

**California Department of Public Health
PARTICIPATION ALERTS and DATA QUALITY REPORTS in
Centers for Disease Control and Prevention
National Health Safety Network (NHSN)**

The Centers for Disease Control and Prevention (CDC) has created standard reports in the National Healthcare Safety Network (NHSN) designed to help hospitals monitor their data for deficiencies and maximize reporting efforts consistent with NHSN requirements. The following screen shots will help you locate the “Participation Alerts” and the “Data Quality” reports in NHSN and assist you in identifying variables in the reports that require your attention. This guidance is tailored to the NHSN Device-Associated and Procedure-Associated Modules.

PARTICIPATION ALERTS

“**Participation Alerts**” are an advanced output option in NHSN analysis that allow facility administrators to view event types, procedures, and summary data that are not compliant with NHSN requirements. Why are Participation Alerts important? If there are potential deficiencies in your data, the Participation Alert Report will indicate the alert type, location, month and year, and identify the problem in a line listing. It is recommended that the Participation Alert report be run and reviewed regularly by your hospital to find potential reporting deficiencies.

Accessing and Understanding the Participation Alert Report

1. Go to the navigation bar and under “Analysis” select “Generate Data Sets.” Next, click on the “Generate New” button.



- Once the new data set has been generated, return to the navigation bar and under “Analysis,” select “Output Options.”

The screenshot shows the CDC Patient Safety Component interface. At the top, the CDC logo and the text "Department of Health and Human Services Centers for Disease Control and Prevention" are visible. Below this is a navigation bar with "NHSN - National Healthcare Safety Network" and links for "NHSN Home", "My Info", and "Contact". On the left is a vertical navigation menu with items: NHSN Home, Reporting Plan, Patient, Event, Procedure, Summary Data, Import/Export, Analysis (highlighted with a red box), Generate Data Sets, Output Options (highlighted with a red box), Statistics Calculator, Surveys, Users, Facility, Group, and Log Out. The main content area is titled "Patient Safety Component Analysis Output Options" and contains two buttons: "Expand All" and "Collapse All". Below these are several folder icons representing different data modules: Device-Associated Module, Procedure-Associated Module, MDRO/CDI Module - Infection Surveillance, MDRO/CDI Module - LABID Event Reporting, MDRO/CDI Module - Process Measures, MDRO/CDI Module - Outcome Measures, Vaccination Module, Advanced, My Custom Output, and Published Output.

- Select the “Advanced” folder,” the “Facility-Level Data,” then “CDC Defined Output.” You will see a report file called “Line-Listing – Participation Alerts.”

This screenshot shows the same interface as the previous one, but with further navigation. The "Advanced" folder is highlighted with a red box. Below it is a link "Create New custom Option". Under "Advanced" are several sub-folders: Patient-level Data, Event-level Data, Procedure-level Data, Summary-level Data, Plan Data, Pathogen-level Data, Facility-level Data (highlighted with a red box), and CDC Defined Output. Under "Facility-level Data" are several report files, each with "Run" and "Modify" buttons. The "Line Listing - Participation Alerts" report file is highlighted with a red box.

| Report File | Run | Modify |
|--|-----|--------|
| Line Listing - Facility Enrollment Data | Run | Modify |
| Line Listing - Conferred Rights | Run | Modify |
| Line Listing - Hospital Survey (CDC 57.103, Rev.2) | Run | Modify |
| Line Listing - Hospital Survey (CDC 57.103, Rev.3) | Run | Modify |
| Line Listing - Dialysis Survey | Run | Modify |
| Line Listing - Participation Alerts | Run | Modify |

- A. If you select “Run,” a report will be produced without filters. It will include all time periods and all types of data your facility has entered into NHSN.
- This method could produce more alerts than what is in our report sent to you as part of our QA/QC process. This is because we have filtered your facility’s NHSN line listing based on California’s reporting requirements and for a specific time period.
- B. To run a report to compare with a QA/QC report, you need to select “Modify.” The following is the template for modifying the report with the CDPH report sent to your facility. Select Modify, then
- planYM = Enter the date range in the header of the QA/QC report
 - module = DA (Device Associated)
 - eventType = CLAB, PCLAB, and TCLAB
- Select “Run”

| | | | |
|----------------------|------------------|---------------|-------------------|
| Date Variable | Beginning | Ending | |
| planYM ▼ | 01/2011 | 12/2011 | Clear Time Period |

Enter Date variable/Time period at the time you click the Run button

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)

| | | | |
|----------|-------------------------------|--|--|
| module ▼ | eventType ▼ | | |
| = DA | IN (CLAB, PCLAB, TCLAB, UCAB) | | |
| | | | |
| | | | |
| | | | |

Other Options:

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable: module ▼

| | | | | |
|-----|---------|-------|------|----|
| Run | Save As | Reset | Back | Ex |
|-----|---------|-------|------|----|

This will generate a report that allows your facility to view those event types/procedures/summary data that are potentially non-compliant with NHSN requirements. Following is an example of a Participation Alert line listing.

| National Healthcare Safety Network | | | | | | | | | |
|-------------------------------------|--------|----------|-------------------|----------|------------|---------|-------------|--|-----------|
| Line Listing - Participation Alerts | | | | | | | | | |
| As of: October 19, 2007 at 11:27 AM | | | | | | | | | |
| Date Range: All PARTICIPATIONALERT | | | | | | | | | |
| module=DA | | | | | | | | | |
| orgID | module | location | locCDC | procCode | outpatient | planYM | birthwtcode | alertType | eventType |
| 10018 | DA | 5PEDCC | IN:ACUTE:CC:M_PED | | | 2007M04 | | 1. Month with plan and no denom | CAU |
| 10018 | DA | 5PEDCC | IN:ACUTE:CC:M_PED | | | 2007M04 | | 1. Month with plan and no denom | CLAB |
| 10018 | DA | BMT | IN:ACUTE:SCA:BMT | | | 2007M06 | | 1. Month with plan and no denom | CAU |
| 10018 | DA | 5PEDCC | IN:ACUTE:CC:M_PED | | | 2007M03 | | 2. Month with plan/event and denom = 0 | CAU |
| 10018 | DA | BMT | IN:ACUTE:SCA:BMT | | | 2007M01 | | 2. Month with plan/event and denom = 0 | CAU |
| 10018 | DA | NICU | IN:ACUTE:CC:NURS | | | 2007M01 | A | 3. Month with denom and no plan | CLAB |
| 10018 | DA | NICU | IN:ACUTE:CC:NURS | | | 2007M01 | A | 3. Month with denom and no plan | UCAB |
| 10018 | DA | NICU | IN:ACUTE:CC:NURS | | | 2007M01 | A | 3. Month with denom and no plan | VAP |
| 10018 | DA | MICU | IN:ACUTE:CC:M | | | 2007M03 | | 4. Month with events and no denom/plan | CAU |
| 10018 | DA | MICU | IN:ACUTE:CC:M | | | 2007M06 | | 4. Month with events and no denom/plan | CAU |
| 10018 | DA | NICU | IN:ACUTE:CC:NURS | | | 2007M04 | A | 4. Month with events and no denom/plan | UCAB |
| 10018 | DA | BMT | IN:ACUTE:SCA:BMT | | | 2007M03 | | 5. Month with 0 Rate (no events entered) | VAP |
| 10018 | DA | ICU/CCU | IN:ACUTE:CC:C_ | | | 2007M01 | | 5. Month with 0 Rate (no events entered) | VAP |
| 10018 | DA | 5PEDCC | IN:ACUTE:CC:M_PED | | | 2007M02 | | 6. Month with plan and denom = 0 | CAU |
| 10018 | DA | 71ICU | IN:ACUTE:CC:CT | | | 2007M07 | | 6. Month with plan and denom = 0 | CAU |
| 10018 | DA | BMT | IN:ACUTE:SCA:BMT | | | 2007M02 | | 6. Month with plan and denom = 0 | CAU |
| 10018 | DA | BMT | IN:ACUTE:SCA:BMT | | | 2007M03 | | 6. Month with plan and denom = 0 | CAU |

Sorted by orgID

Data contained in this report were last generated on September 25, 2007 at 9:42 AM.

Alert types 1/2/3/4 indicate months that are not in compliance with NHSN participation protocol.

Alert types 5/6 are for your information only and do not indicate a problem.

If you are a group user or a facility user with limited rights, alerts may indicate limited rights as opposed to missing data.

The following are definitions for the alert categories (numbered 1 through 6) that can be found in the Participation Alert Report.

Alert 1: Month with plan, no denominator

This means that you have indicated in your monthly reporting plan that you would follow the event type for the location and month specified, but no denominator data have been entered.

Alert 2: Month with plan and event, and denominator = 0

This alert indicates that a plan and at least one event of the type listed for the location and month has been entered, however the denominator has been entered as "0". Additionally, this alert indicates that you will not be able to calculate a rate for the event, location, and month identified.

Alert 3: Month with event and denominator, and no plan

This alert indicates that you have entered denominator data for the location, month, and event type but you did not indicate that you would be following the event type in your monthly reporting plan. It is completely acceptable to enter denominators that are not indicated in your plan, however these denominators will not be counted towards your compliance with NHSN participation requirements.

Alert 4: Month with events, no denominator or no plan

This alert means that you have events of a certain type entered for a month and location in which there is no reporting plan for that event –or– there are no denominator data entered. If no denominator data are entered, you will not be able to calculate a rate for this event type and location. It is completely acceptable to enter events that are not indicated in your plan, however, these events will not be counted towards your compliance with NHSN participation requirements.

Alert 5: Month with 0 rate (no events entered)

This alert indicates that you have denominator data but there are no events entered and the Report No Events box is not checked.

Alert 6: Month with plan, denominator = 0

This alert indicates that you indicated in your plan that you would follow an event for a particular month and the denominator associated with that event has been entered as 0. This alert is intended to be a check-point and does not indicate non-compliance.

DATA QUALITY REPORTS

“Data Quality Reports” are another output option in NHSN analysis that allows facility administrators to view potential data entry errors. These reports were added with the release of NHSN 6.4 on June 6, 2011,

Accessing and Understanding the Data Quality Report

Below is a screenshot showing where to locate the 8 different Data Quality reports in the Analysis section of NHSN. As with all analyses, in order to view the Data Quality Report, you must have generated a data set. (To review how to generate a new data set, refer to *Accessing and Understanding the Participation Alert Report* on page 1.)

By selecting the ‘Run’ button, NHSN will produce a report highlighting potential errors in all your NHSN data for all time periods. Select “Modify” if you wish to filter your data for specific time periods or event types.

The screenshot displays the NHSN interface. On the left is a blue sidebar with the following menu items: Users, Facility, Group, Log Out. The main content area shows a tree view of modules and data categories. The 'Advanced' folder is highlighted with a red box. Below it is a link 'Create New custom Option'. The 'Data Quality' folder is also highlighted with a red box and contains a sub-folder 'CDC Defined Output'. This sub-folder lists eight reports, each with a 'Run' and 'Modify' button:

- MDRO/CDI Module - Process Measures
- MDRO/CDI Module - Outcome Measures
- Vaccination Module
- Advanced
- Create New custom Option
- Patient-level Data
- Event-level Data
- Procedure-level Data
- Summary-level Data
- Plan Data
- Pathogen-level Data
- Facility-level Data
- Data Quality
 - CDC Defined Output
 - Line Listing - Duplicate Procedures
 - Line Listing - Procedures on Patient DOB
 - Line Listing - Procedures with 0 Duration
 - Line Listing - Duplicate BSI/PNEU/UTI Events
 - Line Listing - Duplicate SSI Events
 - Line Listing - SSIs On Procedure Date
 - Line Listing - Extremely High Incidence of SSI
 - Line Listing - Events Reported with 0 Device Days
 - My Custom Output
 - Published Output

Data Quality Report Definitions

- Line Listing - Duplicate Procedures
 - Includes those patients with more procedures of the same type than the maximum allowed for a single day
- Line Listing - Procedures on Patient DOB
 - Includes procedures where the procedure date is the same as the patients date of birth (DOB)
- Line Listing - Procedures with 0 Duration
 - Includes procedures with a duration of 0hr 0min
- Line Listing - Duplicate BSI/PNEU/UTI Events
 - Includes those patients with more than one event of the same type on the same event date
- Line Listing - Duplicate SSI Events
 - Includes those patients with more than one SSI linked to the same procedure
- Line Listing - SSIs On Procedure Date
 - Includes those SSI events recorded with a procedure date equal to the event (i.e. infection) date
- Line Listing - Extremely High Incidence of SSI
 - Shows months where SSI incidence is extremely high
- Line Listing - Events Reported with 0 Device Days
 - Includes those months where at least one DA event was reported with no corresponding device days