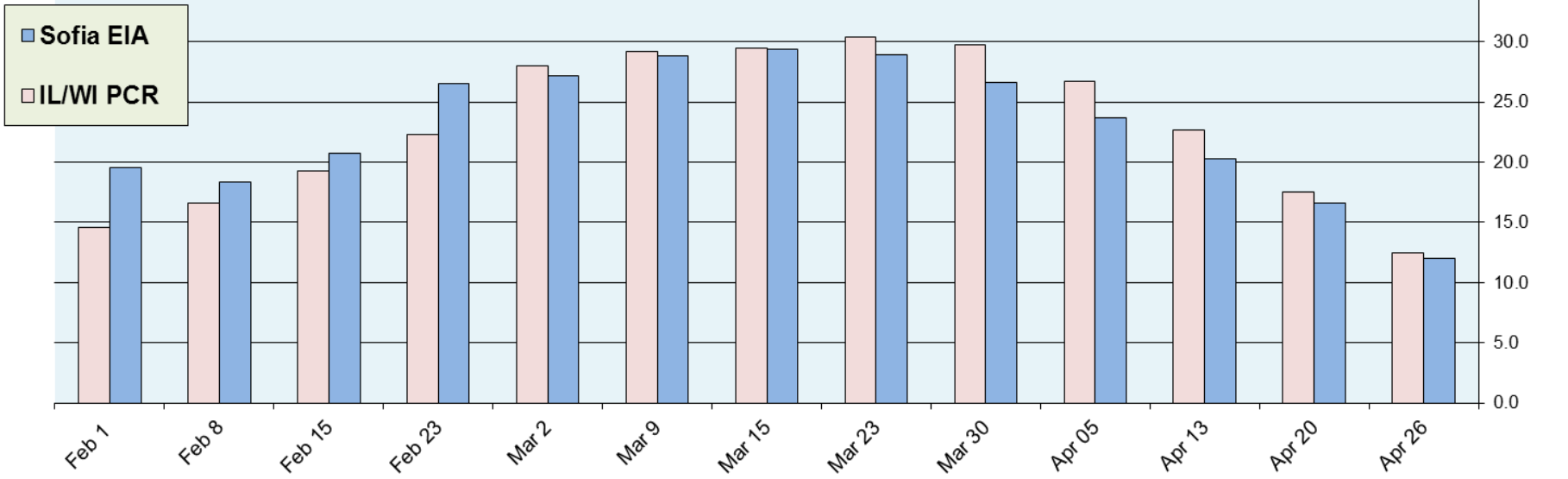


## Respiratory Pathogens Feb 1 - May 4 2019

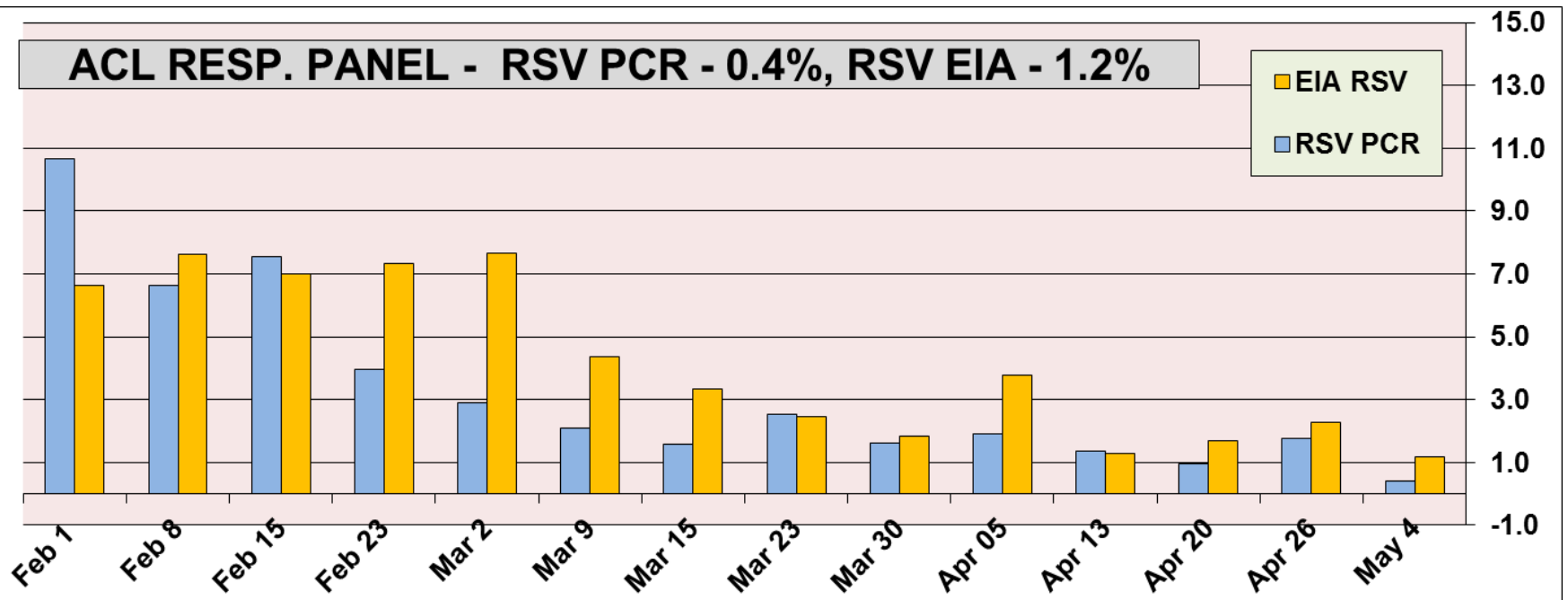
Week	InfA-H1	InfA-H3	2009 H1N1	Inf B	RSV	All Para	EV/ Rhino	Meta pneumo	Adeno	All Corona	Bocca	Mycoplasma	Chlamydia	Total Pos	POS FLU	Total	ACL %FLU	US %FLU	IL/WI PCR	Sofia EIA
May 4	0	6	7	2	3	51	60	34	6	10	3	1	1	184	15	761	2.0	n/a	n/a	8.5
Apr 26	0	13	15	6	14	29	49	37	5	19	4	1	2	194	34	800	4.3	5.4	12.5	12.0
Apr 20	0	16	17	5	8	34	58	47	2	19	8	2	1	217	38	827	4.6	8.1	17.5	Flu PCR % Rate
Apr 13	0	24	33	8	12	28	68	59	8	28	12	1	1	282	65	893	7.3	11.8	22.7	
Apr 05	0	55	26	7	17	33	62	35	5	40	1	1	3	285	88	893	9.9	15.1	26.7	23.7
Mar 30	0	37	45	3	15	25	56	31	6	34	11	1	2	266	85	936	9.1	18.1	29.8	26.6
Mar 23	0	48	40	8	25	20	60	34	6	35	4	0	1	281	96	984	9.8	22.1	30.4	28.9
Mar 15	0	39	65	2	17	15	42	23	7	45	3	0	1	259	106	1076	9.9	26.0	29.5	29.4
Mar 9	0	21	57	1	21	4	68	33	4	57	5	1	1	273	79	1011	7.8	25.8	29.2	28.9
Mar 2	0	34	45	0	28	8	41	27	7	50	3	1	1	245	79	961	8.2	26.1	28.0	27.2
Feb 23	0	10	38	3	36	5	43	20	5	58	7	2	2	229	51	908	5.6	26.7	22.3	26.5
Feb 15	0	5	47	2	61	11	40	31	9	50	8	1	1	266	54	807	6.7	24.6	19.3	20.7
Feb 8	0	11	32	2	51	3	44	25	8	66	3	3	1	249	45	767	5.9	21.6	16.6	18.4
Feb 1	0	7	38	1	80	13	53	22	12	58	4	3	1	292	46	751	6.1	19.2	14.6	19.6



### Regional IL/WI - FLU PCR 12.5% vs. ACL EIA 12% correlation



### ACL RESP. PANEL - RSV PCR - 0.4%, RSV EIA - 1.2%



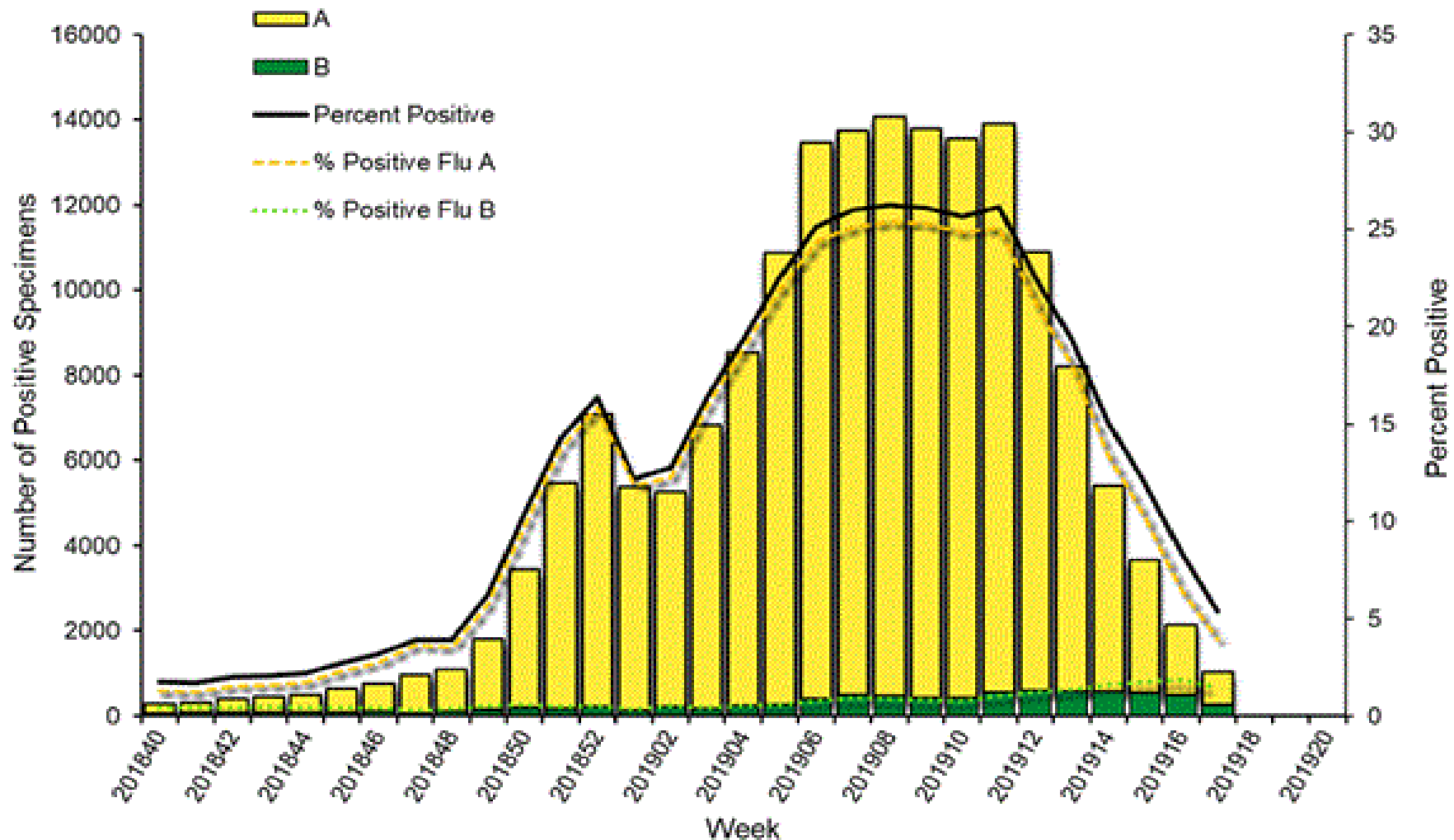
## Correlation between RPPNL (FLU PCR) and Sofia (FLUAG) - Accuracy is 94%

In last three months, a 2716 samples were tested by both methods most of them negative, 158/3093 samples were positive by EIA when confirmed by PCR. 157 negative EIA samples were tested positive by PCR method. *(ACL correlation data is compiled on samples collected within <48 h). Since positive rate is under-represented and provides correlation on very small fraction of positive samples – interpret clinical sensitivity with caution.*

02/02/19 to 04/27/2019				
FLUAG (Sofia) vs RPPNL (PCR) correlation				
		RPPNL		
		+	-	Total
FluAG	+	158	4	162
	-	157	2397	2554
		Total		2716
%				
50.2	Clinical Sensitivity			
99.8	Clinical Specificity			
97.5	Positive Predictive Value (PPV)			
93.9	Negative Predictive Value (NPV)			
94.1	Accuracy			

Apr 27, 2019 **Positivity rate 5.4%** - Flu A – 73% , Flu B – 27%

### Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2018-2019 Season

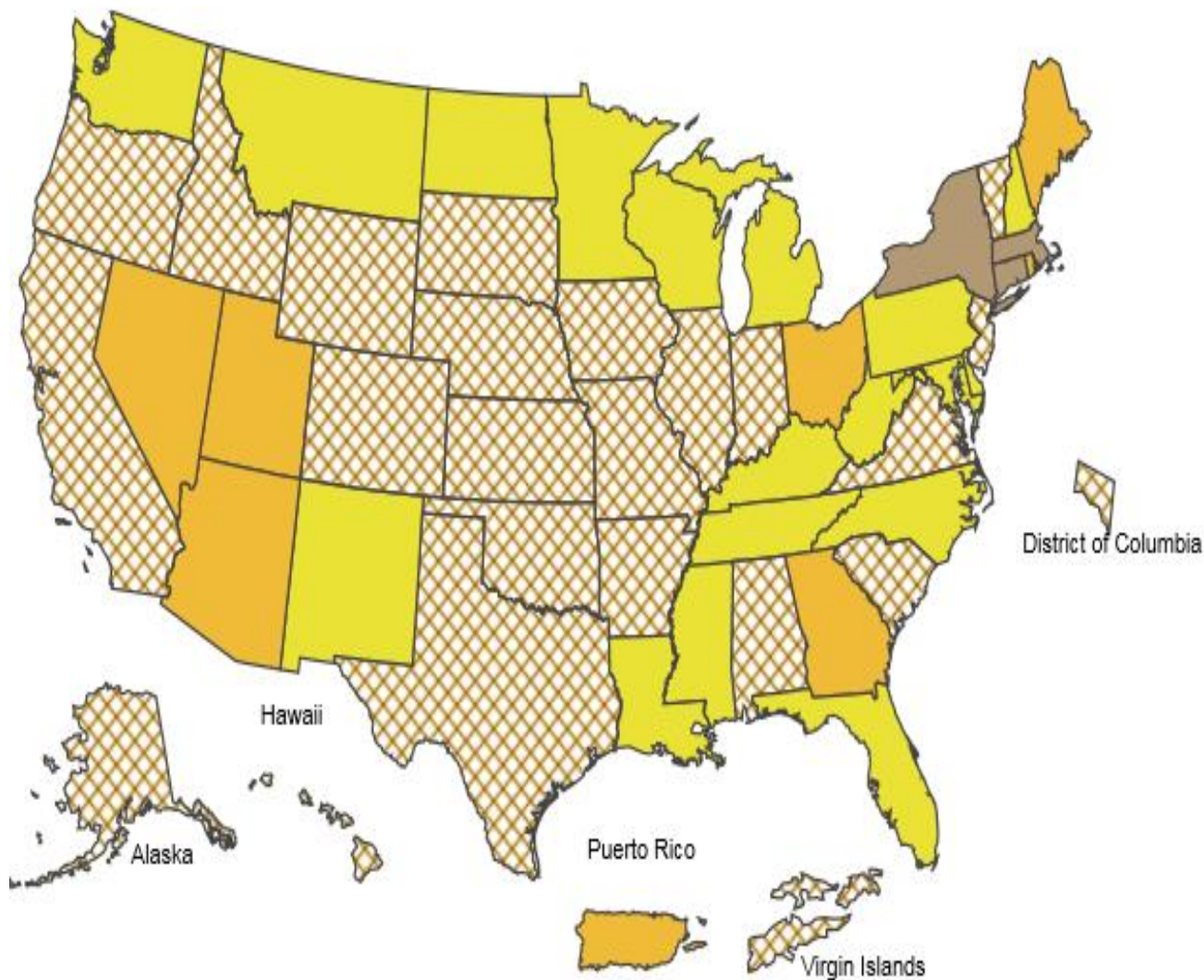


# Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

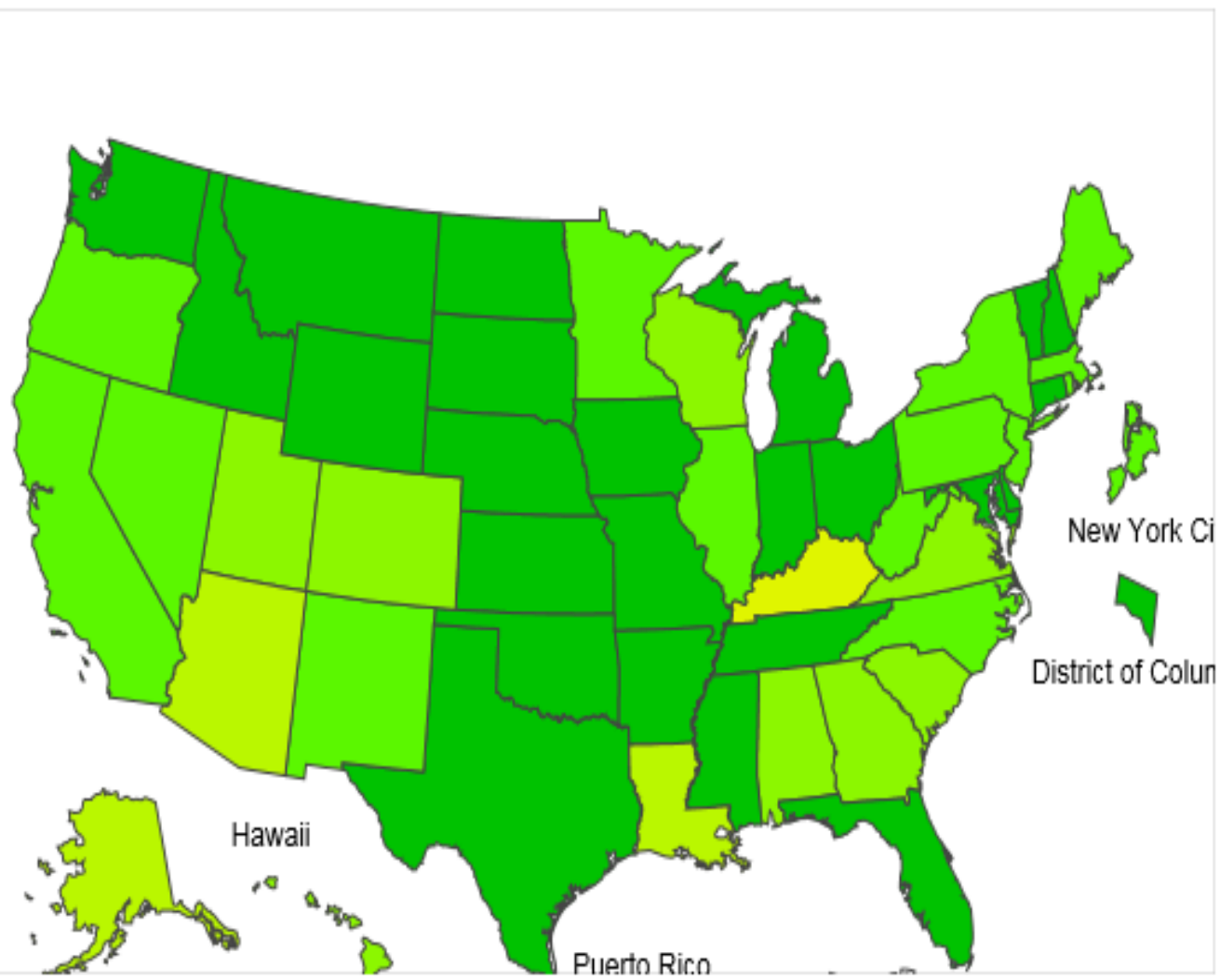
Week Ending Apr 27, 2019 - Week 17

## Influenza Activity I

- No Activity
- Sporadic
- Local Activity
- Regional
- Widespread
- No Report



# 2018-19 Influenza Season Week 17 ending Apr 27, 2019



## ILI Activity

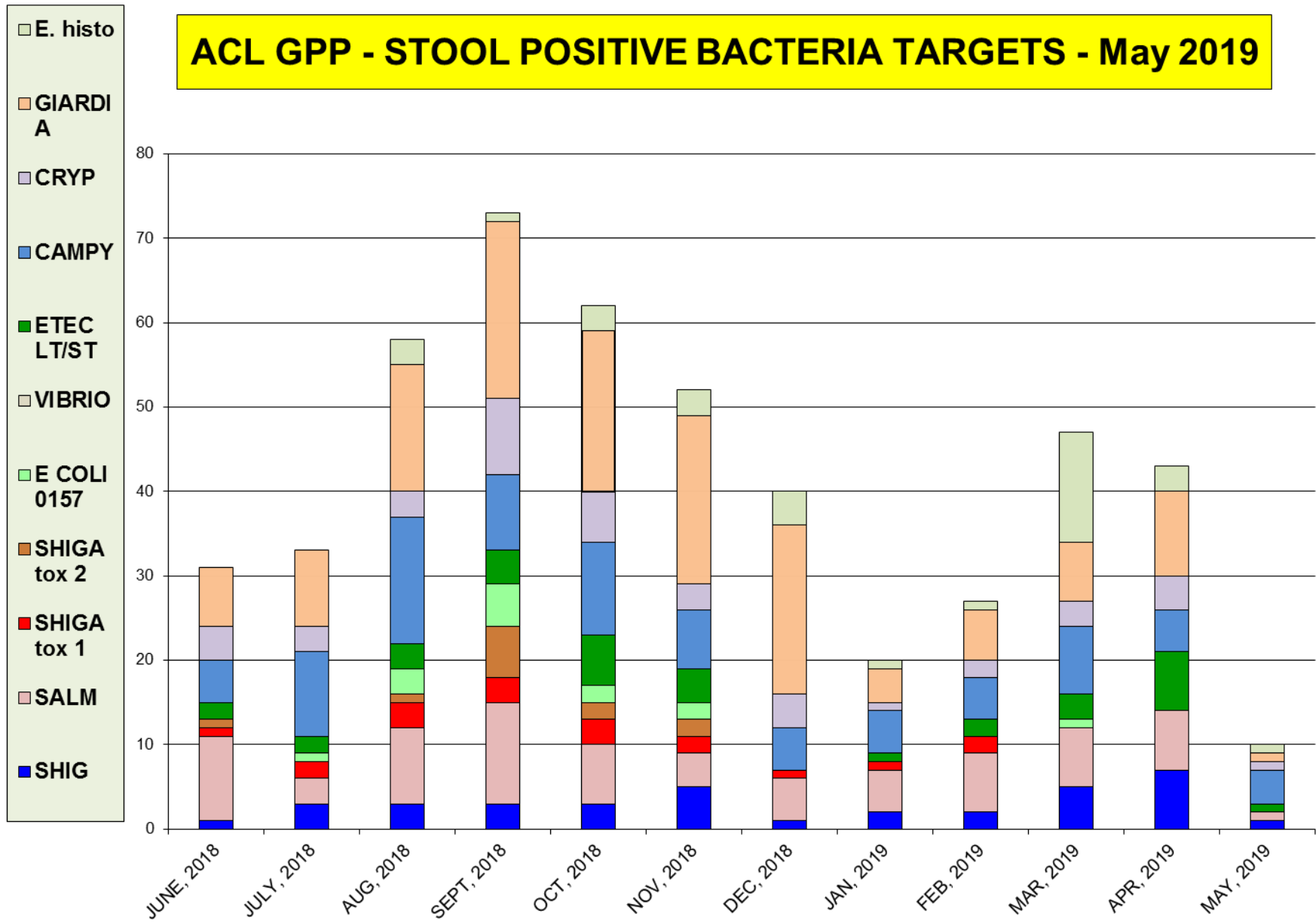




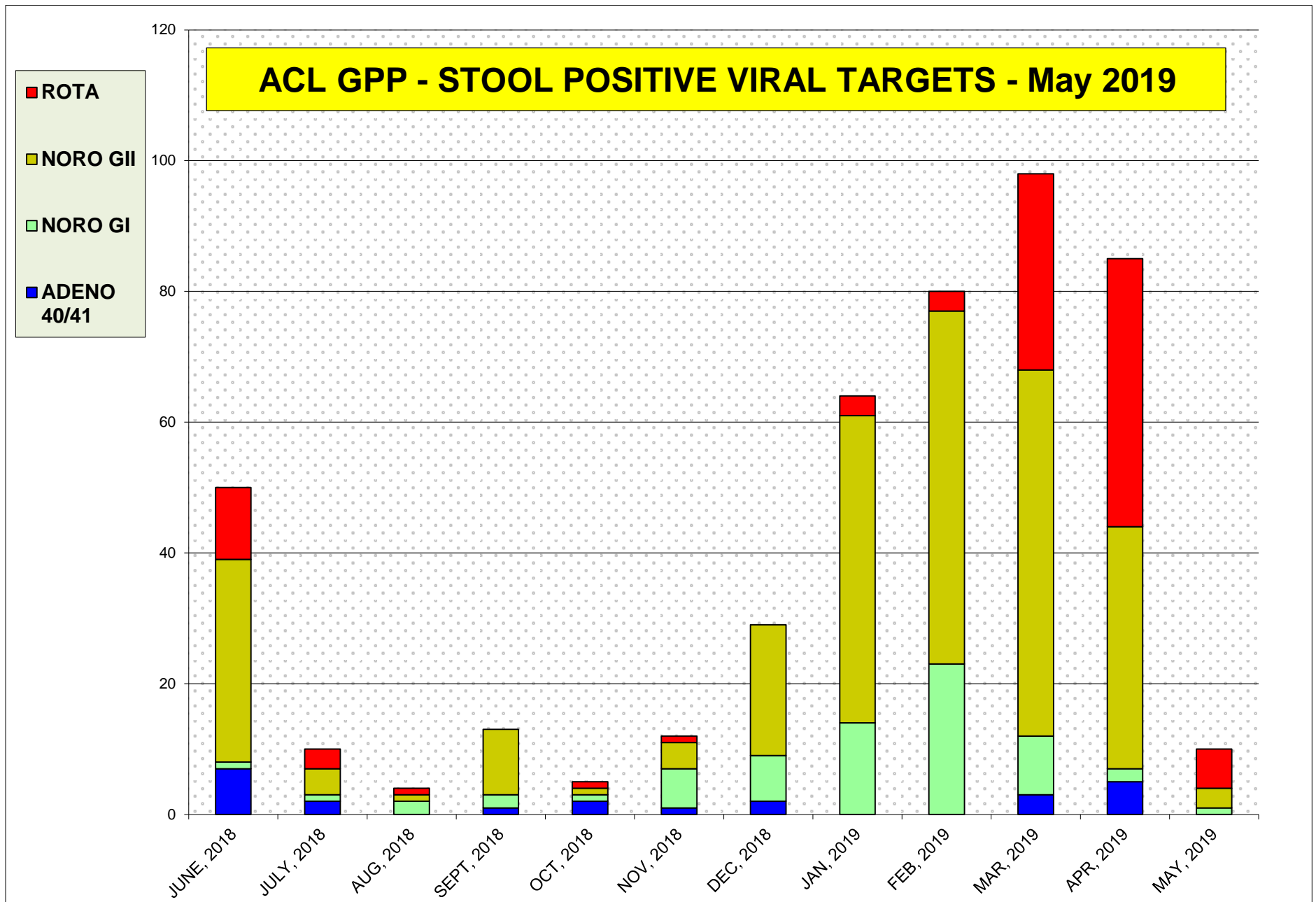


The most prevalent bacterial targets was **Campylobacter**

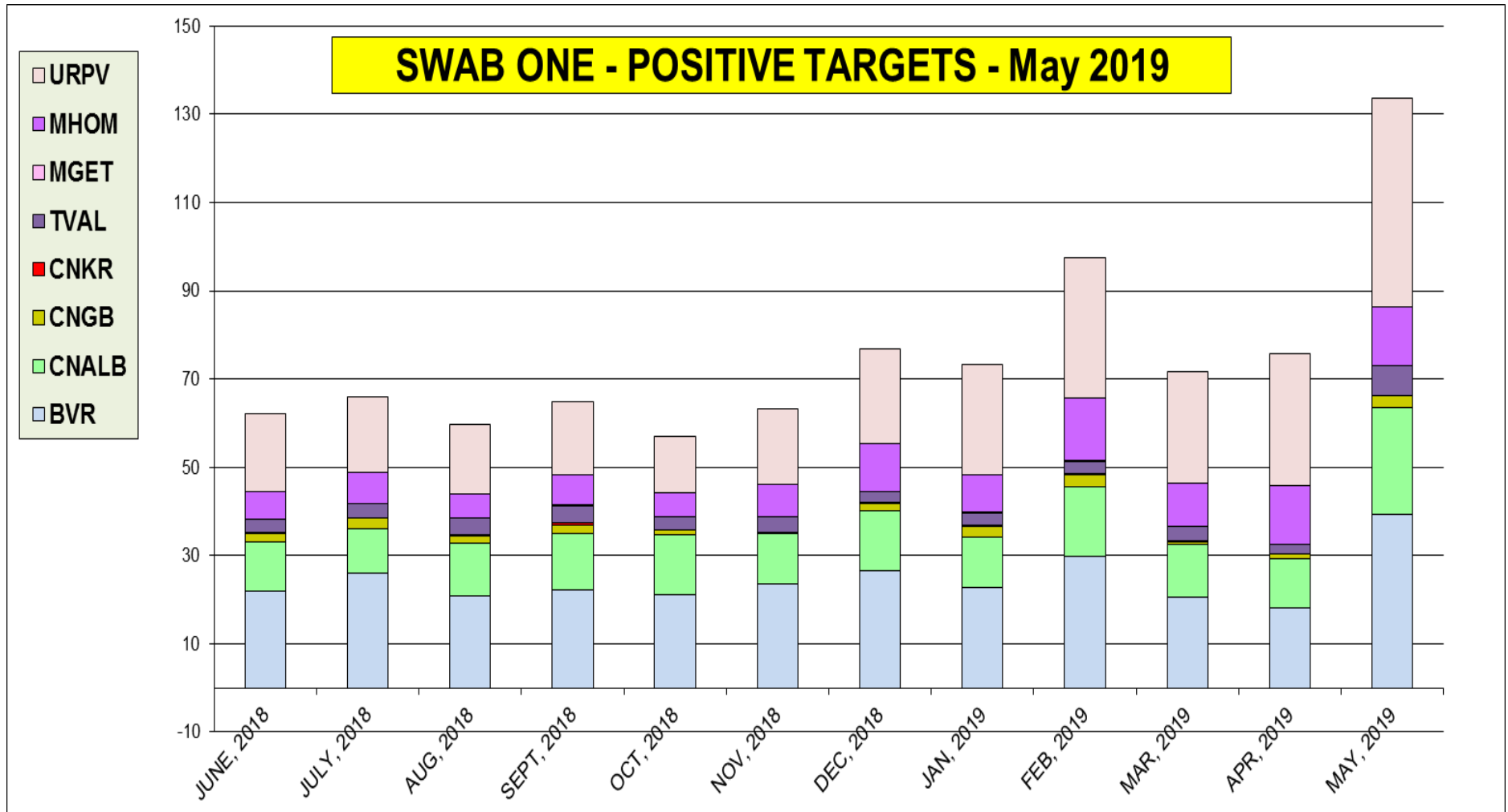
### ACL GPP - STOOL POSITIVE BACTERIA TARGETS - May 2019



The most prevalent virus target was **Rotavirus (7.8%) pos. rate**



BV	C.ALB	C.GLB	C.KUR	T.VAG	M.GEN	M.HOM	U.PAV	Tot. pos.
5,270	5,270	5,270	5,270	5,270	5,270	5,270	5,270	5,270
<b>23.2</b>	<b>12.5</b>	<b>1.6</b>	<b>0.2</b>	<b>3.1</b>	<b>0.1</b>	<b>9.0</b>	<b>22.1</b>	<b>71.8</b>



## Neuraminidase Inhibitors Resistance in samples collected – as of Apr 27, 2019

Per CDC website	Oseltamivir		Peramivir		Zanamivir	
	Virus Samples tested (n)	Resistant Viruses, (%)	Virus Samples tested (n)	Resistant Viruses, (%)	Virus Samples tested (n)	Resistant Viruses, (%)
Influenza A (H1N1)pdm09	<b>1059</b>	<b>0.1</b>	<b>1059</b>	<b>0.1</b>	<b>1059</b>	<b>0</b>
Influenza A (H3N2)	<b>847</b>	<b>0</b>	<b>847</b>	<b>0</b>	<b>847</b>	<b>0</b>
Influenza B	<b>296</b>	<b>0</b>	<b>296</b>	<b>0</b>	<b>296</b>	<b>0</b>

***There is 0.1% resistance detected.***