

How to Set Up VAE and PedVAE Reporting per NHSN Protocol

Reporting of Ventilator-Associated Event (VAE) and Pediatric Ventilator-Associated Event (PedVAE) into NHSN is available for all acute care hospital, long term acute care hospital, and inpatient rehabilitation facility inpatient locations that meet the requirements for the respective events.

For facilities choosing to report these events, this guidance document will be a helpful resource. To complete reporting of these events, NHSN facilities are encouraged to:

- Map each of their locations to CDC locations
- Include VAE and/or PedVAE module in their monthly reporting plan (MRP) each month
- Enter events, per NHSN definitions, when identified
 - VAE: https://www.cdc.gov/nhsn/pdfs/pscmanual/10-vae_final.pdf
 - PedVAE: <https://www.cdc.gov/nhsn/pdfs/pscmanual/pedvae-current-508.pdf>
- Enter location-specific denominator records each month
- Indicate when there are zero VAE and PedVAE events to report for all reporting locations in a given month. **If VAE or PedVAE are in-plan and you do not indicate that your facility identified no VAE and PedVAE events in a month, your data will not show up in NHSN's analysis tool, and hence it will result in inaccurate data reporting to NHSN.**

The following instructions demonstrate how to indicate that your facility identified no events for selected event(s) and location(s) in your MRP.

Step 1: Map inpatient locations

- Each reporting location must be mapped as a unique location in NHSN

- To view, add, or edit the locations that you have mapped in your facility, click on Facility > Locations in the NHSN navigation bar to access the Location Manager
- For more information and instructions on how to map your locations, refer to the location mapping guidance: http://www.cdc.gov/nhsn/PDFs/pscManual/15LocationsDescriptions_current.pdf

Step 2: Complete monthly reporting for VAE and/or PedVAE surveillance

- At the beginning of the month, add the locations and events (example: VAE and PedVAE) you plan to follow for that specific month in your MRP
- The Device-Associated (DA) module section of the MRP must signify the appropriate events as in the screenshot below, as applicable for your facility’s intended surveillance activities (Figure 1)

Figure 1: Monthly Reporting Plan – Device-Associated Module

Device-Associated Module							
	Locations	CLABSI	VAE	CAUTI	CLIP	PedVAP	PedVAE
	CARDCRIT - CARDIO CRIT CARE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NICU - NICU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Step 3: Identify and enter all VAE and/or PedVAE events into NHSN by location

- Throughout the month, monitor your patients for the selected events and report any events that are identified within the locations specified in your MRP. Reporting of Events/Specific Events, Location, etc. are done as described (Figure 2),
 - Select Event → Add Event → VAE/PedVAE → Complete rest of the required fields such as Patient ID, Date of Birth, Date of Event, Specific Event, Location of Mechanical Ventilation, etc.



Figure 2: Enter an VAE/PedVAE event in the Event Form

Step 4: Enter summary data

- At the end of the month, enter a summary data record for each location specified in your MRP
 - Click on 'Summary Data' on the left-hand navigation bar
 - Click on 'Add' from the drop-down menu under 'Summary Data'
 - Select the correct summary data type for the locations (i.e., ICU/Other, NICU or SCA/ONC) you're entering denominator/summary data for and then click the 'Continue' button
 - **NOTE:** Select ICU/Other Locations to enter data for non-oncology ward locations
- From this screen, select the location for which you're entering the denominator/summary data using the drop-down menu next to 'Location Code'
 - Make sure to enter the correct month and year using the respective drop-down menus next to those fields
- After selecting the location code, month, and year, certain fields will become required if you've added specific surveillance types to your MRP for that location
 - **Example:** if you chose to report VAE in your adult ICU location on your MRP, 'Total Patient Days' and 'Ventilator Days' would be the required fields when entering your summary data for this location (Figure 3)
 - Enter your data in these required fields
 - **NOTE:** All required fields will be marked with a red asterisk (*)
- If you've identified and reported events for all locations and event types specified in your MRP, you're finished with your reporting for the month

Figure 3: Denominator Data for Reporting DA Events

Denominators for Intensive Care Unit (ICU)/Other locations (not NICU or SCA)

Mandatory fields marked with *

Facility ID *: DHQP MEMORIAL HOSPITAL (ID 10018) ▼

Location Code *: 0000 - IN ▼

Month *: August ▼

Year *: 2021 ▼

Denominator Data		Report No Events
Total Patient Days *	152	
Central Line Days *	65	CLABSI: <input type="checkbox"/>
Urinary Catheter Days *	63	CAUTI: <input type="checkbox"/>
Ventilator Days *	26	VAE: <input type="checkbox"/> PedVAE: <input type="checkbox"/> PedVAP: <input type="checkbox"/>
APRV Days :		
Episodes of Mechanical Ventilation :		

Sample Values For Estimating Denominator Data		
		Check Box(es) if Sampling Used
Sample Patient Days :		
Sample Central Line Days :		<input type="checkbox"/>
Sample Urinary Catheter Days :		<input type="checkbox"/>

If you did not have any events to report for one or more locations, continue to step 4a: Reporting no events

Step 4a: Reporting no events in ICU or ward locations

- If at the end of the month, you have 0 events to report, you need to indicate that on the denominator data record to have complete reporting for the month, location, and event type
- For each location with 0 events for the month, check the ‘Report No Events’ box next to the event type you’re reporting
- If you have 0 ventilator days to report for a month, enter “0” into the box for that device. The “Report No Events” box will be checked automatically
- After saving, all the selected ‘Report No Events’ boxes are saved (Figure 4)

- If there have been events already reported for the specific location, the 'Report No Events' box will be disabled, preventing it from being checked

Figure 4: Denominator Data for Reporting No Events


Denominators for Intensive Care Unit (ICU)/Other locations (not NICU or SCA)


Successfully added PSSummaryICU record.

Mandatory fields marked with *

Facility ID *: DHQP MEMORIAL HOSPITAL (ID 10018)

Location Code *: 0000 - IN

Month *: August

Year *: 2021

Denominator Data		Report No Events
Total Patient Days *	152	
Central Line Days *	65	CLABSI: <input checked="" type="checkbox"/>
Urinary Catheter Days *	63	CAUTI: <input checked="" type="checkbox"/>
Ventilator Days *	26	VAE: <input checked="" type="checkbox"/> PedVAE: <input type="checkbox"/> PedVAP: <input type="checkbox"/>
APRV Days :		
Episodes of Mechanical Ventilation :		

Sample Values For Estimating Denominator Data		
		Check Box(es) if Sampling Used
Sample Patient Days :		
Sample Central Line Days :		<input type="checkbox"/>
Sample Urinary Catheter Days :		<input type="checkbox"/>

Step 4b: Reporting No PedVAE Events in NICU locations

- Similar to reporting no events in ICU/ward locations, reporting no events in the NICU is done on the summary data screen
- Note that 'Birth Weight' is a required field while 'Gestational Ages' is an optional field
- For each NICU location, check the 'Report No Events' box for each birthweight category in which no events occurred within the given month
 - If there have been events already reported for the specific birthweight category, the 'Report No Events' box will be disabled, preventing it from being checked
- After saving, all the selected 'Report No Events' boxes are saved as seen in Figure 5

Figure 5: Summary Data for Reporting No PedVAE Events

Neonatal Intensive Care Unit

Mandatory fields marked with *

Facility ID *: DHQP MEMORIAL HOSPITAL (ID 10018)

Location Code *: NICU - LEVEL 3 NICU

Month *: December

Year *: 2020

Birth Weights								
Birth Weight	Patient Days *	CL Days *	No CLABSI	Vent Days *	No PedVAE	No PedVAP	EMV	UrC Days
<=750	0	0	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
751-1000	0	0	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
1001-1500	0	0	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
1501-2500	25	5	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		0
>2500	0	0	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0

***Please note:** If you identify and enter a VAE/PedVAE event for a location after you've already checked the 'Report No Events' box, the 'Report No Events' check will automatically be removed in the NHSN database.

Additional Analytic Resources for VAE and PedVAE on NHSN website:

1. VAE and PedVAE Analysis: <https://www.cdc.gov/nhsn/pdfs/training/2021/vae-pedvae-analysis-508.pdf>
2. Differences between Total VAE and IVAC+ Events for Analysis: <https://www.cdc.gov/nhsn/pdfs/training/2021/vae-ivac-analysis-508.pdf>
3. Patient Safety Component Data Quality: <https://www.cdc.gov/nhsn/ps-analysis-resources/data-quality/index.html>