

P16-0371 Panorama Project

Panorama Immunization Management User Manual

SCHOOL IMMUNIZER ROLE

Version 1.0

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1 PURPOSE

The purpose of this course is to present the Panorama system specifically for nurses that will only be conducting school immunizations. This document selectively combines content from several courses that provide complete Panorama training for users in Nova Scotia.

After completing the course, School Immunizers users should be able to:

- Login/Logout of the system
- Navigate the system screens
- Use the most common fields and screen buttons
- Set user defaults
- Search for Mass Immunization Events
- Use Mass Immunization Worksheets to:
 - view the consent,
 - assess the client information including immunization history, allergies, warnings, clinical Notes, and special Considerations
 - record immunizations
 - record the client event status

Note:

School Immunizer training is limited to the Mass Immunization Worksheet and working with the worksheet.



2 USER LOGIN

Each registered user on Panorama will have use their NSHA username and password.

Before a user can begin using Panorama, a user must login into Panorama. Below are the steps outlined for registered users to login into Panorama.

- When working off-site, you must access Panorama through a Virtual Private Network (VPN) connection. The VPN product for NSHA is Global Protect. This is integrated into your login and no action is required by you to enable Global Protect.
- 2. Log into Panorama by opening the web browser and entering the URL provided by the Panorama Team.



3. Select your domain. Enter Username and Password.

4. Select the appropriate role assigned to username. Click OK.

Roles are used by Panorama to define what users are authorized to view and perform while they are working with Panorama. A user may be provided with one or more roles, depending on the nature of the work and the responsibilities involved. A user may be assigned one or more Roles when they are registered to use the system.

Tip: Multiple Roles

For those users with multiple roles, expand the Role drop-down list and select the correct role. Point your mouse pointer slowly to the name of the role you are about to select to ensure you are selecting the correct role for the organization you are supporting today. The full name of the Role and the Organization will be displayed in a yellow message box.



Login / Ouverture de session

* Required Field / Information Requise Specify your Organization, Role and L	anguage preference / Indiquer votre Organisation, rôle et langue préférée
* Organization/Organisation:	Nova Scotia Health Authority
* Role/Rôle:	NS IMMS CLERK
* Language/Langue:	superuser NS_MOH NS_IMMS_NURSE
	Continue/Continuer

Once you press continue, you will be presented with the Panorama Dashboard





3 NAVIGATE IN PANORAMA

Navigating around Panorama allows the User to access certain functionality across the system. This includes:

- Panorama Dashboard
- Using the Left-Hand Navigation
- Accessing Recent Work
- Using the Back Button
- Common Panorama Functions

3.1 Panorama Dashboard

The **Dashboard** page is the first page a user will see upon a successful login to Panorama. This page is accessible from anywhere in Panorama by clicking on the Panorama logo in the upper left-hand corner of any screen.

The **Dashboard** does not contain client information; therefore, it can be used as a "clean" page to quickly bring forward when someone else is present. Keep in mind that if you are in the middle of a transaction, you will lose your work if you do not save before clicking the logo.

To start working with client data, a user needs to click the **Immunization** tab in the top navigation bar.



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3.2 Left-Hand Navigation

The **Left-Hand Navigation** menu bar allows users to easily move between Panorama screens. To access a screen, move your mouse pointer to the name of the Panorama function you need to access.

Some functions are grouped in categories. To see what functions are available within a group, click the arrow next to the name of the primary function (e.g., Client). The menu will expand and display additional functions available (e.g., Immunization Service and All Services).

Immunization	Search Clients	Search	Search Jurisdictional Registry	Search Card Retriev	e Reset 🔒 ?
	Basic Search Criteria		1		*
🖈 Recent Work	Client Number: C	Client Number Type:		Selec	t all that apply: nclude Inactive Clients
LClient V	Gender: N	Nationality:		~	nclude Indeterminate Clients
Search Clients	•	-		t	Jse Phonetic Matches
Client Details ~	First Name:	Middle Name:	Last Name:	Mother's Name:	
Client Demographics					
Occupation/Education	Choose one:				
Health Services	Date of Birth or Age Range Not Ap	pplicable			
Financial Assistance	Date of Birth:	yyyy/mm/dd			
Aboriginal Information	Data of Bisth Banasi	Effective From:	То:		
Immigration Information	Date of Birth Range:	yyyy/mm/dd	yyyy/mm/dd		
Client Warnings	Age:	e.g. 2 or 0-18 or 18	. Year(s) 👻		
Client Relationships	Telephone Number:				
Client Households	Country: Nur	mber:			
Consent Directives ~	· · · · · · · · · · · · · · · · · · ·	x			
Allergies	Health Region Organization:				
Risk Factors	e.g. Organization Display Name	0 Q	Exact Match		
Travel History	Advanced Search Criteria				
Imms History Interpretation	Advanced bearen enterna				
Upload Clients	Search Results				*

3.3 Recent Work

The **Recent Work** feature of Panorama allows a user to bypass client search and quickly access the last ten clients the user has worked with.

To access the **Recent Work** list, click **[Recent Work]** in the top of the **Left-Hand Navigation** menu. The **Recent Work** list will expand to show a list of the last ten clients a user has accessed. The **Recent Work** will store information about these clients even after the end of the user's Panorama session and logout from the system.



	Search Clients	Search	Search
=	Basic Search Criteria		
	Client Number: Client Numb	er Type:	
📌 Recent Work	Recent Work:		
Lient ~	1. Client: juman, jij2 (Client ID: 364)	Immunization	
Search Clients	2 Client: Mara Williams (Client ID: 404)	Immunization	
Client Details ~	- Immunization: Summary	mmunization	
Client Warnings	3. Client: juman, jij (Client ID: 363) - Immunization: Summary	Immunization	
Client Relationships	4 Client: Holly Mayer (Client ID: 403)	Immunization	
Client Households	- Immunization: Summary		
Consent Directives ~	5. Client: Badr, Tim (Client ID: 1) - Immunization: Summary	Immunization	
Allergies	() Date of Birth Range:	ww/mm/dd	To:
Risk Factors	ý	yyymmiud	ууу
		- 0 0 40 40	2//

3.4 Back Button

Users should not use the back button of the internet browser to move/return to the previous screen of Panorama. The most common way to safely exit the active screen and return to the previous screen is by clicking the **Cancel** or **Close** buttons.

Other methods of exiting a specific screen will be described in this manual where applicable.

3.4.1 Common Panorama Fields and Screen Buttons

The following table provides a list and descriptions of common screen elements and buttons in Panorama.

BUTTON/FIELD TYPE	DESCRIPTION
C Radio Button Part of Multiple Birth? O Yes O No O Unknown	A Radio Button is used to select <u>only one</u> value from a predefined set of options. It can be selected or deselected.



Image: DTaP-IPV-HibImage: DTaP-IPV-Hib <tr< th=""><th>A Checkbox is used to select <u>one or more</u> <u>than one</u> value from a predefined set of options. It can be selected or deselected.</th></tr<>	A Checkbox is used to select <u>one or more</u> <u>than one</u> value from a predefined set of options. It can be selected or deselected.
Search Retrieve Clear	A Command button is used to initiate an immediate action that is invoked when the user clicks on the button. For example, clicking the Search button will initiate a client search.
Allergy Category: Allergy Drug Allergy Food Allergy Miscellaneous Allergy Vaccine Allergy	A Dropdown list is used to select one value from a list. When a dropdown list is inactive, it displays a single value. When activated, it displays (drop downs) a list of values from which the user can select one.
 Client Search Clients Client Details Client Warnings Relationships Households Consent Directives Allergies Risk Factors Travel History Imms History Interpretation Upload Clients Potential Client Matches 	The Left-Hand Navigation menu allows the user to easily navigate between the screens once a user has accessed one of Panorama's main sections or components.



Last Name:	Free text fields allow users to enter text of their choice. There may be a limitation to the number of characters a user can enter in a field.
* Last Name: Mohammed	Mandatory fields must be populated before the information on the screen can be saved. Mandatory fields will be marked by a red asterisk.
Occupations: Heal Health Care Worker 20 10/09/14	Type-ahead fields are programmed to anticipate what the user is typing and provide suggestions for the user to choose from. A user can only enter one of the suggested values.
yyyy mm dd	A date field is used to enter dates using a predefined yyyy-mm -dd format.
Image: Height of the state in the state	A calendar field in Panorama can be used to enter the date by picking the date from the calendar. To display the calendar field, a user can click the calendar widget in the date field. By default, the current date is automatically selected. A user can select another date as needed. Single right and left-facing arrows can be used to select a required month. Double right and left- facing arrows can be used to select a required year.



4 SET-UP USER DEFAULTS

User defaults in Panorama are designed to minimize data entry and reduce the time required to enter the same information repeatedly on different Panorama screens. A user can define how Panorama will fill out specific fields on most immunization screens in advance.

User defaults enable users to view and update their preferences for immunization default values. The default values are used to automatically populate specific data entry fields on immunization screens. Immunization defaults will support data entry for routine clinical services at the point of service or for historical documentation.

Set up your Immunization Defaults before entering any data in Panorama. Any information entered in the Immunization Defaults may be updated as often as required.

4.1 Updating User Profile

Users must be assigned to one or more Nova Scotia Health Authority Organizations to use Panorama. There are different types of Organizations in Panorama. These include Nova Scotia Health Authority-related Organizations (called Jurisdictional Organisations or JOrgs in Panorama) and School-related Organizations. More details on the Organizations are included in the ADM 101 training course for System Administrators.

User Profiles will be automatically populated when the user is registered in Panorama. In the situation where users belong to more than one organization, they will select their Organization upon login and the specific Service Delivery Location (SDL) at the Panorama Dashboard page.

A **Service Delivery Location** (SDL) is the physical location where Providers provide immunization services. A user can be assigned to one or more SDLs and will have the option to choose which SDL to record information for by selecting the correct item from the **Service Delivery Location** dropdown list and clicking the **Select** button. You may return to this page and change your SDL at any time during your session.



Public Health Solu	tion for Disease Surveilla	ance and Management	supports the identifica	ation, management and	i		e	Marc	ch Tu	-	2017		
trol of infectious dis	eases and outbreaks the	at pose a threat to the p	publics health.				Su	MO	TU	1	2	3	
Specify your	Service Delivery Locati	ion (SDL).					5	6	7	8	9	10	1
	* Service Delivery Loc	cation: Sample JOrg	SDL C Sel	ect			12	13	14	15	16	17	T
	SUL TIME	Zone:					19	20	21	22	23	24	
							00		20	20	30	31	-
Persor View all yo	nal WorkLoads ur assigned work tasl	s ks	Repo Specify and view	orting client specific and te reports			Ex	terr	20 nal F	Refe	renc	ce L	
Persor View all yo	nal WorkLoads ur assigned work tasi	s ks	Repo Specify and view aggrega	orting client specific and te reports.	7	 No	Ex LINI Refer	terr (s w	Link I	Refei PEN A	renc New	ce L	LI NG
Persor View all you	nal WorkLoads ur assigned work tast ent Manageme	s ks nt	Rep Specify and view aggrega Notifie	orting client specific and te reports. cations	7	L L No	Ex LINI Refer	terr (s w	Link I	Refei PEN A	renc New	ce L	Li

Next you will select **My Account** on the top right-hand corner of the **Dashboard** page, then select **User Profile**. Users should validate their user preferences and update fields as necessary to ensure information is complete (i.e. telephone number and email).



10



	WORK MGMNT INVESTIGATIONS OUTBREAKS IMMUNIZATION FAMILY HEALTH IN	NVENTORY ADMIN
Recent Work Indices Terminology Templates	Manage User Profile	Save Reset
 > Security > Miscellaneous > Reporting & Analysis > Notifications 	Personal Information User ID : PERMISSIONS Name: ALL PERMISSIONS Default SDL : Sample JOrg SDL Organizational Membership Information	g Hide Personal Information
	Organization Name : Sample Jurisdictional Organization Phone Number(s) A maximum of 3 phone numbers can be entered *Type: emergency contact *Number: Row Action: Update Remove Time Mumber: * Number: ************************************	Add Clear
	Type Number Oxt Email:	Add SDL
	Associated Service Delivery Location(s) Default Sample JOrg SDL Default Encounter Group and Service Provider Click Find to select a provider Encounter Group: Default Encounter Group: Click Find to select a provider Click Find	Il Encounter Group and Service Provider
	Provider: Doctor Test	Clear Provider Find Q Save Reset

4.2 Setting Immunization Preferences

Users may also set preferences based on their typical practices for administration of vaccine and pharmacologic products. Panorama enables documentation of age-specific preferences to allow for anatomical sites that appropriate for each client age range.

Setting Immunization Preferences supports faster documentation and auto-populates the user's documented preferences for point of service and historical documentation.

The **Update Immunization Default** screen displays a summary of current Immunization Default settings for the user including:

• General Immunization Defaults

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- Anatomical Admin Site Defaults
- Immunizing Agent Defaults

83 - 2	And the first of the local distance of the l	Tester Pan	orama: su	iperus	er for N	SHA		
PANORAMA Public Health Solution for	PNS Test	Jurisdiction Notifications: 0 Help Co	ontact Us	My Ac	count	Chang	e Role	Logout
Disease Surveillance and Manage	ement			User P	rofile			
	WORK MGMNT INVESTIGATIONS OUTBREAKS	IMMUNIZATION FAMILY HEALTH	INV	Immun	izations I	efaults		
				Notific	ation Pref	erence	s	Next
The Public Health Solution	on for Disease Surveillance and Management supports the identific	ation, management and		Netwo	rk Speed	lest	*	S a
control of infectious dise	ases and outbreaks that pose a threat to the publics health.				1	2	3	4
Specify your Se	ervice Delivery Location (SDL).		5	6	7 8	9	10	11
	* Service Delivery Location: Halifax PHO - Select	ot	12	13	14 15	16	17	18
	SDL Time Zone: ADT		19	20	21 22	23	24	25
			26	27	28 20	30		_
Persona	al WorkLoads Rep	orting	20	21	20 20	00		
View all your	assigned work tasks Specify and view	v client specific and	-					
	aggrega	ate reports.		NKS W	ILL OPEN	A NE	W WIN	Dow
			No Refe	erence	Link has	been	added	
Documer	nt Management Notifi	cations						
Add, update,	delete and search for Create and vie	w jurisdiction and						
electronically	attached documents. threshold	notifications.						
	View Thresh	old Notifications						
	Need Help ? Contact information for the							
## Immunization	Update Immunization Defaults		S	ave	Rese		log	₽?
=	General Immunization Defaults						(*
A Decod Minds	Provider:							
Client Y	e.g. Provider Last Name, First Name							
LCohort ~	e.g. Organization Display Name	Apply defaults to Historical Imm	unizations:					
🥖 Immunizations 🗸 🗸	Service Delivery Location:							I
🖬 Lab 🗸 🗸 🗸	e.g. SDL Display Name							
🔔 Upload Data 🛛 🗸	Holding Point Name:	Holding Point Location:						I
Notes		Ψ.						
Document Management	Anatomical Admin Site Defaults						[*
Communication Templates Deporting & Applying	To create a new record click Add.						[Add
Notifications								
Communications Log	Immunization Agent Lot Number Defaults							*
💩 Workgroups	To create a new record click Add.						[Add
🔑 Administration 🛛 🗸								
Imms Defaults								
Lab Panels								

4.3 Provider Default

It is recommended that nurses leave the Provider section vacant. Panorama will automatically default to the Provider who has signed in when they are documenting provider recorded immunizations.



Additionally, nurses should select 'No' regarding applying default to historical immunizations. Users will still be able to select any provider for the administration of immunizations but this will not be auto-populated when documenting historical immunizations.

Nurses who are recording many immunizations on behalf of another provider may want to set the Provider default setting to reflect another provider's name when documenting non-provider recorded immunizations.

Click on the **Provider** field to type the first few letters of the Provider's **last name**. Allow the name to appear and then click on it to select. Click Save after updating each default field or update all fields and then click **Save**.

Update Immunization Defaults			Reset
General Immunization Defaults			
Provider: Noseworthy, Ch C C Noseworthy, Ch C Noseworthy, Ch C Noseworthy, Ch C Noseworthy, ChRISTENA MARIE , Registered Nurse, CRNNS RN ID # 21668 E.g. Organization Display Name	Apply defaults to Historical Immunizatio	ns:	

) Tip: Clear Default Settings

Remember to clear/update the default setting when you are finished entering information for a different provider.

4.4 Organization Default

Click in the **Organization** field to and type the first few letters of the **Organization**. Allow the name to appear and then click on it to select.

Organization:		
Anti		Q
Antigonish PHO	ation:	60

Tip: Select the Organization that provides the vaccine supply.

4.5 Service Delivery Location Default

Click in the **Service Delivery Location** field to and type the first few letters of the **Service Delivery Location (SDL)**. Allow the name of the SDL to appear and then click on it to select. This will set **the Default SDL** and will make it easier for you to enter SDL data in your immunization service delivery.

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Service Delivery Location:		
Port Hawkesbury PHO, Port Hawkesbury, Nova 5	0	Q

Note: This default is the location you deliver immunizations.

4.6 Holding Point Name Default

Adding the **Holding Point Name** to the defaults will ensure that when immunizations are delivered, the product is auto-decremented from the Holding Point associated with the provider's public health office.

1. Click in the **Holding Point Name** field and type the first few letters of the Holding Point. Allow the name of the **Holding Point** to appear and then click on it to select. This will set the **Holding Point Name**.

Holding Point Name:	
Port Hawkesbury PHO	-

2. Click Save.

4.7 Holding Point Location Default

Each Holding Point contains several Holding Point Locations (HPLs) where inventory is stored. Inventory intended for immunizations is stored in operational Holding Point Locations. Once a Holding Point Location default is set, the immunizations you provide will automatically auto-decrement from it. If setting up a Holding Point Location default, consult with your Biological Coordinator to confirm which Holding Point Location should be selected.

Note: If a nurse delivers immunizations at both school and Public Health Office clinics, two different HPLs will be used.

1. Click in the **Holding Point Location** field and make a selection.





2. Click Save.

4.8 Anatomical Admin Site Default

The Anatomical Admin Site Defaults are an optional process where the preferred sites of administration can be identified for some or all vaccines. This default value is used to record immunization preferences for the anatomical site for a specific immunizing agent administered to a pre-defined age group. Once an immunizing agent is selected for a client of a matching age, Panorama will automatically populate the anatomical site for this vaccination.

1. To add a new Anatomical Admin Site default, click **Add** on the right side of the section.

Immunization	Update Immunization Defaults	Save Reset I 🔤 🖨 ?
=	General Immunization Defaults	×
 ☆ Recent Work Client ✓ Mcohort ✓ / Innunizations ✓ Clab ✓ Lab ✓ Upload Data ✓ Notes 	Provider:	ons:
🕲 Document Management 🛛 🗸	Anatomical Admin Site Defaulte	
Communication Templates		
Reporting & Analysis ~	To create a new record click Add.	Add
Notifications ~	Immunization Agent Let Number Defaulte	
Communications Log		
💩 Workgroups	To create a new record click Add.	Add
/ Administration 🗸		
Imms Defaults Lab Panels		

2. Select the **Immunizing Agent** by scrolling down the dropdown list or by typing the first few letters of the desired agent. Click on the desired agent to select it.



Anatomical Admin Site Defaults										
Add Anatomical Admin Site De	faults	Apply	Reset	x						
Immunizing Agent: DTaP Dtap	• Anatomical Site:									
DTaP-HB-IPV-Hib			Apply	Reset						
DTaP-IPV				Add						
DTaP-IPV-HB										
I DTaP-IPV-Hib	r Defaults			^						

3. Next, select the desired anatomical site location from the dropdown menu.

Anatomical Admin Site Defaults		*
Add Anatomical Admin Site Defaults		Apply Reset 🖨 🗙
Immunizing Agent: DTaP-IPV	* Anatomical Site:	
Minimum Age (Months):		
	Arm: upper left	Apply Reset
To create a new record click Add.	Arm: upper right =	Add
Immunization Agent Lot Number Defaults	Deltoid: right	×
To create a new record click Add.	Dorsogluteal: left Dorsogluteal: right	Add
	Mouth Nares: bilateral	

4. Finally, enter the Minimum and Maximum ages, then click **Apply**. If the default should apply to older children and adults, leave the maximum age field blank. To add more defaults for other agents, simply click **Add** again and repeat this process.

Anato	omica	I Admin Site Defaults			^								
Add	Anate	omical Admin Site Defaults			Apply Reset 🖨 🗙								
* Imm DTa Minin 25	unizin P-IPV num Aç	g Agent: ye (Months):	* An Max	atomical Site:									
_	Apply Reset												
Anato	mical	Admin Site Defaults			*								
Upd	ate	Delete			Add								
	3	Immunizing Agent +	Anatomical Site 0	Min Age 🗘	Max Age 🗘								
		DTaP-IPV	Deltoid, right	25 mo.									
		DTaP-IPV-Hib-HB	Anterolateral thigh, right	0 mo.	24 mo.								
		Pneumococcal Prevnar 13	Deltoid, right	25 mo.									
		Pneumococcal Prevnar 13	Anterolateral thigh, right	0 mo.	24 mo.								
Total:	4				10 -								

NOVASCOTIA

In the example above, the user has set a preference for administering Prevnar 13 in the anterolateral thigh for children ages 0-24 months, and for all clients older than 24 months, the default site is the deltoid. DTaP-IPV-Hib-HB is similarly set for the anterolateral thigh from 0-24 months, with the deltoid site defaulted for DTaP-Hib after age 25 months.

5. After adding all default preferences, click **Save** to ensure User Preferences are successfully added to the profile.

Tip: Changing Defaults

Defaults may be changed at any time by the user. Additionally, when documenting an immunization, the user can select a different value other than the default simply by clicking on the field and selecting a different value. For example, you may have a default set for the left deltoid, but if the client requires a different sit of administration for some reason, the Provider can simply select a different site from the available options in the dropdown menu.



5 IMMUNIZATION FORECASTER

5.1 What is the Immunization Forecaster

The Immunization Forecaster is a decision-support tool contained in the Immunization section of Panorama and used to support clinical identification of the specific vaccine needs of clients based on the Nova Scotia Publicly Funded Vaccine Eligibility Policy, NS Immunization Schedules, best practices and recommendation on immunizations provided through Canadian Immunization Guide, National Advisory Committee on Immunizations, and Product Monographs

The Forecaster tool does not replace clinician judgements about the best care for individual clients based on their unique needs and health situation.

The Immunization Forecaster tool generates a forecast for a client that includes recommendations on which specific immunizations should be administered to a client in the future and the recommended dates of administration.

The Immunization Forecaster assesses all routine, publicly funded immunizations recorded in Panorama. Nova Scotia requirements and immunization guidelines are directly converted into the rules that the Forecaster uses to generate all recommendations.

The Forecaster considers the client's age, gender, administered immunizations, and special considerations such as exemptions and contraindications. If a recorded immunization does not meet the Forecaster rules, the Forecaster will mark it as "Invalid" and the immunization will be displayed in the **Summary Table** with an 'X' in front of the date. Invalid immunizations will not count towards series completion.

The Immunization Forecaster supports clinicians in their decision-making but is not meant to and should never replace clinical judgment. The Immunization Forecaster can save a clinician time and effort in determining the immunizations due or overdue for a client based on a client's clinical history and published clinical guidelines. Your clinical judgment may at times be different from the Immunization Forecaster recommendations. A user can enforce clinical judgment over the Forecaster by 'overriding it' and marking invalid immunizations as valid, as well as the reverse.

The Immunization Forecaster informs all coverage reports, Search Client Forecast results (client immunization status list), and client status in the Mass Immunization Event. This means that whether a client is included in the coverage report or Search Client Forecast as up-to-date or due for an immunization, is based on the Forecaster decision.

To support the Forecaster and the accuracy of a client's individual forecast, as well as other Panorama components such as Search Client Forecast, immunization coverage reports and Mass Immunization Event client lists, **users must ensure that the client immunization history has been correctly documented and validated**. This is an essential component to ensure the future forecast is correct.



A user should verify that all available clinical information for a client has been documented in Panorama.

This includes:

- Age: A client must have a documented date of birth documented in Panorama.
- **Gender:** A client must have a gender documented in Panorama.
- **Historical Immunizations**: All past immunizations must be created as historical immunization records. All immunizations valid from the clinical perspective must display as valid and no invalid immunizations may appear as valid.
- **Special Considerations:** If a client has a history of a disease and should be exempt from a vaccination, is a conscientious objector, or is contraindicated for a vaccination due to a clinical condition, this information must be recorded in the Special Considerations.

The above factors directly impact the Forecaster. For example, if a client is exempt from MMR (and is recorded as a **Special Consideration** in Panorama) then the Forecaster will not forecast MMR during the specified time frame recorded.

As a Panorama user, it is your responsibility to provide accurate and up-to-date information about client clinical history to support informed and accurate decision-making for individual client forecasts and immunization reports.

5.2 Reading the Forecaster

The Immunization Forecast section of the client record displays all recommended immunizing agents based upon the NS immunization schedules currently in effect, compared against the client's age, gender, immunization history, contraindications and exemptions recorded for the client.

Antigens are 'rolled up' or combined to be forecasted as agents such as vaccine products like DTaP-IPV-Hib. This agent will be administered as one vaccine instead of each antigen administered separately. The following screenshot shows the agent being forecasted as one vaccine. Where NS does not use a combined vaccine these antigens will be forecasted separately.

Immunization Forecast by Agent/Antigen 🛛 🕺 🔝										
Last Forecast Ran On: 2018 Feb 01										
Forecast Status calculated as of: 2018 Feb 01 Refresh Forecast										
Immunizing Agent/Antigen	Forecasted Dose # 🗘	Codes ≎	Volume ≎	Brand ≎	Eligible ≎	Due 🔺	Overdue ≎	Forecast Status 🗢		
DTaP-IPV-Hib	1				2016 Mar 20	2016 Apr 07	2016 May 07	Overdue		
Pneu-C-13	1				2016 Mar 20	2016 Apr 07	2016 May 07	Overdue		
Men-C-C	1				2016 Apr 07	2017 Feb 07	2017 Mar 07	Overdue		
MMRV	1				2017 Feb 07	2017 Feb 07	2017 Mar 07	Overdue		
HB-regular	1				2016 Feb 07	2028 Sep 01	2029 Jan 01	Eligible		
HPV-4	1				2025 Feb 07	2028 Sep 01	2029 Jan 01	Up To Date		
Men-C-ACYW-135	1				2017 Feb 07	2028 Sep 01	2029 Jan 01	Eligible		
Pneu-P-23	1				2018 Feb 07	2081 Feb 07	2081 Mar 07	Up To Date		

Dose

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The Forecasted Dose # column identifies the next dose number for an agent in a multidose series for which the client is eligible. Dose # is calculated based on the number of documented valid doses of the agent in the client history.

In the example below, a client has not yet received any doses of MMRV and is forecasted for Dose 1. The client has already received Dose 1 of DTaP-IPV-Hib and is forecasted for Dose 2.

Immunization Forecast by Agent/Antigen										
Last Forecast Ran On: 2018 Feb 02										
Forecast Status calculated as of: 2	018 Feb 02						Re	fresh Forecast		
Immunizing Agent/Antigen	Forecasted Dose # \$	Codes \$	Volume \$	Brand \$	Eligible \$	Due 🔺	Overdue ≎	Forecast Status \$		
Pneu-C-13	1				2016 Mar 20	2016 Apr 07	2016 May 07	Overdue		
DTaP-IPV-Hib	2				2016 May 17	2016 Jun 07	2016 Jul 07	Overdue		
Men-C-C	1				2016 Apr 07	2017 Feb 07	2017 Mar 07	Overdue		
MMRV	1				2017 Feb 07	2017 Feb 07	2017 Mar 07	Overdue		

Codes

Users may occasionally notice values present in the **Code** column. There are three codes that may be used to reflect specific situations.

- EDS indicates if the forecasted agent is *Extra Dose Safe*. This relates to an extra dose of an antigen administered in order to give a particular agent. E.g. Client is complete for measles but needs mumps and rubella. The immunization rules will allow MMR to be forecasted providing the additional measles is the only way to support the client's need for mumps and rubella.
- LOA indicates a *Left-Over Antigen*. This situation appears when the available immunization agents for administration do not contain all forecasted antigens. An example of this would be if a client is missing a Diphtheria or Pertussis but Td is forecasted. The Td would appear as forecasted and the Diphtheria would also appear to be forecasted but would carry the code LOA.
- A letter "**M**" (for mixed dose) may display in the Forecasted Dose column instead of a dose number. A mixed dose indicates that the client has received a different number of doses of the antigen components for the forecasted agent. For example, if a client has a single IPV in history, but no Tdap, the forecasted dose for Tdap will show "M" because it is the first dose of Tetanus, Diphtheria and acellular pertussis but the second dose of IPV.



Eligible

The **Eligible** column displays the earliest clinically valid date on which a forecast agent can be given in compliance with the age and minimum interval rules governing vaccine administration.

In the example below, the client became eligible for Dose 1 of Tdap-IPV on 2006 Mar 21.

Immunization Forecast by Agent/Antigen									
Last Forecast Ran On: 2018 Feb 01									
Forecast Status calculated as of: 2	018 Feb 01 ·						Re	fresh Forecast	
Immunizing Agent/Antigen	Forecasted Dose # 🗢	Codes ≎	Volume ≎	Brand ≎	Eligible ≎	Due 🔺	Overdue ≎	Forecast Status 🗘	
Tdap-IPV	1				2006 Mar 21	2006 Apr 07	2006 May 07	Overdue	
MMRV	1				2007 Feb 07	2007 Feb 07	2007 Mar 07	Overdue	
HB-regular	1				2006 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	
HPV-4	1				2015 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	
Men-C-ACYW-135	1				2007 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	

Due

This column displays the date when the immunization became due. This is the same date as the Eligible date.

Immunization Forecast by Agent/Antigen										
Last Forecast Ran On: 2018 Feb 01										
Forecast Status calculated as of: 2	018 Feb 01 ·						Re	efresh Forecast		
Immunizing Agent/Antigen	Forecasted Dose # 🗢	Codes ≎	Volume ≎	Brand ≎	Eligible ≎	Due 🔺	Overdue ≎	Forecast Status 🗢		
Tdap-IPV	1				2006 Mar 21	2006 Apr 07	2006 May 07	Overdue		
MMRV	1				2007 Feb 07	2007 Feb 07	2007 Mar 07	Overdue		
HB-regular	1				2006 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		
HPV-4	1				2015 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		
Men-C-ACYW-135	1				2007 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		

Overdue

This column displays the date when the immunization became overdue. Based on the DHW rules, this date is defaulted as 1 month after the Due date.

In the example below, the client became overdue for Dose 1 of Tdap-IPV on May 7, 2006.

Immunization Forecast by Agent/Antigen										
Last Forecast Ran On: 2018 Feb 01										
Forecast Status calculated as of: 2018 Feb 01 · Refresh Forec										
Immunizing Agent/Antigen	Forecasted Dose # 🗢	Codes ≎	Volume ≎	Brand ≎	Eligible ≎	Due 🔺	Overdue ≎	Forecast Status ≎		
Tdap-IPV	1				2006 Mar 21	2006 Apr 07	2006 May 07	Overdue		
MMRV	1				2007 Feb 07	2007 Feb 07	2007 Mar 07	Overdue		
HB-regular	1				2006 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		
HPV-4	1				2015 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		
Men-C-ACYW-135	1				2007 Feb 07	2018 Sep 01	2019 Jan 01	Eligible		



Forecast Status

Four types of immunization status exist for clients:

Up to Date: The client is not yet eligible (e.g., "Eligible in the future"), and the minimum interval and/or minimum age has not yet been satisfied.

Eligible: The Eligible date has been reached (minimum interval and/or minimum age have been satisfied), but the Due date is in the future.

Due: The recommended date for vaccine administration according to the current schedule date; this implies minimum intervals and/or minimum age have been satisfied.

Overdue: For *routine immunization schedules*, forecasted agents are considered overdue one (1) month after the Due date has passed,. For *school immunization schedules*, forecasted agents are considered overdue four (4) months after the due date. Overdue status also considers minimum intervals: if a client is behind on immunizations, the status will remain Up to Date until the minimum interval has passed, then it will become Overdue.

Reforecasting

Panorama automatically updates a client's immunization forecast when new immunizations, exemptions/contraindications are added, updated, or deleted, or/and a birth date or gender changes. User also have the option to execute a forecast on demand by clicking the **Refresh** button.

Immunization Forecast by Agent/Antigen									
Last Forecast Ran On: 2018 Feb 01									
Forecast Status calculated as of: 2	018 Feb 01						Re	efresh Forecast	
Immunizing Agent/Antigen	Forecasted Dose # 🗢	Codes ≎	Volume ≎	Brand \$	Eligible ≎	Due 🔺	Overdue ≎	Forecast Status ≎	
Tdap-IPV	1				2006 Mar 21	2006 Apr 07	2006 May 07	Overdue	
MMRV	1				2007 Feb 07	2007 Feb 07	2007 Mar 07	Overdue	
HB-regular	1				2006 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	
HPV-4	1				2015 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	
Men-C-ACYW-135	1				2007 Feb 07	2018 Sep 01	2019 Jan 01	Eligible	

Whenever a client's forecast is re-executed, the validity and dose number of each of the client's immunizations is re-evaluated, updated, and displayed. All valid immunizations will be renumbered sequentially based on the order within the series.

Any immunizations that are marked as invalid after the re-forecast will not be affected. They will be displayed as their intended dose #: the next valid dose will continue with the next available dose number.

Any immunizations that were not forecast will not be affected.

Invalid Immunizations

Any vaccinations that do not meet the forecaster rules are marked as invalid in Panorama. Invalid doses are displayed with an 'X' mark in the immunization date in the **Immunization History- Summary Grid** table.

In the example below, a client was administered MMRV below the minimum age of 12 months, and an X is displayed in the **Summary Grid** table alerting the clinician that this

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dose is invalid. Additionally, the status of the dose is identified as Invalid in the **Detailed Data Table** below the Summary Grid.

Immu	nizatio	n Details										*
Immun	ization H	listory - Summar	y Grid									
	Agent *				Date Administered		tered	Date Administered		d Administered ≎	Date Administered ≎	
0	DTaP-IPV-Hib				2016 Apr 19							
0	MMRV	1			2017 Feb 01 (X)							
Immun	ization H	listory - Detailed	Data Table			-						
							▼ Add	Single Im	munizati	ion 🔽 🗸	Add One or More In	munizations
Upd	late	View Delet	e									
		8	Agent *	Date Administered ≎	Age at Administrat	tion \$	Statu	s ≎	Trade N	Name \$	Body Site \$	Volume \$
			DTaP-IPV- Hib	2016 Apr 19	2m 12d		Valid					
			MMRV	2017 Feb 01	11m 25d		Invali	d				

Invalid doses will not be counted towards the client's total series when planning future doses. For example, the client in the above example will require Dose 1 of MMR to be administered as the Invalid dose will not count as Dose 1.

Invalid doses will be considered when calculating minimum intervals for planned doses for safety/clinical effectiveness reasons.

Each antigen will be listed with one of the following corresponding invalidation reasons:

- Client administered with same agent on same day: If two doses of the same agent/antigen are given on the same day, Dose 1 is marked valid and Dose 2 is marked as invalid. All the antigens within the invalid dose will have this reason.
- Additional dose resulting from use of a multi-antigen agent: If an antigen in a multi-antigen agent is not "Extra Dose Safe" (EDS), and is provided as an additional dose as part of this agent, this reason will display for the invalid antigen.



Update V	View Delet	e							
	B	Agent 🔺	Date Administered ≎	Age at Administratio	on \$	Status 🗘	Trade Name ᅌ	Body Site 🗘	Volume ≎
		DTaP-IPV- Hib	2016 Apr 19	2m 12d	V	/alid			
\bigcirc		М	2017 Apr 12	1y 2m	V	/alid			
\bigcirc		MMRV	2017 Feb 01	11m 25d	In	nvalid			
\bigcirc		MMRV 2017 Jun 13 1y 4m Valid							
			Defenden Crist	Footon TR at	Lie Test		Marca James Torra d		
special Conside	AE	Allergies	Deterrais Risk	ractors (B Sk	kin lest	IGRA Tests	mass imms Event	view Consent	IHI
Antigen Count	t								*
Antigen Count Immunization	t Forecast by <i>l</i>	Agent/Antigen							<!--</td-->
Antigen Count Immunization Last Forecast Ran	t Forecast by / n On: 2018 Feb 0	Agent/Antigen				-	-		× ×
Antigen Count Immunization Last Forecast Ran Forecast Status ca	t Forecast by / n On: 2018 Feb 0 alculated as of:	Agent/Antigen 2 2018 Feb 02				-		Re	V V
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age	t Forecast by / n On: 2018 Feb 0 alculated as of: gent/Antigen	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$	Codes 🗘 V	/olume ≎ Bi	and ≎	Eligible \$	Due 🗘	Re Overdue \$	
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23	t Forecast by , h On: 2018 Feb 0 alculated as of: gent/Antigen	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # ≎ 1	Codes 🗘 V	/olume ≎ Br	łrand ≎	Eligible ≎ 2018 Feb 0	Due ≎ 7 2081 Feb 07	Re Overdue ≎ 2081 Mar 07	fresh Forecast Forecast Status \$ Up To Date
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13	t Forecast by / n On: 2018 Feb 0 alculated as of: gent/Antigen	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # ≎ 1	Codes 🗘 V	/olume ≎ Br	trand \$	Eligible \$ 2018 Feb 0 2016 Mar 2	Due ≎ 7 2081 Feb 07 0 2016 Apr 07	Re Overdue ≎ 2081 Mar 07 2016 May 07	fresh Forecast Forecast Status \$ Up To Date Overdue
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13 MMRV (Measles	t Forecast by / n On: 2018 Feb 0 alculated as of: jent/Antigen	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$ 1 1 M	Codes EDS	/olume ≎ Bi	trand ≎	Eligible \$ 2018 Feb 0 2016 Mar 2 2017 Jul 11	Due ≎ 7 2081 Feb 07 0 2016 Apr 07 2017 Aug 07	Re Overdue ≎ 2081 Mar 07 2016 May 07 2017 Sep 07	fresh Forecast Forecast Status \$ Up To Date Overdue Overdue
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13 MMRV (Measles Men-C-C	t Forecast by / n On: 2018 Feb 0 alculated as of: yent/Antigen es (M)*)	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$ 1 1 1 1 1 1	Codes EDS	/olume ≎ Br	and ≎	Eligible \$ 2018 Feb 0 2016 Mar 2 2017 Jul 11 2016 Apr 07	Due ≎ 7 2081 Feb 07 0 2016 Apr 07 2017 Aug 07 7 2017 Feb 07	Re Overdue ≎ 2081 Mar 07 2016 May 07 2017 Sep 07 2017 Mar 07	fresh Forecast Forecast Status \$ Up To Date Overdue Overdue Overdue
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13 MMRV (Measles Men-C-C Men-C-ACYW-13	t Forecast by / n On: 2018 Feb 0 alculated as of: jent/Antigen es (M)*)	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$ 1 1 1 M 1 1	Codes \$ V	/olume ≎ Bi	irand ≎	Eligible \$ 2018 Feb 0 2016 Mar 2 2017 Jul 11 2016 Apr 0 2017 Feb 0	Due ≎ 7 2081 Feb 07 0 2016 Apr 07 2017 Aug 07 7 2017 Feb 07 7 2028 Sep 01	Re Overdue ≎ 2081 Mar 07 2016 May 07 2017 Sep 07 2017 Mar 07 2029 Jan 01	fresh Forecast Forecast Status \$ Up To Date Overdue Overdue Overdue Eligible
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13 MMRV (Measles Men-C-C Men-C-ACYW-11 HPV-4	t Forecast by / n On: 2018 Feb 0 alculated as of: yent/Antigen es (M)*) 135	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$ 1 1 1 1 1 1 1 1 1	Codes \$ V	/olume ≎ Br	srand ≎	Eligible \$ 2018 Feb 0 2016 Mar 2 2017 Jul 11 2016 Apr 07 2017 Feb 0 2025 Feb 0	Due 7 2081 Feb 07 0 2016 Apr 07 2017 Aug 07 7 2028 Sep 01 7 2028 Sep 01 7 2028 Sep 01	Re Overdue \$ 2081 Mar 07 2016 May 07 2017 Sep 07 2017 Mar 07 2029 Jan 01 2029 Jan 01	fresh Forecast Forecast Status \$ Up To Date Overdue Overdue Eligible Up To Date
Antigen Count Immunization Last Forecast Ran Forecast Status ca Immunizing Age Pneu-P-23 Pneu-C-13 MMRV (Measles Men-C-C Men-C-ACYW-1: HPV-4 HB-regular	t Forecast by / n On: 2018 Feb 0 alculated as of: jent/Antigen es (M)*)	Agent/Antigen 2 2018 Feb 02 Forecasted Dose # \$ 1 1 1 1 1 1 1 1 1 1	Codes \$ V	/olume ≎ Br	srand ≎	Eligible \$ 2018 Feb 0 2016 Mar 2 2017 Jul 11 2016 Apr 0 2017 Feb 0 2025 Feb 0 2016 Feb 0	Due ⇒ 7 2081 Feb 07 0 2016 Apr 07 2017 Aug 07 7 2028 Sep 01 7 2028 Sep 01 7 2028 Sep 01 7 2028 Sep 01	Re Overdue \$ 2081 Mar 07 2016 May 07 2017 Sep 07 2017 Mar 07 2029 Jan 01 2029 Jan 01 2029 Jan 01	fresh Forecast Status \$ Up To Date Overdue Overdue Eligible Up To Date Eligible

• Administered date is less than or greater than eligibility date: If neither of the above two reasons are given, the dose will have this reason. This is what will be seen most often, meaning that a minimum interval, minimum age, or maximum age was violated.

The Forecaster will not invalidate doses in the following cases:

- Additional doses beyond a series end are administered that meet minimum interval requirements
- Dose was received by a route other than what is recommended
- Higher (or lower) than recommended vaccine dosage was administered (except for HB Engerix-B Adult 1.0ml and 2.0ml which have different minimum age eligibilities, and Recombivax Ped 0.5ml and 0.25ml which have different maximum age eligibility)
- Less than a full dose of vaccine given due to syringe/needle malfunction

These and other reasons can be applied by an authorized user to manually mark vaccines as invalid.

Immunization doses that have been overwritten and marked as invalid by the user will be marked with 'OX' (as overridden) not 'X'.



Immu	nization Details						
Immun	ization History - Summary Grid						
	Agent *	Date Administered	Date Administered ≎	Date Administered ≎	Date Administered ≎	Date Administered ≎	Date Administered ≎
0	DTaP-IPV-Hib	2016 Apr 19 (OX)					

Immunization Override

There are two types of immunization overrides. These include:

- From Valid to Invalid, and
- From Invalid to Valid

If a clinician determines that a recorded immunization that is marked as Valid is actually invalid for a particular reason (such as an incorrect route or dosage or some other clinical reason), the status of this immunization can be manually set to Invalid.

 \bigvee Only users authorized to make such decisions should proceed to invalidate immunizations as this action directly affects the Forecaster and the recommendations for client immunizations.

5.3 Special Considerations and the Forecaster

The Immunization Forecaster is a clinical decision support tool used in the Immunization module of Panorama. The Immunization Forecaster produces a forecast for a client, based on recommendations regarding the specific immunizations that should be administered in future and when they should be administered.

Clients may have contraindications or exemptions for a specific vaccine in their presenting condition or history that should temporarily or permanently suspend (delay or stop) the forecast for a vaccine. The forecaster will <u>only</u> use this information if it is recorded under **Special Considerations** in Panorama. It is important to ensure that the exemption and contraindication information in Panorama is always up-to-date as it has a direct impact on the forecaster and client safety.

Active contraindications and exemptions will put the forecast on hold and exclude the client from overdue lists (Query Client Forecast), show the client status as **Not Forecasted** in the Mass Immunization Event Worksheet, and list the client as being up-todate for a vaccine in coverage reports. If a client has an exemption or contraindication for a vaccine but it is not documented in Panorama, this vaccine will still be forecasted.



6 MASS IMMUNIZATIONS FOR SCHOOL IMMUNIZERS OVERVIEW

Mass Immunization Events in Panorama provides the functionality for implementing planned or ad-hoc mass immunization services (e.g. school, community, or outbreak related). The functionality is not designed to plan and deliver a *single* client immunization nor perform standard clinic operations.

Events are created to facilitate provision of immunizations to a group of clients in a single location. In Nova Scotia, Mass Immunization Events will be used when an event needs to be tracked for reporting purposes. The events can be defined in advance, by identifying the date, location, clients, providers and agents involved. The recording of the immunizations on the event date(s) is greatly facilitated by providing appropriate defaults, and reducing data entry as much as possible.

A Mass Immunization Event's main purpose is to facilitate the data entry of multiple immunizations. School Immunizers will not create mass immunization events, but will be responsible to search for a specific event and record immunizations in the Worksheet.

This document will cover the following:

- 1. Regular Mass Immunizations
- 2. School Mass Immunizations (public and private schools)
- 3. Searching Mass Immunization Events
- 4. Mass Immunization Worksheet
- 5. Assess and Immunize
- 6. Updating Event Status

Nova Scotia Standard Operating Procedure (SOP) Check: You should be aware that a detailed SOP is available governing school immunization clinics and associated activities. Please refer to your SOP manual to ensure you are aware of the required protocols and responsibilities for each staff role in preparation for general mass immunization and school clinic events in Nova Scotia.

6.1 Searching for a Mass Immunization Events

Similar to other functions in Panorama, it is best practice to search before proceeding with creating a new record in Panorama. Mass Immunizations can be searched by using multiple parameters such as **Event ID**, **Organization**, **Event Date(s)**, or **Event Type**. Once the User verifies the event has not been created previously, the User can proceed with creating a new event.

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The steps to **Search** for a Mass Immunization Event are as follow:

1. Access the **Mass Immunizations Events** screen under **Immunization** from the **Left-Hand Navigation**. The **Search Immunization Events** screen displays.



Search Mass Immunization Ever	nt		[Search	Retrieve	Reset	₽?
Search Mass Immunization Event							\$
Event ID: Status:		Event Title: Created By:]			
Event Type: School Immunization		L					
yyyy/mm/dd i yyyy/mm/dd ii Organization:							
Service Delivery Location: e.g. SDL Display Name	0 Q						
Search Results							*
No search results							Create

- Search for the mass immunization event by clearing the organization field and typing the service delivery location in the service delivery location field [the school name]
- 3. Select the mass immunization event from the presented list by clicking on the radio button to the left of the event.



Search Results						×
						Create
Update View	Delete Workshee	et				
Event ID 🗘	Event Title ≎	Event Date 💌	Additional Dates	Client List 🗘	Provided By 🗘	Status 🗘
• 1	IMMS-1 HPV-4	2017 Nov 06		Y	DORAN, James Anthony	Open
Total: 1						50 -

Tip: Searching for an Existing Event

If the User searches with the correct information for an event that was previously created, the event will show up in the **Search Results** section. Simply select **Update,** or go straight to the **Worksheet.**

6.2 Using the Immunization Worksheet

The **Mass Immunization Event Worksheet** provides a summary overview of the Mass Immunization Event along with providing the user the ability to perform functions either with an individual client or a group of clients.

The Worksheet works efficiently by sending the user to the screen where the information resides and the User can easily return to the Worksheet or Update Event screen usually by clicking on a return button or a button with the screen name. Example: A user can select a client, click on Assess and Immunize, click on a multitude of buttons that will take them to the screen where the information resides such as AEFIs or Allergies within the client's own record to view and/or record, and then return to the client list on the Work Sheet.

Accessing the immunization worksheet:

1. To access the Event Worksheet, click **Worksheet** from the search results screen.

Se	arch Results						
							Create
	Update View	Delete	et				
	Event ID 🗘	Event Title 🗘	Event Date 💌	Additional Dates	Client List ≎	Provided By 🗘	Status 🗘
	1	IMMS-1 HPV-4	2017 Nov 06		Y	DORAN, James Anthony	Open
Т	otal: 1	<i></i>					50 🔹



2. The Event Worksheet is now displayed.

Event	Works	heet				Launch F	Report	 Additional Actions 	log	2
Cohort I 17	D:	Cohor Truro	t Name: IRHS_Grade7_Novem	ber2017	Encounter G Immunizatio	Group(s): on	Client Lis TruroJRHS	t Name/ ID: S Grade7 November2017 / 1	2	
Event	Worksh	leet	_	_	_	_	-	_	V.	^
Event Tit Event Da Event Ty Display	tle: Truro ate: 2017 ype: Scho ying 7 out	JRHS_Grade7_No Nov 13 , 2017 Nov ool Immunization	vember2017 14		Event ID: 9 Location: 1 Status: Op Created By:) Truro Junior High en PERMISSIONS	School S, ALL			
Reco	ord Conserv	ent Record Ir t Update Clie	nmunization Clie	ent Event Status	Client Event Sum	nmary Defe	errals Pre	eview Client		
	٥	Client ID ≎	Client Name 💌	Date of Birth 🗘	Gender ≎ Filter ▼	Immunizing Agent ≎ Filter ▼	Forecast St Filter 💌	tatus ≎ Consent Readiness ≎ Filter ▼	Eve Sta Fi	ent tus ≎ Iter ▼ N
		42	Winter, Wanda	2005 Feb 24	Female	Men- C-ACYW	Due	Missing		
		42	Winter, Wanda	2005 Feb 24	Female	HPV-4	Due	Missing		
		44	Sunshine, Elissa	2005 Jun 10	Female	Men- C-ACYW	Due	Granted		
		44	Sunshine, Elissa	2005 Jun 10	Female	HPV-4	Due	Granted		
		40	Summer, Susan	2005 Jan 06	Female	Men- C-ACYW	Due	Missing		
		40	Summer, Susan	2005 Jan 06	Female	HPV-4	Due	Missing		
		46	Storm, Henry	2005 Mar 21	Male	Men- C-ACYW	Due	Granted		

Tip: Reading the Worksheet

Only a single immunization can be displayed on each line, so each student will show up on multiple lines if they are receiving more than one agent. This is to accommodate consents/deferrals based on the agent. As an example: A student will be on the list twice if they are receiving Varicella and MMR (Measles, Mumps and Rubella) and display a consent status for each immunization, but a fellow student may only show up once if they are only receiving MMR.

Tip: Printing a Worksheet

The **Immunization Worksheet** can be printed off as a tool for recording information as necessary to manage the collection of paper consents and reminders sent to parents. To print, click on the **Printer Icon** in the upper right corner of the screen within the Mass Immunization Event Worksheet. A separate screen will appear, then click **Print**.

In addition, a custom report called the **Mass Immunization Registration Sheet** may be printed out ahead of time. This report provides the option to create a print out of a mass immunization event client list that can be used to keep track of clients; it also contains



space for comments. The report may be printed before each clinic and will serve as a back-up in case Panorama is not accessible. See **PNS IMM 104**.

3. From **the Event Worksheet** screen, activities can be performed for either an individual client or for a group of clients. At least one client needs to have been selected for tabs to display. Multiple clients can be selected, however certain tabs are only for individual clients.

Within the Mass Immunization Event Worksheet, under Client List, Users can:

- Use the Client List Filter variables to filter the list of clients displayed
- Select Client(s) to Record Consent [Nurses trained as school immunizers only are not to record consent]
- Select Client(s) to View Consent
- Select Client(s) to Update Event Status
- Select Client to Preview Client
- Select Client to Update Client [*Nurses trained as school immunizers only are not to update a client record*]
- Select Client(s) to Record Immunization(s)
- Select Client to create Deferral

Note that Generate Letters is not available in the NS configuration.

Displa	iying 7 out	of 7 clients							
Rec	Record Consent Record Immunization		mmunization	ient Event Status	Client Event Sum	nmary Defe	errals Preview Clie	nt	
Vie	w Consen	t Update Clie	ent Generate Le	tters Assess an	d Immunize				
	\$	Client ID 🗘	Client Name 🔺	Date of Birth \$	Gender ≎ Filter ▼	Immunizing Agent ≎ Filter ▼	Forecast Status Filter	Consent Readiness ≎ Filter ▼	Event Status 🗘 Filter 👻
•		43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Missing	-

Tip: Forecast Status for Adults

NS Immunization Forecaster scope does not include Adult Immunizations, hence the forecaster for certain vaccines (for example, Hepatitis B-Adult) will show as Not Forecasted.

6.3 Viewing Consent



Users can view consent for an individual client. This is done by selecting **the View Consent** tab.

- 1. To view consent for an individual student, go to the **Event Worksheet** and select the student(s) for whom you want to record consent. Select the **View Consent** button.
- 2. The View Consent for Service screen is now displayed.

View (Consent for Service							×
Client N simpsor	lame: n, jody							
	ID 🔺	Directive Status \$	Antigen ≎	Instruction \$	Effective From \$	Effective To \$	User's Organization	\$
0	38	Confirmed	Hepatitis B (HB- regular)	Grant	2018 Jan 09		NSHA	
Total	:1						10	~

3. Return to the Event Worksheet by closing the View Consent for Service

6.4 Recording Immunizations

Users should review the client's information and then immunize through the **Assess and Immunize** function.

6.4.1 Assess and Immunize

The Mass Immunization Event - **Assess and Immunize** screen allows a User to choose and view pertinent immunization-related information on a specific client for assessment purposes as well as for documentation.

1. To work in an individual client record, the User selects the client to be assessed from the Event Worksheet then clicks **Assess and Immunize**.



Rec	Record Consent Record I		mmunization	Client Event Status	Client Event Su	mmary Defe	errals Preview Clie	nt	
View	w Consen	t Update Clie	ent Generate L	etters Assess a	nd Immunize				
	٥	Client ID 🗘	Client Name 💌	Date of Birth ≎	Gender 🗘 Filter 👻	Immunizing Agent ≎ Filter ▼	Forecast Status 🗘	Consent Readiness ≎ Filter ▼	Event Status C Filter
-		42	Winter, Wanda	2005 Feb 24	Female	Men-	Due	Missing	

2. The **Assess and Immunize** screen now displays with the individual student In Context. The nurse can now review the clients information including immunization history, view consents, client warnings, special considerations, deferrals, allergies, and AEFI information. Clinical notes are accessible form the x symbol above the client id.

Tip: Assessing the Client

A checkmark in the tab indicates that there is information recorded for the client. Click on the tab to review the specific information.

Assess and Immunize	Return Record	Consent Record Immunization	Add to WQ Actions
Client ID: 42	Name(Last, First Middle)/Gender: Winter, Wanda / Female	Health Card No: 0091000000	Active Date of Birth / Age: 2005 Feb 24 / 12 years 8 months
Phone Number: 1-(902)-667-5673(Primary home)	Jurisdiction Info: Northern Zone, Truro Public Health Office	Additional ID Type / Additional ID: Provincial health service provider ide	ntifier / -
Immunization History	cast by Agent ✓ Forecast by Disease	✓ Client Event Summary Antigen Cou	int
View Consent Client Warnings	Special Considerations Deferrals	Allergies AEFI IHI	

When the user had completed the review of the client information, return to the **Event Worksheet.**

ssess and Immunize	Return	Record Consent Record Immunization			Actions		?
Client ID: ① R Nan 42 Win	ne(Last, First Middle)/Gender: ter, Wanda / Female	Health Card No: 0091000000		Date 200	e of Birth / Age: 5 Feb 24 / 12 yea	Acti	ve
Phone Number: Juri I-(902)-667-5673(Primary home) Nor	sdiction Info: thern Zone,Truro Public Health Of	Additional ID Type / A fice Provincial health serv	dditional ID: ice provider iden	tifier / -			
Client Immunization Profile						% ^	
Immunization History V Forecast by	Agent V Forecast by Diseas	e Client Event Summary	Antigen Cour	nt			
View Consent Client Warnings	Special Considerations Deferra	als Allergies AEFI IH	1				

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6.4.2 Recording Immunizations

1. On the Worksheet, click the checkbox beside all the immunizing agents the student that will be having their immunization recorded for. Select **Record Immunization**.

Record Con	nt Update Cli	Immunization Cli ent Generate Let	ters Assess and	Client Event Sur Immunize	mmary Defe	Preview Clie	nt	
•	Client ID ≎	Client Name 🔺	Date of Birth ≎	Gender ≎ Filter ▼	Immunizing Agent Filter -	Forecast Status 🗘	Consent Readiness ≎ Filter ▼	Event Status
	43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Granted	
	43	Autumn, Andrew	2005 Sep 27	Male	HPV-4	Due	Granted	Client refusal
	45	Cloud, Rodney	2005 Aug 05	Male	Men- C-ACYW	Due	Granted	
	45	Cloud, Rodney	2005 Aug 05	Male	HPV-4	Due	Granted	Client refusal
2	41	Spring, May	2005 Nov 15	Female	Men- C-ACYW	Due	Granted	
/	41	Spring, May	2005 Nov 15	Female	HPV-4	Due	Granted	

2. On the Record Immunization screen, select each immunizing agent in the list that appears, enter **Date Administered**, **Time**, and **Site** then click **Save**. Note: the provider should default to you.

Recor	d Immunizatio	n					
Clients: Spring. Mav		* Date Ac 2017 No	dministered: w 21 ▼	Time Administered: Leave blank Enter time: Use current time Use current time			
A Provi	der is not set up fo	r the logged-in user. Non-provider	recorded mode is app	plied.			
~	Immunizing Agent 🔺	Lot Number ≎	Trade Name 🗘	Route 🗘	Dosage 🗘	Site 🗘	Provider ≎
~	HPV-4	M006158 Exp. 2018 Nov 03	Gardasil	Intramuscular	0.5		PIEK, KRISTA LEIGH
~	Men- C-ACYW-135	TSTM13048Z Exp. 2018 Nov 19	Menveo	Intramuscular	0.5	Arm Arm: upper left	PIEK, KRISTA LEIGH
						Arm: upper right	
							Save Rese



3. All immunizations that are recorded for this student will now show up in their **Event Status** column as **Immunized**.

Even	t Worksh	leet							*	
Event Title: TruroJRHS_Grade7_November2017 Event Date: 2017 Nov 13, 2017 Nov 14 Event Type: School Immunization					Event ID: 9 Location: Truro Junior High School Status: Open Created By: PERMISSIONS, ALL					
Re	cord Cons	ent Record In	nmunization Clie	ent Event Status	Client Event Sum	nmary Defe	rrals Preview Clie	nt		
Vie	w Consen	t Update Clie	nt Generate Lett	ers Assess and I	mmunize					
	٥	Client ID 💠	Client Name 🔺	Date of Birth 🗘	Gender ≎ Filter ▼	Immunizing Agent ≎ Filter ▼	Forecast Status 🗢	Consent Readiness ≎ Filter ▼	Event Status ≎ Filter ▼	
		43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Granted		
		43	Autumn, Andrew	2005 Sep 27	Male	HPV-4	Due	Granted	Client refusal	
		45	Cloud, Rodney	2005 Aug 05	Male	Men- C-ACYW	Due	Granted		
		45	Cloud, Rodney	2005 Aug 05	Male	HPV-4	Due	Granted	Client refusal	
		41	Spring, May	2005 Nov 15	Female	Men- C-ACYW	Due	Granted	Immunized	
		41	Spring, May	2005 Nov 15	Female	HPV-4	Due	Granted	Immunized	
		46	Storm, Henry	2005 Mar 21	Male	Men- C-ACYW	Due	Granted	Immunized	
		46	Storm, Henry	2005 Mar 21	Male	HPV-4	Due	Granted	Immunized	



Once a client's **Event Status** changes to **Immunized**, the **Forecaster** will update based on the new immunization record. This usually takes up to two minutes to refresh.

Tip: Client Alerts

Panorama provides alerts next to a client's name if the client has any **Warnings, Special Considerations,** or **Clinical Notes.**

Tip: Immunized Status

Once an immunization is recorded via the Mass Immunization Worksheet, the status will update to 'Immunized' and cannot be changed.

If the immunization was recorded in error, it can be deleted from the individual client's standard Immunization screen. (Go to **Left Hand Navigation**, then to the **Immunization** section, then to **Record & Update Immunization**. Select the erroneous immunization and delete).





At any time, if you need to return back to the Mass Immunization Event Worksheet (from almost any screen), click the **Cancel** button. To exit the Mass Immunization Worksheet screen, click Cancel Worksheet.

Immunizations removed from the standard Immunization screen will be removed from the client record but will still show up as "Immunized" in the Event Worksheet.

Tip: Provider Recorded and Non-Provider Recorded Immunizations

If the User logged in is a Provider and is added as one of the **Providers** in the **Mass Immunization Event,** the logged-in User will be defaulted under **Provider** in the figure above. This will be documented as a **Provider Recorded Immunization**.

6.5 Updating the Mass Immunizations Event Status

The **Update Event Status** button allows a User to update an individual client's Event Status or update a group of clients at one time. By default, all Event Statuses are set to "------", if no action has been recorded in the Mass Immunization Worksheet. This can be done prior to or during the immunization event as the information is available or the action is performed.



E	vent Worksheet							Report • Additio	nal Actions	log 🔒 ?
	View Consent Update Client Generate Letters Assess and Immunize									
		\$	Client ID ≎	Client Name 🔺	Date of Birth ≎	Gender ≎ Filter 👻	Immunizing Agent 🗢 Filter 👻	Forecast Status 🗘	Consent Readiness ≎ Filter ▼	Event Status ≎ Filter ▼
			43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Granted	
			43	Autumn, Andrew	2005 Sep 27	Male	HPV-4	Due	Granted	
			45	Cloud, Rodney	2005 Aug 05	Male	Men- C-ACYW	Due	Granted	
			45	Cloud, Rodney	2005 Aug 05	Male	HPV-4	Due	Granted	
			41	Spring, May	2005 Nov 15	Female	Men- C-ACYW	Due	Granted	
			41	Spring, May	2005 Nov 15	Female	HPV-4	Due	Granted	
			46	Storm, Henry	2005 Mar 21	Male	Men- C-ACYW	Due	Granted	
			46	Storm, Henry	2005 Mar 21	Male	HPV-4	Due	Granted	
			40	Summer, Susan	2005 Jan 06	Female	Men- C-ACYW	Due	Missing	
			40	Summer, Susan	2005 Jan 06	Female	HPV-4	Due	Missing	
			44	Sunshine, Elissa	2005 Jun 10	Female	Men- C-ACYW	Due	Granted	
			44	Sunshine, Elissa	2005 Jun 10	Female	HPV-4	Due	Granted	
			42	Winter, Wanda	2005 Feb 24	Female	Men- C-ACYW	Due	Missing	
			42	Winter, Wanda	2005 Feb 24	Female	HPV-4	Due	Missing	

To change the Event Status of clients in the Worksheet, complete the following steps:

- Select the Client and all their Immunizing Agents for whom you wish to update their Event Status then click Client Event Status. Select a Client Event Status from the dropdown list:
 - Absent for immunization
 - Client refusal
 - Contraindication
 - Exemption (Presumed immune)
 - Moved out of school
 - No parental consent
 - Previous immunization





2. Click Save.

Update Client Event Status		X
Clients: Autumn, Andrew	Client Event Status will be updated for: HPV-4 Men-C-ACYW-135	
Client Event Status: Client refusal		Save Reset



3. The column Event Status will update according to the selected Event Status.

	\$ Client ID 🗘	Client Name 🔺	Date of Birth 🗘	Gender ≎ Filter 👻	Immunizing Agent ≎ Filter ▼	Forecast Status 🗘	Consent Readiness \$ Filter •	Event Status \$ Filter •
	43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Granted	
	43	Autumn, Andrew	2005 Sep 27	Male	HPV-4	Due	Granted	Client refusal
-			1			1		

6.6 Deferring a Client

Deferrals should be documented into the event worksheet during the event.

1. To create a deferral, select the student and all applicable agents, click **Deferrals**.

Displa	splaying 8 out of 8 clients									
Re	Record Consent Record Immunization Client Event Status Client Event Summary Deferrals Preview Client									
Vie	View Consent Update Client Generate Letters Assess and Immunize									
	٥	Client ID ≎	Client Name *	Date of Birth 🗘	Gender ≎ Filter 👻	Immunizing Agent ≎ Filter ▼	Forecast Status 🗘	Consent Readiness Filter	Event Status ≎ Filter ▼	
		43	Autumn, Andrew	2005 Sep 27	Male	Men- C-ACYW	Due	Granted	Immunized	
		43	Autumn, Andrew	2005 Sep 27	Male	HPV-4	Due	Granted	Client refusal	
		45	Cloud, Rodney	2005 Aug 05	Male	Men- C-ACYW	Due	Granted	Immunized	
		45	Cloud, Rodney	2005 Aug 05	Male	HPV-4	Due	Granted	Client refusal	
~		48	Smith, Samuel	2005 Nov 01	Male	Men- C-ACYW	Due	Missing		



2. Enter the Effective Date as today's date and select Reason, then Save.

Record Deferral		×
Clients: Smith, Samuel	Deferrals will be recorded for: HPV-4 Men-C-ACYW-135	
* Effective From: To: 2017/11/14 2017/11/21		
* Reason: Awaiting imms record		
Comment Text:		
(2000 characters remaining.)		Save Reset

3. A Deferral will be created, and the event status for the impacted client(s) will change to Deferral. The Deferral may be reviewed on the **Assess and Immunize** screen.

Assess and Immunize	Return Record	Consent Record Immuniza	tion Add to WQ 🗸 Actions
			Active
Client ID: 48 Smith,	.ast, First Middle)/Gender: Samuel / Male	Health Card No: 0245670000	Date of Birth / Age: 2005 Nov 01 / 12 years 0 months
Phone Number: Jurisd 1-(904)-444-4444(mobile contact) Northe	ction Info: rn Zone,Truro Public Health Office	Additional ID Type / Additiona Provincial health service prov	ıl ID: vider identifier / -
Client Immunization Profile			
Immunization History V Forecast by A	jent V Forecast by Disease	✓ Client Event Summary Antig	gen Count
View Consent Client Warnings Spe	cial Considerations	Is Allergies AEFI IHI	



6.7 Managing Vaccine Wastage

During an immunization event, some doses of a vaccine may be 'wasted' as the client receives immunizations, and in situations where a portion of the vaccine is spoiled, spilled, or drawn, but with no further clients left to immunize. The vaccine wastage information is required to account for doses removed from inventory that are not administered to clients or returned to the provincial supplier, as well as to monitor vaccine handling and management practices.

All users will continue to follow the existing manual process in Nova Scotia for recording and tracking vaccine wastage.