

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #18

April 26 – May 2, 2020

(This report was prepared by Jayme Parker, Public Health Microbiologist III at the Alaska State Virology Lab in Fairbanks, Alaska)

The Section of Epidemiology is the primary contact for consultation for the following potential active infections: rabies, norovirus, measles, mumps, rubella, varicella zoster, novel influenza, or [novel coronavirus](#). Please direct your calls to the Epi-Team at 907-269-8000; or their 24 hour # 1-800-478-0084.

1. SARS-CoV-2 (COVID-19)

Total tested by ASVL	Total Specimens Tested	Total Positive Specimens (% positive)
Week 2020-18	290	3 (1.0%)
To date	4,176	113 (2.7%)

2. Influenza virus

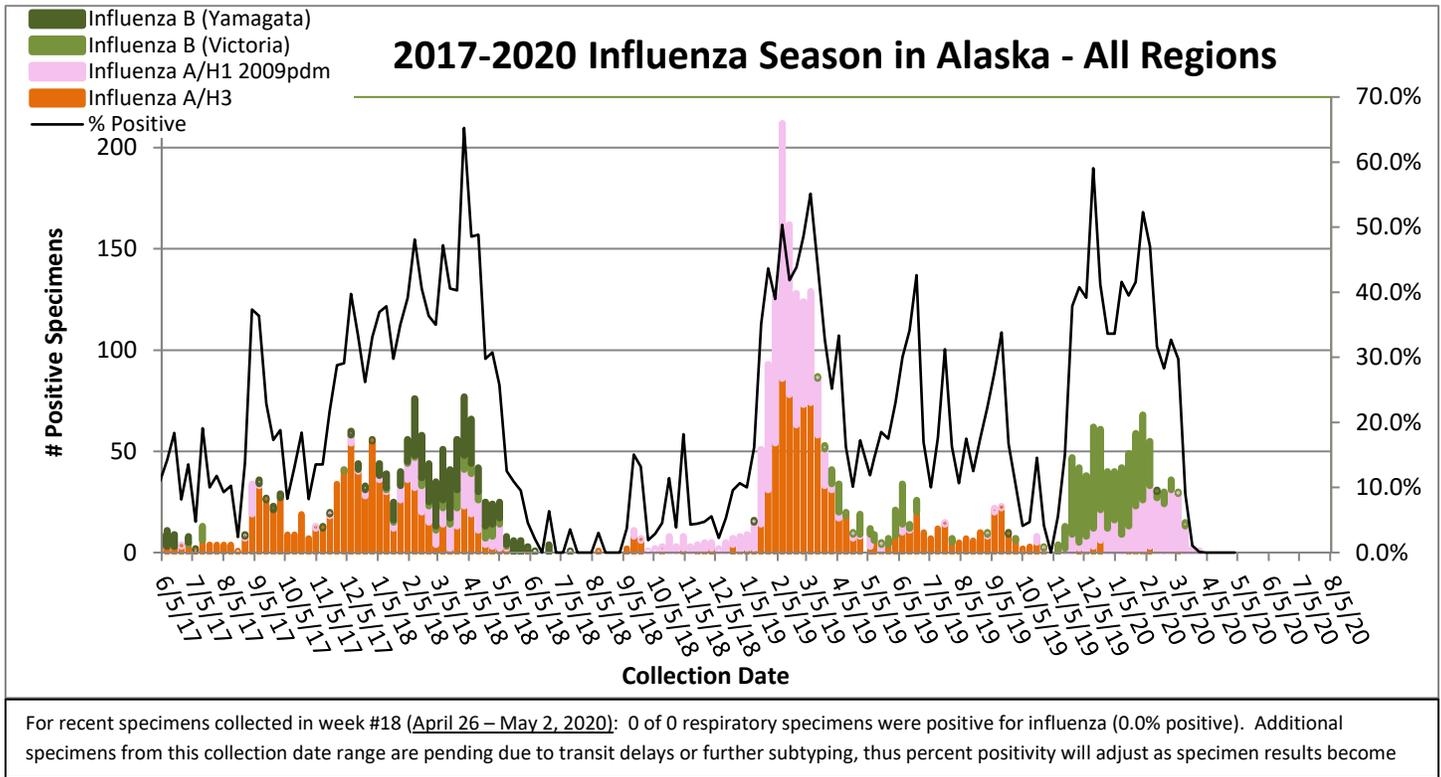
PCR Testing for Week #2020-18 TP: true positive, FP: false positive, TN: true negative, FN: false negative. True = 2 tests concur, False = 2 tests do not concur Collection Date Range: 3/4/2019 – 4/10/2020		Corresponding Influenza Sentinel Providers Results								
ASVL PCR Results		Rapid Influenza Test Results				PCR Test Results				No Data
		TP	TN	FP	FN	TP	TN	FP	FN	
Influenza A/H1 2009 pdm Positive										
Influenza A/H3 Positive										
Influenza A (subtype pending)	7	1				6				
Influenza B Positive (Yamagata lineage)										
Influenza B Positive (Victoria lineage)										
Influenza B (genotype pending)	1								1	
Influenza Negative	338						52			286
Total # Specimens Tested	346	1	0	0	0	6	52	0	1	286

Summary: Alaska influenza virus characterizations by Centers for Disease Control and Prevention (Specimens collected between 6/1/2019 – present)

2019-2020 Northern Hemisphere Vaccine Strain (by virus)	Antigenic Characterization		Genetic Characterization		Antiviral resistance	
	# tested	Strain	# tested	Clades	# tested	Resistant/Susceptible
Influenza A/H3N2 viruses						
A/KANSAS/14/2017 (H3N2)-LIKE	10	A/SINGAPORE/INFIMH-16-0019/2016-LIKE	23	3c.2a1	7	Susceptible
	4	A/KANSAS/14/2017-LIKE (H3N2)				
Influenza A/H1N1 viruses						
A/BRISBANE/02/2018 (H1N1)pdm09-LIKE	2	A/MICHIGAN/45/2015-LIKE (H1N1)pdm09	10	6B.1A	3	Susceptible
	3	A/BRISBANE/02/2018-LIKE (H1N1)pdm09				
Influenza B (Victoria lineage) viruses						
B/COLORADO/06/2017-LIKE	1	B/COLORADO/06/2017-LIKE	14	V1A.3	5	Susceptible
	2	B/COLORADO/06/2017-LIKE LOW*				
Influenza B (Yamagata lineage) viruses						
B/PHUKET/3073/2013-LIKE	2	B/PHUKET/3073/2013-LIKE	2	Y3	1	Susceptible

*LOW: Viruses that are not as well inhibited by the vaccine antibody are designated as “LOW” when performing antigenic characterizations. For more information, visit the weekly U.S. influenza surveillance report at <https://www.cdc.gov/flu/weekly/index.htm>.

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3. Hepatitis C virus (HCV)

For recommendations on types of Hepatitis C testing, test interpretation and post-test patient counseling:

- CDC MMWR: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6104a1.htm>
- 5/27/15 AK Epidemiology Bulletin: http://www.epi.alaska.gov/bulletins/docs/b2015_11.pdf

HCV Antibody screening	Total Tested	Total Positive (%)
Week #2020-18	0	0 (0.0%)
Last 12 month period	5,941	1,052 (17.7%)
HCV RNA testing		
Week #2020-18	122	76 (62.3%)
Last 12 month period	979	723 (73.9%)

HCV Genotyping	Total Tested	Type 1a	Type 1b	Type 2a/c	Type 2b	Type 3	Type 4	Type 6	Unable to Genotype
Week #2020-18	76	44	5		14	13			
Last 12 month period*	725	449 (61.9%)	17 (2.3%)	4 (0.6%)	83 (11.4%)	151 (20.8%)	5 (0.7%)	1 (0.1%)	15 (2.1%)

*HCV genotyping data includes 9 coinfections (3 specimens with subtypes 1a & 3, 2 specimens with subtypes 1a & 1b, 3 specimen with subtypes 1a and 2b, and 1 specimen with types 1 & 4)

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4. Human Immunodeficiency virus (HIV)

HIV antigen/antibody combination screening	Total Tested	Total Confirmed Positive
Week #2020-18	43	0 (0.00%)
Last 12 month period	8,621	10 (0.12%)

5. Norovirus Outbreaks

- No new outbreaks to report.

6. Rabies virus - Human Exposures

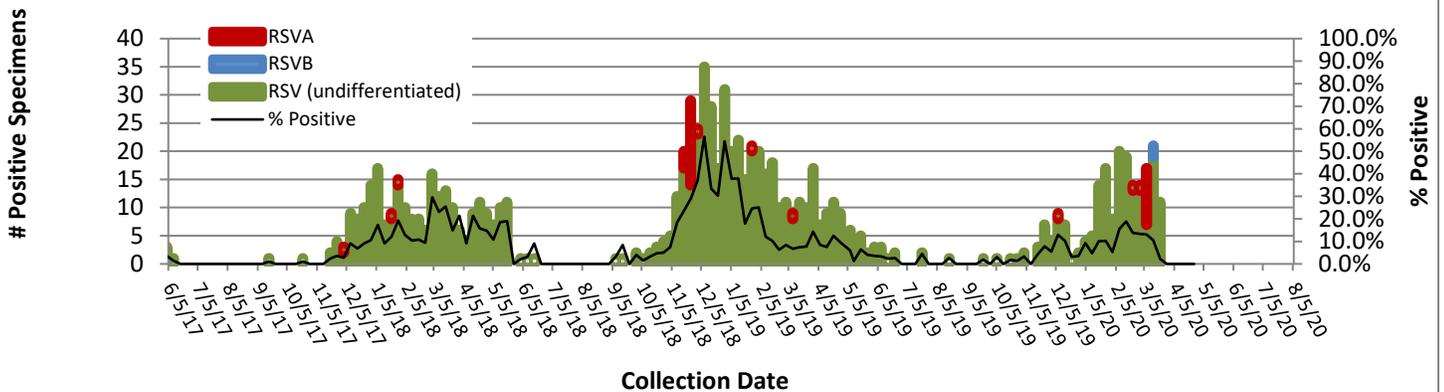
- A red fox from the northern region was considered unsatisfactory for testing due to unidentifiable brain anatomy.

7. Respiratory Syncytial Virus (RSV)

*Surveillance of RSV using a PCR assay that does not differentiate groups A from B began 2/27/2017. Seasons are calculated from October 1 – September 30.

PCR testing	Total Tested	Total Positives (% pos)	Total Positive RSV A (% of pos)	Total Positive RSV B (% of pos)	Total Positive (RSV undifferentiated)* (% of pos)
Week #2020-18	657	27 (4.1%)	2 (7.4%)	0 (0.0%)	25 (92.6%)
Season 2019-2020 (current)	2,786	202 (7.3%)	13 (6.4%)	2 (1.0%)	187 (92.6%)
Season 2018-2019	3,973	474 (11.9%)	21 (4.4%)	0 (0.0%)	453 (95.6%)
Season 2017-2018	2,952	256 (8.7%)	3 (1.2%)	0 (0.0%)	253 (98.8%)
Season 2016-2017	5,550	383 (6.9%)	108 (28.2%)	158 (41.3%)	117 (30.5%)

2017-2020 Respiratory Syncytial Virus Season - All Regions



For recent specimens collected in week #18 (April 26 – May 2, 2020): 0 of 0 respiratory specimens were positive for RSV (0.0% positive). Additional specimens from this collection date range are pending due to transit delays, thus percent positivity will adjust as specimen results become available.

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8. Respiratory Pathogen Panel Summary – by Region

Numbers reflect the total positives detected within a particular time period. Surveillance for respiratory pathogens was reduced in 2017, hence lower numbers for pathogens other than influenza and RSV after that time. Current respiratory season is 10/1/2019 – 9/30/2020. NT = Not tested

	Influenza A/H3	Influenza A/H1pdm09	Influenza A (subtype pending)	Influenza B (Yamagata)	Influenza B (Victoria)	Influenza B (genotype pending)	RSV A	RSV B	RSV (undifferentiated)	Rhino/Enterovirus	Metapneumovirus	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4	Adenovirus	Coronavirus 229E	Coronavirus NL63	Coronavirus HKU1	Coronavirus OC43	Human Bocavirus	<i>Chlamydophila pneumoniae</i>	<i>Mycoplasma pneumoniae</i>	Total Specimens Tested	
All Regions																									
Week #2020-18			7			1	2		25	1	5				1				1		1				346
Season 2019-20 (current)	30	301		1	449	13	2	187	12	7	0	0	5	2	0	0	0	1	5	0	3	0	0		5,125
Season 2018-19	865	698		2	92	21	0	453	15	0	0	1	1	3	0	2	0	0	0	2	2	0	2		5,768
Season 2017-18	647	179		322	60	2	0	245	23	5	1	0	1	1	1	2	3	0	0	0	3	1	0		4,442
Season 2016-17	946	22		262	15		109	158	125	197	77	9	32	136	31	140	79	3	0	175	1	1	0		5,864
Anchorage/MatSu Region																									
Week #2020-18			2			2		8	1	5				1					1		1				180
Season 2019-20 (current)	17	156		1	165	5	0	67	9	7	0	0	0	1	0	0	0	0	4	0	1	0	0		2,095

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Season 2018-19	310	249		1	11		1	0	82	12	0	0	1	1	1	2	0	0	0	2	2	0	2	2,102
Season 2017-18	246	82		82	34		1	0	62	9	1	1	0	0	0	2	0	2	0	0	1	0	0	1,702
Season 2016-17	317	1		49	2		53	24	35	70	52	0	11	37	14	21	32	1	0	64	1	1	0	2,178
Gulf Coast Region																								
Week #2020-18						1			3															65
Season 2019-20 (current)	2	43		0	46		1	0	42	1	0	0	0	0	0	0	0	0	0	0	0	0	0	610
Season 2018-19	66	109		0	6		0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	740
Season 2017-18	49	28		79	4		0	0	48	3	0	0	0	0	0	0	2	0	0	0	0	0	0	810
Season 2016-17	109	2		43	1		12	16	18	9	1	7	5	19	7	2	14	0	0	19	0	0	0	853
Interior Region																								
Week #2020-18			3						6															45
Season 2019-20 (current)	4	51		0	64		0	2	30	0	0	0	0	3	1	0	0	1	0	0	1	0	0	1,431
Season 2018-19	286	123		0	33		19	0	144	2	0	0	0	0	2	1	2	0	0	0	0	0	0	1,326

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Season 2017-18	189	27		112	16		0	0	58	9	4	0	0	1	1	0	0	1	0	0	2	0	0	933
Season 2016-17	269	1		44	4		19	65	43	51	19	0	8	44	2	36	16	2	0	42	0	0	0	1,298
Northern Region																								
Week #2020-18			1																					9
Season 2019-20 (current)	0	2		0	63		0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Season 2018-19	49	20		0	0		0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
Season 2017-18	19	0		3	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	35
Season 2016-17	4	17		4	0		4	1	4	0	0	0	0	0	0	2	0	0	0	1	0	0	0	32
Southeast Region																								
Week #2020-18									8															8
Season 2019-20 (current)	6	19		0	77		7	0	31	2	0	0	0	2	0	0	0	0	1	0	1	0	0	540
Season 2018-19	130	134		1	0		0	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	950

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Season 2017-18	120	11		15	1		0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	648
Season 2016-17	195	1		114	8		18	49	12	37	2	2	5	17	7	69	11	0	0	33	0	0	0	1,235
Southwest Region																								
Week #2020-18			1																					39
Season 2019-20 (current)	1	30		0	34		0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310
Season 2018-19	24	63		0	42		1	0	86	1	0	0	0	0	0	0	0	0	0	0	0	0	0	485
Season 2017-18	24	31		31	4		1	0	39	1	0	0	0	0	0	0	0	0	0	0	0	0	0	314
Season 2016-17	52	0		8	0		3	3	13	15	3	0	3	19	1	6	6	0	0	16	0	0	0	268