Easy to Use Tools for Displaying Hand Hygiene and Outbreak Surveillance Data

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Philadelphia Healthcare Associated Infections & Antimicrobial Resistance Program Webinar, December 10th, 2019



Speaker Disclosure

- Susy Rettig has nothing to disclose
- Anita Wade has nothing to disclose

Housekeeping

- All participants have been muted during the presentation
- Please type any questions in the group chat box during the presentation
- Time permitting there will be a Q&A session at the end
- This presentation is being recorded and will be shared on our

website: https://hip.phila.gov/HAIAR



Objectives

- A brief overview of the importance of infection control surveillance
- Tutorial on how to use the PDPH Microsoft Excel tools to track hand hygiene observations and outbreaks in your facility
- Tools to graphically display your data to share with staff and partners
- Examples of using your data to support your process improvement efforts



What We Learned about Surveillance from Our ICAR Visits

- Hand hygiene observations are performed, but not always documented
- Feedback for hand hygiene compliance is given, but not documented
- Data are reported at monthly meetings, but not displayed and trended over time
- Outbreak data are not plotted on an EPI curve



What is Surveillance?



APIC Surveillance Definition

- "The ongoing, systematic collection, analysis, interpretation, and dissemination of data to identify infections and infection risks, to try to reduce morbidity and mortality and to improve health."
- Core activity of an IPC program



Purpose of Surveillance

- Identify infections/outbreaks
- Monitor trends in infections and pathogens
- Monitor staff adherence to IPC practices
- Identify performance improvement opportunities
- Track progress toward priorities identified on the annual facility IPC risk assessment

Process and Outcome Surveillance Measures

- Process measures- Audit of practice with direct observation or review of documentation
 - Hand hygiene
 - PPE use
- Outcome measures- Identify infection events
 - Influenza case count/rate
 - Norovirus case count/rate

Data Collection Tools for Detecting an Outbreak



Examples of Data Tools

- 24 hour report
- Line list for targeted infection



Line List for Targeted Infection

Demographics

PDPH 2019 Influenza Line List

- Location
- Signs and symptoms

	Name/Initials	Resident or Staff?	Staff role	Room #	Age	Sex	Flu Vaccine Received Yes/No	Onset Date
1								
2								

- Diagnostics
- Treatment
- Outcome

			Influ	enza Test	ing	Treatment	Hospi	talized		Outcome
Temp	Cough Yes/No	Sore Throat Yes/No	Rapid, Culture, Other	Test Date	Result	(Tamiflu, Amantadine, Antibiotics)	Hospital	Admit Date	Discharge Date	(Recovered, Transferred, Deceased)

Outbreak Tracking Sheet is available on the PDPH Health Information Portal at:

https://hip.phila.gov/DiseaseControlGuidance/DiseasesConditions/Influenza#LinksResources



Methods for Displaying an Outbreak

Outbreak scenario:

Influenza outbreak on 4 South

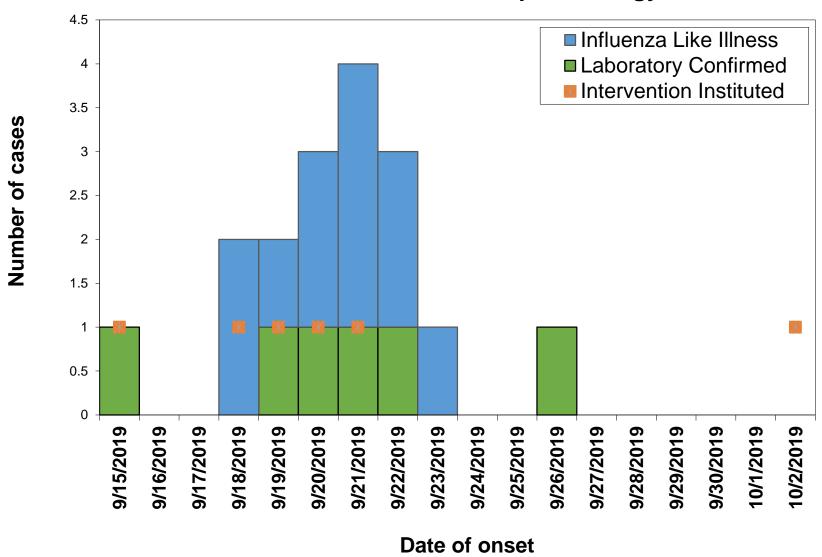
- Started 02/18
- Ended 03/02
- 15 cases
- Interventions



Epidemic Curve for an Outbreak

- Displays the number of cases of illness by the date of illness onset
- Shows your distribution of cases over time
- Provides a sense of the magnitude
- Estimate disease/incubation period
- Histogram is used to show frequency distributions

Influenza Like Illness Epidemiology Curve



Data Collection Tools for Hand Hygiene Compliance



Hand Hygiene and PPE Observation Sheet

	Hand	Hygiene an	d PPE Use Observa	ations		
Staff type*	Type of HH Opportunity		Indication for PPE use	Type of PPE Indicated?	Appropriate PPE used?	
	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	Gloves Gloves and gown Mask/ goggles/ faceshield None	○ Yes ○ No ○ N/A - PPE use not indicated	
	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	 ○ Gloves ○ Gloves and gown ○ Mask/ goggles/ faceshield ○ None 	○ Yes ○ No ○ N/A - PPE use not indicated	
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Available at: https://hip.phila.gov/HAIAR/Resources

Utilizing PDPH Data Collection Tools



Hand Hygiene Observation Sheet

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1 Row Used per Staff Member and HH opportunity



HH Observations

	Hand	Hygiene an	d PPE Use Observa	ations	
Staff type*	Type of HH Opportunity	HH Performed?	Indication for PPE use	Type of PPE Indicated?	Appropriate PPE used?
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PPE Observations

	Hand	Hygiene an	d PPE Use Observa	ations	
Staff type*	Type of HH Opportunity	HH Performed?	Indication for PPE use	Type of PPE Indicated?	Appropriate PPE used?
	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	Gloves Gloves and gown Mask/ goggles/ faceshield None	○ Yes ○ No ○ N/A - PPE use not indicated
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Filled in Observation Sheet

	Hand	Hygiene an	d PPE Use Observa	ations	
Staff type*	Type of HH Opportunity	HH Performed?	Indication for PPE use	Type of PPE Indicated?	Appropriate PPE used?
MD	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	Gloves Gloves and gown Mask/ goggles/ faceshield None	○ Yes ○ No ○ N/A - PPE use not indicated
CNA	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	○ Gloves○ Gloves and gown○ Mask/ goggles/ faceshield○ None	Yes No N/A - PPE use not indicated
LPN	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	○ Gloves○ Gloves and gown○ Mask/ goggles/ faceshield○ None	○ Yes ○ No ○ N/A - PPE use not indicated
LPN	Roomentry Roomexit Before resident contact After resident contact Before glove After glove Other:	Alcohol-rub Hand wash No HH done	Exposure to bodily fluids (standard precautions) Contact precautions Droplet precautions PPE use not indicated	Gloves Gloves and gown Mask/ goggles/ faceshield None	Yes No N/A - PPE use not indicated

nit:	Rev. Sept. 20	19



HAND HYGIENE OBSERVATIONS

Instructions: Use a \checkmark for each hand hygiene success observed and a \emptyset to designate each time hand hygiene was not performed. Multiple observations can be made in each box.

	Staff			Success (✓)	/ Failure (Ø)		
Date	Туре	Room Entry	Room Exit	Before Resident Contact	After Resident Contact	Before Glove	After Glove
otals		√= Ø=	√= Ø=	√= Ø=	√= Ø=	√= Ø=	√= Ø=

*Staff key: MD/DO= Physician PA= Physician assistant, NP= Nurse practitioner, RN= Registered nurse, LPN= Licensed practical nurse, CNA= Certified nursing assistant, REHAB= Rehabilitation staff (e.g. physical/ occupational/ speech / respiratory therapist), DIET= Dietary staff, EVS= Environmental services or housekeeping staff, SW= Social worker, RP= Religious personnel (Priest, Pastor, Rabbi, Imam, etc.) OTHER= Volunteer/Research
UNK= unknown/ unable to determine

One row can have multiple observations for the same staff member

Rev. Sept. 2019

Observer: Jane Doe, RN



HAND HYGIENE OBSERVATIONS

Instructions: Use a \checkmark for each hand hygiene success observed and a \emptyset to designate each time hand hygiene was not performed. Multiple observations can be made in each box.

	Staff			Success (✓) / Failure (Ø)		
Date	Туре	Room Entry	Room Exit	Before Resident Contact	After Resident Contact	Before Glove	After Glove
0/2	LPN	1/1 R	1111	1&1	111	Rb √	1111
10/2	MD	1111	¤b√	1/1 R	4111	101	J J J
10/2	RN	1&1	4111	ROI	///	1/18	4111
10/2	REHAB	4111	101	4111	1/18	J J J	Rb1
tals		√= 13 Ø= 2	√= 11 ø= 3	√= 10 Ø= 4	√= 13 Ø= 1	√= 9 Ø= 4	√= 12 Ø= 2

*Staff key: MD/DO= Physician PA= Physician assistant, NP= Nurse practitioner, RN= Registered nurse, LPN= Licensed practical nurse, CNA= Certified nursing assistant, REHAB= Rehabilitation staff (e.g. physical/ occupational/ speech / respiratory therapist), DIET= Dietary staff, EVS= Environmental services or housekeeping staff, SW= Social worker, RP= Religious personnel (Priest, Pastor, Rabbi, Imam, etc.) OTHER= Volunteer/Research
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Notes:

Observer: Jane Doe, RN



HAND HYGIENE OBSERVATIONS

Instructions: Use a ✓ for each hand hygiene success observed and a Ø to designate each time hand hygiene was not performed . Multiple observations can be made in each box.

Date Type Room Entry Room Exit Before Resident Contact Resident Contact Dollar				eacii	ume nand nygiene was n		: Observations can be n	naue in each box.			
Type Room Entry Room Exit Before Resident Contact After Glove Resident Contact Before Glove After Glove 10/2 LPN	Data	Staff	Success (✓) / Failure (Ø)								
10/2 MD 11/1 RD1 11/18 11/1 18/1 11/1 18/1 11/1	Date	Туре	Room Entry				Before Glove	After Glove			
10/2 RN 181 1111 18 1111	10/2	LPN	1/18	1111	101	111	201	1111			
	10/2	MD	4111	ROI	1/18	4111	101	111			
10/2 REHAB 1111 181 1111 118 111 BP1	10/2	RN	101	4111	RO1	111	1/18	4111			
	10/2	REHAB	4111	101	4111	1/18	111	ROI			

Totals $\sqrt{=13}$ $\phi = 2$ $\sqrt{=11}$ $\phi = 3$ $\sqrt{=10}$ $\phi = 4$ $\sqrt{=13}$ $\phi = 1$ $\sqrt{=9}$ $\phi = 4$ $\sqrt{=12}$ $\phi = 2$

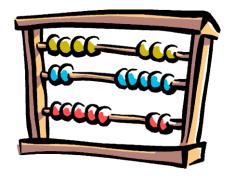
Entering Data



Public Health							
	ITY OF PHILADELP						
Staff type*	Type of HH Opportunity	HH Performed?					
1) PC	Room entry Room exit	Alcohol-rub					
	Before resident contact	Hand wash					
LPN	After resident contact	○ No HH done					
	Before glove After glove	0					
	Other:						
	Room entry Room exit	○ Alcohol-rub					
	Before resident contact	Hand wash					
_	0	No HH done					
CNA	After resident contact	Nothradile					
	Before glove After glove						
	Other:						
	Room entry Room exit	Alcohol-rub Hand wash					
	Before resident contact						
CNA	After resident contact	○ No HH done					
	○ Before glove ○ After glove						
	Other:						
	Room entry Room exit	Alcohol-rub					
	Before resident contact	Hand wash					
MD	After resident contact	○ No HH done					
MD	Before glove After glove						
	Other:						
	Room entry Room exit	O Alcohol-rub					
	Before resident contact	O Hand wash					
EVS	After resident contact	No HH done					
	○ Before glove ○ After glove						
	Other:	_					
	Room entry Room exit	Alcohol-rub					
057/45	Before resident contact	O Hand wash					
KtHAB	After resident contact	○ No HH done					
	○ Before glove ○ After glove						
	Other:						

Tally up the number of time HH was performed or not performed by opportunity type or staff type

HH Opportunity	HH Performed	HH Missed
Room Entry	Ш	
Room Exit	I	П



Observer: Jane Doe, RN



HAND HYGIENE OBSERVATIONS

Instructions: Use a \checkmark for each hand hygiene success observed and a \emptyset to designate each time hand hygiene was not performed. Multiple observations can be made in each box.

Staff Success (✓) / Failure (Ø)								
Date	Туре	Room Entry	Room Exit	Before Resident Contact	After Resident Contact	Before Glove	After Glove	
10/2	LPN	171 B	1111	1&1	///	RB1	1111	
10/2	MD	4111	R P I	1/1 R	1111	1&1	J J J	
10/2	RN	101	4111	ROY	J J J	171 R	4111	
10/2	• Count the total number of HH successes observed by opportunity type							
		Enter	in the HF	l data tool				
				l data tool				

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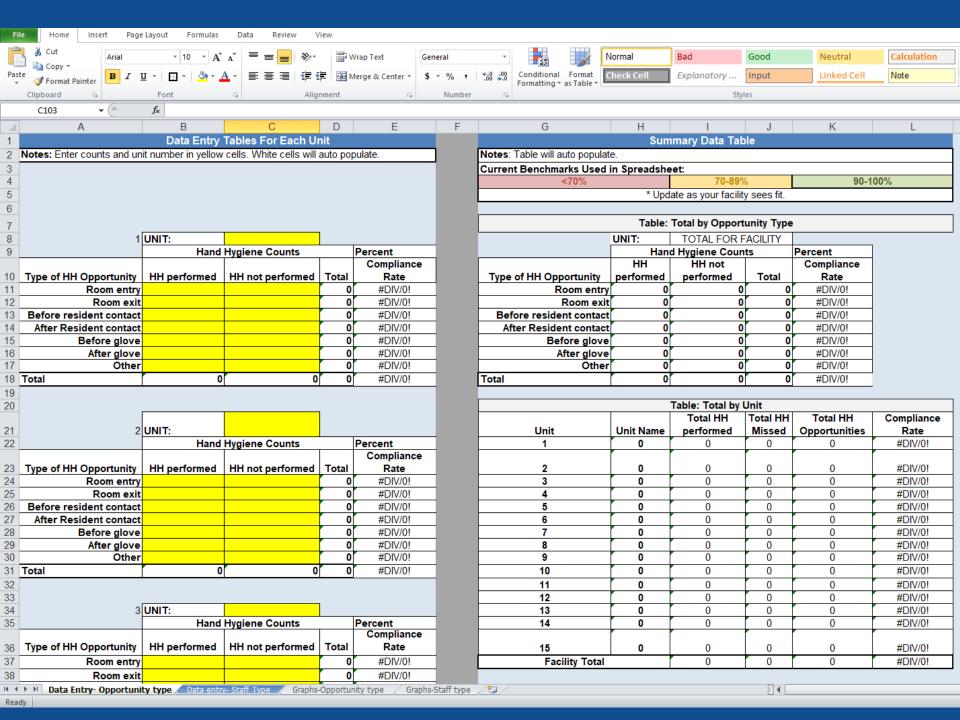
			eac	:n ume nand nygiene was	not periormea . Mulup	ie observations can be i	nade in each box.		
	Staff			Success (✓) / Failure (Ø)					
Date	Туре	Room Entry	Room Exit	Before Resident Contact	After Resident Contact	Before Glove	After Glove		
10/2	LPN	171 R	1111	101	///	RB1	1111		
10/2	MD	1111	Rb1	1/18	4111	101	///		
10/2	RN	101	1111	Rb1	///	1/18	4111		
10/2	R	Count the	e total ni	ımber of fa	ailed HH o	bservatio	ns hv		
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				H data too	l				
							 		
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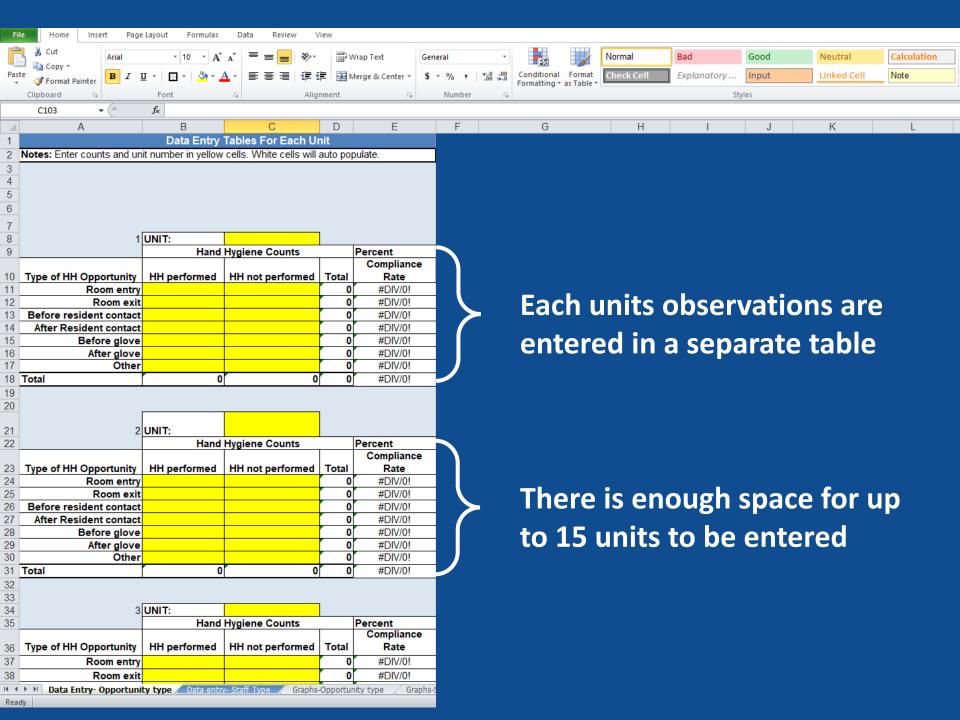
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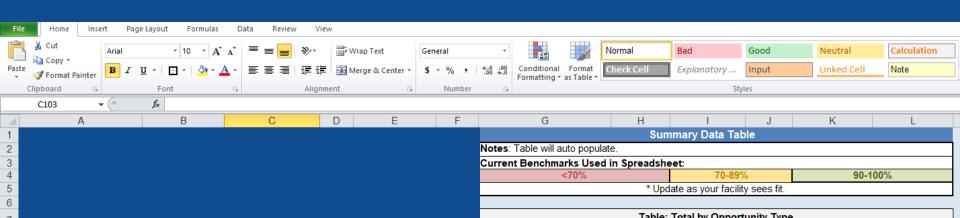
Notes:

Hand Hygiene Data Display Toolkit









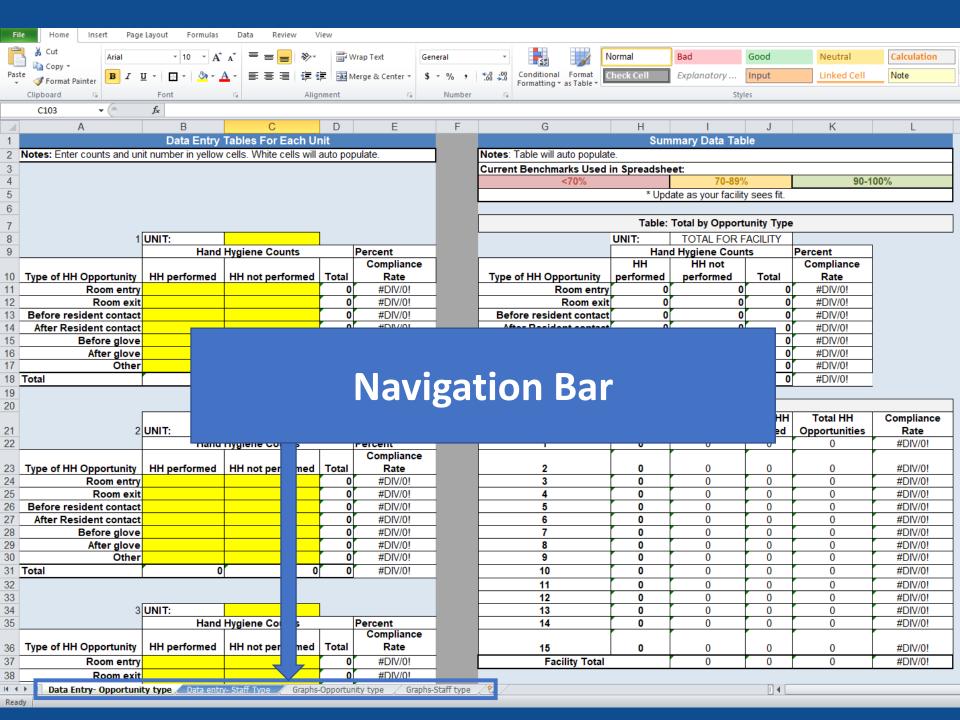
A summary table is autopopulated for the whole facility by opportunity type

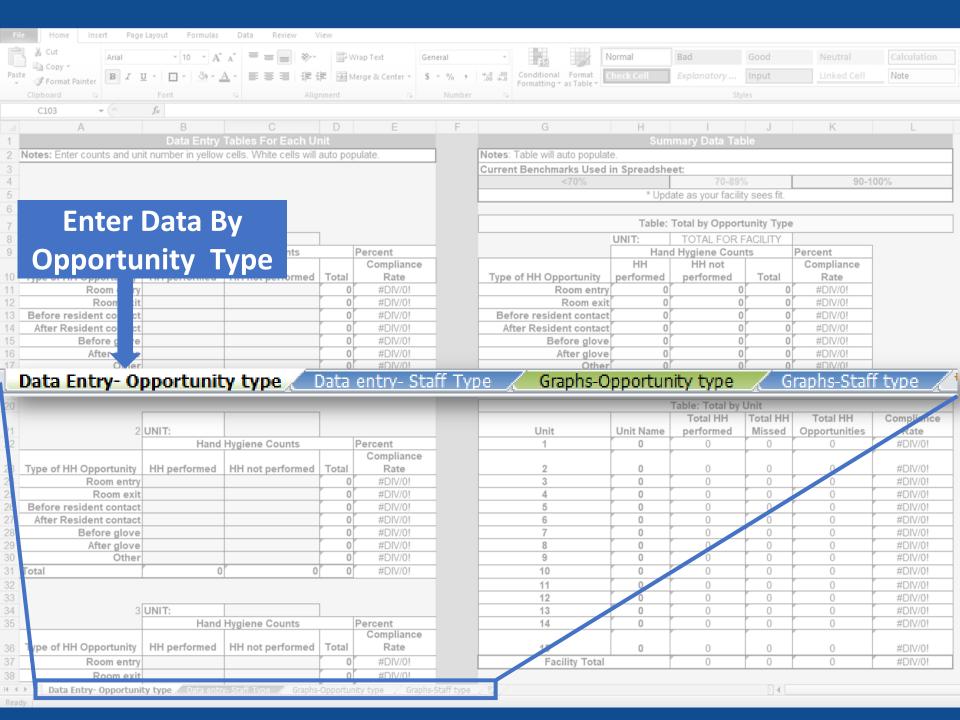
A summary table is autopopulated the whole facility by unit

Table: Total by Opportunity Type							
	UNIT:						
	Hand	d Hygiene Coun	Percent				
	HH	HH not		Compliance			
Type of HH Opportunity	performed	performed	Total	Rate			
Room entry	0	0	0	#DIV/0!			
Room exit	0	0	0	#DIV/0!			
Before resident contact	0	0	0	#DIV/0!			
After Resident contact	0	0	0	#DIV/0!			
Before glove	0	0	0	#DIV/0!			
After glove	0	0	0	#DIV/0!			
Other	0	0	0	#DIV/0!			
Total	0	0	0	#DIV/0!			

Table: Total by Unit							
		Total HH	Total HH	Total HH	Compliance		
Unit	Unit Name	performed	Missed	Opportunities	Rate		
1	0	0	0	0	#DIV/0!		
2	0	0	0	0	#DIV/0!		
3	0	0	0	0	#DIV/0!		
4	0	0	0	0	#DIV/0!		
5	0	0	0	0	#DIV/0!		
6	0	0	0	0	#DIV/0!		
7	0	0	0	0	#DIV/0!		
8	0	0	0	0	#DIV/0!		
9	0	0	0	0	#DIV/0!		
10	0	0	0	0	#DIV/0!		
11	0	0	0	0	#DIV/0!		
12	0	0	0	0	#DIV/0!		
13	0	0	0	0	#DIV/0!		
14	0	0	0	0	#DIV/0!		
15	0	0	0	0	#DIV/0!		
Facility Total		0	0	0	#DIV/0!		
-							

□ 4





1	UNIT:	Example 1 N		
	Hand	Hygiene Counts		Percent
Type of HH Opportunity	HH performed	HH not performed	Total	Compliance Rate
Room entry	13	2	15	87%
Room exit	11	3	14	79%
Before resident contact	10	4	14	71%
After Resident contact	13	1	14	93%
Before glove	9	1	10	90%
After glove	12	2	14	86%
Other	0	0	0	#DIV/0!
Total	68	13	81	84%

Enter Data in the yellow boxes



1	UNIT:	Example 1 N		
	Hand	Hygiene Counts		Percent
Type of HH Opportunity	HH performed	HH not performed	Total	Compliance Rate
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Other	0	0	0	#DIV/0!
Total	68	13	81	84%

Total number of observations will auto-populate



1	UNIT:	Example 1 N		
	Hand	Hygiene Counts		Percent
Type of HH Opportunity	HH performed	HH not performed	Total	Compliance Rate
Room entry	13	2	15	87%
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Before glove	9	1	10	90%
After glove	12	2	14	86%
Other	0	0	0	#DIV/0!
Total	68	13	81	84%

Compliance rate will auto-populate



1	UNIT:	Example 1 N		
	Hand	Hygiene Counts		Percent
Type of HH Opportunity	HH performed	HH not performed	Total	Compliance Rate
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After Resident contact	13	1	14	93%
Before glove	9	1	10	90%
After glove	12	2	14	86%
Other	0	0	0	#DIV/0!
Total	68	13	81	84%

#DIV/0! Signifies that there were 0 observations made for that opportunity type



Fill in separate tables for each unit

1	UNIT:	Example 1 N		
'			D	
	Hand	Hygiene Counts		Percent
Type of HH Opportunity	HH performed	HH not performed	Total	Compliance Rate
Room entry	13	2	15	87%
Room exit	11	3	14	79%
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After glove	12	2	14	86%
Other	0	0	0	#DIV/0!
Ctiloi				0.40/
Total	68	13	81	84%
Total	UNIT:	Example 1 S	81	
Total	UNIT:		81	Percent
Total	UNIT:	Example 1 S	Total	
Total 2	UNIT: Hand	Example 1 S Hygiene Counts		Percent
Total 2 Type of HH Opportunity	UNIT: Hand HH performed	Example 1 S Hygiene Counts HH not performed	Total	Percent Compliance Rate
Total 2 Type of HH Opportunity Room entry	UNIT: Hand HH performed	Example 1 S Hygiene Counts HH not performed	Total 18	Percent Compliance Rate 83%
Total 2 Type of HH Opportunity Room entry Room exit	UNIT: Hand HH performed 15	Example 1 S Hygiene Counts HH not performed 3	Total 18 12	Percent Compliance Rate 83% 83%
Total 2 Type of HH Opportunity Room entry Room exit Before resident contact	UNIT: Hand HH performed 15 10	Example 1 S Hygiene Counts HH not performed 3 2	Total 18 12 12	Percent Compliance Rate 83% 83% 92%
Total Type of HH Opportunity Room entry Room exit Before resident contact After Resident contact	UNIT: Hand HH performed 15 10 11	Example 1 S Hygiene Counts HH not performed 3 2 1	Total 18 12 12 9	Percent Compliance Rate 83% 83% 92% 100%
Type of HH Opportunity Room entry Room exit Before resident contact After Resident contact Before glove	UNIT: Hand HH performed 15 10 11 9	Example 1 S Hygiene Counts HH not performed 3 2 1 0 4	Total 18 12 12 9 16	Percent Compliance Rate 83% 83% 92% 100% 75%

An automated summary table is created

	Sum	mary Data Tab	ole		
Notes: Table will auto populate.					
Current Benchmarks Used in	Spreadsheet:				
<70%		70-89%	, D	90-1	00%
	* Upd	ate as your facility	/ sees fit.		
	Table:	Total by Opportu	unity Type		
	UNIT:	TOTAL FOR FA	ACILITY		
	Han	d Hygiene Count	s	Percent	
	HH	HH not			
Type of HH Opportunity	performed	performed	Total	Compliance Rate	
Room entry	45	5	50	90%	
Room exit	28	5	33	85%	
Before resident contact	21	5	26	81%	
After Resident contact	28	1	29	97%	
Before glove	26	5	31	84%	
After glove	24	5	29	83%	
Other	3	1	4	75%	
Total	172	27	202	85%	

The automated summary table created for the facility by opportunity type

Summary Data Table										
Notes: Table will auto populate.										
Current Benchmarks Used in Spreadsheet	:									
<70%	70-89%	90-100%								
* Update as your facility sees fit.										

Table: Total by Opportunity Type

	UNIT:	TOTAL FOR FA	CILITY	
	Han	d Hygiene Counts	S	Percent
	НН	HH not		
Type of HH Opportunity	performed	performed	Total	Compliance Rate
Room entry	45	5	50	90%
Room exit	28	5	33	85%
Before resident contact	21	5	26	81%
After Resident contact	28	1	29	97%
Before glove	26	5	31	84%
After glove	24	5	29	83%
Other	3	1	4	75%
Total	172	27	202	85%

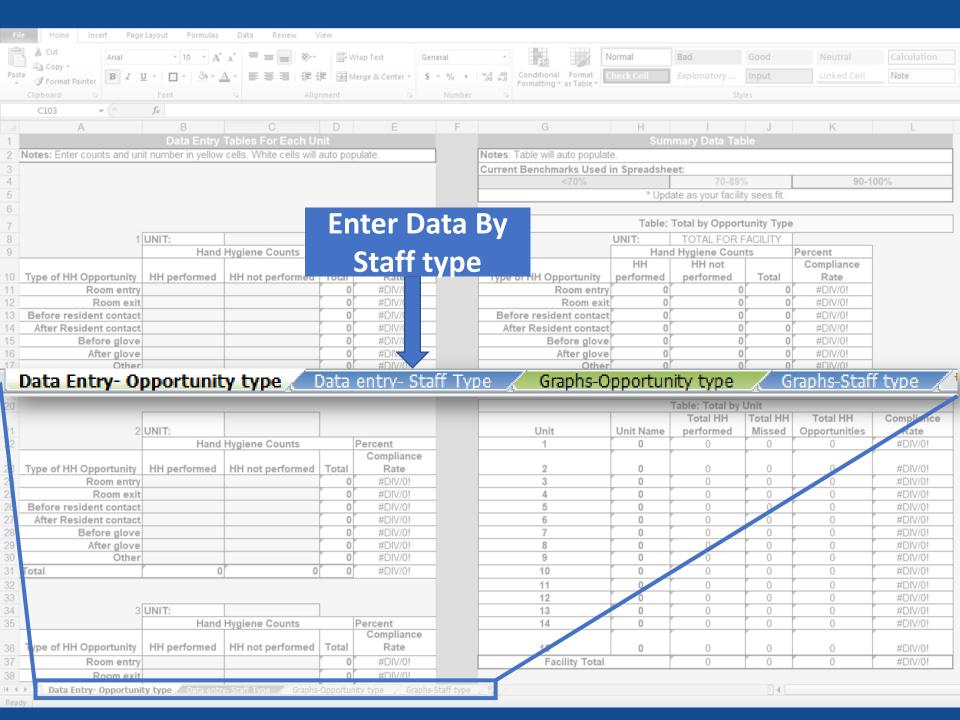
Current
benchmark
rates are used
as an example,
but can be
adjusted to fit
your facility

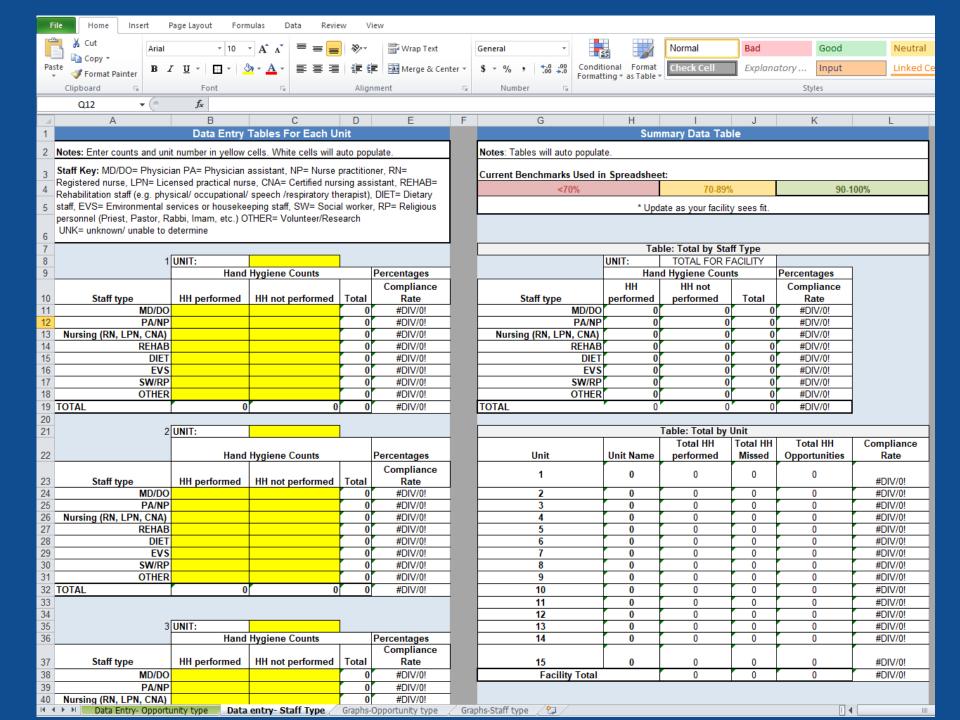
The automated summary table created for the whole facility by unit

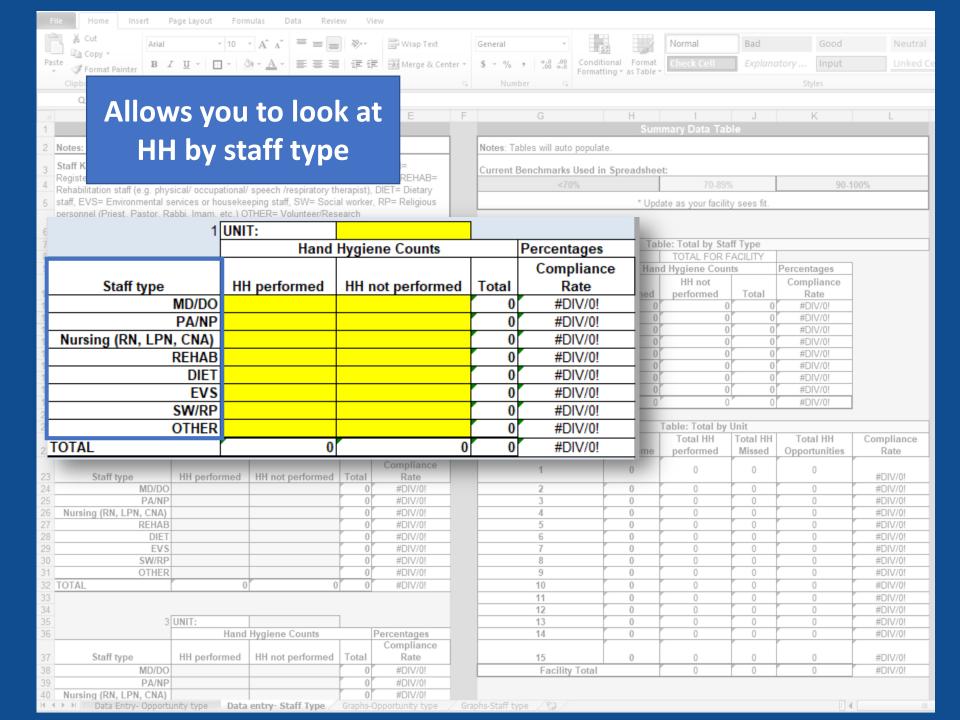
		Table: Total by U	Jnit		
Unit	Unit Name	Total HH performed	Total HH Missed	Total HH Opportunities	Compliance Rate
1	Example 1 N	•	13	81	84%
2	Example 1 S	65	14	79	82%
3	3	0	0	0	#DIV/0!
4	4	0	0	0	#DIV/0!
5	5	0	0	0	#DIV/0!
6	6	0	0	0	#DIV/0!
7	7	0	0	0	#DIV/0!
8	8	0	0	0	#DIV/0!
9	9	0	0	0	#DIV/0!
10	10	0	0	0	#DIV/0!
11	11	0	0	0	#DIV/0!
12	12	0	0	0	#DIV/0!
13	13	0	0	0	#DIV/0!
14	14	0	0	0	#DIV/0!
15	15	0	0	0	#DIV/0!
Facility Total		133	27	160	83%

Example in Excel







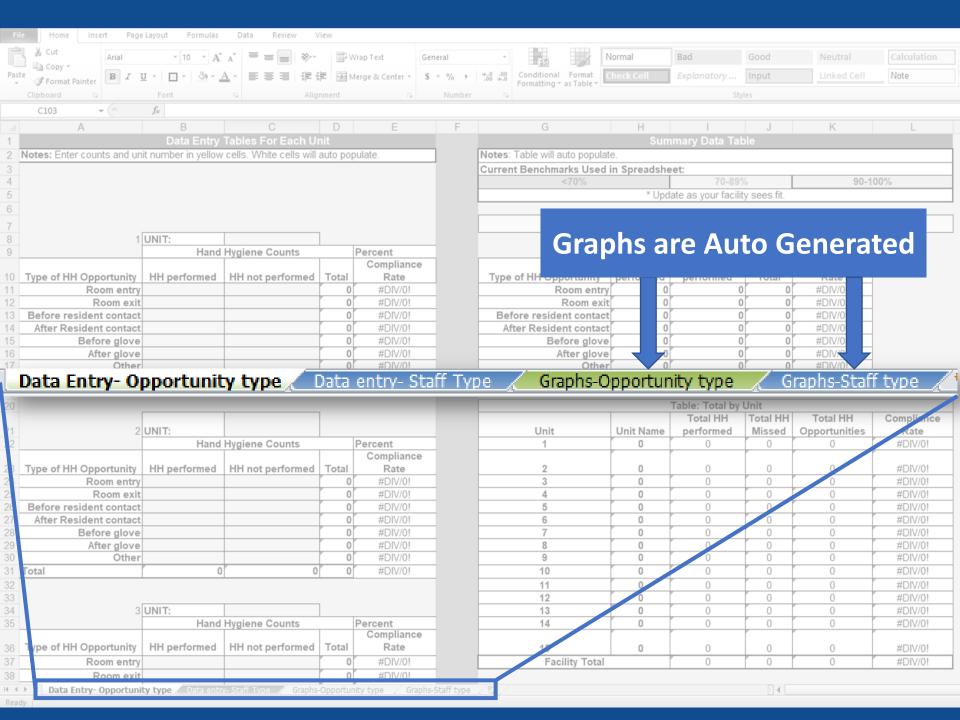


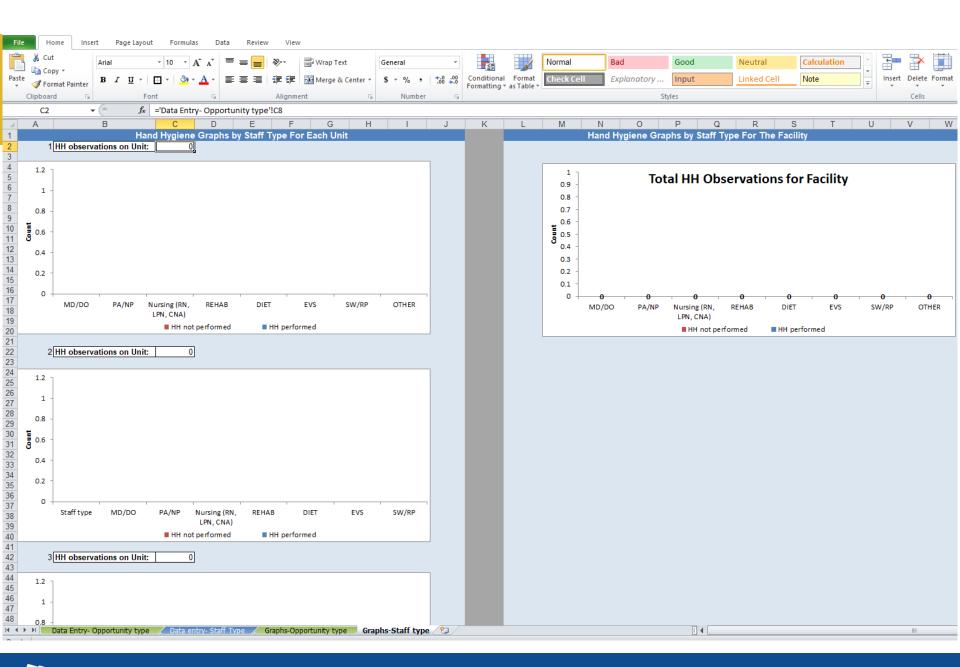
Example in Excel



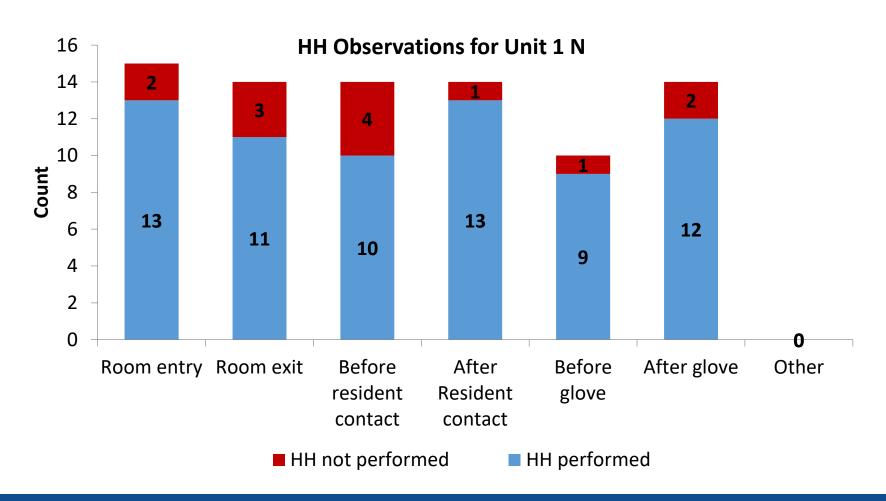
Visualizing the Data



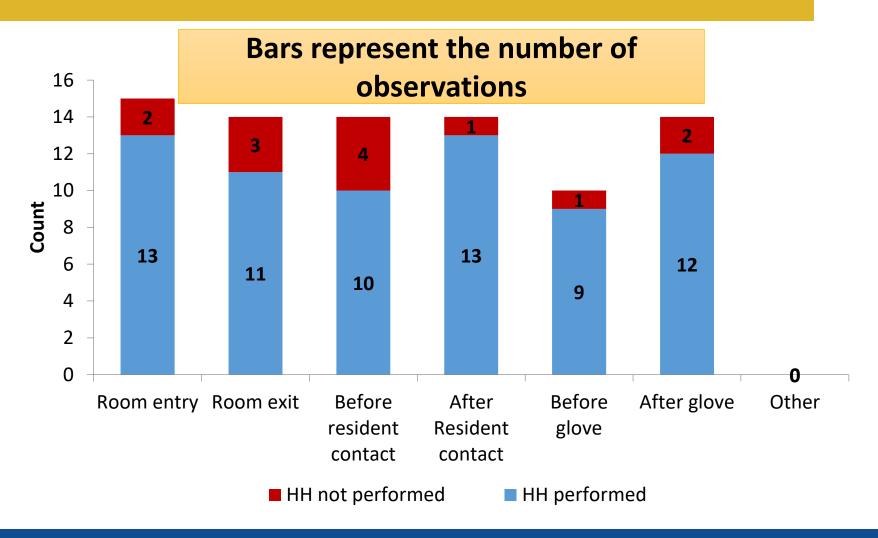




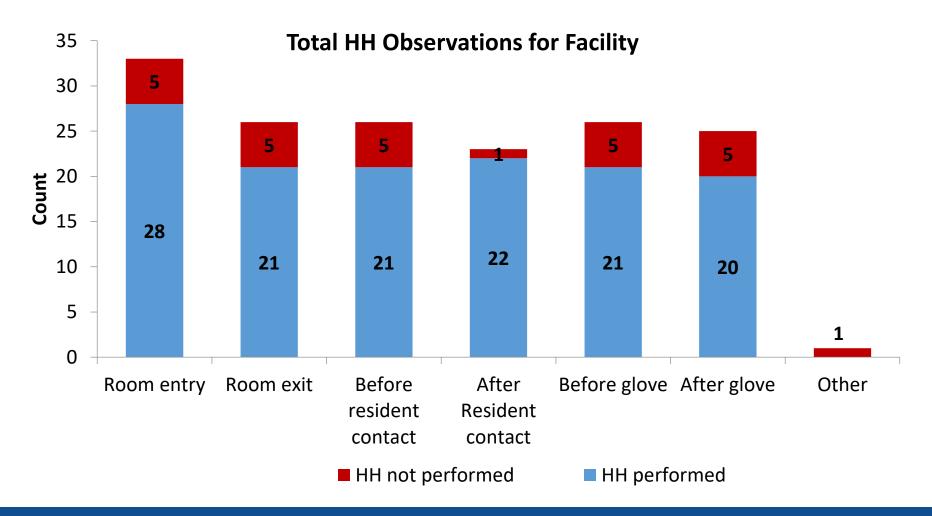
A graph is created for each unit



A graph is created for each unit



A summary graph is created for the facility



Example of Graphs in Excel



Tracking Data Over Time



The Hand Hygiene Master Sheet

- Separate excel file
- Used to track
 HH
 compliance
 rates
 overtime

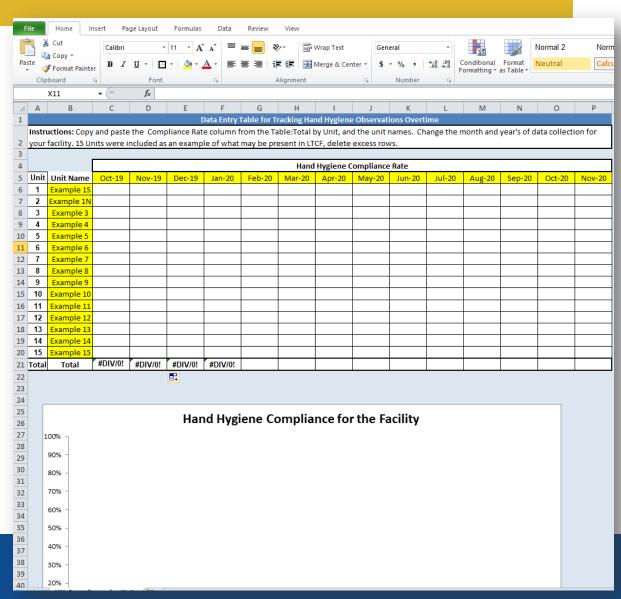




	Table: Total by Unit											
		Total HH	Total HH	Total HH								
Unit	Unit Name	performed	Missed	Opportunities	Compliance Rate							
1	Example 1 N	68	13	81 🕸	84%							
2	Example 1 S	65	14	79	82%							
3	3	0	0	0	#DIV/0!							
4	4	0	0	0	#DIV/0!							
5	5	0	0	0	#DIV/0!							
6	6	0	0	0	#DIV/0!							
7	7	0	0	0	#DIV/0!							
8	8	0	0	0	#DIV/0!							
9	9	0	0	0	#DIV/0!							
10	10	0	0	0	#DIV/0!							
11	11	0	0	0	#DIV/0!							
12	12	0	0	0	#DIV/0!							
13	13	0	0	0	#DIV/0!							
14	14	0	0	0	#DIV/0!							
15	15	0	0	0	#DIV/0!							
Facility Total		133	27	160	83%							

Highlight the compliance rate column by selecting the first cell with your mouse and holding the left button on the mouse as you drag down



		Table: Total by U	Jnit							
		Total HH	Total HH	Total HH		×	Cu <u>t</u>			
Unit	Unit Name	performed	Missed	Opportunities	Compliance Rate	þ	<u>C</u> opy			
1	Example 1 N	68	13	81	849	<u> </u>	Paste Options:			
							123 f _x 11 %			
2	Example 1 S	65	14	79	829		Paste Special			
3	3	0	0	0	#DIV/0!		Insert Copied Cells			
4	4	0	0	0	#DIV/0!		Delete			
5	5	0	0	0	#DIV/0!		Clear Contents			
6	6	0	0	0	#DIV/0!					
7	7	0	0	0	#DIV/0!		Filter >			
8	8	0	0	0	#DIV/0!		Sort >			
9	9	0	0	0	#DIV/0!		Insert Comment			
10	10	0	0	0	#DIV/0!		Format Cells			
11	11	0	0	0	#DIV/0!		Pick From Drop-down List			
12	12	0	0	0	#DIV/0!		Define Name			
13	13	0	0	0	#DIV/0!	9	Hyperl <u>i</u> nk			
14	14	0	0	0	#DIV/0!	1				
						Aria	I - 10 - A A \$ - % , a			
15	15	0	0	0	#DIV/0!	B	I ≣ 🐎 → 🛕 → 🖽 → 👯 💞			
Facility Total		133	27	160	839	%				

Right click on your mouse and select copy



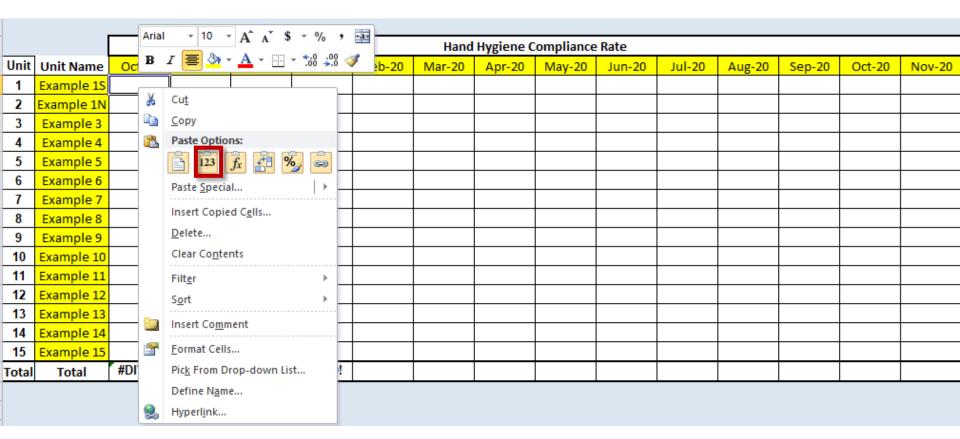
Data Entry Table for Tracking Hand Hygiene Observations Overtime

Instructions: Copy and paste the Compliance Rate column from the Table:Total by Unit, and the unit names. Change the month and year's of data collection for your facility. 15 Units were included as an example of what may be present in LTCF, delete excess rows.

							Hand	Hygiene C	ompliance	Rate					
Unit	Unit Name	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
1	Example 1S														
2	Example 1N														
3	Example 3														
4	Example 4														
5	Example 5														
6	Example 6														
7	Example 7														
8	Example 8														
9	Example 9														
10	Example 10														
11	Example 11														
12	Example 12														
13	Example 13														
14	Example 14														
15	Example 15														
Total	Total	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!				·				·	·	

Navigate to the HH Master Sheet File





- Place your cursor in the first cell of the month your data is from and right-click
- Select "Paste Values"

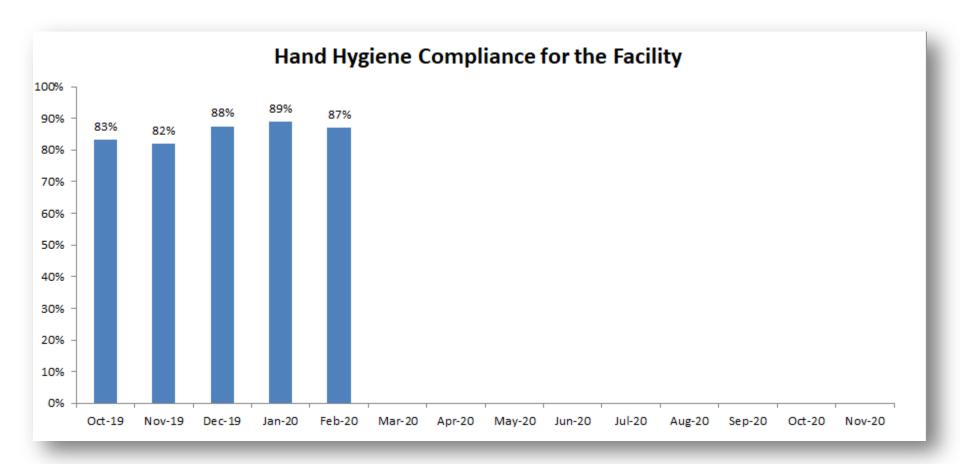


		Hand Hygiene Compliance Rate													
Unit	Unit Name	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
1	Example 1S	84%	85%	90%	91%	92%									
2	Example 1N	82%	79%	85%	87%	82%									
3	Example 3	#DIV/0!													
4	Example 4	#DIV/0!													
5	Example 5	#DIV/0!													
6	Example 6	#DIV/0!													
7	Example 7	#DIV/0!													
8	Example 8	#DIV/0!													
9	Example 9	#DIV/0!													
10	Example 10	#DIV/0!													
11	Example 11	#DIV/0!													
12	Example 12	#DIV/0!													
13	Example 13	#DIV/0!													
14	Example 14	#DIV/0!													
15	Example 15	#DIV/0!													
Total	Total	83%	82%	88%	89%	87%									

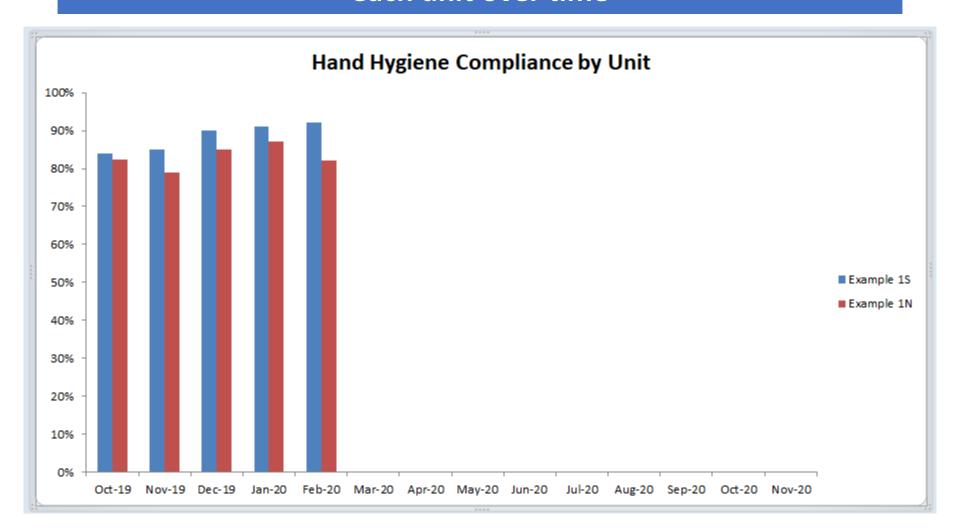
Example of a few months of data



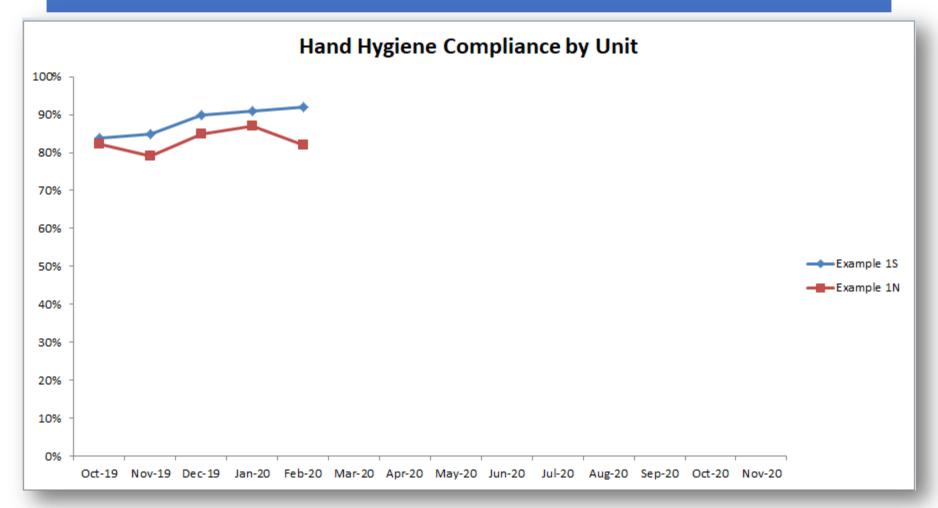
A graph will be auto-generated to track HH compliance for the facility over time



Two graphs will be auto-generated to track HH compliance for each unit over time

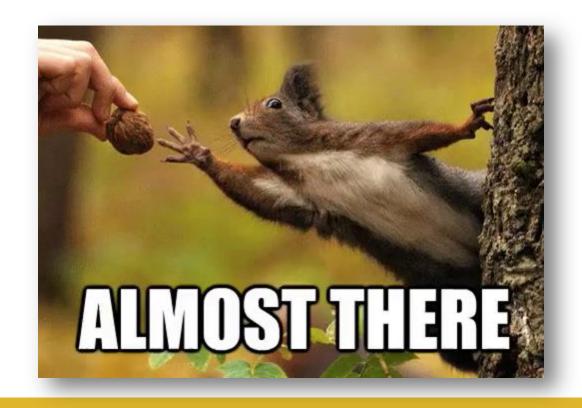


Two graphs will be auto-generated to track HH compliance for each unit over time



Example in Excel





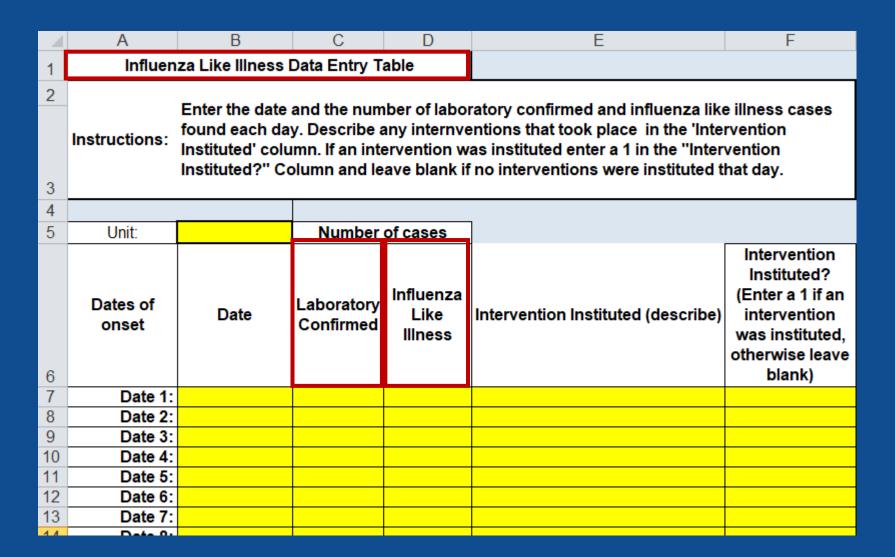
Identifying an Outbreak



	Α	A B		D	Е	F					
1	Influen	nfluenza Like Illness Data Entry Table									
3	Instructions: Enter the date and the number of laboratory confirmed and influenza like illness cases found each day. Describe any internventions that took place in the 'Intervention Instituted' column. If an intervention was instituted enter a 1 in the "Intervention Instituted?" Column and leave blank if no interventions were instituted that day.										
4					1						
5	Unit:		Number	of cases							
6	Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)					
7	Date 1:										
8	Date 2:										
9	Date 3:										
10	Date 4:										
11	Date 5:										
12	Date 6:										
13	Date 7:										
4.4	Data 0.										

An example of the blank spreadsheet for tracking influenza like illnesses by unit or the whole facility





Change the column titles to adjust for other conditions



Unit:	nit: Example 1 N Number of case		of cases		
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0	2	Initiate active surveillance	1
Date 5:	9/19/2019	1	1	Initiate staff screening	1
Date 6:	9/20/2019	1	2	Unit closed to visitors	1
Date 7:	9/21/2019	1	3	Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019	1	0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1

Example of a filled in surveillance sheet



Unit:	Example 1 N	Number	of cases		
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0		Initiate active surveillance	1
Date 5:	9/19/2019	1		Initiate staff screening	1
Date 6:	9/20/2019	1		Unit closed to visitors	1
Date 7:	9/21/2019	1		Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019	1	0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1

Enter the date



Unit:	Example 1 N	Number	of cases		
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0		Initiate active surveillance	1
Date 5:	9/19/2019	1		Initiate staff screening	1
Date 6:	9/20/2019	1	2	Unit closed to visitors	1
Date 7:	9/21/2019	1	3	Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019	1	0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1



Enter the number of laboratory confirmed cases



Unit:	Example 1 N	Number of cases			
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0	2	Initiate active surveillance	1
Date 5:	9/19/2019	1	1	Initiate staff screening	1
Date 6:	9/20/2019	1	2	Unit closed to visitors	1
Date 7:	9/21/2019	1	3	Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019		0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1





Unit:	Example 1 N	Number	of cases		
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0		Initiate active surveillance	1
Date 5:	9/19/2019	1		Initiate staff screening	1
Date 6:	9/20/2019	1	2	Unit closed to visitors	1
Date 7:	9/21/2019	1	3	Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019	1	0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1





Unit:	Example 1 N	Number	of cases		
Dates of onset	Date	Laboratory Confirmed	Influenza Like Illness	Intervention Instituted (describe)	Intervention Instituted? (Enter a 1 if an intervention was instituted, otherwise leave blank)
Date 1:	9/15/2019	1	0	Droplet precautions	1
Date 2:	9/16/2019	0	0		
Date 3:	9/17/2019	0	0		
Date 4:	9/18/2019	0	2	Initiate active surveillance	1
Date 5:	9/19/2019	1	1	Initiate staff screening	1
Date 6:	9/20/2019	1	2	Unit closed to visitors	1
Date 7:	9/21/2019	1	3	Residents confined to their rooms	1
Date 8:	9/22/2019	1	2		
Date 9:	9/23/2019	0	1		
Date 10:	9/24/2019	0	0		
Date 11:	9/25/2019	0	0		
Date 12:	9/26/2019	1	0		
Date 13:	9/27/2019	0	0		
Date 14:	9/28/2019	0	0		
Date 15:	9/29/2019	0	0		
Date 16:	9/30/2019	0	0		
Date 17:	10/1/2019	0	0		
Date 18:	10/2/2019	0	0	Unit opened	1

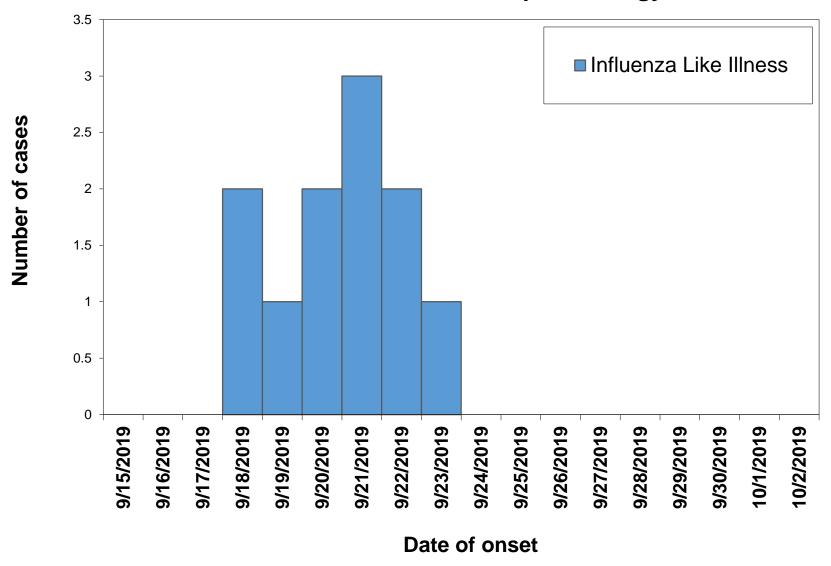




Enter a "1" if an intervention(s) was instituted, otherwise leave blank

The toolkit will automatically create the figure below

Influenza Like Illness Epidemiology Curve



The toolkit will automatically create the figure below

Influenza Like Illness Epidemiology Curve

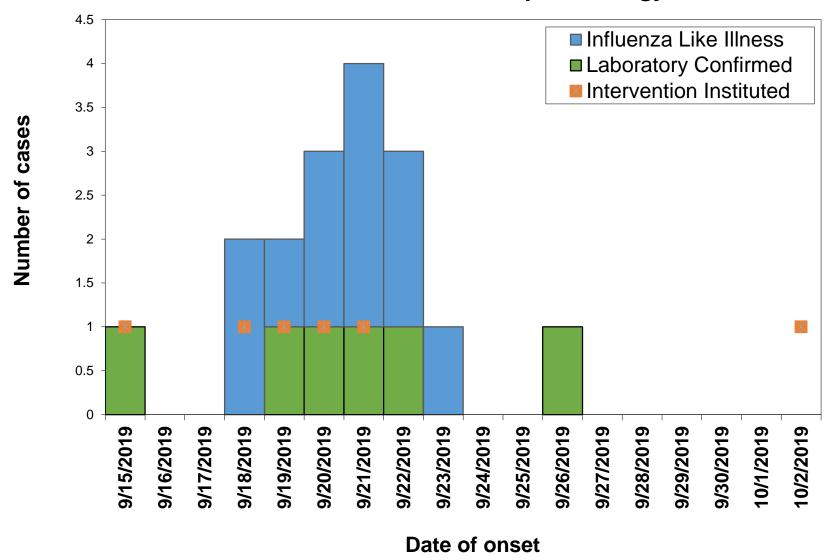
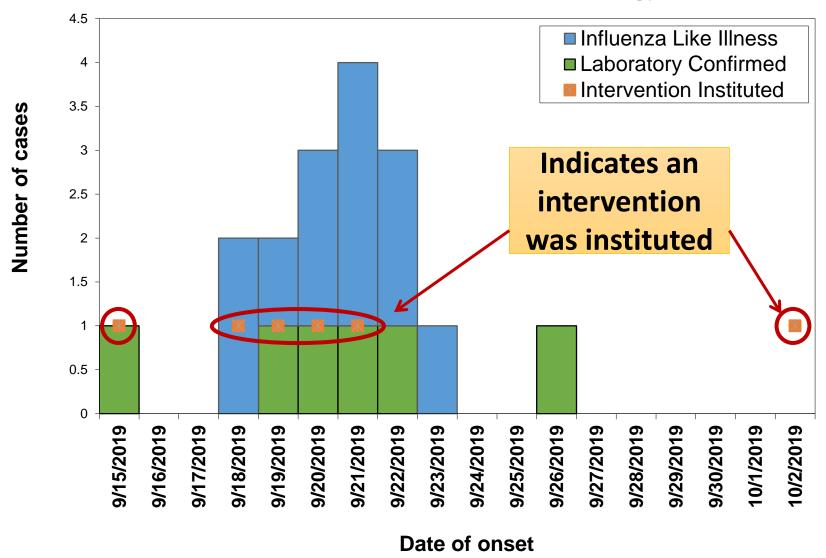


Figure will show the number of laboratory confirmed and influenza like illness cases by date

Influenza Like Illness Epidemiology Curve



Example of Creating the Epidemiology Curve in Excel



Turn Data into Action



Turn Data into Action



technology to support infection prevention





Apply basic statistical analyses



Interpret your data to inform infection prevention practices



Build confidence in sharing and explaining data



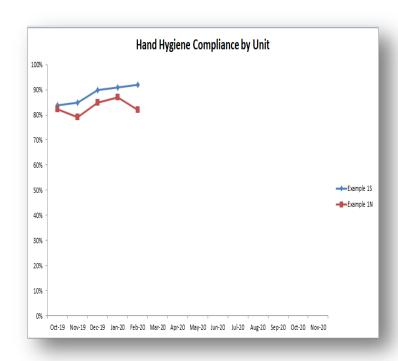




Developed by The Rhode Island Department of Health in collaboration with Healthcentric Advisors.

Interpret and Use the Data

- Informs IPC program activities
- Identifies practice improvement needs
- Monitor compliance over time to establish your baseline



Share Data with Stakeholders

- Facility leadership and frontline staff
- IPC/QAPI
 Committee
 Meetings
- Residents and families



Next Steps

- Document hand hygiene observations
- Use the data entry tools
- Display data at your IPC and/or QAPI meetings
- Sign-up for our LTC working group by emailing us at hai.pdph@phila.gov



Conclusion



What did we cover today?

- The importance of surveillance
- 3 Separate Excel Tools
 - Hand hygiene observations for 1 month
 - By opportunity type and staff type
 - By unit and whole facility
 - Tracking hand hygiene observations over time
 - Bar graphs and line graphs by unit or facility-wide
 - Tracking an outbreak in your facility
 - Create an epidemiology curve

What's new at PDPH?

 Check out our *NEW* website for resources, presentation slides, reporting guidance and more!

https://hip.phila.gov/HAIAR/AboutHAI



Philadelphia Department of Public Health

Health Information Portal

Healthcare-Associated Infections / Antimicrobial Resistance (HAI/AR)

About the Program	Infection Prevention & Control	Antimicrobial Stewardship	HAI/AR Collaborative
Surveillance Data	Drug-Resistant Organisms	Services	Resource Library

QUESTIONS



THANK YOU



Contact Information

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HAI/AR Program

hai.pdph @phila.gov