User Guide for Interactive Report I

2010-11 Influenza Vaccination Coverage

The **interactive report I** displays the 2010-11 monthly cumulative influenza vaccination coverage estimates based on self-reported influenza vaccinations from the Behavioral Risk Factor Surveillance System (BRFSS) and National Immunizations Survey (NIS). See *Methods and Limitation Companion Report* on the <u>influenza vaccination coverage</u> webpage for further data analysis description.

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Map Selection

• The **interactive report I** initially displays cumulative influenza vaccination coverage estimates for persons 6 months and over for the latest month of available data. The map of the United States shows the states demarcated by their designated Department of Health and Human Services (HHS) Region.



• To view influenza vaccination coverage for other groups click on the Map Selection button.



• The **Map Selection** menu lists three categories: all persons, adults, and children. The menu displays the months of available data for the different age groups within each of the categories. Select the desired age group and month of vaccination to view map (to expand or collapse the list of options click on the small grey triangles).

Map Selection	Map Filter	Clear Selection		Map Selection	Map Filter	Clear Selection
▶ All Persons		ΟX		All Persons		O X
▶ Adults				▶ Aged ≥6 mos		
▶ Children			v	/ Adults		
				▶ Aged ≥18 yrs		
				▶ Aged 18-49 yrs		
				▶ Aged 18-49 yrs HR ((‡)	
				▶ Aged 50-64 yrs		
				▶ Aged ≥65 yrs		
			v	r Children		
				▶ Aged 6 mos-17 yrs		
				▶ Aged 6 mos-4 yrs		
				▶ Aged 5-12 yrs		
				▶ Aged 13-17 yrs		
		- +	L			- +

Map Selection	Map Filter	Clear Selection
▼ All Persons		ΩX
▶ Aged ≥6 mos		
🔻 Adults		
▶ Aged ≥18 yrs		
🔻 Aged 18–49 yrs		
Nov		
Oct		
Sep		
Aug		
▶ Aged 18-49 yrs HR (*	‡)	
▶ Aged 50-64 yrs		-
► Aged ≥65 yrs		
🔻 Children		
► Aged 6 mos-17 yrs		.
l		- +

- Click '+' button in the *bottom right corner* of the Map Selection window to expand all categories, age groups, and months of data.
- Click '-' button in the *bottom right corner* of the Map Selection window to collapse all categories, age groups, and months of data.
- Click 'x' button in the *top right corner* of the Map Selection window to close the selection menu.

Map Layers

• HHS Regions are outlined in the United States map by default. Click the check box in the **legend** box to toggle the HHS Region outlines on / off.



Map Filter

• The map can be filtered by HHS regions. To select a region click on the **Map Filter** button.



• Select the desired HHS region from the **Map Filter** menu.

Map Selection	Map Filter	Clear Selection
🔻 Filter to HHS Region 🧹		O X D
Region 1		
Region 2		
Region 3		
Region 4		
Region 5		
Region 6		
Region 7		
Region 8		
Region 9		
Region 10		
Remove Filter		
		- +

• Once the desired region is selected, only the states within the specific region remain highlighted in the map accordingly. The *State Coverage Ranking* bar chart and the *Coverage Estimates by State* table will also only display states within the selected HHS region.



• To clear the filtered region and return the map and other figures to the original look, go back to the **Map Filter** menu and select *Remove Filter*.

Map Selection	Map Filter	Clear Selection
🔻 Filter to HHS Region		
Region 1		
Region 2		
Region 3		
Region 4		
Region 5		
Region 6		
Region 7		
Region 8		
Region 9		
Region 10		
Remove Filter		
•		
		- +

Interactive Features

Map and Charts

- Once the desired age group and month of vaccination are selected, the map is updated automatically. States
 are shaded based on their coverage estimates, as specified by the map legend. The shaded color of the selected
 state in the U.S. map corresponds to the color in the *State Coverage Ranking* bar chart, which includes error
 bars representing the 95% confidence intervals of each state's vaccination coverage estimate.
- To display the name and corresponding vaccination coverage estimate for any state, hold the mouse pointer over the state in the map (without clicking it to select). The selected state will be highlighted in the map, the State Coverage Ranking bar chart and the Coverage Estimates by State table. For the highlighted state, a trend of cumulative vaccination by month also appears in Coverage by Month line graph.



- The *Coverage by Month* line graph shows the vaccination cumulative coverage by month through the influenza season (from August through the latest month of data). To view the vaccination coverage trend for a particular state or region, hold the mouse over the selected state or region in the map, the *State Coverage Ranking* bar chart or the Coverage Estimates tables.
- Click a state in the map, data table or bar chart to select it and freeze the trend in the *Coverage by Month* line graph. Selecting a state will shade it red. Hold the mouse pointer over the points in the *Coverage by Month* graph to display the month and coverage level of the selected state.



• The *State Coverage Ranking* bar chart displays error bars representing the lower limit (LL) and upper limit (UL) of the 95% confidence intervals associated with the vaccination coverage estimate for the featured month, age-group and state. Hold the mouse pointer over any of the bars in the *State Coverage Ranking* bar chart to display the state name, its' influenza vaccination coverage estimate and 95% LL and UL confidence intervals.



• To clear any selections click on the **Clear Selection** button.



• See <u>Comparisons</u> for further guidance on selecting multiple geographic areas and producing comparisons between geographical areas in *Coverage by Month* line graph and *State Coverage Ranking* bar chart.

Coverage Tables

• To move between the *National/Regional Coverage Estimates* table and *Coverage Estimates by State* table, click the button *Switch National to State Tables*. Both tables provide the name of the geographical area (state or region), the sample size, the coverage estimate and the 95% confidence interval. Both tables can be sorted by each of these columns.

	Switch Natio	nal to Stat	te Table	s 🗾		Switch N	ational to State	Tables			Switch Natio	nal to Sta	te Table:	5
Г	National/Region	al Covera	ge Estim	ates 🗆 🗙	F	Click to switch b	etween state a	nd		\square	Coverage E	stimates t	y State	ΠX
	U.S./HHS Region		% (§)	CI (¶)		national/region	al table of estir	nates			States	• n	% (§)	CI (¶)
	United States	511,357	41.2	(±0.4)		United States	511,357	41.2	(±0.4)	• •	🕻 Alabama	9,323	39.8	(±2.0)
•	Region 1	54,853	49.1	(±1.2)		Region 1	54,853	49.1	(±1.2)	• •	Alaska	4,987	38.1	(±2.8)
	Region 2	21,314	42.4	(±1.4)		Region 2	21,314	42.4	(±1.4)	• •	🕻 Arizona	8,065	41.2	(±2.6)
•	Region 3	50,561	45.0	(±1.1)		Region 3	50,561	45.0	(±1.1)	• •	🕻 Arkansas	5,871	52.1	(±3.9)
	Region 4	92,724	39.0	(±0.8)		Region 4	92,724	39.0	(±0.8)	•	California	17,151	36.9	(±1.4)
•	Region 5	55,952	40.5	(±0.9)		Region 5	55,952	40.5	(±0.9)	• •	Colorado	10,746	45.0	(±2.3)
	Region 6	54,652	42.3	(±1.1)		Region 6	54,652	42.3	(±1.1)	•	Connecticut	8,563	44.6	(±2.1)
•	Region 7	45,100	43.8	(±1.1)		Region 7	45,100	43.8	(±1.1)	• •	L Delaware	7,145	44.4	(±2.4)
	Region 8	54,066	44.4	(±1.2) 🔻		Region 8	54,066	44.4	(±1.2)	•	District of Columbia	6,307	43.6	(±3.0) 🔻

The Coverage Estimates by State table also provides the legend color for each state corresponding to the state's color in the map, and a zoom-to-state feature represented by the magnifying glass. The National/Regional Coverage Estimates table colors correspond to the colors of the lines shown in the Coverage by Month line graph and State Coverage Ranking bar chart.

Legend

• States can also be selected through the legend. Hold your mouse pointer over a class in the legend to highlight the states that fall into that class. Click the square to the left of the desired class to select the states that fall within that class. The selection will appear in red in the map, the bar chart, the line graph, and the coverage table.



Zoom

- Use the slider bar on the left of the map to zoom in and out. You can also use the scroll wheel on your mouse to zoom in and out of any section of the map.
- To zoom to a specific state, go to the *Coverage Estimates by State* table and select the zoom-to-state feature (signified by a magnifying glass) of the desired state.

Map Selection Map Filter Clear Selection	Play Time Animation
	Aug Sep Oct Nov Dec Jan Feb Mar Apr May
a Astronom	Coverage by Month X 0.0 - 9.9 0.0 - 9.9 0
	Switch National to State Tables
	States A n % § CI 1
State Coverage Banking	● Q District of Columbia 6,307 43.6 (±3.0) ▲
	Q Florida 25,071 35.3 (±1.5)
100	Q Georgia 7,795 36.7 (±2.1) Legend Settings
80	• Q '' " 9,816 56.0 (±2.2)
	Q Q + usine 8,680 34.0 (±2.1)
	Q Illinois 8,728 38.1 (±2.1) Print Report
8 20 -	Q Indiana 11,036 41.5 (±1.6) Export Report
0 States	• Q Iowa 8,156 48.8 (±1.9) Coverage for May
	• Q Kansas 13,899 41.9 (±1.6)

• Click the zoom full icon (bottom magnifying glass in the map window) to return the map back to full view.



Map Animation

• The **time animation** feature can be used to view changes in vaccination coverage by state over time. Click on the second grey-shaded triangle and move to change the month that is currently displayed.



Click the "play" (clear triangle) button to automatically display coverage through all the available months for the selected age group. The animation may be paused by clicking on the pause button (the two parallel vertical dashes; available after "play" has been selected). The left and right arrow buttons may also be used to manually navigate through each month.

					Pla	ay Tin	ne Ani	matio	1				ПX			Pla	ny Tin	ne Ani	matio	n				ПX
D	<	>		Aug	Sep	Oct I	Nov	Dec	Jan I	Feb	Mar	Apr	May	-*-	Aug	Sep	0đ	Nov	Dec	Jan I	Feb	Mar	Apr	May
	PI	ay	Ca	vera	je by I	Month					Leg	end		C	Anim	ation I	Delay	(seco	nds)			Leg	end	٥x

Comparisons

Compared to Other States

The user can start a comparison by selecting a state in the map, in the bar chart or in the state coverage table.
 To select multiple states, hold the 'Ctrl' key or hold the 'Shift' key to select a range of states. To select an extended area, use the 'Ctrl' key and click and drag a box in the map. The states within the box drawn will become selected. Selected state(s) will appear shaded red in the map, the bar chart, the time series line graph, and the state coverage table. Holding the 'Ctrl' key and clicking on a selected state allows you to deselect it.



- The *Coverage by Month* time series chart displays trends of influenza vaccination coverage and allows comparison of vaccination coverage by month for selected states.
 - A note of caution: because all the states selected will appear red in the line graph, please limit comparisons to a maximum of three states.
- To clear any comparisons click on the **Clear Selection** button.



Compared to United States or HHS Regions

• To view and compare to national and regional influenza vaccination coverage estimates select the desired area(s) from the *National/Regional Coverage Estimates* table. Again, to move between national and state influenza vaccination coverage tables, click the **Switch National to State Tables** button.

Switch Na	itional to State	e Tables	
Click to switch be national/regiona	etween state a I table of estin	nd nates	
United States	511,357	41.2	(±0.4)
Region 1	54,853	49.1	(±1.2)
Region 2	21,314	42.4	(±1.4)
Region 3	50,561	45.0	(±1.1)
Region 4	92,724	39.0	(±0.8)
🥮 Region 5	55,952	40.5	(±0.9)
Region 6	54,652	42.3	(±1.1)
Region 7	45,100	43.8	(±1.1)
🛑 Region 8	54,066	44.4	(±1.2)

On the State Coverage Ranking bar chart, national and regional coverage estimates are shown using a horizontal line across the bars. At the same time, a trend line will appear in the Coverage by Month graph. The colors of both lines correspond with the color of the solid circle next to the selected US/HHS region in the National/Regional Coverage Estimates table.



Legend Settings and Personalization

• The legend is displayed in the *Legend* box and can be changed as needed by clicking on the **Legend Settings** button below. This will open the **Legend Settings** dialogue box.



- The legend and influenza vaccination coverage classes are initially set to the default color. Such things as border color, palette, number of classes and classifiers can all be designated by the user for personal applications. The following items are available in the **Legend Settings**:
 - **Border color**: The color of the border around each state on the map.
 - **Transparency**: By sliding the bar, the transparency of the states in the map can be lighter or darker.
 - **Palette**: The color palette used in the map can be changed by selecting other available palettes.
 - **Reverse Palette**: By checking this box you can reverse the color palette (in example, change light-todark to dark-to-light and vice versa).

- No. Classes: You can increase or decrease the number of classes by clicking the increase or decrease buttons (labeled with black arrows).
- **Classifiers**: Select a classifier from the drop-down. This will decide how the ranges are calculated.
 - Equal Interval: The intervals between class breaks are equal. Class breaks are calculated automatically based on the selected data and will update if you change the number of classes. The advantage of the equal-interval classification is that many users find it simple to understand. However, a disadvantage is that only the minimum and maximum data values are used when determining class breaks for the intervals.
 - Quantile: Each class in the legend contains an approximately equal number of states. Class breaks are calculated automatically based on the selected data and will update if you change the number of classes (tertiles, quartiles, quintiles...). Two advantages of the quantile classification are that it is appropriate for ordinal data (as data are rank-ordered) and that it can help make map comparisons (assuming that the same number of classifications is used for all maps). A disadvantage of the quantile classification is that it does not consider how the data are distributed. If the data distribution is highly skewed, data observations will be forced into the same class (either the lowest or highest) where this may not be appropriate. As a result, the quantile classification may give a false impression that there is a relatively normal data distribution.
 - Natural Breaks: This classification method is also known as Optimal Breaks and Jenks' Method. Class breaks are calculated automatically based on the selected data and will update if you change the number of classes. Data are assigned to classes based upon their position along the data distribution relative to all other data values. An iterative algorithm is used to assign values to classes such that the variances within all classes are minimized whereas the variances among classes are maximized. The advantage of this classification is that the data distribution is explicitly considered for determining class breaks. However, the disadvantage is that users may not understand the classification method used and that class breaks may not be immediately intuitive.
 - Continuous: Each geographic feature is shaded differently using a continuous scale. This legend type is useful for identifying extremely high or low values.
 - Standard Deviation: Class breaks reflect the number of standard deviations from the data average (or mean). States are classified according to how many standard deviations above or below the average their coverage estimate value falls. The number of classes for this legend type cannot be changed.



Report Options

• Click the blue square in the top right corner of **any box** to maximize.



• Click the blue arrow in the top right corner of the **maximized box** to restore the box down.



Footnotes

Footnotes for the symbols shown in the titles, table headings, and data values are displayed by selecting the
 Footnotes button, which opens a window shown as a pop-up notepad. To close the window, either select the
 Footnotes button again or select the X in the top right corner.

	Legend Settings	(±1.4)	42.4	4
	Footnotes	(±1.1)	45.0	1
	T obtilotes	(±0.8)	39.0	4
nation	o view additional inform	(Click t	40.5	2
	Export Report	(±1.1)	42.3	2
	Coverage for May	(±1.1)	43.8	0

Map Selection	Map Filter	Clear Selection	Play	Time Anima	ation		ПX
+			Aug	Sep		Oct	Nov
		Footnotes				D X D	
 Coverage es November 2011 Excludes U Selected his Month of va U.S. populatio 95% confide Data for inte Estimates r £ Estimates r ¥ Estimates r 	timates are for persons i D. S. territories Arrisk conditions are ast ccination was imputed fo n. ance interval viriew months through De tot reliable because sam tot reliable because relat night be unreliable becau	nterviewed September through Decemb thma, diabetes, and heart disease r respondents whose database record v cember were not available. ple size is <30. ive standard error is >0.3. ise confidence interval half-width is >10.	er 2010 who reported b	n field. Perca	ted August	through	D X
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100		Begion 2	10 30	5 397	(+2.5)	L	
ê 80 -		Begion 3	16,64	7 43.2	(+2,2)	Legend Setti	ngs
e 60		- TTT Begion 4	34.10	36.3	(±1.4)	Footnotes	;
		TITTITITI	21,86	4 38.1	(±1.7)	Drint Men	
8 20 - 22 Jun		Region 6	13,28	1 37.8	(±2.9)	E se	
0	Shakes	Region 7	15,86:	2 42.2	(±2.4)	Export Mer	iu -
	States	Region 8	20,05	4 38.4	(±1.8)	Through Nov	

Print Menu

• Printing options for the full **interactive report** or individual components of the report are available by selecting the **Print Menu** button, which opens the menu as a pop-up window.

Print (Options	×
Print full screen		1.*
Legend		*
Coverage Estimates	by State	
Coverage by Month		
State Coverage Ran	king	
U.S. Map		Y
Resize to fit page		
Show Buttons		
🖌 Show Images		
Show Background		

- There are two print modes available: 'Rescale to fit page' or 'Resize to fit page'. '
 - Rescale to fit page' prints out exactly what is seen on the screen, rescaled to fit the paper size. The quality of the output (especially text) might not be quite as crisp as for the resize option.
 - 'Resize to fit page' internally resizes all components individually to fit to the paper size. The output will be crisp but text in the report may appear larger than on the screen. Different chart axis labels and scroll bars may appear although they are not present on the screen.

• There is also an option to have the buttons within the **interactive report** shown in the printout. The images and the background may be selected to appear or disappear in the printout by checking or unchecking the respective boxes.

Print Options	×
Print full screen	•
Print As Vector (best quality)	
Print As Bitmap (supports transp	arency)
 Rescale to fit page 	
🔘 Resize to fit page	
Show Buttons	
🖌 Show Images	
Show Background	
Print	Close

Export Menu

• The **Export Menu** button allows exporting of the full **interactive report** or individual components of the report in either JPEG or PNG format. **Export Menu** is displayed in a pop-up window.



Other Features

• Many of the interactive report options are also available with the right click mouse button.



- A right click anywhere in the active report will display the following menu options.
 - *Clear State Selection*: This option deselects all states currently selected.
 - o *Clear National/Regional Selection*: This option deselects all regional or national comparisons.
 - *Filter Map to Selected States*: This option creates a filter from the states that are currently selected.
 - *Clear Filter*: This option clears all filters that applied.
 - **Print Menu**: See **<u>Print Menu</u>** for further information.
 - Export Menu: See Export Menu for further information.
 - *Reset Layout*: This option returns the page layout to the original layout of the interactive report.
 - **About InstantAtlas**: Provides software version and website information for InstantAtlas, the software used to create the interactive report.
 - Settings: Opens Adobe Flash Player settings menu.
 - *Global Settings*: Provides website and help menu for Adobe Flash Player 10 in pop up window.
 - **About Adobe Flash Player 10**: Provides website and information for Adobe Flash Player 10 in pop up window.

Help Guide

This help guide can be accessed anytime from the Interactive Report I page by selecting the Help Guide button.
 Alternatively it can be found on the influenza vaccination coverage webpage as the user guide to using the interactive report.