Council Direction:

This report is provided in keeping with the Board of Health policy on communication between the Medical Officer of Health and the Board of Health, as outlined in Report PH06038.

Information:

This is a summary report covering the period from July 1, 2012 to December 31, 2012. The Ontario Public Health Standards (OPHS) are the guidelines for the provision of mandatory health programs and services for Boards of Health in Ontario. Investigations completed by the program areas for Infectious Diseases and Environmental Health within the OPHS are the focus for this report. These program areas are as follows:

- **Infectious Diseases** (which includes the Reportable Diseases under the Health Protection and Promotion Act):
  - Infectious Diseases Prevention and Control
  - Rabies Prevention and Control
- Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections (including HIV)
- Tuberculosis Prevention and Control
- Vaccine Preventable Diseases

**Environmental Health**
- Food Safety
- Safe Water
- Health Hazard Prevention and Management

Reportable Disease cases are reported among individuals who reside within the City of Hamilton at the time of their diagnosis. The figures in Appendix A have been extracted from the Ontario Ministry of Health and Long-term Care integrated Public Health Information System (iPHIS) database and are subject to change due to case follow-up procedures and/or delayed diagnosis.

**Significant Program Activities Completed During Q3 and Q4, 2012:**

**Infectious Diseases**
- Infection Prevention and Control week was recognized in October. A number of activities occurred including an education day for long-term care home staff and targeted marketing campaign using social network sites to distribute information about tattooing and body art.

**Environmental Health**
- The Food Safety team has begun participating in the Canadian Food Inspection Agency; National Microbiological Baseline Study in Broiler Chickens from 2012-2013. The study will provide Canadian baseline data on the prevalence and levels of *Salmonella* and *Campylobacter* in broiler chicken flocks as well as on raw chicken products sold at retail.
- The Health Hazards program responded to 605 enquiries/complaints in 2012 related to bed bugs compared to the 2011 total of 660. This is the first time since 2007 that there was a decrease in the reported number of bed bug enquiries/complaints from the year prior.
- Rabies incidents in 2012 were the highest they have been since 2008. From 2009 to 2011 there was an average of 1306 investigations per year compared to 1459 in 2012. Dogs were the most common animal involved (over 625 in 2012), with bats showing a peak, as usual, in late July and August.
Infectious Disease and Environmental Health Report: Q3 & Q4 2012

Number of reportable diseases investigations* conducted by report quarter, City of Hamilton, Q3-Q4 2011 and 2012.

<table>
<thead>
<tr>
<th>Program</th>
<th>Type</th>
<th>Reported 2011*</th>
<th>Reported 2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Annual Total</td>
</tr>
<tr>
<td>Infectious Diseases ID</td>
<td>Cases</td>
<td>286</td>
<td>270</td>
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<tr>
<td></td>
<td>Active TB</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Latent TB</td>
<td>188</td>
<td>190</td>
</tr>
<tr>
<td>Sexually Transmitted Infections</td>
<td>Cases</td>
<td>455</td>
<td>508</td>
</tr>
</tbody>
</table>

Column Total: 932, 979, 4111

Most frequently investigated IDs this year:
- Influenza
- Hepatitis C
- Salmonellosis
- Campylobacter enteritis
- Streptococcus pneumonia

Top Sexually Transmitted Infection reported this year:
- Chlamydia

Human cases of West Nile virus, City of Hamilton, 2002-2012.

Interpretation: This year, there was a marked increase in reports of WNV, with 20 cases identified. With the exception of 2002 (arrival year for human WNV), reports of cases ranged from 0 – 3 cases / year.

Program Impacts: A fourth round of catch basin treatment occurred for added control of mosquitoes. Radio advertising was expanded and program staff provided outreach at two additional festivals to alert the public to the high risk of human infection.

Quarterly cases of Verotoxin producing E.Coli (VTEC), City of Hamilton, 2006 - 2012.

Interpretation: Since 2006, case reports of VTEC have declined. In 2012, there were 7 sporadic cases (3 of which resulted from travel elsewhere in Ontario or outside of Canada).

Program Impacts: As cases have become increasingly less common, each case now receives a higher degree of scrutiny during the investigation, as the province and Public Health Agency of Canada are intensely looking for possible exposure sources at a broader level. This has resulted in more detailed and focused investigation tools being developed, which result in investigations of increased duration and intensity.
### Environmental Health investigation responses by site visit, telephone call or email, Q3-Q4 2011 and 2012.

<table>
<thead>
<tr>
<th></th>
<th>Reported 2011</th>
<th></th>
<th>Reported 2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Annual Total</td>
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<tr>
<td><strong>Food Safety</strong></td>
<td>139</td>
<td>120</td>
<td>559</td>
<td>172</td>
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<td><strong>Water Quality</strong></td>
<td>196</td>
<td>97</td>
<td>534</td>
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<td><strong>Health Hazard Abatement</strong></td>
<td>418</td>
<td>399</td>
<td>1504</td>
<td>340</td>
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<td><strong>Tobacco Control under Smoke Free Ontario Act</strong></td>
<td>54</td>
<td>81</td>
<td>283</td>
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<td><strong>By-law 11-080</strong></td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td><strong>West Nile Virus</strong></td>
<td>62</td>
<td>2</td>
<td>127</td>
<td>0</td>
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<tr>
<td><strong>Infection Control Prevention</strong></td>
<td>*553</td>
<td>227</td>
<td>1618</td>
<td>278</td>
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<tr>
<td><strong>Rabies Potential Exposure Investigations</strong></td>
<td>510</td>
<td>216</td>
<td>1298</td>
<td>224</td>
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<tr>
<td><strong>Column Total</strong></td>
<td>1932</td>
<td>1142</td>
<td>5923</td>
<td>1222</td>
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</tbody>
</table>

### Food safety investigations, City of Hamilton, 2011-2012.

**Interpretation:** In 2012 there was an increase to the amount of investigations generated due to the media’s coverage of the Eat a Pita outbreak and the removal of the Roma 2 for 1 Pizza license after a show cause hearing at the Hamilton Licensing Tribunal.

### Health hazard investigations, City of Hamilton, Q3 - Q4, 2012.

**Interpretation:** Bed bug complaints continue to be the most significant health hazard complaint despite there being a decrease in number of calls in 2012 compared to 2011.

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*Note: Unusually high complaint rate related to Infection Control Prevention - Q3 2011*