

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27

July 1 -7, 2018

(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, and novel influenza. Please direct your calls to the Epi-Team at 907-269-8000; or their 24 hour # 1-800-478-0084. **For information regarding mumps infections in Alaska, please visit:**

<http://dhss.alaska.gov/dph/Epi/id/Pages/Mumps.aspx>

1. Mumps virus

Specimens collected from patients with suspected mumps infections (or any vaccine preventable infection) are tested by the APHL/CDC Vaccine Preventable Disease Reference Center in California. If Mumps RNA is detected, genotyping is attempted at the California laboratory. Please see additional information regarding mumps and mumps genotypes at cdc.gov/mumps.

Collection Date Range: 6/28/2017 – 6/25/2018

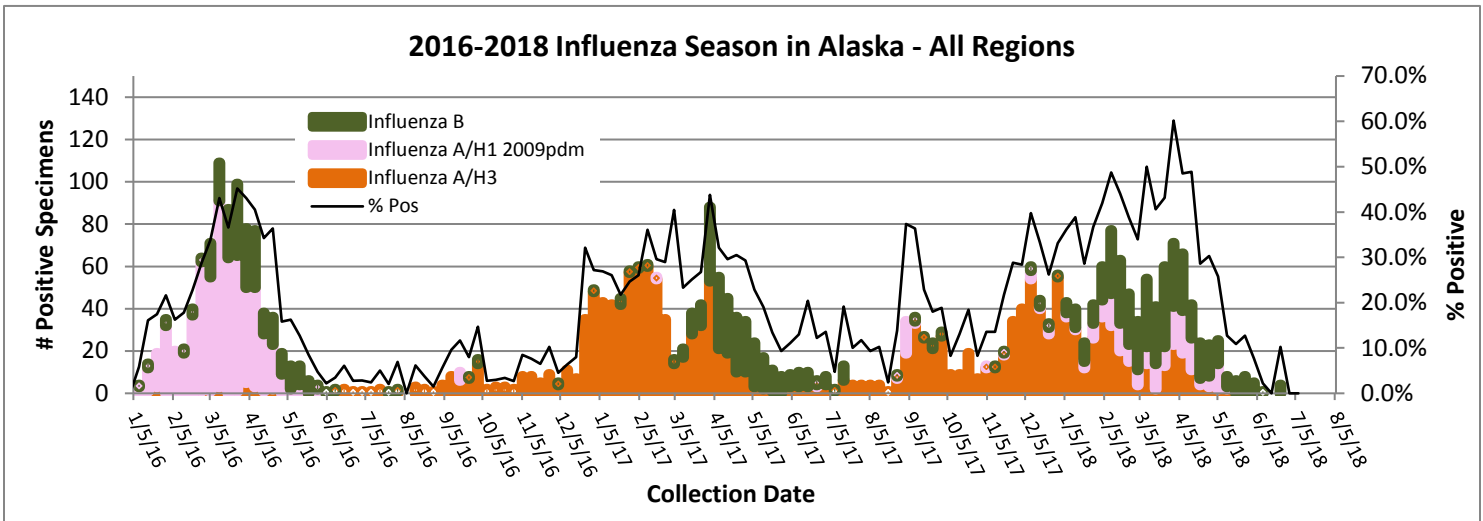
| # AK Specimens Tested by APHL/CDC Reference Center | Mumps RNA Detected | Genotype G |
|----------------------------------------------------|--------------------|------------|
| 817 | 294 (36.0%) | 112 |

*These mumps numbers are not the official numbers for the outbreak and only represent specimens routed through the Alaska State Public Health Laboratories. They are presented for illustrative purposes only and should not be reported in any external reports or media.

2. Influenza virus

| PCR Testing for Week #2018-27 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: 6/18/2018 – 6/28/2018 | | Corresponding Influenza Sentinel Providers Results | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|-----------------------------------|-----------|----------|----------|----------|
| | | Rapid Influenza Test Results | | | | PCR Test Results | | | | No Data |
| ASVL PCR Results | | TP | TN | FP | FN | TP | TN | FP | FN | |
| Influenza A/H1 2009 pdm Positive | | | | | | | | | | |
| Influenza A/H3 Positive | | | | | | | | | | |
| Influenza A (subtype pending) | | | | | | | | | | |
| Influenza B Positive | | | | | | | | | | |
| Influenza Negative | 22 | | | | | | 18 | | | 4 |
| Influenza Inconclusive (PCR inhibitive) | | | | | | | | | | |
| Total # Specimens Tested | 22 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 4 |
| Summary: Influenza vaccine strain match (specimens collected between 6/1/2018 – present) | | | | | | | | | | |
| # AK Specimens Tested by CDC | Results | Most closely related subtype | | | | Match with 2017–2018 flu vaccine? | | | | |
| 0 Influenza A/H3 viruses | | <i>*No viruses tested from recent collections (after 6/1/18). Results from antigenic testing will update as summer viruses are further characterized.</i> | | | | | | | | |
| 0 Influenza A/H1N1 viruses | | | | | | | | | | |
| 0 Influenza B virus (Yamagata) | | | | | | | | | | |
| 0 Influenza B viruses (Victoria) | | | | | | | | | | |
| Summary: Influenza antiviral resistance surveillance (specimens collected between 6/1/2018 – present) | | | | | | | | | | |
| # AK Specimens Tested by CDC | Results | Description | | | | | | | | |
| 0 Influenza A/H3 viruses | | <i>*No viruses tested from recent collections (after 6/1/18). Results from antiviral resistance testing will update as summer viruses are further characterized.</i> | | | | | | | | |
| 0 Influenza A/H1N1 virus | | | | | | | | | | |
| 0 Influenza B (Victoria) | | | | | | | | | | |
| 0 Influenza B (Yamagata) | | | | | | | | | | |

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27
July 1 -7, 2018



For recent specimens collected in week #27 (July 1 – 7, 2018): 0 of 0 respiratory specimens were positive for influenza (0.0% positive). Additional specimens from this collection date range are pending due to transit delays or further subtyping, thus percent positivity will adjust as specimen results become available.

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 #2018-27 | 140 | 19 (13.6%) |
| Last 12 month period | 6,670 | 893 (13.4%) |
| HCV RNA testing | | |
| Week #2018-27 | 0* | 0 (0.0%) |
| Last 12 month period | 936 | 639 (68.3%) |

*Testing has continued and data will be available soon.

| HCV Genotyping | Total Tested | Type 1a | Type 1b | Type 2a/c | Type 2b | Type 3 | Type 4 | Type 6 | Unable to Genotype |
|-----------------------|--------------|-------------|-----------|-----------|------------|-------------|----------|----------|--------------------|
| Week #2018-27 | 0 | | | | | | | | |
| Last 12 month period* | 639 | 357 (55.9%) | 28 (4.4%) | 7 (1.1%) | 83 (13.0%) | 128 (20.0%) | 8 (1.3%) | 0 (0.0%) | 28 (4.4%) |

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

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27

July 1 -7, 2018

4. Human Immunodeficiency virus (HIV)

| HIV Antibody screening (4 th Generation) | Total Tested | Total Confirmed Positive |
|-----------------------------------------------------|--------------|--------------------------|
| Week #2018-27 | 86 | 0 (0.00%) |
| Last 12 month period | 8,040 | 15 (0.19%) |

5. Norovirus Outbreaks

- No new outbreaks to report.

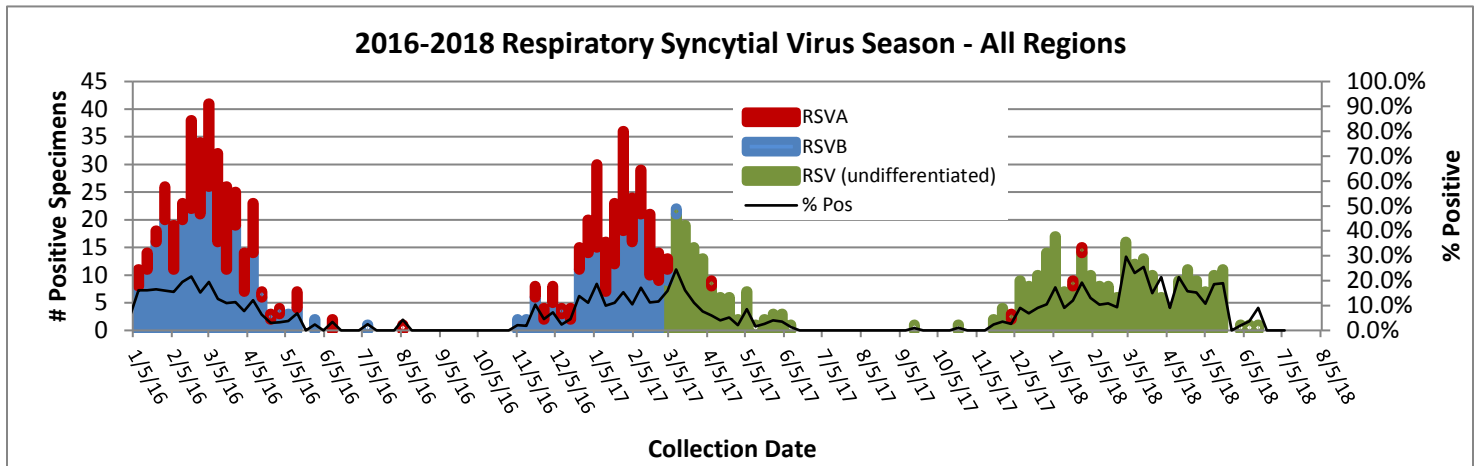
6. Rabies virus - Human Exposures

- A dog from the interior region has tested **negative** for rabies.

7. Respiratory Syncytial Virus (RSV)

*Surveillance of RSV using a PCR assay that does not differentiate groups A from B began 2/27/2017.

| PCR testing | Total Tested | Total Positives (% pos) | Total Positive RSV A (% of pos) | Total Positive RSV B (% of pos) | Total Positive (RSV undifferentiated)* |
|----------------------------|--------------|-------------------------|---------------------------------|---------------------------------|----------------------------------------|
| Week #2018-27 | 0 | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Season 2017-2018 (current) | 2,537 | 252 (9.9%) | 3 (1.2%) | 0 (0.0%) | 249 (98.8%) |
| Season 2016-2017 | 5,550 | 383 (6.9%) | 108 (28.2%) | 158 (41.3%) | 117 (30.5%) |
| Season 2015-2016 | 4,987 | 388 (7.8%) | 145 (37.4%) | 243 (62.6%) | 0 (0.0%) |



For recent specimens collected in week #27 (July 1 – 7, 2018): 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.

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27
July 1 -7, 2018

8. Respiratory Pathogen Panel Summary – by Region

Numbers reflect the total positives detected within a particular time period. Current respiratory season is 10/1/2017 – 9/30/2018. NT = Not tested

| | Influenza A/H3 | Influenza A/H1pdm09 | Influenza A (subtype pending) | Influenza B | 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>Chlamydia pneumoniae</i> | <i>Mycoplasma pneumoniae</i> | Total Specimens Tested |
|---------------------------------|----------------|---------------------|-------------------------------|-------------|-------|-------|------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|------------------|------------------|------------------|------------------|-----------------|-----------------------------|------------------------------|------------------------|
| All Regions | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 22 |
| Season 2017-18 (current) | 630 | 174 | | 397 | 2 | 0 | 241 | 13 | 5 | 1 | 0 | 1 | 1 | 1 | 0 | 3 | 0 | 0 | 3 | 1 | 0 | 3,816 |
| Season 2016-17 | 946 | 22 | | 287 | 109 | 158 | 125 | 197 | 77 | 9 | 32 | 136 | 31 | 140 | 79 | 3 | 0 | 175 | 1 | 1 | 0 | 5,864 |
| Season 2015-16 | 94 | 622 | | 226 | 146 | 254 | 0 | 706 | 183 | 97 | 2 | 70 | 43 | 272 | 25 | 86 | 82 | 115 | NT | NT | NT | 5,036 |
| Anchorage/MatSu Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 14 |
| Season 2017-18 (current) | 242 | 81 | | 125 | 1 | 0 | 60 | 5 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1,386 |
| Season 2016-17 | 317 | 1 | | 51 | 53 | 24 | 35 | 70 | 52 | 0 | 11 | 37 | 14 | 21 | 32 | 1 | 0 | 64 | 1 | 1 | 0 | 2,178 |
| Season 2015-16 | 33 | 203 | | 87 | 25 | 107 | 0 | 253 | 37 | 30 | 0 | 29 | 16 | 102 | 12 | 30 | 22 | 40 | NT | NT | NT | 1,903 |
| Gulf Coast Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 0 |

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27
July 1 -7, 2018

| | Influenza A/H3 | Influenza A/H1pdm09 | Influenza A (subtype pending) | Influenza B | 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>Chlamydomphila pneumoniae</i> | <i>Mycoplasma pneumoniae</i> | Total Specimens Tested |
|---------------------------------|----------------|---------------------|-------------------------------|-------------|-------|-------|------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|------------------|------------------|------------------|------------------|-----------------|----------------------------------|------------------------------|------------------------|
| Season 2017-18 (current) | 46 | 28 | | 88 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 664 |
| Season 2016-17 | 109 | 2 | | 46 | 12 | 16 | 18 | 9 | 1 | 7 | 5 | 19 | 7 | 2 | 14 | 0 | 0 | 19 | 0 | 0 | 0 | 853 |
| Season 2015-16 | 7 | 54 | | 10 | 4 | 11 | 0 | 47 | 15 | 9 | 0 | 3 | 2 | 9 | 2 | 9 | 1 | 9 | NT | NT | NT | 480 |
| Interior Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 8 |
| Season 2017-18 (current) | 188 | 27 | | 132 | 0 | 0 | 56 | 6 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 858 |
| Season 2016-17 | 269 | 1 | | 51 | 19 | 65 | 43 | 51 | 19 | 0 | 8 | 44 | 2 | 36 | 16 | 2 | 0 | 42 | 0 | 0 | 0 | 1,298 |
| Season 2015-16 | 14 | 164 | | 72 | 101 | 62 | 0 | 210 | 75 | 34 | 1 | 19 | 8 | 96 | 6 | 28 | 37 | 31 | NT | NT | NT | 1,396 |
| Northern Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 0 |
| Season 2017-18 (current) | 19 | 0 | | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 35 |
| Season 2016-17 | 4 | 17 | | 4 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 32 |
| Season 2015-16 | 1 | 35 | | 1 | 0 | 11 | 0 | 2 | 3 | 1 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 1 | NT | NT | NT | 59 |

Alaska State Virology Laboratory (ASVL) Weekly Report – Week #27
July 1 -7, 2018

| | Influenza A/H3 | Influenza A/H1pdm09 | Influenza A (subtype pending) | Influenza B | 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>Chlamydomphila pneumoniae</i> | <i>Mycoplasma pneumoniae</i> | Total Specimens Tested |
|---------------------------------|----------------|---------------------|-------------------------------|-------------|-------|-------|------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|------------------|------------------|------------------|------------------|-----------------|----------------------------------|------------------------------|------------------------|
| Southeast Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 0 |
| Season 2017-18 (current) | 111 | 7 | | 17 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 579 |
| Season 2016-17 | 195 | 1 | | 129 | 18 | 49 | 12 | 37 | 2 | 2 | 5 | 17 | 7 | 69 | 11 | 0 | 0 | 33 | 0 | 0 | 0 | 1,235 |
| Season 2015-16 | 37 | 130 | | 39 | 10 | 38 | 0 | 117 | 42 | 18 | 1 | 11 | 7 | 28 | 4 | 8 | 17 | 29 | NT | NT | NT | 921 |
| Southwest Region | | | | | | | | | | | | | | | | | | | | | | |
| Week #2018-27 | | | | | | | | | | | | | | | | | | | | | | 0 |
| Season 2017-18 (current) | 24 | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 294 |
| Season 2016-17 | 52 | 0 | | 6 | 3 | 3 | 13 | 15 | 3 | 0 | 3 | 19 | 1 | 6 | 6 | 0 | 0 | 16 | 0 | 0 | 0 | 268 |
| Season 2015-16 | 2 | 36 | | 17 | 6 | 25 | 0 | 77 | 11 | 5 | 0 | 8 | 9 | 34 | 0 | 11 | 5 | 5 | NT | NT | NT | 277 |