

# Healthcare-Associated Infections HAI Interactive Map User Guide

Updated November 2019

## Navigate Using a Keyboard for Accessibility

Tableau dashboards can be navigated with a keyboard for accessibility purposes. Use the “Tab” key to move around the page. The [full list of keyboard shortcuts](#) is available.

(<https://onlinehelp.tableau.com/current/pro/desktop/en-us/shortcut.html>)

## Printing

### Printing the Hospital Profiles, County Profiles, and Statewide Profiles

1. Select “Print Version” at the top right corner. A new tab will then open with a printable version of the profile.

The screenshot shows the HAI Interactive Map interface. At the top, the browser address bar shows [cdph.ca.gov/Pages/HAI.aspx](http://cdph.ca.gov/Pages/HAI.aspx). The page header includes the California Department of Public Health logo, a search bar, and navigation links: [en Español](#), [Contact Us](#), [About](#), [News & Media](#), and [Jobs/Careers](#). There are also links for [Select Language](#) and [Text Resize](#).

The main content area features a blue banner with the text "HOSPITAL ASSOCIATED INFECTIONS". Below this, there is a navigation bar with tabs: [Hospital Map](#), [Hospital Profile](#) (highlighted), [Hospital Comparison](#), [SSI Comparison](#), [Statewide Profile](#), [County Profile](#), and [Resources](#).

The "Hospital Profile" section displays the "Healthcare-Associated Infections Report, 2018" for "Adventist Health and Rideout". It shows the City as Marysville, County as Yuba, and Hospital Type as Community, 125 Beds. A "Link to Print Version" button is visible in the top right corner, highlighted with a red box and a red arrow labeled "1".

Below the report, there is a section for "Central Line-Associated Bloodstream Infections (CLABSI)".

In the top right corner of the browser window, a new tab titled "Workbook: HAI Map and Hosp..." is open, highlighted with a red box and a red arrow labeled "2". A red box labeled "New tab with Print Version" points to this tab.

2. Click the Download button in the toolbar at the bottom of the page and then select “PDF.”

Healthcare-Associated Infections Report, 2018

Adventist Health and Rideout

City: Marysville County: Yuba Hospital Type: Community, 125–250 Beds

The **trend lines** show this hospital's healthcare-associated infection (HAI) incidence from 2015 to 2018, report... as standardized infection ratios (SIR) when possible.  
Each result is interpreted as the **Same**, **Better**, or **Worse** than the national or state comparison.

**Central Line-Associated Bloodstream Infections (CLABSI)**

2018 Reported	5
2018 Predicted	4.8
Central Line Days	6,971
SIR	1.05

Compared with 2015 National Baseline: **Same**  
On Track to Reach 2020 Prevention Goal? **No**  
(SIR below 0.70 in 2018)

**Methicillin-Resistant**

2018 Reported	4
2018 Predicted	2.8
Patient Days	57,185
SIR	1.43

Compared with 2015 National Baseline: **Same**  
On Track to Reach 2020 Prevention Goal? **No**  
(SIR below 0.70 in 2018)

**Clostridioides difficile Infections (CDI)**

2018 Reported	38
2018 Predicted	36.2
Patient Days	53,365
SIR	1.05

Compared with 2015 National Baseline: **Same**  
On Track to Reach 2020 Prevention Goal? **No**  
(SIR below 0.70 in 2018)

Download PDF

The PDF file has been generated.

3. The Download PDF window appears. No changes are required. Click “Create PDF,” then select “Download” when the PDF file has been generated.

Download PDF

Include: This View

Scaling: 100%

Paper Size: Letter Orientation: Portrait

Cancel Create PDF

Download PDF

The PDF file has been generated.

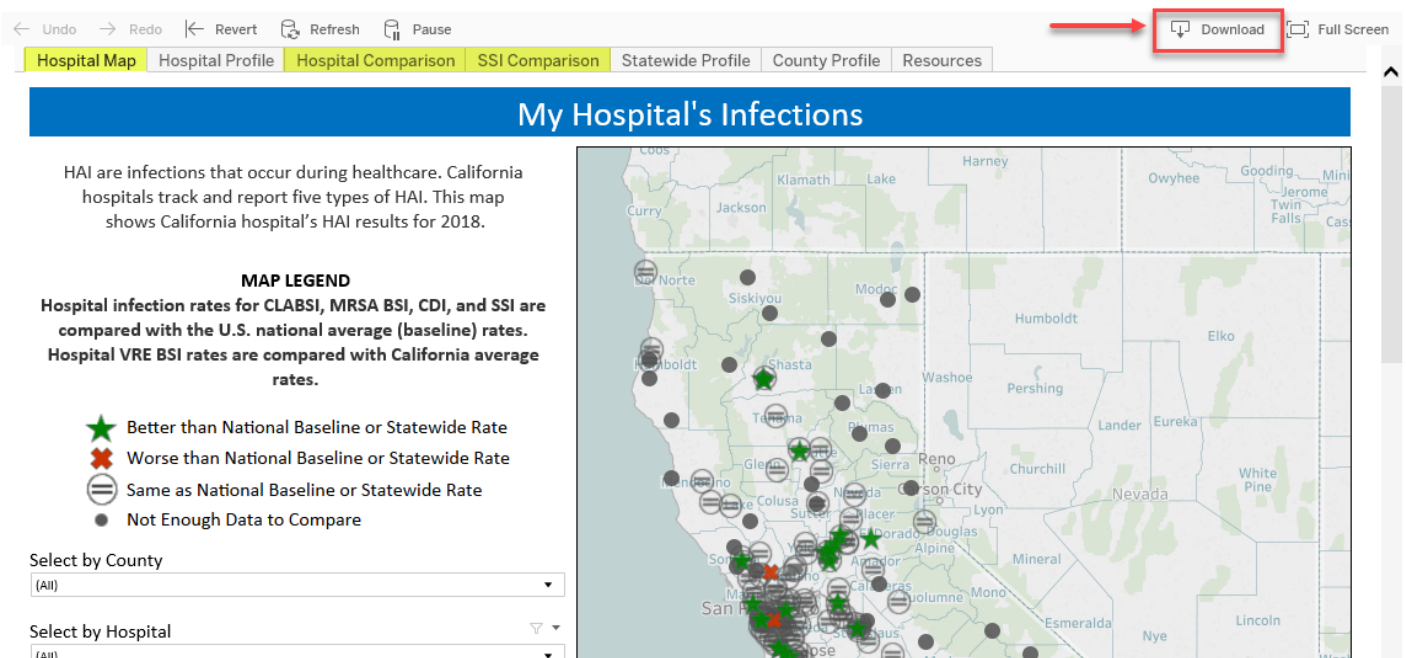
Cancel Download

4. Another window appears at the bottom of the browser window asking if you want to Open or Save the file (Note: this window may appear in a different location in browsers other than Internet Explorer). Choose “Open” to open it now and print, or “Save” to save it for later viewing and printing.



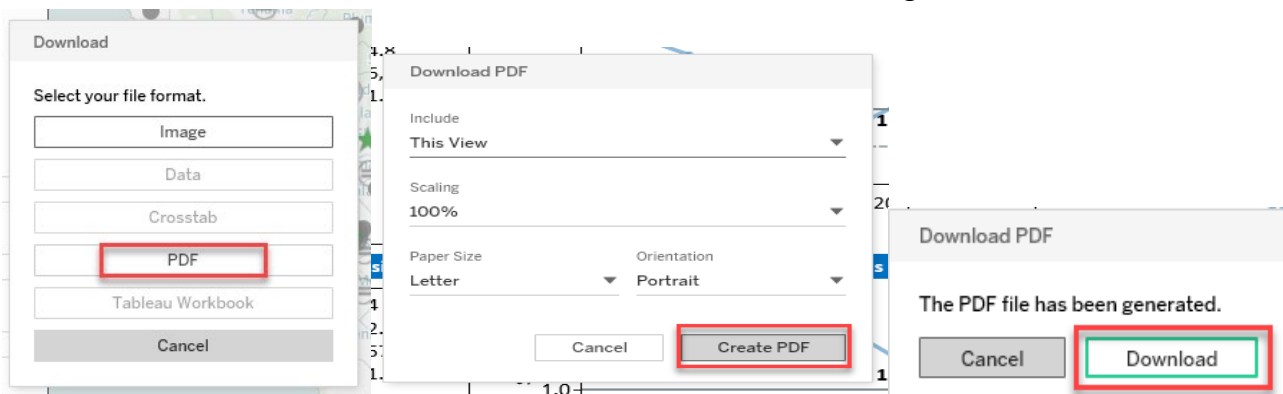
## Printing the Hospital Map, Hospital Comparison, and SSI Comparison

1. Click the Download button in the toolbar at the top of the page.

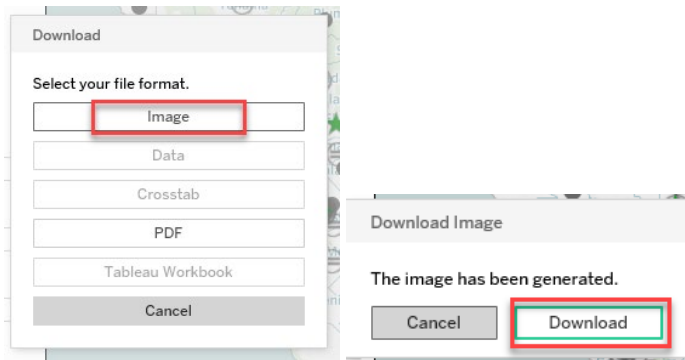


2. Then select either “PDF” or “Image.”

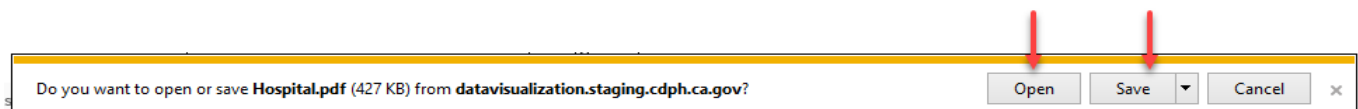
If “PDF” is selected, the Download PDF window appears. No changes are required. Click “Create PDF,” then select “Download” when the PDF file has been generated.



If “Image” is selected, the Download Image window appears. Select “Download,” and then an image is generated as a PNG file.

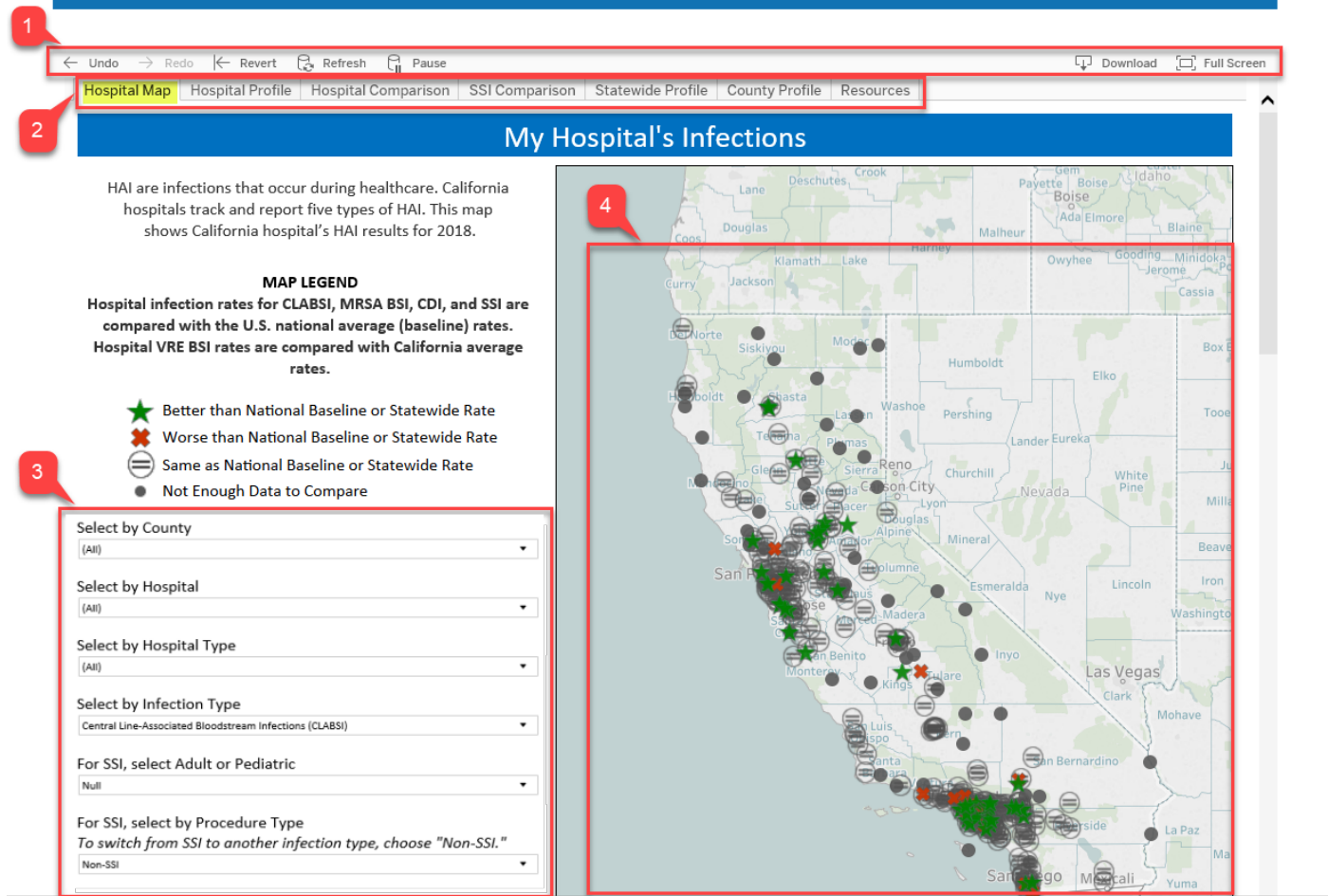


3. Another window appears at the bottom of the browser window asking if you want to Open or Save the file (Note: this window may appear in a different location in browsers other than Internet Explorer). Choose “Open” to open it now and print, or “Save” to save it for later viewing and printing.



## Using the Hospital Map

### HOSPITAL ASSOCIATED INFECTIONS



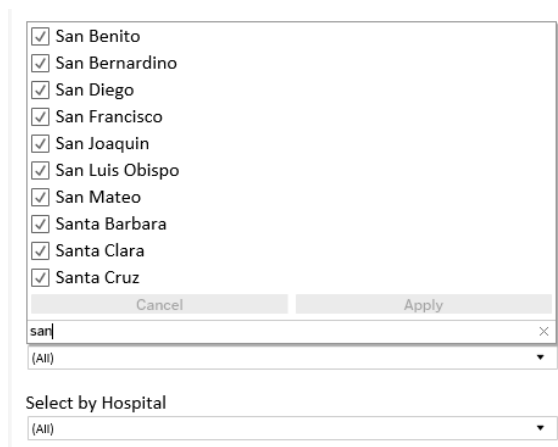
1. The toolbar provides various options you can control
  - a. Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - b. Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - c. Refresh and Pause – these buttons are not applicable to the HAI Map and can be ignored.
  - d. Download – This button allows you to print the dashboard as an image (PNG) or file (PDF).
  - e. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources dashboards.
3. The dropdown menus allow you to filter by locations and infection types. All dropdown

menus interact with each other, so a selection in one dropdown menu will determine the selections available in other dropdown menus. For instance, if “San Francisco” is selected in the “Select by County” dropdown menu, then only hospitals located in San Francisco County will appear in the “Select by Hospital” dropdown menu.

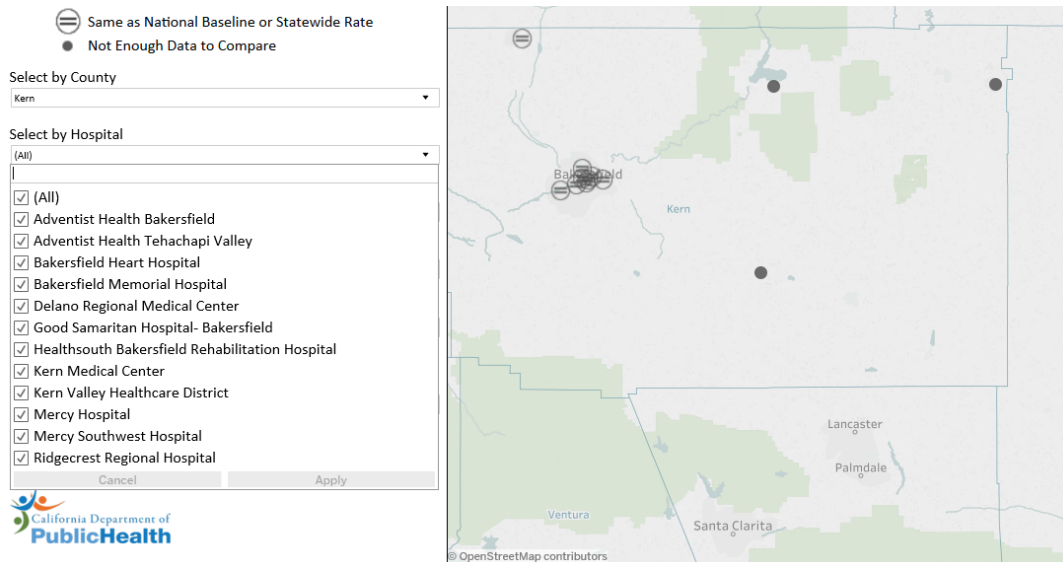
Individual dropdown menus can be reset, and the selection settings can be adjusted.



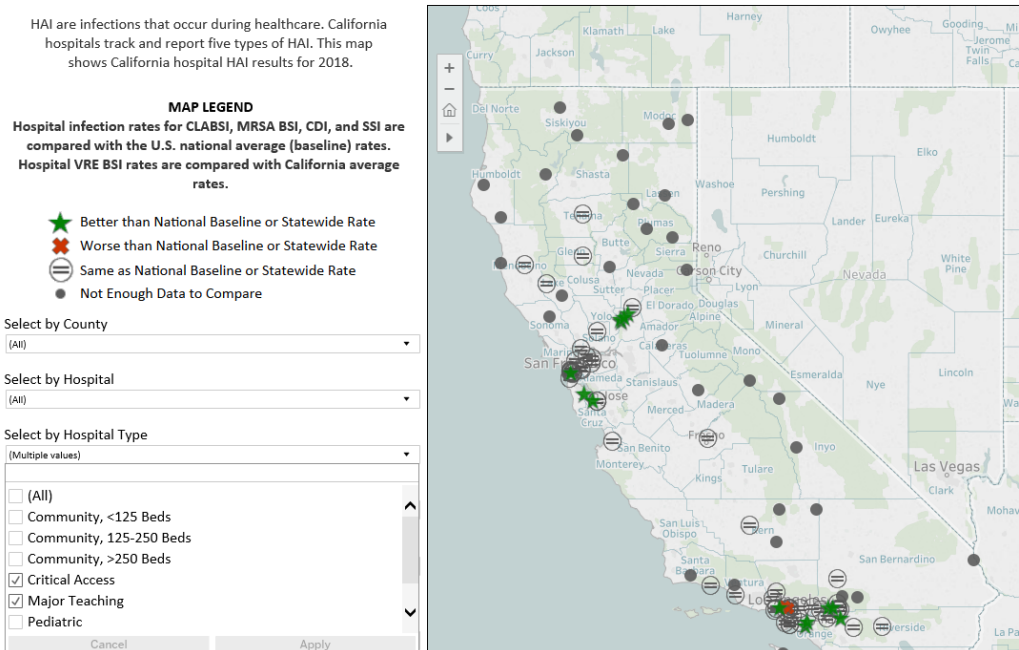
a. Select by County – This filter allows you to choose a specific county. By default, all counties are selected. You can search for a county by typing its name (or any part of its name) in the dropdown menu’s search bar. For example, if I start typing “san”, it shows me a list of all counties with “san” in their name. Please note that you can select multiple counties - the map will zoom based on the selection(s).



b. Select by Hospital – This filter allows you to choose a specific hospital. By default, all hospitals are selected. You can search for a hospital by typing its name (or any part of its name) in the dropdown menu’s search bar. If a county is selected, then the hospital list will be narrowed down to the hospitals in that county. In this example we have chosen Kern County. Notice that the map zooms in on Kern County, and the Hospital list updates to only show hospitals in that County. Please note that you can select multiple hospitals - the map will zoom based on the selection(s).

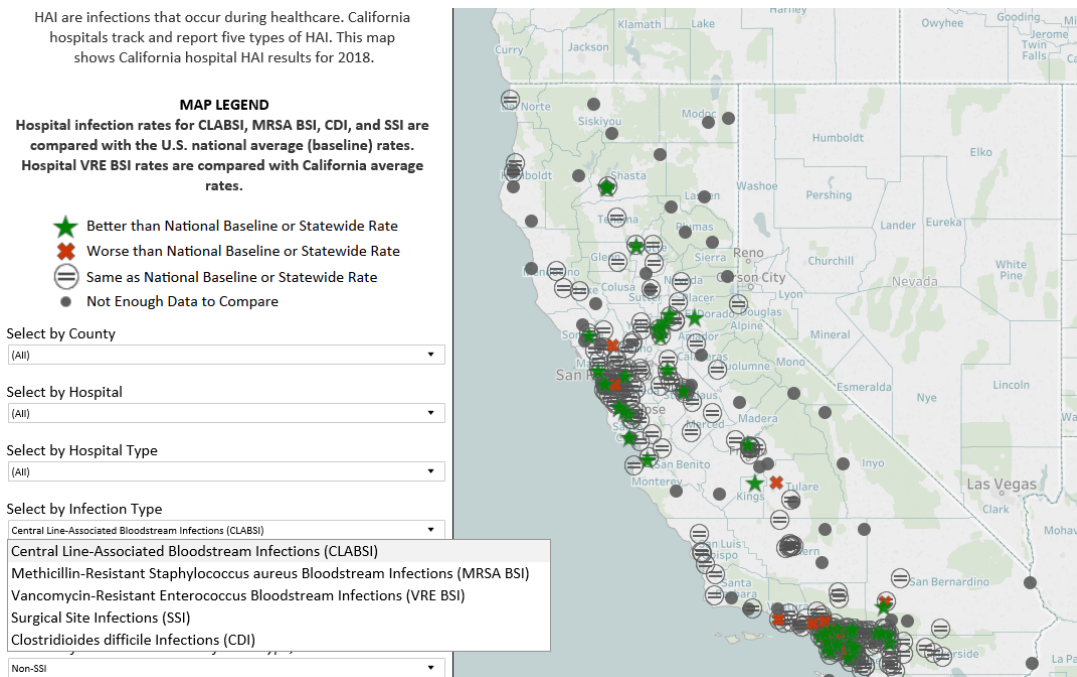


c. Select by Hospital Type – This filter allows you to choose a specific hospital type. By default, all hospitals types are selected. If a hospital type is selected, then other dropdown menus will adjust accordingly. For example, Long-Term Acute Care hospitals will limit infection types to Non-SSI because this hospital type does not have SSI data. In this example Critical Access and Major teaching hospital types are selected, so only those types of hospitals will appear on the map. Please note that you can select multiple hospital types - the map will zoom based on the selection(s).



d. Select by Infection Type – This filter allows you to choose a specific infection type. By default, no infection type is selected. Only one infection type can be selected at a time. If an infection type is selected, then other dropdown menus will adjust accordingly. The example below shows all CLABSI data on the map when no selections in other filters have been made.





Please note that if SSI is selected as the infection type and you want to view data for another infection type, the “For SSI, select Adult or Pediatric” and the “For SSI, select by Procedure Type” dropdown menus need to be reset before selecting another infection type.

**For SSI, select Adult or Pediatric**

Adult

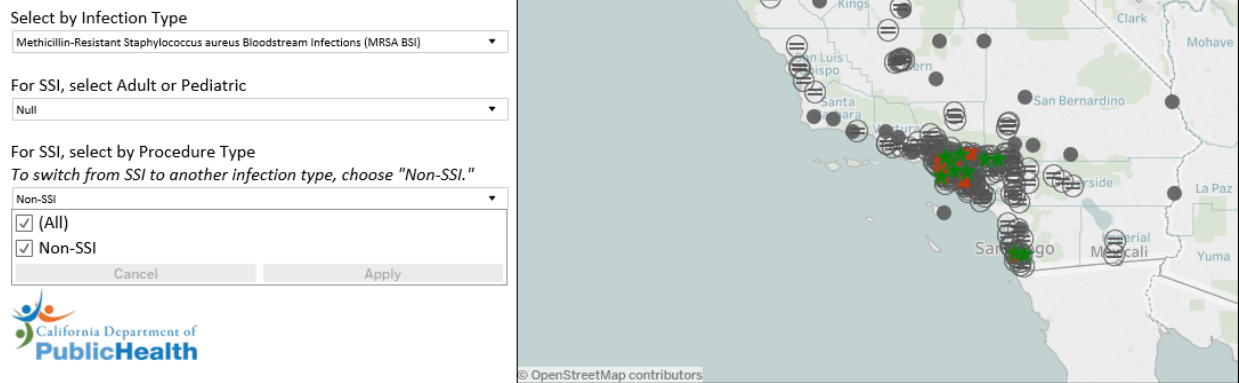
**For SSI, select by Procedure Type**

Gallbladder surgery

e. For SSI, select Adult or Pediatric – This filter allows you to choose between Adult and Pediatric SSI data if the SSI Infection Type is selected. By default, no age group is selected – if no selection is made in this dropdown menu then data for both age groups will populate the map, and the symbols won’t be distinguishable. If an age group is selected, then other dropdown menus will adjust accordingly. For example, the selection of “Adult” will show the procedure types performed on this age group. **Please note that SSI needs to be selected as the Infection Type before using this dropdown menu.**

This example shows how the SSI filters are affected when MRSA BSI is selected as the Infection Type instead of the SSI Infection Type.



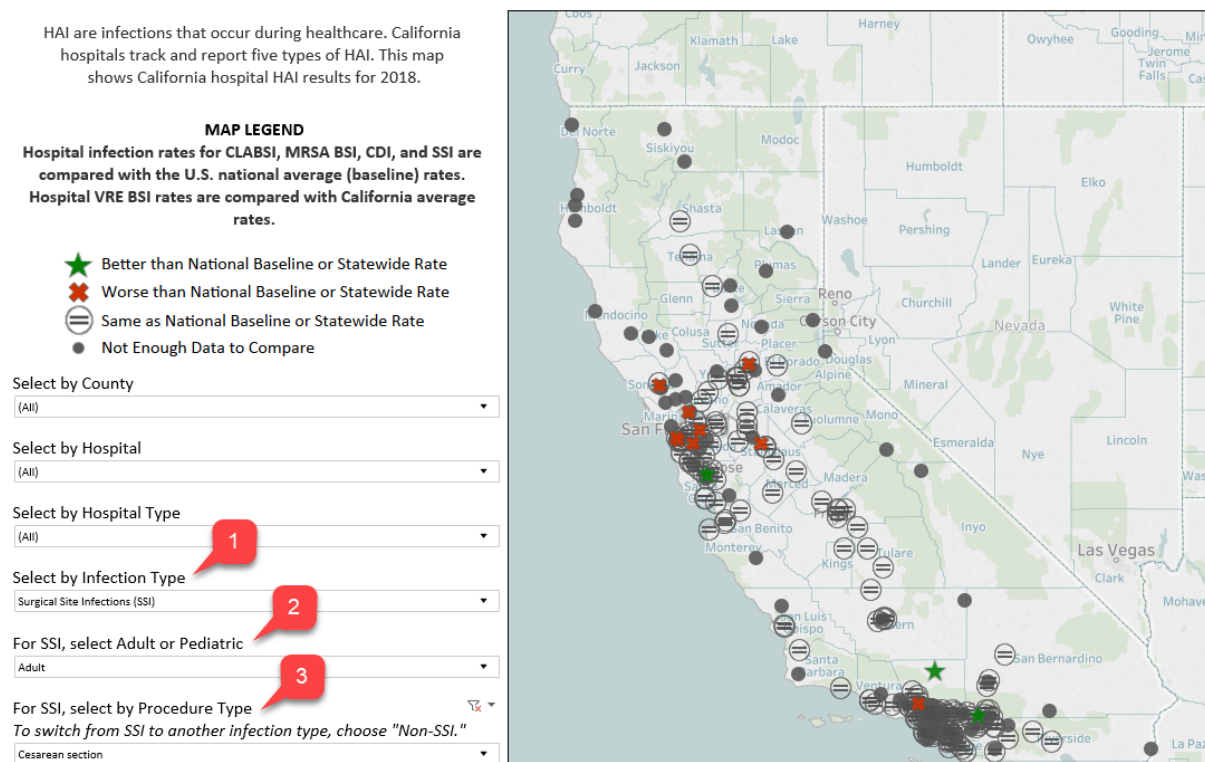


Please note that if SSI is selected as the infection type and you want to view data for another infection type, the “For SSI, select Adult or Pediatric” and the “For SSI, select by Procedure Type” dropdown menus need to be reset before selecting another infection type.

For SSI, select Adult or Pediatric  
Adult

For SSI, select by Procedure Type  
Gallbladder surgery

f. For SSI, select by Procedure Type - This filter allows you to select a specific surgical procedure if the SSI Infection Type is selected. By default, no procedure is selected – if no selection is made in this dropdown menu then data for all procedures will populate the map, and the symbols won’t be distinguishable. **Please note that SSI needs to be selected as the Infection Type and an age group needs to be selected before using this dropdown menu.**



Please note that if SSI is selected as the infection type and you want to view data for another infection type, the “For SSI, select Adult or Pediatric” and the “For SSI, select by Procedure Type” dropdown menus need to be reset before selecting another infection type.

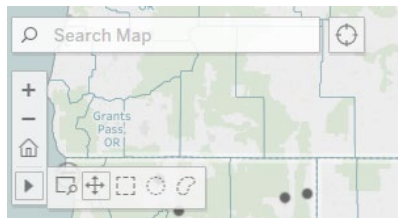
**For SSI, select Adult or Pediatric** 

Adult

**For SSI, select by Procedure Type** 

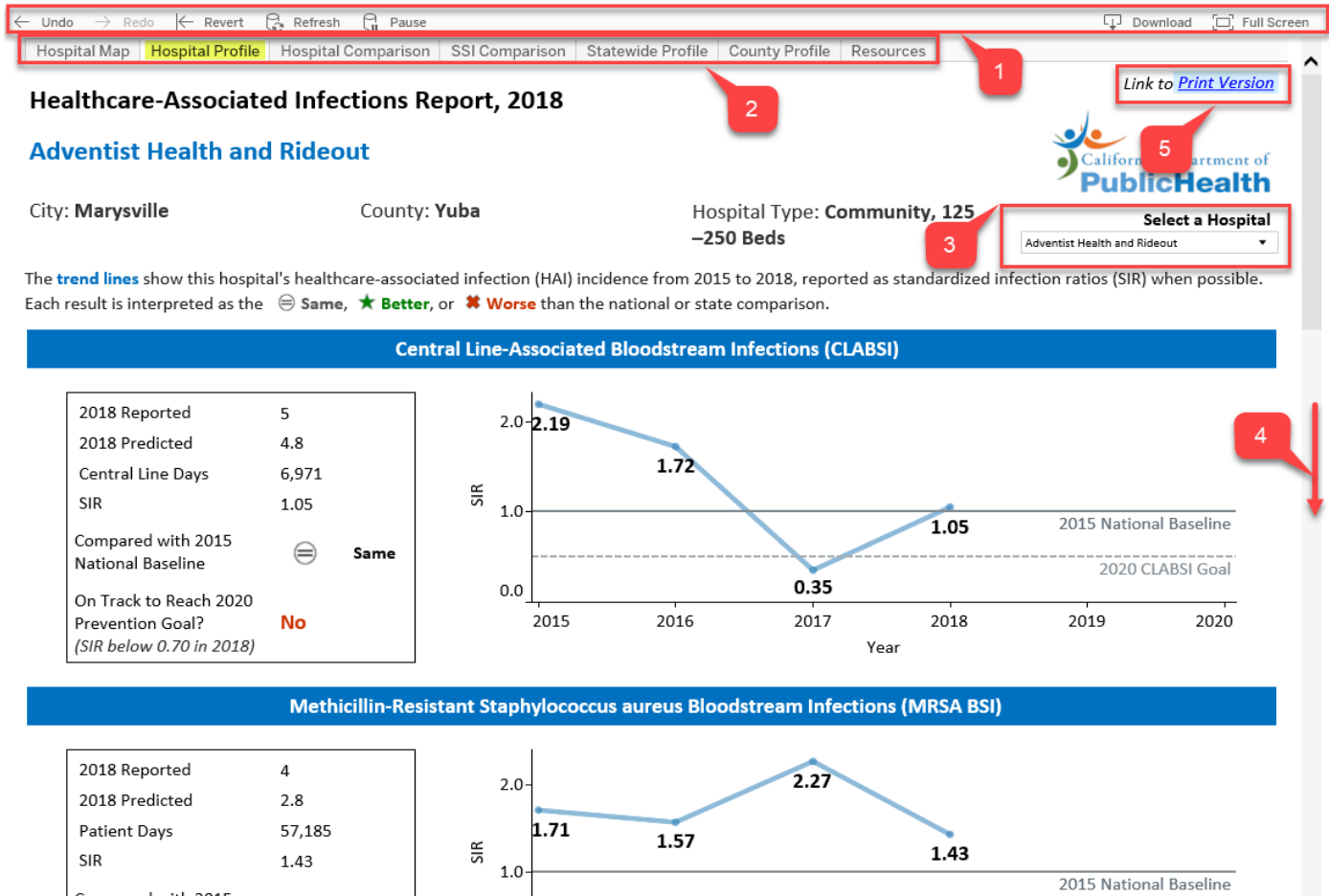
Gallbladder surgery

4. The map itself can be interacted with. Hover over the map to view the Map Control tools.



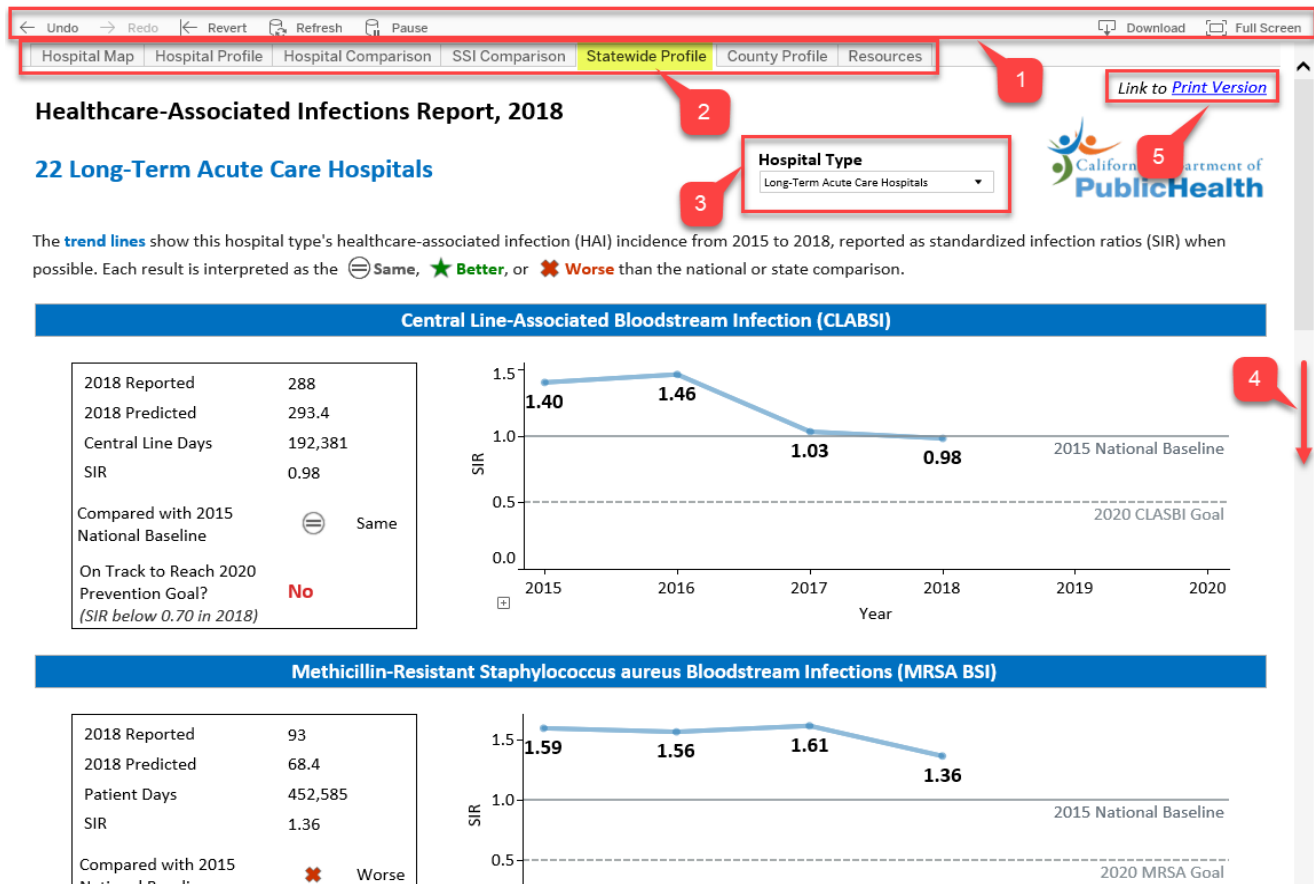
- Click the magnifying glass and type in the search bar to search for a specific geographic location, such as City or County name.
- The “+” and “-” symbols allow you to zoom in and out, respectively
- Click the Home icon to reset the map to the default zoom level
- Hover over the right-pointing arrow to see additional map controls. The default setting is the icon with overlapping arrows which allows you to click and drag to move the map. The other options give different ways of clicking and dragging to select data points on the map.

# Using the Hospital Profiles



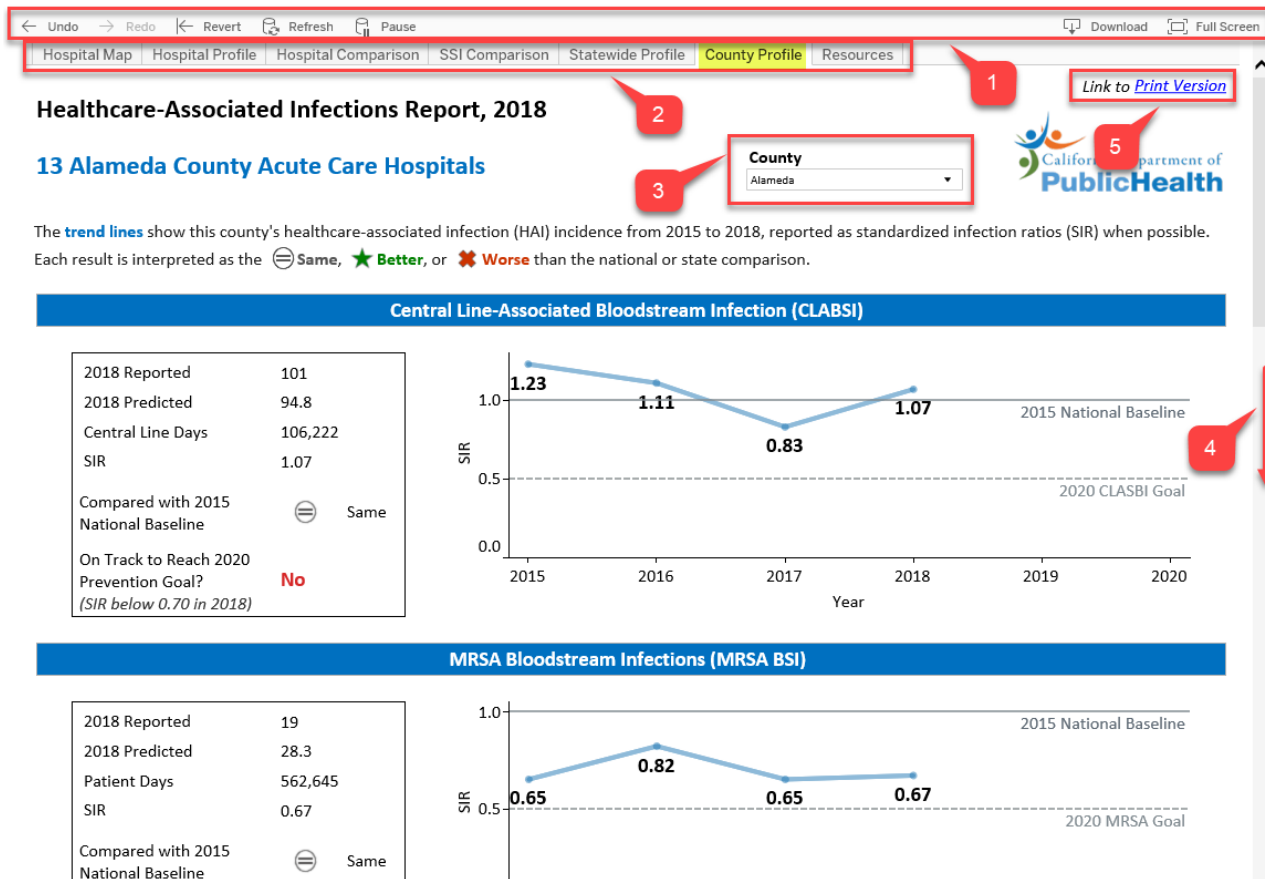
- The toolbar provides various options you can control
  - Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - Refresh, Pause, and Download – these buttons are not applicable to the Hospital Profile and can be ignored.
  - Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
- These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources dashboards.
- Select a Hospital filter - Click the drop-down menu to select a specific hospital and view its profile. The search bar updates the list dynamically as you type.
- Make sure to scroll down to see all the information!
- Please see instructions on how to print Hospital Profiles on page 1.

# Using the Statewide Profiles



1. The toolbar provides various options you can control
  - a. Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - b. Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - c. Refresh, Pause, and Download – these buttons are not applicable to the Statewide Profile and can be ignored.
  - d. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources dashboards.
3. Hospital Type filter - Click the drop-down menu to select a specific hospital type and view its profile. The search bar updates the list dynamically as you type.
4. Make sure to scroll down to see all the information!
5. Please see instructions on how to print Statewide Profiles on page 1.

## Using the County Profiles



1. The toolbar provides various options you can control
  - a. Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - b. Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - c. Refresh, Pause, and Download – these buttons are not applicable to the County Profile and can be ignored.
  - d. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources dashboards.
3. County filter - Click the drop-down menu to select a specific county and view its profile.

The search bar updates the list dynamically as you type. County profiles are available for counties that have 5+ acute care hospitals, so not every county has a profile.
4. Make sure to scroll down to see all the information!
5. Please see instructions on how to print County Profiles on page 1.

# Using the Hospital Comparison

**Healthcare-Associated Infections Hospital Comparison, 2018**

**Select 1st Hospital to Compare:** Adventist Health and Rideout  
**Select 2nd Hospital to Compare:** Adventist Health Bakersfield  
**Select 3rd Hospital to Compare:** (None)

	Adventist Health and Rideout	Adventist Health Bakersfield
<b>CLABSI</b>		
City: Marysville		City: Bakersfield
County: Yuba		County: Kern
Hospital Type: Community, 125–250 Beds		Hospital Type: Community, >250 Beds
2018 Reported	5	8
2018 Predicted	4.8	14.3
SIR	1.05	0.56
Central Line Days	6,971	17,905
Same as 2015 National Baseline	On Track Towards 2020 Goal? No	On Track Towards 2020 Goal? Yes
<b>MRSA BSI</b>		
2018 Reported	4	2
2018 Predicted	2.8	3.5
Patient Days	57,185	74,286
SIR	1.43	0.58

1. The toolbar provides various options you can control
  - a. Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - b. Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - c. Refresh and Pause – these buttons are not applicable to the Hospital Comparison and can be ignored.
  - d. Download – This button allows you to print the dashboard as an image (PNG) or file (PDF).
  - e. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, and Resources dashboards.
3. Select 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> Hospital to Compare – Use these filters to choose specific hospitals to compare against each other. The search bar updates the list dynamically as you type.
4. The Hospital Comparison shows comparisons for multiple HAI types so make sure to scroll down to see all the information!

# Using the SSI Comparison

The screenshot shows the 'SSI Comparison' dashboard for 'Surgical Site Infections in Adults, 2018'. The dashboard includes a toolbar at the top with options: Undo, Redo, Revert, Refresh, Pause, Download, and Full Screen. Below the toolbar is a navigation bar with tabs: Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison (highlighted), Statewide Profile, County Profile, and Resources. The main header area displays the California Department of Public Health logo and the title 'Surgical Site Infections in Adults, 2018'. Below this is a section for selecting hospitals: 'Select 1st Hospital' (Adventist Health and Rideout), 'Select 2nd Hospital' (None), and 'Select 3rd Hospital' (None). A note states 'These data refer to Adult patients only'. The main content area is titled 'Adventist Health and Rideout' and displays a table of SSI data for 28 procedures. The table has columns for Procedure Name, Procedure Count, 2018 Reported, 2018 Predicted, SIR, Compared to 2015 Baseline, and On Track for 2020 Goal. The table is filtered to show data for Adventist Health and Rideout. A legend on the left indicates that a green star means 'Better than National Baseline or Statewide Rate', a red star means 'Worse than National Baseline or Statewide Rate', and a grey circle means 'Same as National Baseline or Statewide Rate'. The table shows that for 'Abdominal aortic aneurysm repair', 'Appendix surgery', 'Bile duct, liver or pancreatic surgery', 'Cardiac surgery', 'Cesarean section', and 'Colon surgery', the hospital is 'On Track for 2020 Goal?'. For 'Coronary bypass', the hospital is 'Not On Track for 2020 Goal?'. A red box highlights the first six procedures, and a red arrow points to the 'Colon surgery' row.

Procedure Name	Procedure Count	2018 Reported	2018 Predicted	SIR	Compared to 2015 Baseline	On Track for 2020 Goal?
Abdominal aortic aneurysm repair	4	0	0.0			
Appendix surgery	103	0	0.4	0.00	⊖	Yes
Bile duct, liver or pancreatic surgery	34	1	0.3	3.64	⊖	No
Cardiac surgery	37	0	0.1			
Cesarean section	561	0	0.5	0.00	⊖	Yes
Colon surgery	72	4	1.6	2.50	⊖	No
Coronary bypass	75					

1. The toolbar provides various options you can control
  - a. Undo, Redo – Undo or Redo an action, such as modifying a filter setting.
  - b. Revert – Allows you to completely undo all filter selections and “revert” to the original dashboard settings. Use this if you have made multiple filter selections and want to return to a clean slate.
  - c. Refresh and Pause – these buttons are not applicable to the SSI Comparison and can be ignored
  - d. Download – This button allows you to print the dashboard as an image (PNG) or file (PDF).
  - e. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources dashboards.
3. Select 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> Hospital to Compare – Use these filters to choose specific hospitals to compare against each other. The search bar updates the list dynamically as you type.
4. The SSI Comparison shows comparisons for 28 procedures so make sure to scroll down to see all the information!



## Using the Resources

The screenshot shows the 'Hospital Associated Infections (HAI) Map Resources' dashboard. At the top is a toolbar with buttons for Undo, Redo, Revert, Refresh, and Pause, followed by Download and Full Screen buttons. Below the toolbar is a navigation bar with tabs for Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, Statewide Profile, County Profile, and Resources. The Resources tab is currently selected. The main content area is titled 'Hospital Associated Infections (HAI) Map Resources' and features a 'Frequently-Asked Questions (FAQs):' section. The FAQs are organized into blue boxes with white text. Callout 1 points to the toolbar, callout 2 points to the title, callout 3a points to the FAQs section, callout 3b points to a contact information box on the left, and callout 4 points to a scroll arrow on the right side of the page.

1. Toolbar: Undo, Redo, Revert, Refresh, Pause, Download, Full Screen

2. Title: Hospital Associated Infections (HAI) Map Resources

3a. Frequently-Asked Questions (FAQs):

3b. Share comments or questions about this interactive map by contacting the HAI Program at [HAIProgram@cdph.ca.gov](mailto:HAIProgram@cdph.ca.gov). For additional CDPH general information or comments, visit the CDPH [Contact Us](#) page.

4. Scroll arrow

**Where can I find out more about the features and functions of this interactive map?**  
Please review this [user guide](#) for more information regarding the HAI Interactive Map.

**Where do I get print versions of the Hospital, Statewide, and County Profiles?**  
Printable ADA compliant hospital, statewide, and county profiles are available in the Hospital Profile, Statewide Profile, and County Profile tabs, respectively. On the top of each profile, select "Print Version," and an ADA-compliant printout will be generated.

**Can I access and utilize the data that are in the map?**  
Yes, all the data you see are available through the [California Health and Human Services Open Data Portal](#)

**Where do these data come from?**  
Hospitals report all their data through the National Healthcare Safety Network (NHSN), which is a national HAI tracking system operated by the Centers for Disease Control and Prevention. Please visit the [NHSN website for information on how the data are reported](#).

**Does CDPH assess the quality of the data?**  
For information on our data quality methods and processes, please visit our Data Quality webpage (coming soon)

**What do all of these data mean and how are they used to prevent healthcare-associated infections in the state of California?**

1. The toolbar provides various options you can control
  - a. Undo, Redo, Revert, Refresh and Pause – these buttons are not applicable to the HAI Resources and can be ignored.
  - b. Download – This button allows you to print the dashboard as an image (PNG) or file (PDF).
  - c. Full Screen – This expands the dashboard to fill the entire screen. This is good for use in presentations. Click the “Esc” button on your keyboard to leave full screen mode.
2. These tabs allow quick navigation between the Hospital Map, Hospital Profile, Hospital Comparison, SSI Comparison, and Resources dashboards.
3. The right column contains a) a list of Frequently Asked Questions. The left column contains b) contact information.
4. There are several FAQs, so make sure to scroll down to see all the information!