



City of Milwaukee Health Department Laboratory

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# SUMMARY OF CONFIRMED INFECTIONS

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## Syphilis

| Test          | Total | Test               | Total |
|---------------|-------|--------------------|-------|
| RPR Reactive  | 10    | Darkfield Reactive | 0     |
| VDRL Reactive | 18    | TP-PA Reactive     | 11    |

## New Cases of Syphilis

| Stage              | Number of Cases |          |
|--------------------|-----------------|----------|
|                    | Dec 2016        | Dec 2015 |
| Primary syphilis   | 0               | 0        |
| Secondary syphilis | 0               | 0        |
| Early latent       | 0               | 0        |
| Late latent        | 2               | 1        |
| Total              | 2               | 1        |

Source: Wisconsin Division of Health

## Gonorrhea Antimicrobial Susceptibility Testing

| Number Tested | Non-Susceptible (NS) / Decreased Susceptible (DS) / Resistant (R) Antibiotics |          |             |              |
|---------------|---|----------|-------------|--------------|
|               | Ciprofloxacin   | Cefixime | Ceftriaxone | Azithromycin |
| 41            | 1 (R)   | 0        | 0           | 0            |

## Reference Cultures

| Age | Sex | Source                     | Identification                              |
|-----|-----|----------------------------|---|
| 29  | M   | Stool                      | <i>Campylobacter jejuni</i>                 |
| 71  | M   | Stool                      | <i>Campylobacter jejuni</i>                 |
| 59  | M   | Tracheal/Endotracheal swab | <i>Corynebacterium pseudodiphtheriticum</i> |
| 82  | F   | Whole Blood                | <i>Dermabacter hominis</i>                  |
| 77  | F   | BAL Fluid                  | <i>Lactobacillus reuteri</i>                |
| 83  | F   | Urine                      | <i>Salmonella</i> Anatum                    |

**DNA Sequencing:** The MHD laboratory uses 16S rRNA and the D2 region of the 26S rRNA genes for DNA sequence-based microbial identification of selective reference bacteria and fungal isolates.

| Age | Sex | Source                     | Target gene | Final Identification                        |
|-----|-----|----------------------------|-------------|---|
| 71  | M   | Stool                      | 16 S rRNA   | <i>Campylobacter jejuni</i>                 |
| 29  | M   | Stool                      | 16 S rRNA   | <i>Campylobacter jejuni</i>                 |
| 59  | M   | Tracheal/Endotracheal swab | 16 S rRNA   | <i>Corynebacterium pseudodiphtheriticum</i> |
| 81  | F   | Blood                      | 16 S rRNA   | <i>Dermabacter hominis</i>                  |

**Molecular Amplification**

| Agent                       | Method           | Tested | Positives | Percent (%) |
|-----------------------------|------------------|--------|-----------|-------------|
| Norovirus                   | Real time RT-PCR | 2      | 2         | 100         |
| Mumps virus                 | Real time RT-PCR | 13     | 1         | 8           |
| <i>Bordetella pertussis</i> | Real time PCR    | 4      | 0         | 0           |
| Influenza virus             | Real time RT-PCR | 7      | 0         | 0           |
| Herpes simplex virus        | Real time PCR    | 36     | 10        | 28          |

***Chlamydia trachomatis* (CT) and *Neisseria gonorrhoea* (GC) Nucleic Acid Amplification**

| Source       | Tested | CT        |             | GC        |             |
|--------------|--------|-----------|-------------|-----------|-------------|
|              |        | Positives | Percent (%) | Positives | Percent (%) |
| Urine        | 488    | 65        | 13          | 51        | 10          |
| Throat or NP | 388    | 5         | 1           | 23        | 6           |
| Rectal       | 116    | 15        | 13          | 5         | 4           |

**Virus/*Chlamydia trachomatis* Isolation from Clinical Specimens**

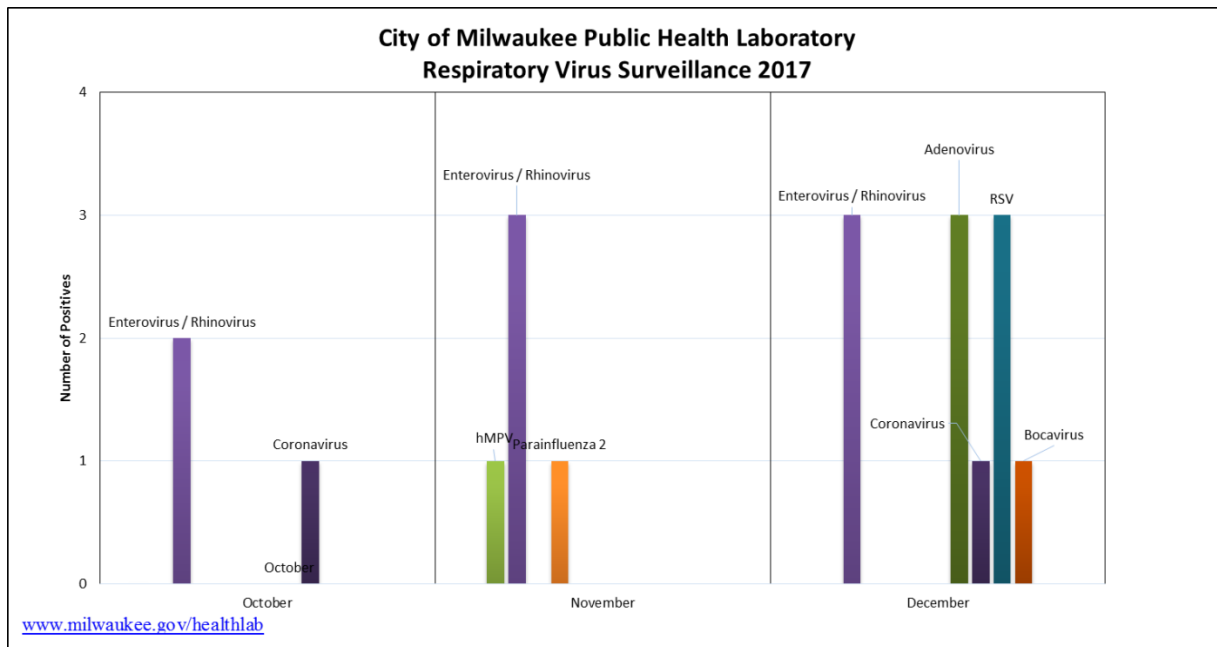
| Agent       | Virus Isolated in Culture |         |        |                     |                   |
|-------------|---------------------------|---------|--------|---------------------|-------------------|
|             | Throat                    | Genital | Lesion | Virus swab – Other* | Isolate (Total %) |
| Adenovirus  | 0                         | 0       | 0      | 1                   | 14                |
| Enterovirus | 0                         | 0       | 0      | 1                   | 14                |

\* Includes lung, NP/Throat combined, Cytomegalovirus(CMV) shell vials, and unspecified sources  
 Specimens tested for virus: n = 7 (December 2016); Specimen tested for *Chlamydia* detection in culture: n = 2 (December 2016); Specimen tested for CMV n = 6 (December, 2016)

**Respiratory Virus Surveillance:**

| Respiratory Virus Panel Test Results |           |             |
|--------------------------------------|-----------|-------------|
| Virus                                | Positives | Percent (%) |
| Human Adenovirus                     | 3         | 17          |
| Enterovirus/Rhinovirus               | 3         | 17          |
| Respiratory Syncytial Virus          | 3         | 17          |
| Human Bocavirus                      | 1         | 6           |
| Human Coronavirus OC43               | 1         | 6           |

Specimens tested: n = 18 (Dec 2016 – Not including Influenza PCR data)



**Note: The MHDL provides comprehensive detection of multiple respiratory viruses and their subtypes: Influenza A, Influenza B, Respiratory Syncytial Virus (RSV), Human Metapneumovirus (hMPV), Enterovirus/ Rhinovirus (ENT/HRV), Adenovirus, Parainfluenza (HPIV 1-4), Coronavirus and Boca viruses. The RPP assay also detects three bacterial targets of respiratory interest: *Chlamydia pneumoniae*, *Mycoplasma pneumoniae*, and *Legionella pneumophila***