Microsoft Vaccination Management in a Day

Lab 02: Data Setup

Step-by-Step Lab

April 2021

Contents

Overview

Prerequisites

Note: If you are in an official training, the environment has been set up and provided to you.

This is the **second** lab in a series covering Microsoft Vaccination Management (MVM). These labs follow a sequence of presentations covering an overview of Microsoft Vaccination Management, Solution Center installation, and the accompanying Data model. Before beginning this lab, confirm that you have provisioned an environment with the necessary components installed as described in the following link:

- [Deploy MVM](#)

You must also have completed **Lab 01: System Configuration** before starting Lab 02.

Before you Begin

Note: If you're in an official training the user credentials and environment name have been provided to you.

1. You must be connected to the internet.
2. Open an internet browser in either In-Private or Incognito mode.
3. Navigate to [Power Apps](#) and sign-in with your user credentials.

Select the correct environment from the upper-right Environment drop down.

Recommended Resources

The following resources provide a full understanding of Microsoft Vaccination Management and its components and are helpful general resources:

- [MVM Homepage](#)
- [MVM MS Docs](#)

Background and Capabilities

Microsoft Vaccine Management's reference and management data are used to provide a starting point for vaccination site frontline workers and staff to quickly begin the vaccine distribution process and strengthen the "last mile" in the supply chain. This setup data resides in the Vaccination Management app, which is a Power Apps model-driven app.

The Vaccination management app is used by the healthcare administrator to set up and manage phases, vaccines, doses, and schedules. The healthcare administrator can also see who has registered, vaccine inventory, and view basic reports on the daily schedule and activities, and outcomes of vaccinations.

Users and Scenarios

This lab covers the following Microsoft Vaccination Management user experiences and scenarios:

Vaccination Program Administrators who are looking to:

- Learn how to quickly pull data into Dataverse to create new records.
- Setup Reference Data to launch new Vaccine Sites and Locations
- Setup Master Data to manage Vaccine and Program data

Vaccination Provider Administrators who are looking to:

- Create Vaccine Batches
- Create Vaccination Sites
- Create Site Schedules

Goals

After this lesson you will be able to do the following:

- Understand Microsoft Vaccination Management reference data for setting up vaccine locations and phases.
- Learn how to create Vaccination Site Management Master data so that frontline can record immunization details in the Power App.
- Discover how to retrieve and load new data into Microsoft Vaccination Management

The estimated time to complete this lab is **30** minutes.

Exercise 1: Loading and Connecting to Data with Power Query

Power Query is a data transformation and data preparation engine. Power Query comes with a graphical interface for getting data from sources and a Power Query Editor for applying transformations. Because the engine is available in many products and services, the destination where the data will be stored depends on where Power Query was used. Using Power Query, you can perform the extract, transform, and load (ETL) processing of data.
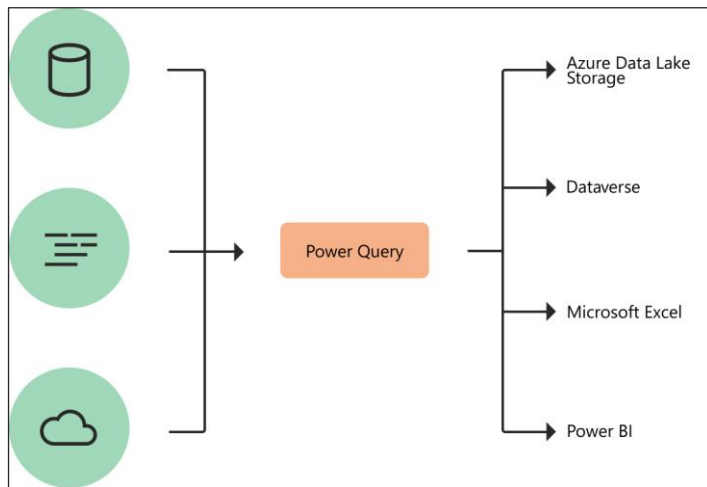
The Power Query user experience is provided through the Power Query Editor user interface. The goal of this interface is to help you apply the transformations you need simply by interacting with a user-friendly set of ribbons, menus, buttons, and other interactive components. Power Query can connect to many different data sources so you can work with the data you need.

In this exercise, you will be playing the role of a Business Analyst and learn how to do the following:

1. Use Power Query options to quickly import a small subset of data into Dataverse.

2. Learn how to create Excel templates.

Task 1: Navigate to Get Data in Power Apps

In this task, you will get to know the Power Query options available to get small amounts of data into Dataverse.

1. Navigate to [Power Apps](#) (recommend Incognito or InPrivate session).

2. Log in using the credentials supplied in the training for your user.

3. Select the correct environment from the upper right **Environment** drop down.

4. Expand **Data** on the left navigation bar and select **Tables.**
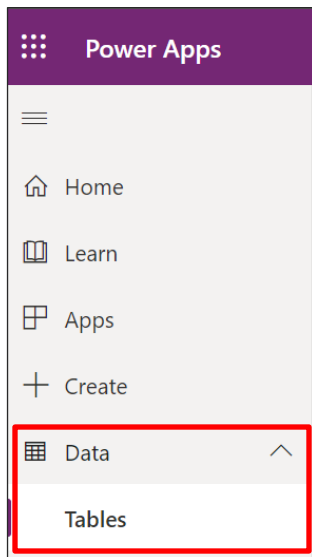
5. On the top menu bar, click the down arrow next to **Data**, and then click Get Data to open Power Query.
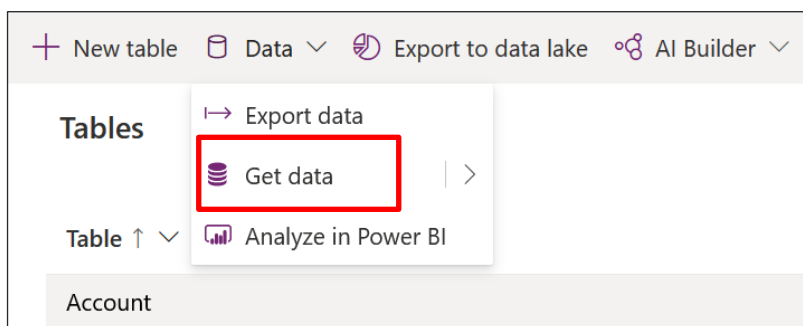
6. Browse through the various Power Query options available to import data into Dataverse. Power Query offers a wide number of data connectors, which are broken down into multiple categories. These connectors range from data sources such as TXT, CSV, and Excel files, to databases such as Microsoft SQL Server, and popular SaaS services such as Microsoft Dynamics 365.

   Please reference this article to learn more about best practices when working with Power Query to get data into Dataverse.
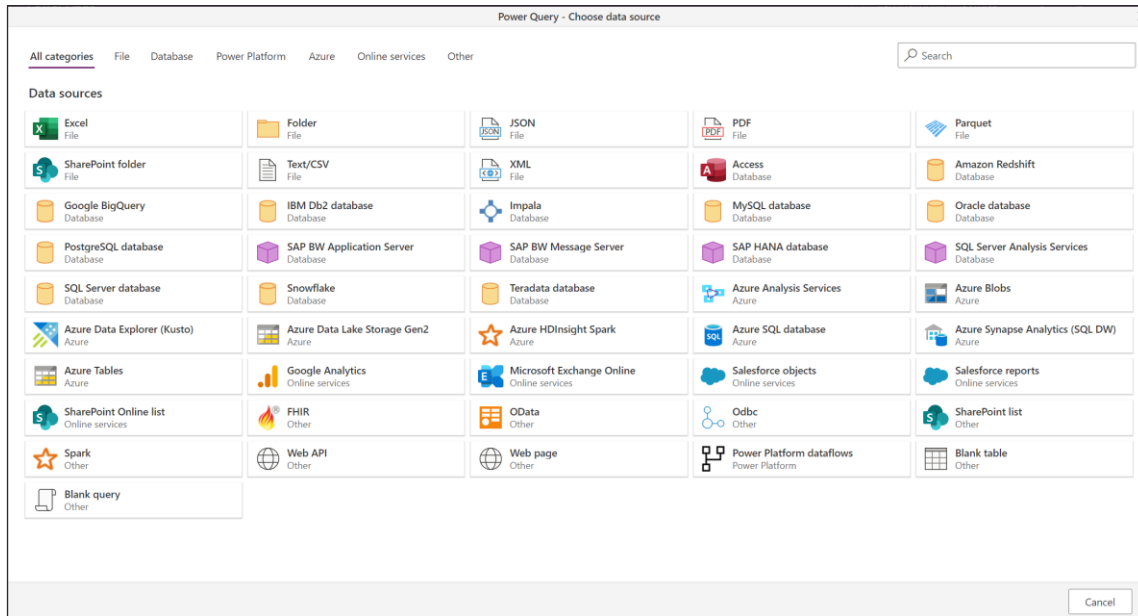
Congratulations! You have navigated to Power Query from within Power Apps and reviewed the options available to quickly import data into Dataverse.

Task 2: Importing data from Excel

In this task, we will walk through the steps to import data into Dataverse from an Excel file using the UI within Microsoft Vaccine Management. This is another option to import data into Dataverse.

1. Navigate to Power Apps (recommend Incognito or InPrivate session).
2. Log in using the credentials supplied in the training for your user.
3. Select the correct environment from the upper right **Environment** drop down.


4. Select **Apps** on the left navigation bar.
5. Find the **Vaccination management app** and click on the app name .
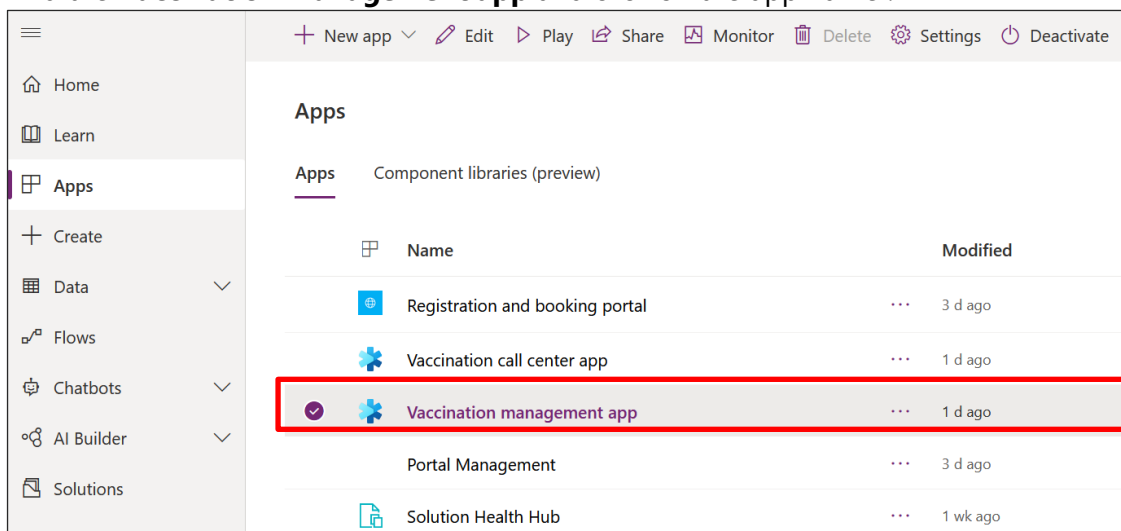
6. In the bottom left-hand corner, change the selected module to Reference Data.
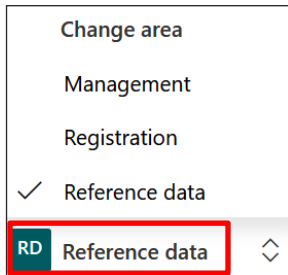
7. With Phases highlighted on the left site map, go to the top menu, and click the **Import from Excel** button. This method will import data from an Excel workbook directly to the highlighted table in the Vaccine Site Management App. If you click the down arrow next to the button, you will see that you can also import CSV and XML files to quickly create new records.
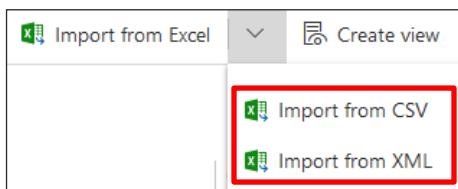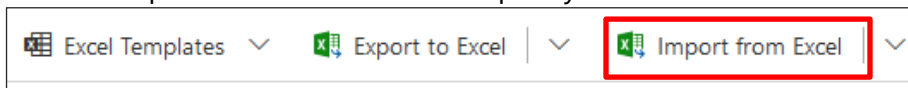
Congratulations! You have learned how to use the Import from Excel feature to quickly import data into Dataverse.

Exercise 2: Vaccination Site Management Reference Data Setup

The Vaccination Site Management App is a model-driven Power App that allows a Location/Site manager to setup the reference data which is required to initially set up and begin using Microsoft Vaccine Management apps like the Vaccination Site Management app, Frontline Worker App and the Registration and Booking Portal.

In this exercise, you will be playing the role of a Business Analyst and learn how to do the following:

1. Create a new Medical Code to track additional vaccine details.
2. Use Power Querry functionality in Power Apps to quickly import new Location records into Dataverse.

Task 1: Create a new Medical code record

In this task, we will begin by quickly creating a new Medical Code CVX record that will be used later for creating a new Vaccine Type in the next exercise. A medical code represents a custom entity value that is usually supplied by providing a reference to one or more terminologies, but it may also be defined by the provision of text. CVX codes indicate the product used in a vaccination. They are maintained by the Centers for Disease Control and Prevention, Immunization Information System Support Branch (IISSB) for use in HL7 data transmission. Provide the vaccination's CVX code. For Ex: 210 for Covid-19 Vaccine

1. Navigate to Power Apps (recommend Incognito or InPrivate session).
2. Log in using the credentials supplied in the training for your user.
3. Select the correct environment from the upper right **Environment** drop down.


4. Select **Apps** on the left navigation bar.

5. Find the **Vaccination site management app** and click on the app name .
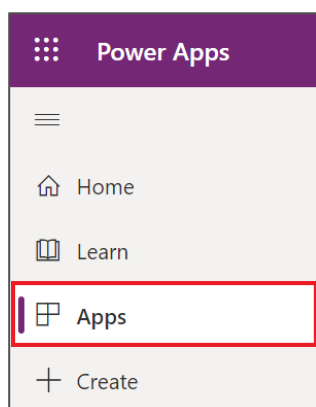
	Name		Modified	Owner	Type
	Apps Component libraries (preview)				
⚡	Frontline worker app	⋯	2 h ago		Canvas
🌐	Registration and booking portal	⋯	2 h ago		Portal
🗔	Vaccination site management app	⋯	3 h ago		Model-driven
🗔	Portal Management	⋯	1 wk ago		Model-driven
🗔	Solution Health Hub	⋯	1 wk ago	SYSTEM	Model-driven

6. On the left site map, select **Medical codes** and then click **+ New** to create a new record.

Vaccine

- ☰ Phases
- ⊗ Medical codes
- ▣ Education

← | 📈 Show Chart | + New | 🗑 Delete | ⌄
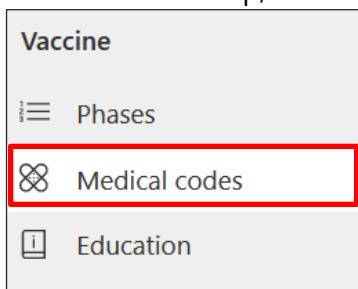
7. Create a new Medical Code record by entering the following information:
   a. **Name**: 210
   b. **Text**: 210
   c. **Type**: Immunization Reason Code
      * *Note: This may be near the bottom of the list.*
   d. **Code**: CVX

New Medical code

General

Name	* 210
Text	210
Type	Immunization Reason Code
Code	* CVX

8. Click **Save & Close** to save the record and return to the Active State/Province view.

← | 💾 Save | 🖫 Save & Close
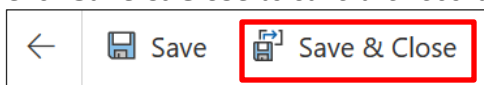
Congratulations! You have created a new Medical code record in the Vaccination Site Management app.

Task 2: Import a list of counties and create them as records

In this task, we will use the Import data feature in Power Apps to quickly import the remaining Washington County records into Dataverse.

1. While in the Vaccination Site Management app, click County under the Location section on the left site map.

2. Go to the top menu and click the down arrow next to **Import from Excel** button and then select **Import from CSV**.
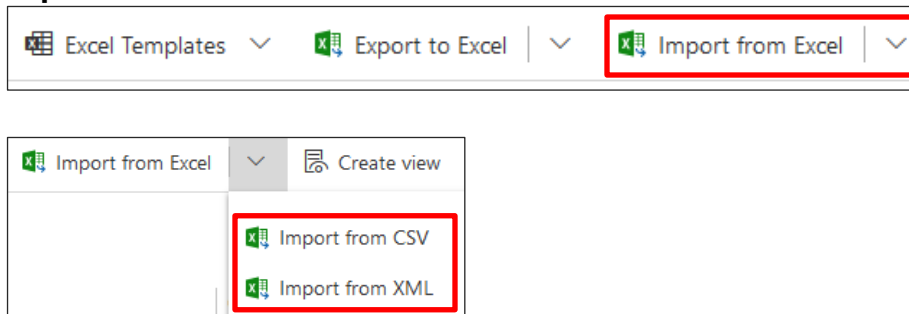
3. Click **Browse** to upload **Washington Counties.csv** file provided to you by your lab instructor, then click **Next**.

4. Keep all the defaults and click **Review Mapping**.

5. Review the Map Attributes to ensure the automated mappings are accurate and then click **Finish Import.**
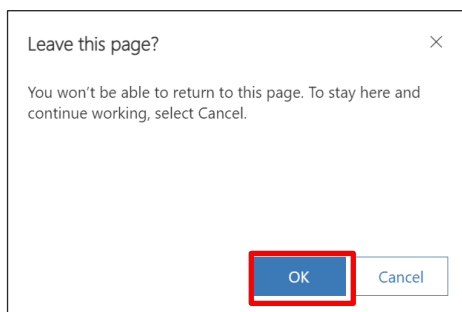
6. You can track the progress of your import by clicking the **Track Progress** button. This will bring up a dialog window that will navigate you to your

Import from CSV   ×

    Your data has been submitted for import

Track Progress | Done

Leave this page?   ×

You won't be able to return to this page. To stay here and
continue working, select Cancel.

OK | Cancel

📌 My Imports ⌄

☐	Import Name	Status Reaso...	Successe...	Partial Failure...	Errors	Total Pr...
	CaliforniaCounties.csv	Completed	58	0	0	58

7. Navigate back to County on the left-hand site map and your will now see the new Counties that have been created.

Congratulations! You used the Import data feature in Power Apps to quickly import new County records into the Vaccination Site Management app for the state of California.

Exercise 3: Vaccination Management Master Data Setup

The Vaccination Management App is a model-driven Power App that is used by the healthcare administrator to set up and manage phases, vaccines, doses, and schedules. The healthcare administrator can also see who has registered, vaccine inventory, and view basic reports on the daily schedule and activities, and outcomes of vaccinations.

In this exercise, you will be playing the role of a Site/Location manager and learn how to do the following:

1. Setup Vaccine manufacturer's details.
2. Record the Vaccine details along with its dosage, storage, and immunization education details.
3. Setup Provider's details.
4. Setup Vaccination site details and then associate the vaccinators to a site.
5. Create schedules and auto-create slots.
6. Record vaccination shipments.

Before beginning this exercise:

1. Navigate to Power Apps (recommend Incognito or InPrivate session).
2. Log in using the credentials supplied in the training for your user.
3. Select the correct environment from the upper right **Environment** drop down.

4. Select **Apps** on the left navigation bar.

5. Find the **Vaccination site management app** and click on the app name .

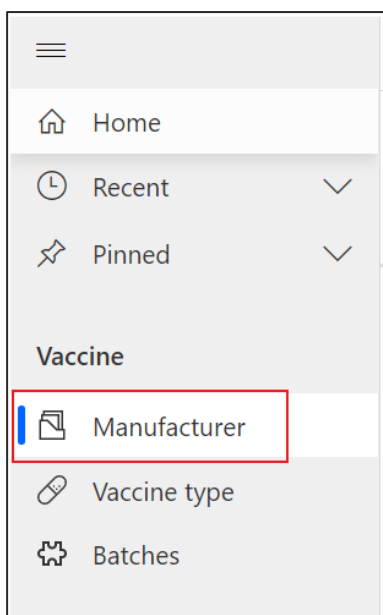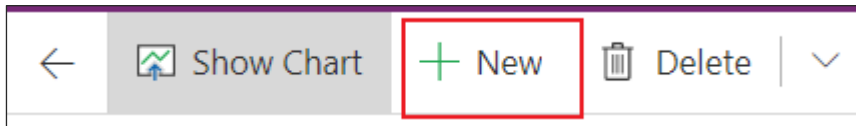6. In the bottom left corner, change the area to Management.

Task 1: Create Manufacturer

In this task, you will create a Vaccine manufacturer record. This will enable you to onboard new vaccine manufacturer into the system.

1. In the left pane, click on **Manufacturer** and then you can view the list of active manufacturers.

2. On the **Manufacturer** form, click on **New** button.

3. On the new manufacturer form, enter the values as mentioned below and then click on **Save** button.

    a. **Account Name**: Provide the Vaccine manufacturer's name. For Ex: Contoso Pharmaceuticals

    b. **Account Type**: Select the type as "Manufacturer"

    c. **Manufacturer Code**: Provide the manufacturer's code. For Ex: 1001

    d. **Phone**   : 425-555-0100

    e. **Fax**   : 425-555-0100

    f. **Website**   : https://www.contoso.com/

    g. **Ticker Symbol**   : CONTOSO

    h. **Address 1:Street 1**   : 3422 DELASKO Lane

    i. **Address 1:City**   : Elko New Market

    j. **Address 1:State/Province** : MN

    k. **Address 1:ZIP/Postal Code** : 99887

    l. **Address 1: Country/Region** : US

Task 2: Create a Vaccine type

In this task, you will create a vaccine type. This will enable you to create new a vaccine record along with its dosage, storage, and education details.
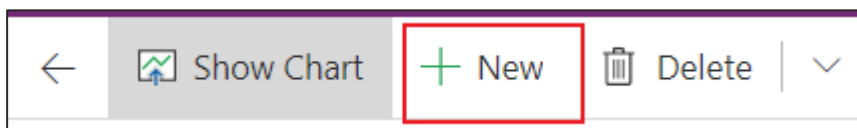
4.   In the left pane, click on **Vaccine type** and then you can view the list of active vaccines.
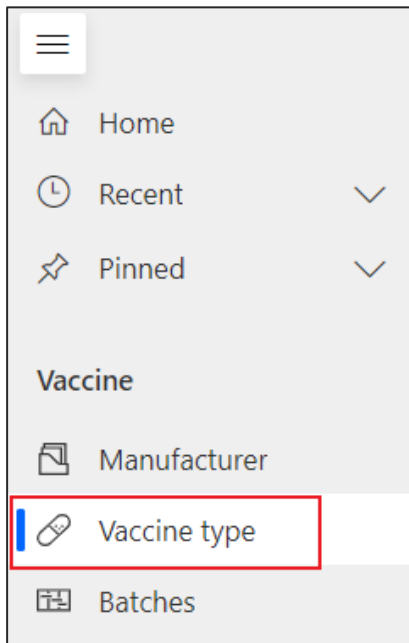
5. On the **Vaccine type** form, click on **New** button.

6. On the new vaccine form, enter the values as mentioned below and then click on **Save** button.

    a. **Name**: Contoso Covid Vaccine

    b. **Manufacturer**: Contoso Pharmaceuticals.

    c. **Code(CVX)**: Choose the **210** record that you created in the previous exercise.

    d. **GTIN**: Provide the GTIN code of the vaccine. For Ex: 1234567890

    e. **NDC Code**: The National Drug **Code** (**NDC**) is the **number** which identifies a vaccine/drug. For Ex: 12345-678-09

    f. **Standard Dose Range High**: Provide the higher standard dosage range. For Ex: 0.3

    g. **Standard Does Range Low**: Provide the lower standard dosage range. For Ex: 0.3

    h. **Standard Dose Range Unit**: Provide the unit of measure for the dose ranges value. For Ex: mL

    i. **Standard Dose Quantity**: Provide a value for the standard dosage quantity. For Ex: 1

    j. **Period to Next Dose**: Provide a value for the wait time for the next dose. For Ex: 21

    k. **Period to Next Dose**: Enter the wait time for the next dose in words. For Ex: Twenty-one days

    l. **Storage Temperature**: Enter the temperature at which the vials need to be frozen. For Ex: 40.

m. **Storage Temperature Unit**: Select the temperature unit. For Ex: Fahrenheit.

General Immunization Education			
Name *	Contoso Covid Vaccine	Is Brand	Yes
Manufacturer *	🗟 Contoso Pharmaceuticals	Is Over the Counter	No
Code (CVX)	⟨⟩ Injection, intravenous	Form	⟨⟩ Injection, intravenous
GTIN	1234567890	Amount	---
NDC Code	12345-678-09		

Dosage			
Standard Dose Range High *	0.30	Standard Dose Quantity *	1
Standard Dose Range Low	0.30	Period to Next Dose *	21
Standard Dose Range Unit *	mL	Period to Next Dose (string)	Twenty one days

Storage			
Storage Temperature	40	Storage Temperature Unit	Fahrenheit

Congratulations! You have created a new Vaccine manufacturer in the Vaccine Site management app.

Task 3: Create Provider

In this task, you will create a Provider record. A provider is an organization that manages a vaccination site. This will enable you to onboard new providers into the system.

1. In the left pane, click on **Provider** and then you can view the list of active providers.
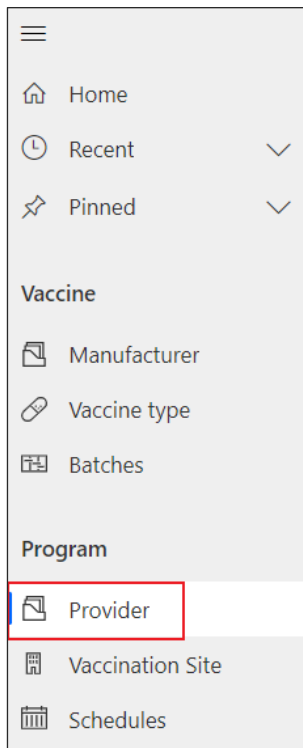
2. On the **Provider** form, click on **New** button.

3. Set the Account form type to Organization.
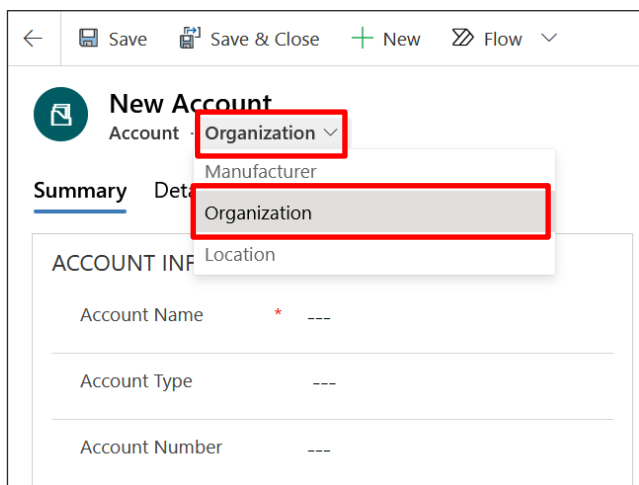
4. On the new provider form, make sure that the view is set as Organization and then enter the values as mentioned below and then click on **Save** button.

     a. **Account Name**: Lamna Healthcare Company

     b. **Account Type**: Organization

     c. **Account Number**: 1001

      d.   **Phone**: 425-555-0100

      e.   **Fax**: 425-555-0100

      f.   **Website**: http://www.lamnahealthcarecompany.com/

      g.   **Address 1:Street 1**: 3422 DELASKO Lane

      h.   **Address 1:City**: Elko New Market

      i.   **Address 1:State/Province**: MN

      j.   **Address 1:ZIP/Postal Code**: 99887

      k.   **Address 1: Country/Region**: US

New Account
Account · Organization

Summary · Details

ACCOUNT INFORMATION

Account Name *	Lamna Healthcare Company
Account Type	Organization
Account Number	1001
Phone	425-555-0100
Fax	425-555-0100
Website	http://www.lamnahealthcarecompany.com/
Parent Account	---
Ticker Symbol	---

ADDRESS

Address 1: Street 1	3422 DELASKO Lane
Address 1: Street 2	---
Address 1: Street 3	---
Address 1: City	Elko New Market
Address 1: State/Province	MN
Address 1: ZIP/Postal Code	99887
Address 1: Country/Region	US
Address 1: Longitude	---
Address 1: Latitude	---

Congratulations! You have successfully created a Vaccination Provider in the Vaccination Site Management App.

Task 4: Create Vaccination Site details and associate vaccinators

In this task, you will create vaccination site details and associate vaccinators/frontline worker to a site so that these users can be selected on the canvas app for the respective site. This will enable you to onboard new providers into the system.

1. In the left pane, click on **Vaccination Site** and then you can view the list of vaccination sites.
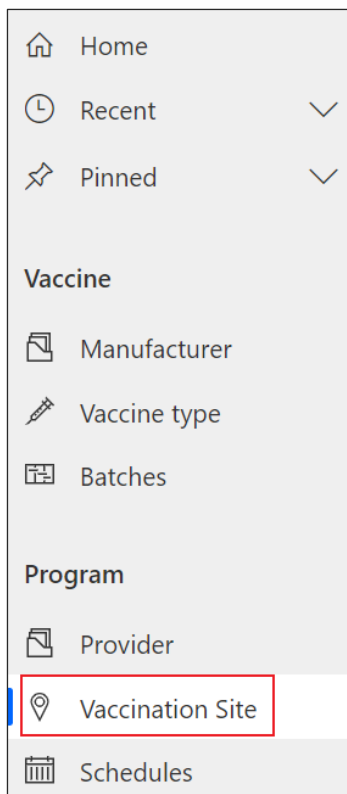
2. On the new Vaccination site form, enter the values as mentioned below and then click on **Save** button.

    a. **Name**: Provide a name for the site. For Ex: Lamna - Redmond

    b. **Provider**: Select a provider. For Ex: Lamna Healthcare Company

    c. **Location Number**: Provide a unique location number. For Ex: 1234

    d. **Timezone**: Select a timezone and it will be used in Frontline worker app. For Ex: (GMT-08:00) Pacific Time (US & Canada)

    e. **Street 1**: 8582 PALMITER Court

    f. **City**: Redmond

    g. **Country/Region**: US

h. **State/Province**: WA

i. **ZIP/Postal Code**: 98052

j. **Latitude:** 47.6701

k. **Longitude: -**122.1182

l. **Timezone**: (GMT-8:00) Pacific Time (US & Canada)

m. **Timezone IANA**: America/Tijuana

Lamna - Redmond
Vaccination Site

General   Site Inventory   Related

Name *	Lamna - Redmond	
Provider	🗃 **Lamna Healthcare Company**	
Location Number	---	
Primary Site Manager	---	

Address

Street 1 *	8582 PALMITER Court
Street 2	---
Street 3	---
City *	Redmond
Country *	📖 **United States**
State/Province *	🗺 **Washington**
County	---
ZIP/Postal Code *	98052

Timezone *	(GMT-08:00) Pacific Time (US & Canada)
Timezone IANA *	**America/Tijuana**

Site Staff

Search this view 🔍

✓	Full Name ∨	Name ↑ ∨	First Name ∨	Last Name ∨	Function ∨

📄

No data available.

ABC   0 - 0 of 0 (0 selected)

Site Managers

Search this view 🔍

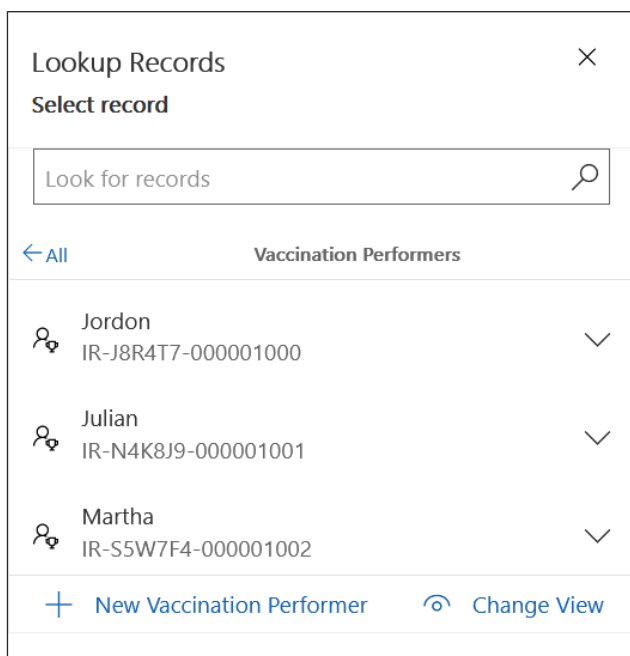| ✓	Full Name ↑ ∨	Email ∨	Company Name ∨	B

🔲 Active   💾 Save

3. Upon saving the record, the controls in the **Vaccinators** group will be visible. Click on **Add Existing Vaccination Performer** button to associate an existing user to a vaccination site.
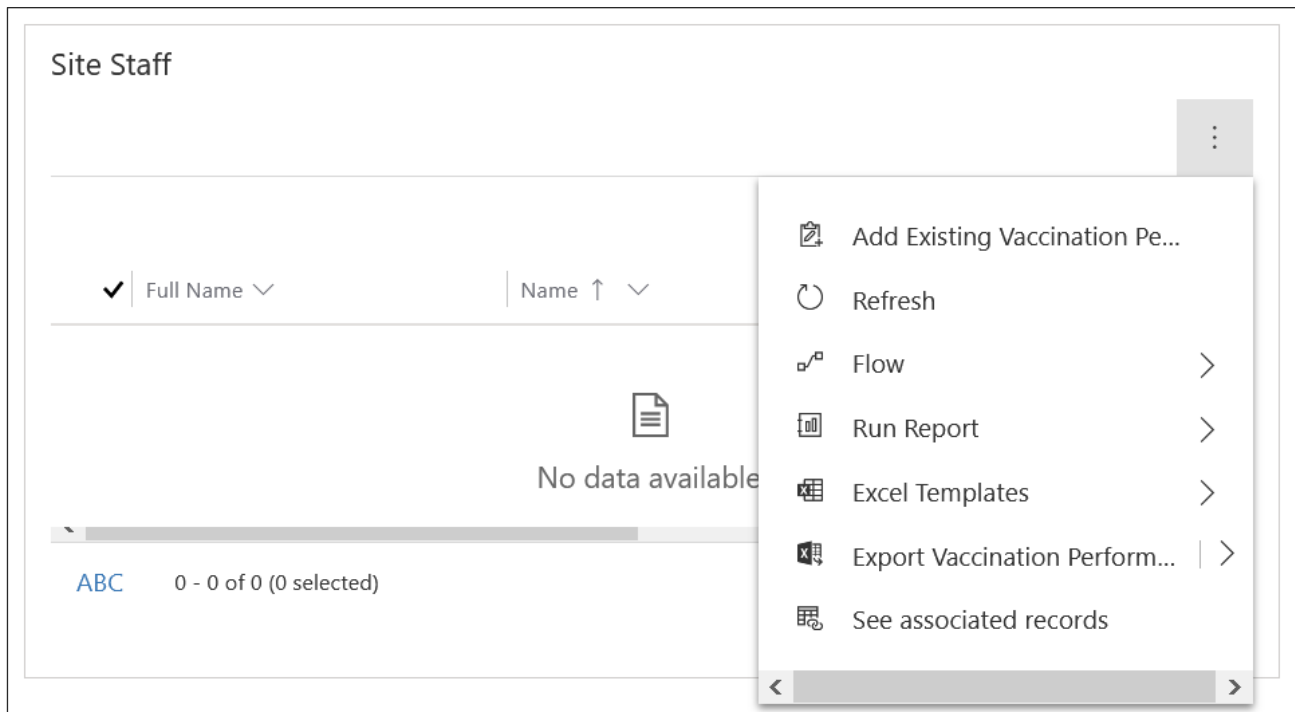
4. On the pop-up, **search** for the name of any Performer that is already created. Select the **Performer** name and click on **Add** button.
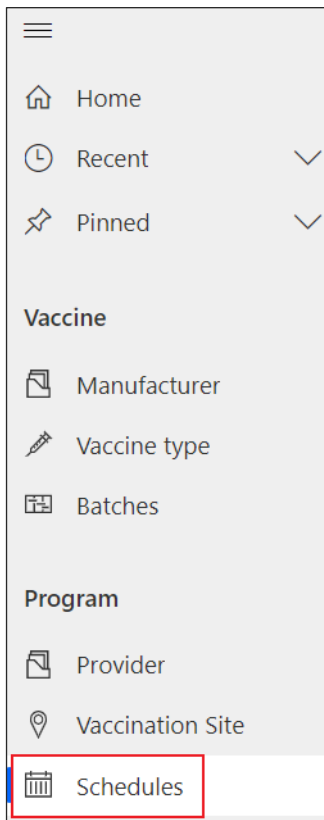

Congratulations! You have successfully created a Vaccination Site in the Vaccination Site Management App.

Task 5: Create Schedule and Slots

In this task, you will learn to create new schedules and automatically create slots. Once the slots are created, it will be displayed in the

1. On the left site map, select **Schedules** and then click **+ New**.

2. On the new Schedule record, fill out the following information:

   Name: Lamna Vaccine Event

   Location: Contoso - Redmond

   Enable Schedule Builder Automation: Yes

   Dose: Dose 1

   Vaccine: Contoso Covid Vaccine

   Start Date: Yesterday

   End Date: Tomorrow

   Start Time: 08:00

   End Time: 18:00

   Slot Interval: 30 minutes

   Slots Per Interval: 5

   Monday – Saturday: Yes

   Important Note: Be sure to check off at least one day prior to saving the record for the first time, otherwise no slots will be created.

Click **Save & Close.** The Schedule Builder will then process and create the slots for the Schedule record.

Congratulations! You have successfully created a slot schedule for a vaccination site in the Vaccination Site Management App.

Task 6: Create a Batch

In this task you will create a batch of newly received vaccine doses to be made available to residents.

1. On the left site map, navigate to **Batches** under the Vaccine section and then click **+ New.**
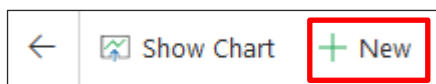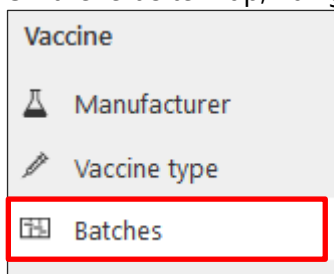
2. Create a new Vaccine Batch record by entering in the following information:

Medication ID: Contoso Covid Vaccine

Batch Expiration Date: Two weeks from now, 8:00 PM

Batch Lot Number: 85

Dose Quantity: 10

Dose Quantity (string): 10

Location: Contoso - Redmond

Congratulations! You have successfully created a vaccine batch in the Vaccination Site Management App.
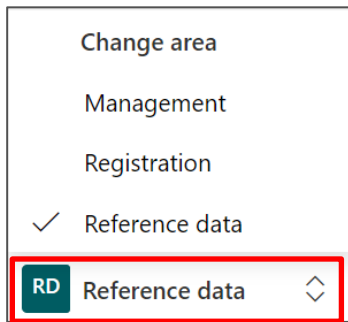
Task 7: Open a Vaccine Phase for Booking

To address the situation of when demand for appointments is greater than the availability of appointment slots, vaccination program administrators can set a phase to allow or not allow eligible residents to make an appointment.

- If **Book During Registration** is set to **Yes**, upon registering currently eligible residents can continue and directly book a vaccination appointment.
- If **Book During Registration** is set to **No**, currently eligible residents cannot book an appointment upon registering. Eligible residents are presented with a screen that informs them that they are eligible. If they provide their contact information, they will be notified in email about when and how to make an appointment.

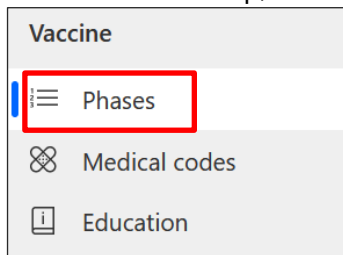To make access to vaccination appointments more equitable, a vaccination program administrator can specify that the selection of eligibility is random. This uses a lottery method to select which eligible residents are sent email invitations. The default selection method is first in, first out (FIFO).

In this task, we will open a Vaccine Phase for Registration & Booking.

1. Select **Reference Data** from the bottom left site map.

2. On the left site map, select **Phases** and then open the **Phase 2** record.

3. Change the '**Booking open'** field from No to **Yes**. This will lock the field once changed so that it cannot be changed back. All future Vaccine Eligibility records will now be tracked against this phase. Click **Save & Close** to close the record.

Congratulations! You have open up a Vaccine Phase for registration and booking in the Vaccination Site Management app.

Summary

In this lab, you learned how a Vaccination Program Manager can quickly pull data into Dataverse to create new records. You also discovered how to create new Reference Data to launch new Vaccine Sites and Locations. Finally, you setup Master Data to manage Vaccine and Program data for Microsoft Vaccine Management.

Lab Survey

We would appreciate your feedback on Microsoft Vaccination Management in a Day and this hands-on-lab, such as the quality of documentation and the usefulness of the learning experience.

Please use the survey at **https://aka.ms/MVMIADSurvey** to share your feedback.

You may provide feedback for each module as you complete it or at the end once you've completed all the modules. Thank you!

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