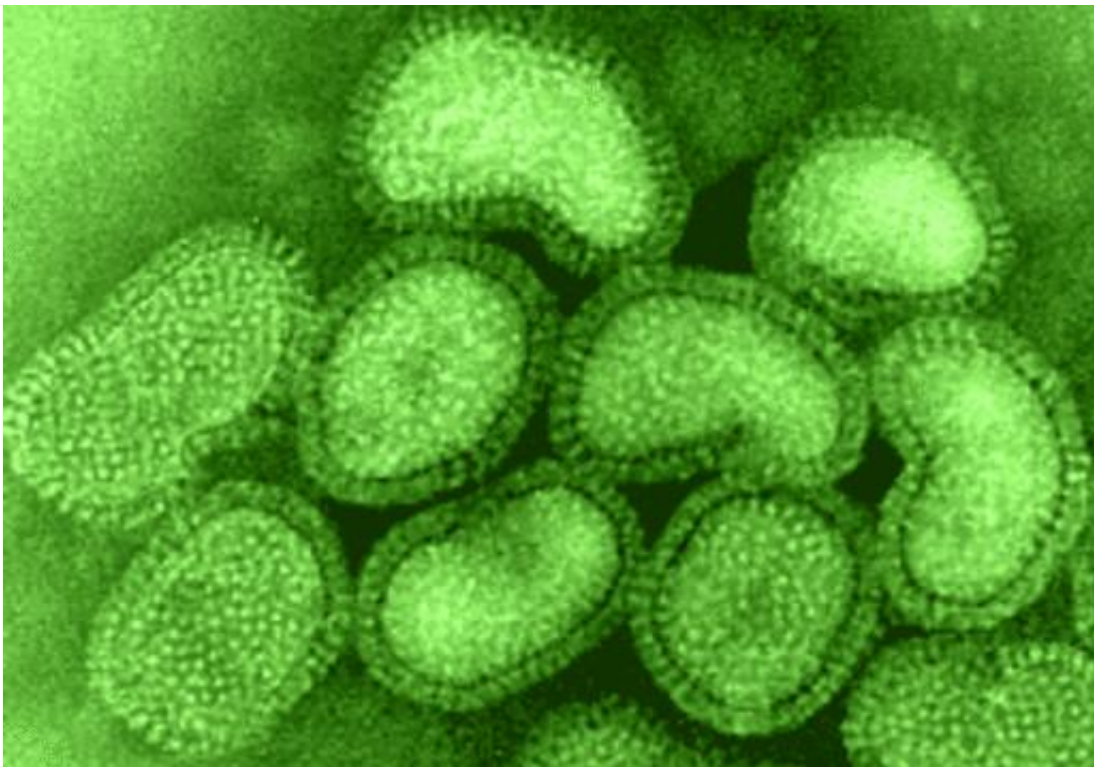


**Institute for Population Health (IPH)**  
**Preliminary Influenza Activity Report**  
**2012/2013 Flu Season**

As of February 23<sup>rd</sup>, 2013, the Institute for Population Health (IPH) received reports of 59 confirmed influenza cases among residents of the City of Detroit. The below tables and figures provide additional information about these cases.

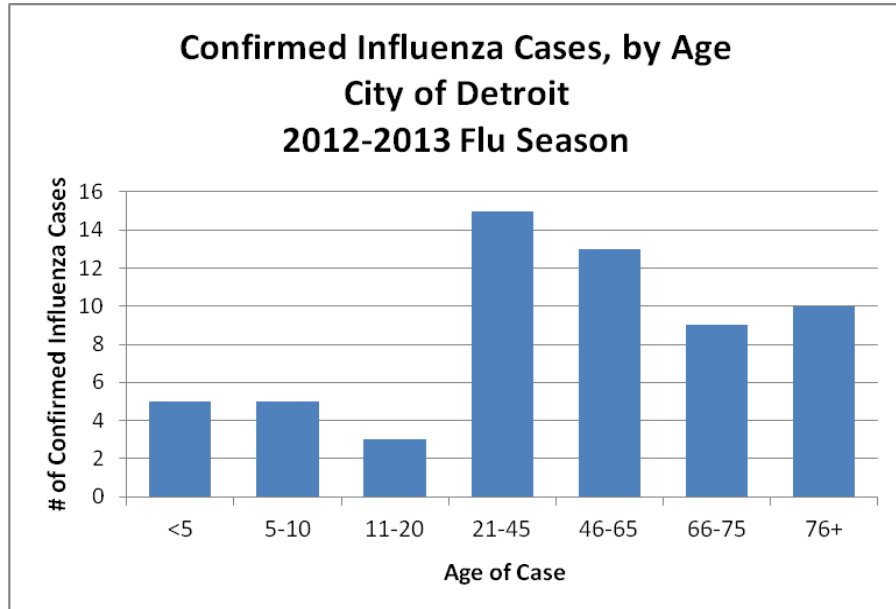
**Note:** All data presented below are from MMWR Week 2012-48 through MMWR Week 2013-8. Many of the Influenza A cases reported to IPH were not typed out to the serotype level (e.g., H3N2).



Picture source: <http://web.uct.ac.za/depts/mmi/stannard/fluivirus.html>

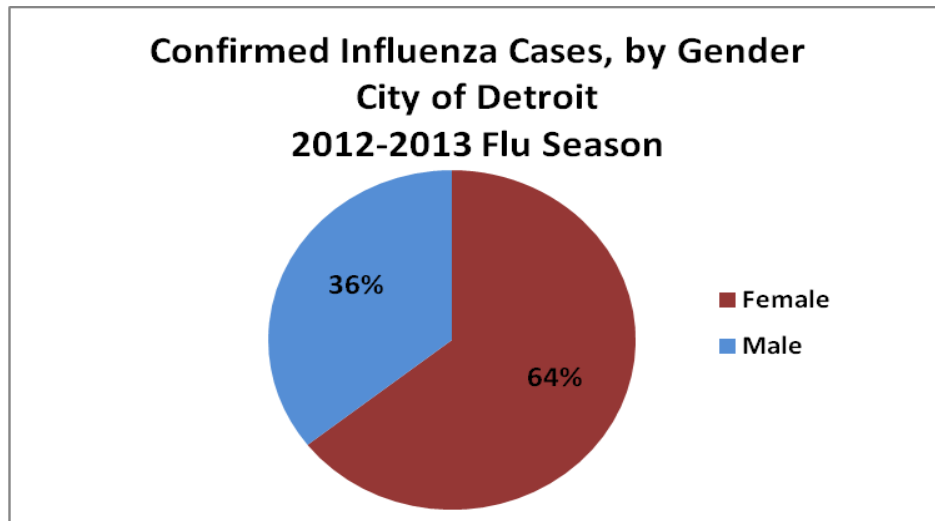
As illustrated below (see Figure 1), a large proportion (47.5%) of the confirmed influenza cases reported in IPH’s jurisdiction were young and middle-aged adults. In comparison, elderly individuals (>65) accounted for 30.5% of confirmed flu cases and children and adolescents accounted for 22.0% of confirmed cases.

**Figure 1.**



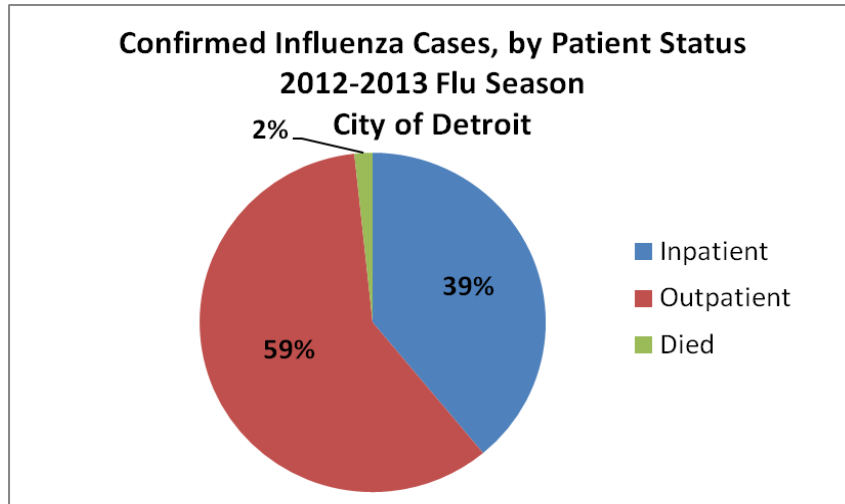
Females accounted for approximately two-thirds of the confirmed influenza cases reported in IPH’s jurisdiction (see Figure 2).

**Figure 2.**



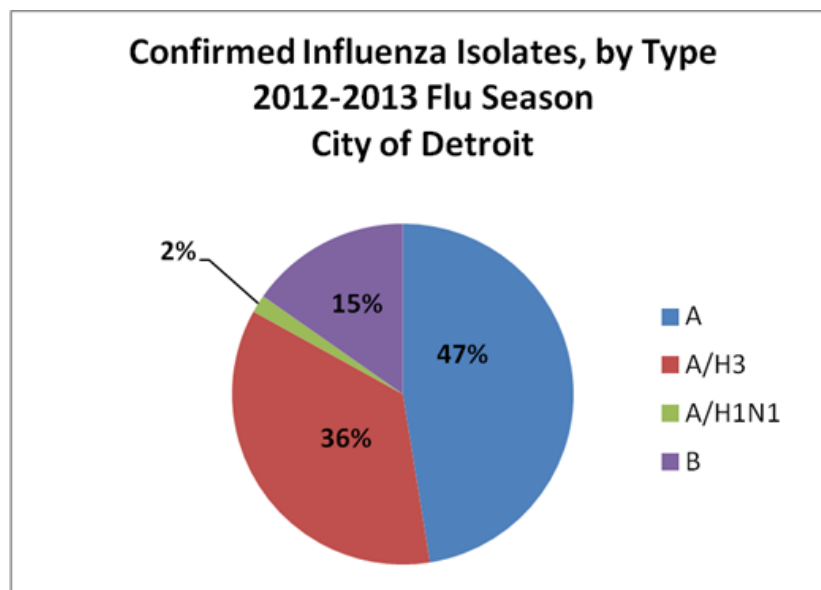
As illustrated in Figure 3, while the majority of confirmed cases (35 cases; 59%) in IPH's jurisdiction were tested at outpatient facilities and Emergency Rooms, a substantial proportion (23 cases; 39%) were tested while inpatient. Additionally, one patient (an elderly individual) expired after being diagnosed with influenza.

**Figure 3.**



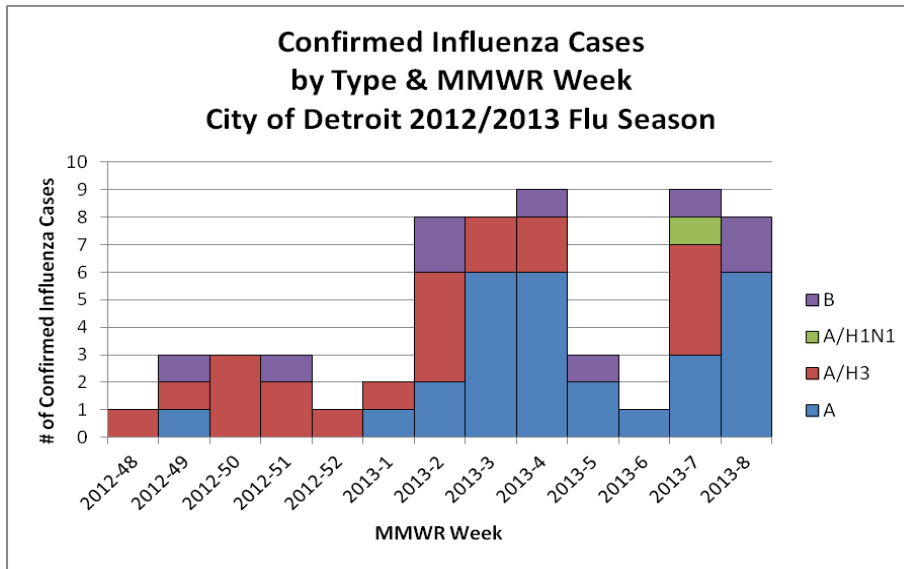
Influenza A species accounted for the vast majority of confirmed influenza cases (50 cases; 85%) among Detroit residents (see Figure 4). Of the 50 Influenza A cases, 22 were subtyped (21 H3 and 1 H1N1). Comparatively, 15.2% of IPH's confirmed flu cases were Influenza B. These proportions are similar to what has been seen at the state level. According to the February 21<sup>st</sup> edition of MI Flu Focus, 82.4% of the influenza test results statewide were for Influenza A and 17.6% of results were for Influenza B.

**Figure 4.**



This has been a bi-modal flu season for the IPH jurisdiction. In both MMWR Week 2013-4 and 2013-7, 9 confirmed influenza cases were reported among Detroit residents (see Figure 5). Although it originally appeared that flu activity was waning after the peak in MMWR Week 2013-4, the number of cases jumped rapidly again in MMWR Week 2013-7 and has continued to remain elevated. Of note, the Influenza B cases seen in our jurisdiction have occurred sporadically throughout the season.

Figure 5.



As illustrated in Figure 6, the number of reported influenza & flu-like disease cases tended to rise and fall at similar points during the season. In contrast, Invasive *Streptococcus pneumoniae* cases did not trend in tandem with influenza & flu-like disease cases.

Figure 6.

