

# CoCASA Version 15.0

## What's New

Here are the major changes between CoCASA Version 14 and CoCASA Version 15:

### Meningococcal B

One of the main functional changes in version 15 is the addition of Meningococcal B to the list of vaccinations that you can assess in CoCASA. Please note, however, that MenB's calculation algorithm uses two different interval tables based on the two different brands of MenB, Trumenba and Bexsero. Each of these brands have different minimum intervals between subsequent doses, so CoCASA has to know which brand has been dispensed in order to determine the validity of the dose. Therefore, if you choose MenB in your assessment, the assessment will automatically require brand names as shown in the figure below:

The screenshot displays the 'Assessments' form in the CoCASA application. At the top, there are navigation tabs: 'Assessment', 'Patients (0)', 'Coverage Levels', and 'Reports'. The main heading is 'Assessments'. Below this, there are two buttons: 'Add New Assessment' and 'Delete This Assessment'. The form shows the following details:

- Provider: **Continuous Health 24-7 (8562)**
- Assessment: **New Assessment (05/01/2020)**
- Assessment Date:
- Assessment Name:

The 'Age Range for this Assessment' section includes:

- From:  To:
- Radio buttons for  Month(s) and  Year(s)
- As Of:
- Earliest Date of Birth: 05/02/2017
- Latest Date of Birth: 03/01/2020

The 'Antigens Assessed' section has a list of checkboxes with the instruction: 'Antigens will display in the order that they are clicked'. The checked items are:

- MenB
- DTaP
- IPV
- MMR
- Hib

Other unchecked items include: HepB, VAR, PCV13, IIV or LAIV, HepA, Tdap, HPV, MenACWY, and RV.

The 'Display Brand Names?' section has radio buttons for  Yes and  No.

A dialog box titled 'Brand Name Required' is open, displaying an information icon and the message: 'MenB requires a brand name, so Display Brand Names has been set to Yes.' with an 'OK' button.

At the bottom of the form, there are two buttons: 'Save Changes' and 'Undo Changes'.

If the brand name is missing from a dose of MenB, CoCASA has to consider it an invalid dose because it has no way of calculating the proper intervals without knowing the brand name. Note that this requirement also pertains to assessments imported from an outside source, i.e. from an IIS. If your import template does not already include brand names, you will need to add a brand name field to your import template and arrange for it to be added to files that you import from your IIS if you expect to assess MenB. This only pertains to MenB, however. If you are not interested in assessing for MenB or you already import brand names, then you do not need to do anything to your import files.

### Viewing Doses

Another change in version 15 is the addition of the View Doses tab. This is a non-editable, information-only view of a patient's dose history. Being read-only means that the tab should load faster than the Edit Doses tab and should make navigating from patient to patient faster as well.

The screenshot shows a web application interface for patient management. At the top, there are tabs for 'Assessment', 'Patients (51)', 'Coverage Levels', and 'Reports'. The 'Patients' tab is active, displaying a search bar with a 'Find' button and a list of patient names on the left. The main area is titled 'Patients' and shows details for 'Aardvark, Aaron (05/01/2005)'. Below this is a 'Demographic Information' form with fields for Last Name, First Name, Middle Initial, Date of Birth, Sex, MOGE, Ethnicity, Race, Identifier 1, Identifier 2, and Chart Number. At the bottom, there is a 'View Doses' table with columns for Complete, AntigenName, Dose1, Dose2, Dose3, Dose4, Dose5, Dose6, and Dose7. The table contains several rows of vaccine data, including DTaP, HepB, Hib, MenB, PCV13, VAR, MMR, and IPV. A 'Record Saved' message is visible at the bottom of the interface.

Complete	AntigenName	Dose1	Dose2	Dose3	Dose4	Dose5	Dose6	Dose7
	<a href="#">DTaP</a>	07/01/2010 Adacel	(XI) 07/12/2010 Infanrix	11/15/2010				
✓	<a href="#">HepB</a>	05/01/2010	07/01/2010	09/01/2010 Hexavac	(XA, XI) 11/15/2010			
	<a href="#">Hib</a>	(XA) 09/01/2010	(XA) 06/14/2011					
	<a href="#">MenB</a>	(XA, XB) 06/14/2011	07/01/2015 Bexsero					
✓	<a href="#">PCV13</a>	07/01/2005	09/01/2005	11/15/2005	06/14/2006			
✓	<a href="#">VAR</a>							
	<a href="#">MMR</a>							
	<a href="#">IPV</a>							

As you can see in this figure, the first column of the Dose View indicates that the dose series is complete with a check mark. The second column indicates the antigens, and each one is also a link to the online CoCASA Algorithm Reference. If you have a question about how the validity or completeness was calculated you can click the link and go directly to the pertinent section of the online CoCASA Algorithm Reference page. The remaining columns contain dose dates and

brand names, if brand names have been selected for the assessment. Invalid doses are indicated in red and have an X indicator to tell you why the dose is invalid. XA means that the dose was given at an invalid age, either too soon or too late. XI means that the dose interval is invalid, i.e. it was given too soon after the previous dose. XB means that the MenB brand name is missing. If you hover the mouse cursor over a dose entry for a moment, you will see a display of the age of the patient at the time of the dose and the interval calculated between that dose and the previous one. In addition, if the dose is invalid you will see the reason the dose is considered invalid. If you wish to change a value on the View Doses tab, click the Edit Doses tab, make the change, and then press the Save Changes button.

### Reports

On the Reports tab, we regrouped the reports on the screen, putting the most popular ones at the top of the list. The rest are grouped below under Other Reports. Another minor change we made to the reports is that ages and intervals were added to the Invalid Doses report and the Individual Immunization History report.

The screenshot shows a web application interface for reports. At the top, there are navigation tabs: **Assessment**, **Patients (51)**, **Coverage Levels**, and **Reports**. The **Reports** tab is active. Below the tabs is a header area with the title **Reports** in the center. On the right side of this header, there are two buttons: **Run Report** and **Export**. Below the header, there are two filter fields: **Provider: A1 Health Providers (393939)** and **Assessment: Demo Assessment (04/29/2020)**. Below the filters is a section titled **Report List**. This section contains a tree view of reports, organized into two main categories: **Assessment Reports** and **Other Reports**. Each category has a list of report names with a small square icon to its left. The **Assessment Reports** category includes: Invalid Doses, Last Visit >= 12 Months, Missing Immunizations, Not Up-To-Date, and Patient List. The **Other Reports** category includes: Adolescent Coverage, Demographic Report, Diagnostic Report Childhood, Duplicate Patient Names, HPV Report, Immunization Histories List, Individual Immunization History, Influenza Report, Last Visit < 12 Months, Late Up-To-Date, List Of All Assessments, Mailing Addresses, Missed Opportunities, Moved/Gone Elsewhere, Need One Dose, No Immunization History, Not Eligible For Vaccine, Patient Data Listing, Provider Mailing Addresses, Provider Specific Assessment History, Quick Count Report, Reasons Not Vaccinated, Single Antigen Report Childhood, Summary Report, and Up-To-Date. At the bottom of the interface, there are left and right navigation arrows.

## Importing Text Files

In order to try and improve the user experience for importing text files from an IIS, we have made several changes to import process in version 15. To begin with, CoCASA will now recognize the entire list of existing CVX and CPT codes. But, even though it recognizes all of the codes, it will only import the vaccines that are supported by CoCASA. The rest will be rejected, even though CoCASA recognizes the code. We have put a process in place to provide updates to those codes should it be necessary to do so in the future.

In addition to text names, CVX codes and CPT codes, CoCASA will now also import NDC Sale and NDC Use codes. An Import Mapping Index report showing all the acceptable codes and values for Shot Type that CoCASA will accept, and the antigens to which they will be mapped, is now available. You can view and print this report by choosing it from the Import menu.

The main screen of the import process remains essentially unchanged, except for the addition of Brand Name, but when you initiate the import, a dashboard screen will now appear giving you a dynamic view of the import as it is progressing:

The screenshot displays the 'Text File Import Dashboard' window. At the top, it shows the file path for the import: 'C:\Users\Public\CDC\CoCASA BETA\TemplateImportSampleDemo.txt'. Below this, there are several summary statistics:

- Records Read: 1080
- Records Imported: 1069
- Records Rejected: 11
- Patients Added: 51
- Patients Skipped: (empty)
- Age Range Selected: (empty) To (empty)
- Earliest DOB Found: 07/27/2009
- Latest DOB Found: 07/17/2010
- Age Range Found: 10 To 11 Years
- Doses Added: 1069
- Doses Skipped: 10
- Antigens Recognized: 11

An 'Error Log' table is also present, listing various errors encountered during the import process. The table has columns for Record Number, Errors, Last Name, First Name, Date of Birth, Shot Type, Shot Date, Brand Name, and History of Varicella (chicken). The errors include duplicate doses, missing brand names, unrecognized codes, and unsupported antigens.

Rec #	Errors	Last Name	First Name	Date of Birth (MANDATORY)	Shot Type	Shot Date	Brand Name	History of Varicella (chicken)
2	Duplicate dose and date for this patient	Aardvark	Aaron	05/01/2010	DTaP	07/12/2010		
3	WARNING: MenB brand name is missing or unknown	Aardvark	Aaron	05/01/2010	MenB	06/14/2011		
4	WARNING: Mismatched brand name	Aardvark	Aaron	05/01/2010	HIB	09/01/2010	Trumenba	
5	Unk Code: XXXX is not recognized	Aardvark	Aaron	05/01/2010	XXXX	09/01/2010		
6	Dengue Is Not supported by CoCASA	Aardvark	Aaron	05/01/2010	Dengue	07/01/2010		
7	Plague Is Not supported by CoCASA	Aardvark	Aaron	05/01/2010	23	07/01/2010		
8	Antigen Date Is Not correct	Aardvark	Aaron	05/01/2010	MMR	07/01/2020		
9	WARNING: Unknown or invalid brand name	Aardvark	Aaron	05/01/2010	HIB	06/14/2011	MyBrand	
10	Antigen Date Is invalid	Aardvark	Aaron	05/01/2010	DTaP	11//2010		
11	DOB is invalid	Aardvark	Aaron	05//2010	DTwP	09/01/2010		
14	Duplicate dose and date for this patient	Aardvark	Aaron	05/01/2010	HIB	06/14/2011		
24	Duplicate dose and date for this patient	Aardvark	Aaron	05/01/2010	HIB	09/01/2010		
25	WARNING: MenB brand name is missing or unknown	Barsom	Bill	11/05/2009	MenB	05/26/2010		y
47	Unk Code: XXXXXXX is not recognized	Callaway	Christine	11/05/2009	XXXXXXXX	09/01/2010		
48	Smallpox Is Not supported by CoCASA	Callaway	Christine	11/05/2009	75	09/01/2010		

At the bottom of the dashboard, there is a progress bar showing 100.0% completion, along with 'Cancel' and 'Close' buttons. A 'Print Summary Report' button is also visible.

It shows various counts, metrics, and errors encountered as the import is proceeding. If you should notice that every imported record is being rejected for some reason, you can now interrupt the import by clicking the Cancel button so that you can troubleshoot the problem.

CoCASA creates a summary report for every text file import and saves it in a pdf format. Upon completion of the import, you can view, and subsequently print, this report by pressing the Print Summary Report button. You can view past reports by choosing the View Import Error Logs item on the Import menu.

Note that, with the exception of the text file data import, the other imports and exports remain unchanged from version 14.