-down at the top of the page and choose **Reports**. RCKMS displays the *Reports* page.
- Click the **Conditions Details** button.



3. Select the jurisdiction whose reporting specification you want to view and then click **Next**. You can also select “Default” to view the default reporting specification for all conditions available for authoring.

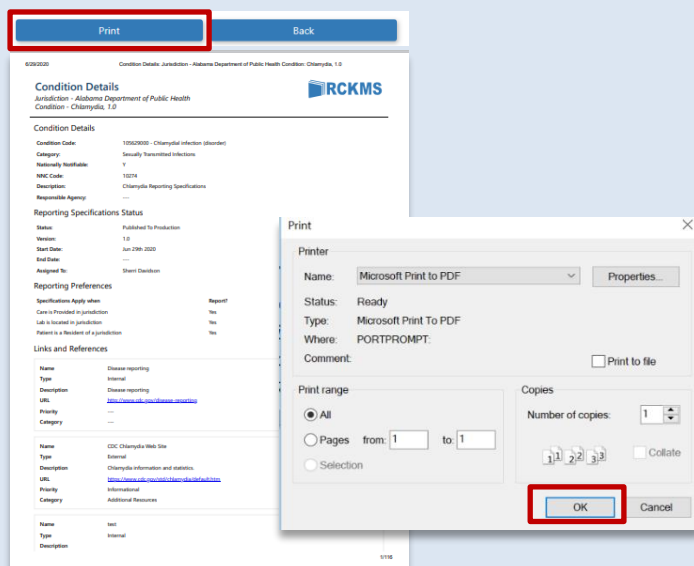


4. Select a condition from the drop-down list. The list will include only specifications that a jurisdiction has imported for authoring. The report will automatically be generated when you select a condition.

5. Click the **Export Report** button to generate a document that can be printed or saved as a PDF.



6. To save, click **Print** and the *Print* window will open. Change the printer name to the Microsoft Print to PDF option. Click **OK**.



Glossary

APHL Informatics Messaging Service (AIMS)

A secure, cloud based environment that accelerates the implementation of public health messaging solutions by providing shared services to aid in the transport, validation, translation, and routing of electronic data.

Association of Public Health Laboratories (APHL)

An organization that works to strengthen laboratory systems serving the public's health in the United States and globally. APHL represents state and local governmental health laboratories in the United States. Its members, known as "public health laboratories," monitor, detect, and respond to health threats.

Authoring Interface

The centralized web portal that PHAs use to input, edit, and manage reporting criteria for their jurisdiction. The Authoring Interface comes pre-populated with default reporting specifications based on CSTE position statements as is designed to meet HL7 standards. Each PHA can either use the default content as-is or customize it to meet their needs.

Authoring Status Report

The Authoring Status Report displays a summary output of all information related to your jurisdiction. This generates a Jurisdiction Report that includes PHA details, condition list, zip codes, contact information, user list, responsible agency by condition, and external links and references by condition.

Condition Details Report

The Condition Details Report displays detailed output of the reporting specification for the jurisdiction and condition you select, and listings of the Sufficient, Necessary, and Optional reporting rules. You may run this report for the default or for any jurisdiction that has authored in RCKMS. The Condition Details Report also generates reporting specification status, reporting preferences, links and references, logic set details, criteria list, and concept and value sets.

Content Repository

A collection of condition-specific reference materials for the conditions you may be authoring. The Content Repository includes default reporting specifications, Value Sets, and the RCTC.

Council of State and Territorial Epidemiologists (CSTE)

A nonprofit membership organization consisting of local, territorial, county, and state public health epidemiologists representing multiple levels of public health practice. CSTE works to advance public health policy and epidemiologic capacity. It provides information, education, and developmental support of practicing epidemiologists, as well as expertise, technical advice, and assistance for program and surveillance efforts to partner organizations and federal public health agencies, such as the Centers for Disease Control and Prevention in a broad range of areas, including occupational health, infectious diseases, environmental health, chronic diseases, injury control, and maternal and child health.

Criteria

The narrative descriptions that determine whether a case should be reported to Public Health. In the RCKMS application, you use the criteria options to capture information, such as a diagnosis, that can be input in a

diagnosis field or captured in an active problem list. Each criterion is tied to logic that is supported by Value Sets and are represented by means of criteria templates that provide pre-populated options used to create jurisdiction-specific criteria using the options on the Criteria window.

Criteria Templates

The template of pre-populated options upon which the criteria are based. Each criterion is tied to logic that is supported by Value Sets and are represented by criteria templates.

Decision Support Service (DSS)

A service linked to provider EHR systems that is used to conduct a query to determine if a case should be reported and, if so, to where. The DSS uses the criteria and rules logic you entered using the RCKMS Authoring Interface to evaluate an eICR and determine reportability. After the patient visits the provider, the encounter information is recorded in the EHR. If the EHR detects information that suggests a suspected case, the EHR will call the DSS, which provides the [RR](#).

Default Content

The reporting specifications for each of the conditions pre-populated in the RCKMS and made available through the website.

Determination of Reportability

The process of reviewing an initial core message against rules logic to assess if a case report should be sent to a jurisdiction based on the jurisdiction's reporting specifications. RCKMS centralizes this function in the DSS.

Electronic Case Reporting (eCR)

The electronic transmission of case reports from providers' EHR systems to Public Health.

Electronic Health Record (EHR)

An electronic version of a patient's medical history that is maintained by the provider over time and may include all of the key administrative clinical data relevant to that person's care under a particular provider, including demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports.

Electronic Initial Case Report (eICR)

An initial case report made to Public Health containing sufficient data for PHAs to initiate investigation or other appropriate public health activities that is automatically initiated by the EHR when patient data is matched against a series of RCTCs. The eICR conveys core, initial case data to a PHA that may also lead to additional reporting or follow-up intended to confirm reportability, provide condition-specific or public health jurisdiction-specific reporting data, or support public health investigation, contact tracing, and/or countermeasure administration. The eICR serves as input to reportability evaluation to RCKMS and also allows PHAs to communicate the reportability of a condition back to clinical care personnel through the RR.

External Reference

Information, such as text, links to websites, documents, and other modes of information that the PHA makes available to reporters.

Internal Reference

Information, such as text, links to websites, documents, and other modes of information for use by the PHA.

Jurisdiction

The physical location bounding the PHA's area of responsibility.

Jurisdiction Administrator

An RCKMS user enabled to view and edit information for their assigned jurisdiction and no other.

Jurisdictions Module

The RCKMS application pages displaying detailed information about your jurisdiction, including the PHA details, status of the supported conditions and reporting specifications, as well as zip codes and users.

Knowledge Repository

A database containing all the data related to reporting specifications, both the default content, and any customizations made by a PHA. When a PHA authors in the Authoring Interface, those data are stored here to be deployed to the DSS.

Logic Sets

Logical statements expressed in machine-processable language that indicate when a given reporter type should report to Public Health and what is required of them for reporting. A logic set is translated into rules logic for use in determining reportability. Used in combination with reporting criteria, logic sets follow the "S, N, O" notation used in the CSTE position statements. "S" indicates the criterion by itself qualifies the case for reporting, where "N" indicates necessary and "O" is optional.

May be Reportable

May be reportable refers to age-related cases where the age criterion is missing. Without the age information, RCKMS cannot determine whether or not the case is reportable, so it returns a "May be Reportable" response with the reason included.

Necessary

As part of the S, N, O notation, Necessary is used in combination with logic sets to indicate that a criterion qualifies the case for reporting. Presence of this criterion with other criteria (either *Necessary* or *Optional*) is needed to meet the requirement for reporting. For example, three criteria each indicate *Necessary*. If all three criteria are met, then the user must report. If only one or two criteria are met, then the user does not report.

Optional

As part of the S, N, O notation, Optional is used in combination with logic sets to indicate that a criterion qualifies the case for reporting. Within a group of Optional criteria, at least one *Optional* criterion is needed. *Optional* criteria must be paired with at least one *Necessary* criterion to meet the requirement for reporting. For example, criterion 1 is *Necessary* and criteria 2 and 3 are *Optional*. If criterion 1 is met, AND either criteria 2 or 3 (or both) is met, then the user must report. If only criteria 2 and 3 are met, then the user does not report.

Position Statements

The narrative descriptions published by CSTE used as the source for the RCKMS default reporting specifications. The CSTE Position Statements' Section VI-A narratives and Table VI concerning case reporting are used to determine whether a case should be reported to Public Health. Position Statements employ the "S, N, O" notation to indicate reportability, where "S" indicates the criterion by itself qualifies the case for reporting, where "N" indicates necessary and "O" is optional.

Production Environment

Use the production environment to author jurisdiction-specific reporting rules for conditions, test those rules, and publish them for eCR production use. The information published in the production environment populates the Knowledge Repository and, therefore, must reflect your PHA's reporting rules.

Public Health Agency (PHA)

The governmental body at the local, state, and federal level responsible for delivery of public health services.

Publish

In the RCKMS application, the process by which a completed and saved reporting specification is made available to the DSS rules engine to run the rules logic and respond on receipt of an eICR and determine if it is reportable.

RCKMS Administrator

A RCKMS user enabled to view, edit, and delete information for all jurisdictions, as well as perform other application administration tasks.

Reportability Response (RR)

A message generated by the RCKMS DSS documenting if any condition(s) in the eICR were found to be reportable, to which jurisdiction(s) reporting is required, and additional information, such as contact information of the relevant PHA. See [Decision Support Service](#).

Reportable Conditions Knowledge Management System (RCKMS)

A tool developed to enhance surveillance by providing comprehensive information to clinicians, labs, and reporters about the "who, what, where, when, why, and how" of case reporting with the aim of delivering information from providers on potential cases to state and local public health as a service of the broader infrastructure for eCR. The RCKMS application has three main parts: the Authoring Interface, the Knowledge Repository, and the DSS.

Reportable Conditions Trigger Codes (RCTC)

Codes implemented in the EHR system to match against encounter information and initiate an eICR. See [Trigger Codes](#).

Reporting Criteria

The narrative descriptions that determine whether a case should be reported to Public Health, which serve as the source for the RCKMS default reporting specifications. Reporting criteria are based on the CSTE Position Statements' Section VI-A narratives and Table VI concerning case reporting. In the RCKMS application, each

criterion is tied to logic that is supported by the value sets. These are represented by means of criteria templates that provide pre-populated options used to create jurisdiction specific criteria.

Reporting Specification

The criteria, Value Sets, and logic sets representing each of the conditions pre-populated in the RCKMS tool, based on the CSTE Position Statements Section VI-A narratives and Table VI and any jurisdiction-specific criteria. Reporting specifications describe the details of reporting a condition to a jurisdiction and include all criteria, Value Sets, logic sets, and rules logic that specify when an RR is sent.

Reporting Specifications Module

The RCKMS application pages that provide options for managing the set of reporting specifications for the conditions supported in a jurisdiction. The *Reporting Specifications* module enables you to search and display reporting specifications for the available conditions; add and edit reporting specifications; view and edit basic information about the reporting specification; add and edit reporting criteria and logic sets; add reporting time frame information and indicate criteria are Sufficient, Necessary, or Optional; add and edit supporting text, links to web sites, and other documents; delete reporting specifications; save changes to reporting specifications; and publish reporting specifications.

Reports Module

The RCKMS application pages that provide a printable report or electronic file that contains information about the jurisdiction details and reporting specifications that were entered through the Authoring interface.

Responsible Agency

The description of the PHA to which reporting is legally required.

Routing Entity

The PHA that receives the eICR and RR. The routing entity is defined when you set up your PHA details on the *Edit Jurisdiction* page using the “Route eICR and Reportability Response to” field.

Rules Authoring Agency

The PHA that enters the reporting rules into RCKMS. An authoring agency could author rules on behalf of another agency (e.g., a state authoring rules for a local agency).

Rules Logic

Interpretation of reporting criteria into computable rules to be used in a decision support tool.

S, N, O Notation

Used in combination with reporting criteria, S, N, O notations are used with logic sets to express whether a criterion is Sufficient, Necessary, or Optional to qualify the case for reporting. Sufficient means that the criterion alone makes this reportable to the PHA. Necessary and Optional work together, with all Necessary criteria in addition to at least one Optional criteria required for reporting.

Standard Codes

Numerical values (codes) and human-readable names (terms), drawn from standard vocabularies, such as SNOMED CT, RxNorm, LOINC and ICD-10-CM. See [Value Set](#).

Sufficient

As part of the S, N, O notation, Sufficient is used in combination with logic sets to indicate that a criterion qualifies the case for reporting. Presence of this criterion alone indicates sufficient requirement for reporting. For example, three criteria each indicate *Sufficient*. If any one of the three criteria is met, then the user must report.

Test Case

An RCKMS application routine used to test the logic set and rules for the reporting criteria associated with the selected reporter type. A test case confirms the criteria authored as Sufficient, Necessary, and Optional based on rules for the selected reporter type, as displayed in the *Specifications* tab. When you run a test case, the application simulates receipt of a report and moves that information through the logic chain defined for the reporting specification's criteria, logic sets, and rules options. A successful test case provides confirmation that the criteria and rules for a given reporter provide the expected results.

Test Cases Module

The RCKMS application pages used to manage test case information and view test results. The Test Cases options confirm the criteria as Sufficient, Necessary, and Optional based on rules for the selected reporter type as displayed in the Specifications tab. You can add new test cases and edit existing test cases.

Timeboxing

An effort to reduce the number of eICR messages that are determined to be reportable to PHAs based on Encounter Diagnosis or Problem list entries that may not be related to the current instance of disease. This is accomplished by including date-based logic in RCKMS rules to assess the interval between two key dates from the eICR message.

Training Environment

Use the training environment of the RCKMS Authoring Interface to familiarize yourself with the tool and the authoring process.

Trigger Codes

Codes (LOINC, SNOMED, RXNorm, ICD-9/ICD-10) that, when present in an EHR, initiate the sending of an initial case message to Public Health. See [Standard Codes](#); [Value Set](#).

Value Set

The numerical values (codes) and human-readable names (terms) drawn from standard vocabularies, such as SNOMED CT, RxNorm, LOINC, and ICD-10-CM, which are used to define concepts used in clinical quality measures (e.g., patients with diabetes, clinical visit). (see <https://vsac.nlm.nih.gov/>)

Virtual Medical Record (vMR)

A simplified, standardized EHR data model sponsored by HL7 and designed to support interfacing to clinical decision support (CDS) systems. vMR is compatible with Service-oriented Architecture (SOA) of CDS.

XML

Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.