Frequently Asked Questions: Analysis			
Date	**Topic**	**Question**	**Response**
Jan-14	**Generating Datasets**	If I generate datasets, will I be able to analyze the data that were entered by my colleagues? Or can I only analyze the data I've entered?	While each user must generate datasets in order to analyze data, the datasets will be inclusive of all data entered for your hospital.
Jan-14	**SIRs**	When running my CLABSI and CAUTI SIRs, I noticed that a couple of my locations are excluded. Why is this?	The SIRs will exclude data from locations for which there were no pooled means in the published baseline report. One common location we get questions about is the Telemetry location designation – this location type was not included in the CLABSI and CAUTI baseline reports and therefore, all CLABSI and CAUTI data reported from these locations will not be included in the SIRs until we are able to define a new baseline period. Our recommendation is that, in lieu of a location's inclusion into the overall SIR, facilities may actually want to utilize internal comparisons using their own device-associated infection rates for these excluded units. By using the statistics calculator within NHSN, anyone can measure if their own rates have increased or decreased over time (using the Incidence Density Rate option within the statistics calculator). For more information regarding the Statistics Calculator, please see: http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/StatsCalc.pdf For a list of baseline reports relevant to each SIR, please see: http://www.cdc.gov/nhsn/PDFs/sir/RatesSIRsReference_Apr2013.pdf
Jan-14	**SIRs**	I work in a small hospital and therefore, the number of expected infections is most often less than 1. Because of this, our SIR is not calculate. What is the justification for this? And are there other options to calculate an SIR in this scenario?	NHSN withholds the calculation of the SIR when the number expected is <1 in order to help enforce precision of the estimate and comparisons to the national data. If the number expected is less than 1, this means that the risk of patients is low enough (according to national baseline data) such that not even 1 infection or event of that type is predicted to occur in that group of patients. When this happens, you may wish to group SIRs into large time periods - such as calendar year.
Jan-14	**SIRs**	What is a 95% Confidence Interval and how do I interpret it for my SIRs?	A 95% confidence interval (CI) is an interval for which we have a high degree of confidence that it contains the true SIR. The upper and lower limits are used to determine the significance and accuracy (or precision) of the SIR. If the 95% CI of the SIR includes the value of 1 - meaning, the lower bound is <1 and the upper bound is >1, then the SIR is not statistically significant. Example of a non-significant 95% CI: (0.674, 3.578) - notice that the lower bound, 0.674, is less than 1 and the upper bound, 3.578, is greater than 1. Since these two values are on the opposite side of the nominal value of 1, we say that the 95% CI "includes" 1 and is therefore not statistically significant. For additional details regarding the interpretation of p-values and 95% CIs, please see the NHSN Analysis trainings at: http://www.cdc.gov/nhsn/Training/analysis/index.html
Jan-14	**Line Lists**	Is there a way to see which records have been changed in NHSN, and when?	Line lists available from the "Advanced" output options folder do provide the date a record was first entered into NHSN (variable name = createDate) and the last date during which a non-deleted record was modified (variable name = modifyDate). When a record has <u>not</u> been changed, the modify date and the create date will be the same. Note that this information will only list the date of the last saved change prior to generating datasets. Additionally, there is no record of exactly what has been changed. For more information about how to customize various analytic reports in NHSN, please see: http://www.cdc.gov/nhsn/PS-Analysis-resources/reference-guides.html
Jan-14	**SIRs**	I am running an SSI SIR and I noticed that there are a few procedures listed at the bottom of the report that are excluded from the SIR calculation. Why are they excluded?	Procedures (and any associated SSIs) can be excluded from the SIRs if they meet one or more of the defined exclusion criteria, as described in Appendix C of the SIR Newsletter: http://www.cdc.gov/nhsn/PDFs/Newsletters/NHSN_NL_OCT_2010SE_final.pdf. Note also that Appendix C makes reference to a specialized line list that can be run in NHSN that will include only those procedure records that are excluded from the SIRs for the reasons listed. While these records may be technically complete, the data in those records are considered "outliers" or invalid (e.g., extremely high procedure duration, procedure date = patient DOB). There are some instances when the record can be fixed – for example, if the wound class (variable swclass) is recorded as "U" (unknown) but the facility is able to obtain the accurate wound class for that procedure from the OR record, this procedure can be updated in NHSN and it will then be included in the SIR. There are other instances, however, where it may be impossible to include the procedure in the SIR. For example, if a procedure has an extremely long procedure duration (what we call being greater than the IQR5 – as described in the above newsletter) – and that duration is accurate – there is nothing that can be fixed on the record and therefore, it will continue to be excluded from the SIRs.

Jan-14	**SSI Rates**	Where can I find the most recently published SSI rates?	In the past, CDC published SSI rates stratified by procedure category and basic risk index, as reported to NHSN. We last published data in this way in 2009 - the report can be found here: http://www.cdc.gov/nhsn/PDFs/dataStat/2009NHSNReport.PDF Since the fall of 2010, we have progressed to the use of standardized infection ratios (SIRs) which utilize a different kind of risk adjustment which is an improvement over the risk adjustment afforded by the legacy basic risk index. In the past, we would compare a hospital's SSI rate to the national SSI rate (for a given strata). With the SIRs, we can now use the national baseline data to determine risk adjustment and the number of SSIs predicted based on those risk factors. From there, we then calculate the SIR which is: # of observed SSIs/# of predicted SSIs. For details regarding this risk adjustment used in the SIRs for all procedure categories, please see: http://www.cdc.gov/nhsn/PDFs/pscManual/SSI_ModelPaper.pdf. Additionally, if you're interested in national SSI SIRs, please see our SIR report, available at: http://www.cdc.gov/hai/national-annual-sir/index.html.
Jan-14	**Fiscal Year SIRs**	I would like to obtain a fiscal-year SIR, however when I try to set the time period, I am unable to obtain a single SIR.	If you would like a cumulative SIR for a time period that you've defined – such as fiscal year, this can be obtained by leaving the Group By drop-down blank on the modification screen. We have a quick reference guide on our website that details the steps for obtaining cumulative SIRs in this manner: http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FAQ-Fiscal-Year.pdf.