

Section 7 Pandemic Surveillance

Contents

1. Overview of Current Seasonal Influenza Surveillance
2. HKPRDHU Surveillance Activities

Appendices

- | | |
|---------------|---|
| Appendix 7.1 | HKPR Respiratory Surveillance |
| Appendix 7.2a | Influenza – Case Definition |
| Appendix 7.2b | Avian H5N1 Case Definition |
| Appendix 7.3 | School Surveillance Protocol |
| Appendix 7.4a | Local Sentinel Physician Program |
| Appendix 7.4b | How to take a Nasopharyngeal Swab-Nasopharyngeal Specimen |
| Appendix 7.5 | Surveillance Situation Reports, Phase 4 – 5 |
| Appendix 7.6 | Surveillance Situation Reports, Phase 6 (Weekly) |
| Appendix 7.7 | Pandemic Surveillance Tools |

Surveillance is the continuous and systematic process of collecting, analyzing, interpreting and disseminating descriptive information to monitor public health and to ensure timely interventions to reduce morbidity and mortality (Ontario Health Plan for an Influenza Pandemic, 2005).

The objectives of HKPRDHU's pandemic surveillance plan are:

- To detect the pandemic strain early in HKPR District
- To track the occurrence, severity, and progression of the pandemic, based on the WHO pandemic phases.
- To monitor influenza-like illness (ILI) activity in order to:
 - Detect unusual events (new strains including epizootic strains, antigenic drift/shift, unusual outcomes/syndromes, unusual severity, unusual distribution)
 - Compare new strains with vaccine composition and recommendations
 - Estimate the impact of ILI in terms of attack rate, outpatient visits, hospitalizations, and case fatality rate
 - Describe the affected population in order to identify high-risk groups, modes of transmission, risk and protective factors.
- To share surveillance information with responders to help identify disease, guide prevention, control, and research; and to evaluate the effectiveness of treatment, prophylaxis and education.

The HKPRDHU surveillance plan is organized according to the phase-specific activities at the local level outlined in the Ontario Health Plan for an Influenza Pandemic (OHPIP) and the surveillance sections of the Canadian Pandemic Influenza Plan (CPIP).

1. Overview of Current Seasonal Influenza Surveillance

In Canada the federal government bears responsibility to establish surveillance Networks, and coordinate with the World Health Organization (WHO) and the Centre for Disease Control and Prevention (CDC).

Influenza surveillance takes place in cooperation with provincial and regional epidemiologists and the sentinel physicians. Weekly or bi-weekly *FluWatch* reports are published at <http://www.phac-aspc.gc.ca/fluwatch/index.html>

Locally, seasonal influenza surveillance activities consist of the following:

- Monitoring for the introduction and spread of influenza and other respiratory viruses within HKPRDHU;
- Rapid identification and control of facility outbreaks, to minimize morbidity and mortality in vulnerable populations;
- Providing information on influenza epidemiology to hospitals, long term care homes and physicians;
- Providing local information to provincial and federal authorities that will contribute to national surveillance information.

The Health Unit surveillance activities will depend on WHO phases and will correspond to the local objectives outlined in OHPIP. Changes in WHO phases will affect the surveillance activities that the health unit undertakes

2. HKPRDHU Surveillance Activities

| WHO Pandemic Phase | Surveillance Activities |
|---|--|
| <p style="text-align: center;">Phase 1 & 2 Interpandemic Period</p> | <ol style="list-style-type: none"> 1. Conduct passive surveillance of global statistics on avian influenza activity (from FluWatch, Ont. Influenza Bulletin, WHO, newswires i.e., CBC) and report, when necessary to Manager/Supervisor of Communicable Disease and Environmental Health. 2. Develop and update a list of pandemic influenza websites (List + Bookmark). 3. Investigate all reported cases of influenza in the community and in institutions 4. Submit weekly reports to MOHLTC and share information with internal staff (CDC, MOH etc.) on community and institutional flu activity 5. Disseminate the location and status of institutional respiratory outbreaks to ICP, EMS, and other health care providers. 6. Track staff influenza immunization rates in LTCF and hospitals. 7. Investigate all reported positive FRI screens with a travel link and clusters of FRI from institutional settings in HKPR District. 8. Develop/adopt a FRI database (Similar to Durham's). 9. Educate HKPRDHU CDC staff re: Latest FRI guidelines 10. Evaluate the effectiveness of FRI screening tool at acute care facilities in HKPRDHU jurisdiction |
| <p style="text-align: center;">Phase 1 & 2 Interpandemic Period</p> | <ol style="list-style-type: none"> 11. Establish/Improve communication re: FRI surveillance with physicians, CCAC, walk-in clinics, EMS and First Nation community. 12. Provide training/direction to LTC facilities on FRI surveillance (e.g., LTCHs annual workshop, Health Matters etc.,) 13. Work with school liaisons to establish contacts with School Boards and develop a sentinel school surveillance protocol to monitor absenteeism during flu season and during pre-pandemic period (CDC to determine time of implementation). 14. Re-establish contact with HKPR sentinel physicians for surveillance of ILI and flu cases. |

| | |
|---|---|
| <p>Phases 3-5 "Pandemic Alert Period"</p> | <ol style="list-style-type: none"> 15. Continue with interpandemic period activities. 16. Confirm that surveillance tools and protocols required for later phases are available and up-to-date 17. Comply with current standards and protocols for collecting, storing and transporting specimens. 18. Monitor H.U staff absenteeism rates. 19. Activate HKPR sentinel surveillance (schools and/or physicians) as pandemic "phase" progresses to level 4 or as determined by CDC director or designate. 20. Disseminate alerts (internal and external) about the progress of the pandemic to increase awareness and inform public health and clinical decision-making. 21. Increase surveillance activities as required. 22. Implement new and updated FRI surveillance tools as provided by the MOHLTC. 23. Review and revise information required for surveillance purposes for potential progression to Phase 6. |
| <p>Phase 6 "Pandemic Period"</p> | <ol style="list-style-type: none"> 24. Continue to monitor and report the spread and impact of pandemic virus strain as required by MOHLTC 25. Develop/Implement investigation protocols for clusters i.e. school settings 26. Evaluate current epidemiology of pandemic to direct priorities and define high-risk groups. 27. Adopt and implement revised case definitions as necessary. |
| <p>Post Pandemic Period "Return to Phase 1"</p> | <ol style="list-style-type: none"> 28. Evaluate pandemic surveillance 29. Submit report to MOH 30. Monitor occupational health effects of pandemic response on HKPR employees. |

Φ Next Steps

Surveillance guidelines, forms and tools are being developed by the MOHLTC, once released; HKPRDHU will use and/or modify these forms as required to collect the necessary information. The surveillance priorities over the next year will be to:

- explore the use of a **web portal** to allow institutions and flu centres to submit ILI reports electronically to the ministry
- develop protocols for special studies
- develop vaccine adverse events reporting form
- develop vaccine uptake reporting form
- develop antiviral uptake reporting form.