

Instructions for Completion of Denominators for Intensive Care Unit (ICU)/Other Locations (Not NICU or SCA) (CDC 57.118)

Data Field	Instructions for Data Collection
Facility ID #	The NHSN-assigned facility ID will be auto-entered by the computer.
Location code	Required. Enter the location code of the unit where you collect the data.
Month	Required. Record the 2-digit month during which the data were collected for
	this location.
Year	Required. Record the 4-digit year during which the data were collected for this
	location.
Number of patients	Required. For each day of the month selected, record the number of patients on the unit. Record this number at the same time each day.
	NOTE: If participating in weekly denominator sampling, in addition to daily recording of the number of patients on the unit, the number of patients present on the unit must be identified and recorded for the day that weekly device day sampling is collected, for example, central line days, urinary catheter days. This data must be identified and entered into NHSN in the Sample Values for Estimating Denominator Data section under the option to Add Summary Data.
Number of patients with at	Conditionally required. Complete if you have chosen central line-associated
least 1 central line	bloodstream infection (CLABSI) as an event to follow in your Reporting Plan for this month.
	All patients with at least one central line in place at the time of the count are included in the denominator regardless of access or the number of days the central line has been in place.
	NOTE: Count only one device day per patient per calendar day regardless of how many central lines the patient may have in place.
	Use one of the two manual data collection methods, to collect this data or capture the data electronically, as below:
	Manual Methods:
	Daily collection: For each day of the month, at the same time each day, record the number of patients on the selected unit who have at least 1 central line. At the end of the month, total the daily counts and record the sum for the month in the NHSN system for Central Line Days under the option to Add Summary Data.



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	Sampling (weekly): On a designated day each week, for example, every Tuesday, at the same time during the month, record the number of patients on the selected unit who have at least 1 central line. At the end of the month, total the sampled counts and record the sum for the month in the NHSN system for Central Line Days under the option to Add Summary Data.
	Note: Count only one device day per patient per calendar day regardless of the number of central lines the patient may have in place.
	Evaluations of this method have repeatedly shown that use of Saturday or Sunday generate the least accurate estimates of denominator data, therefore, these days should not be selected as the designated day. If the day designated for the collection of sampled data is missed, collect the data on the next available weekday instead.
	 NOTES: To ensure the accuracy of estimated denominator data obtained by sampling, only ICU and ward location types with an average of 75 or more urinary catheter-days per month are eligible to use this method. A review of each location's central line denominator data for the past 12 months in NHSN will help determine which locations are eligible.
	When these data are entered, the NHSN application will calculate an estimate of central line-days.
	Electronic Capture:
	For <u>any</u> location, when denominator data are available from electronic sources; for example, central line days from electronic charting, these sources may be used as long as the counts are not substantially different (+/- 5%) from manually-collected, once a day counts, pre-validated for a minimum of three consecutive months.
	When converting from one electronic counting system to another electronic counting system, the new electronic system should be validated against manual counts as above. If electronic counts for the new electronic system are not within 5% of manual counts, resume manual counting and continue working with IT staff to improve design of electronic denominator data extraction (while reporting manual counts) until concurrent counts are within 5% for 3 consecutive months. Note: This guideline is important because validating a new electronic counting
	system against an existing electronic system can magnify errors and result in inaccurate denominator counts.



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	The validation of electronic counts should be performed for each location separately.
	At the end of the month, record the sum of central line day counts in the NHSN system for Central Line Days under the option to Add Summary Data.
	 NOTE: If a device has been pulled on the first day of the month in a location where there are no other device days in that month, and a device-associated infection develops after the device is pulled, attribute the infection to the previous month.
Number of patients with a urinary catheter	Conditionally required. Complete if you have chosen catheter-associated urinary tract infection (CAUTI) as an event to follow in your Reporting Plan for this month. All patients with an indwelling urinary catheter in place at the time of the count are included in the denominator regardless of the number of days the catheter has been in place (specifically catheter day 1 and day 2 are included in the denominator count). Use one of the two manual data collection methods to collect this data or capture the data electronically, as below:
	Manual Methods: Daily collection: For each day of the month, at the same time each day, record the number of patients on the selected unit who have an indwelling urinary catheter. At the end of the month, total the daily counts and record the sum for the month in the NHSN system for Urinary Catheter Days under the option to Add Summary Data.
	Sampling (weekly): On a designated day each week; for example, every Tuesday), at the same time during the month, record the number of patients on the selected unit who have an indwelling urinary catheter. This data must be identified and entered into NHSN in the Sample Values for Estimating Denominator Data section under the option to Add Summary Data. At the end of the month, total the sampled counts and record the sum for the month in the NHSN system for Urinary Catheter Days under the option to Add Summary Data.
	Evaluations of this method have repeatedly shown that use of Saturday or Sunday generate the least accurate estimates of denominator data, therefore, these days should not be selected as the designated day. If the day designated



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	for the collection of sampled data is missed, collect the data on the next available weekday instead.
	 NOTES: To ensure the accuracy of estimated denominator data obtained by sampling, only ICU and ward location types with an average of 75 or more urinary catheter-days per month are eligible to use this method. A review of each location's urinary catheter denominator data for the past 12 months in NHSN will help determine which locations are eligible. When these data are entered, the NHSN application will calculate an estimate of urinary catheter days.
	Electronic Capture:
	For <u>any</u> location, when denominator data are available from electronic sources, for example, urinary catheter days from electronic charting), these sources may be used as long as the counts are not substantially different (+/-5%) from manually-collected, once a day counts, pre-validated for a minimum of three consecutive months.
	When converting from one electronic counting system to another electronic counting system, the new electronic system should be validated against manual counts as above. If electronic counts for the new electronic system are not within 5% of manual counts, resume manual counting and continue working with IT staff to improve design of electronic denominator data extraction (while reporting manual counts) until concurrent counts are within 5% for 3 consecutive months.
	Note: This guideline is important because validating a new electronic counting system against an existing electronic system can magnify errors and result in inaccurate denominator counts.
	The validation of electronic counts should be performed for each location separately.
	At the end of the month, record the sum of urinary catheter day counts in the NHSN system for Urinary Catheter Days under the option to Add Summary Data.
	NOTE: If a device has been pulled on the first day of the month in a location where there are no other device days in that month, and a device-associated infection develops after the device is pulled, attribute the infection to the previous month.
Number of patients on a ventilator	Conditionally required. Complete if you have chosen ventilator-associated event (VAE), pediatric ventilator-associated event (PedVAE), or pediatric



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	ventilator-associated pneumonia (PedVAP) as an event to follow in your Reporting Plan for this month.
	All patients on a ventilator at the time of the count are included in the denominator regardless of eligibility for inclusion in VAE, PedVAE, or PedVAP surveillance, including ventilator days for patient on mechanical ventilation for < 3 days (specifically ventilator day 1 and day 2 are included in the denominator count) and ventilator days for patients excluded from VAE or PedVAE surveillance due to mode of ventilator support.
	NOTE: There are two sub-columns within this data field: one for "Total Patients" and one for "Number on APRV."
	Manual Method: "Total Patients": For each day of the month, at the same time each day, record the total number of patients on the selected unit who are on a ventilator (to include those on an APRV mode, excluded modes, and those who have been ventilated < 3 days).
	"Number on APRV": This field can optionally be completed if you have chosen VAE as an event to follow in your Reporting Plan for this month. For each day of the month, at the same time each day (and at the same time that "Total Patients" is assessed), record the number of patients on the selected unit, among the total number of patients on that unit who are on a ventilator, who are on Airway Pressure Release Ventilation (APRV) or a related mode of mechanical ventilation for example, BiLevel, Bi Vent, BiPhasic, PCV+, DuoPAP.
	Electronic Capture: For any location, when denominator data are available from electronic sources, for example, ventilator days from electronic charting), these sources may be used as long as the counts are not substantially different (+/- 5%) from manually-collected, once a day counts, pre-validated for a minimum of three consecutive months.
	The validation of electronic counts should be performed for each location separately.
	When converting from one electronic counting system to another electronic counting system, the new electronic system should be validated against manual counts as above. If electronic counts for the new electronic system are not within 5% of manual counts, resume manual counting and continue working with IT staff to improve design of electronic denominator data



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	extraction (while reporting manual counts) until concurrent counts are within 5% for 3 consecutive months. Note: This guideline is important because validating a new electronic counting system against an existing electronic system can magnify errors and result in inaccurate denominator counts.
	NOTE : If a device has been pulled on the first day of the month in a location where there are no other device days in that month, and a device-associated infection develops after the device is pulled, attribute the infection to the previous month.
Number of Episodes of Mechanical Ventilation	Optional. This field is an optional field if you have chosen VAE or PedVAE as an event to follow in your Reporting Plan for this month. Count <u>all</u> patients, regardless of eligibility for inclusion in VAE or PedVAE surveillance, that were on mechanical ventilation in the location on the first day of the month. On each subsequent day, count each additional patient that was started on mechanical ventilation. This would include those that are admitted to the location already on mechanical ventilation, those that are newly ventilated, and any previously ventilated patients who have new episodes of mechanical ventilation occurring during the same month. At the end of the month total all counts. Day 1 Episodes plus all subsequent day Episodes equals the total EMV for the month.
	NOTE : An episode of mechanical ventilation is defined by the number of consecutive days during which the patient was mechanically ventilated. A period of at least 1 calendar day off the ventilator, followed by reintubation or re-initiation of mechanical ventilation, defines a new episode of mechanical ventilation. A patient may have more than one episode of mechanical ventilation per month.
Total	Required. Totals for each column should be calculated. This is the number that will be entered into the NHSN application.
Report No Events	While not on the paper data collection form, when completing summary data entry on-line, if no events included on your monthly reporting plan are reported, you will be required to check the appropriate Report No Events box(es), specifically, CLABSI, CAUTI, VAE, PedVAP, PedVAE.
Custom Fields	Optional. Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYYY), numeric, or alphanumeric.
	NOTE: Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.

