Texas Influenza Surveillance Handbook

Influenza Surveillance Team
Emerging and Acute Infectious Diseases Branch
Infectious Disease Control Unit
Texas Department of State Health Services
# Table of Contents

**Introduction** i  
**Contributors** ii  
**Record of Revisions** iii  

**Section I: Influenza 101**  
- What is Influenza? I.2  
- Types of Influenza I.3  
- Influenza Naming Convention I.5  
- Testing I.6  
  - Influenza Signs and Symptoms and the Role of Laboratory Diagnosis I.6  
  - Rapid Diagnostic Testing for Influenza: Information for Healthcare Professionals I.7  
  - Rapid Diagnostic Testing for Influenza: Information for Clinical Laboratory Directors I.8  
  - Descriptions of common influenza testing types I.11  
- Prevention I.13  
- Vaccinations I.14  
- Antivirals I.16  
- References I.18  

**Section II: Influenza Surveillance Overview**  
- Goals of Influenza Surveillance II.2  
  - Texas goals of influenza surveillance II.2  
- Components of Influenza Surveillance II.3  
  - Mortality surveillance II.4  
  - Morbidity surveillance II.5  
  - Viral surveillance II.9
- Ad hoc surveillance II.10
- A Brief History of Influenza Reporting in Texas II.11
- References II.12

Section III: Influenza Surveillance Reporting

- Background III.2
- Seasonal Influenza Surveillance III.3
  - DSHS reporting process MMWR week 40 – MMWR week 20 III.3
  - DSHS reporting process MMWR week 21 – MMWR week 39 III.3
  - Timeline for voluntary surveillance reporting III.4
  - Other reporting time frames and requirements III.5
  - Surveillance roles: local/regional/state III.6
- National Influenza Surveillance Report III.7
- Texas Influenza Surveillance Report III.8
- Regional / Local Influenza Surveillance Report III.9
- References III.10

Section IV: Influenza Surveillance Activities

- Key Texas Surveillance Activities IV.4

Subsection a) ILINet IV.5

- ILINet Overview IV.5
- How to Log into the ILINet Portal IV.9
- How to Enter a Weekly Report IV.10
- Using the New ILINet Website: Download and Summarize Data Using Excel Pivot Tables IV.12
  - What is a pivot table? IV.12
o Instructions IV.12
o Definitions for ILINet data fields IV.19
o Quick reference and helpful hints for pivot tables IV.19

- Data Quality Checks in ILINet IV.22
- ILINet Application Form IV.23

Subsection b) RVSP/IISP IV.24
- RVSP/IISP Overview IV.24
- Example RVSP Report Form IV.26

Subsection c) ILI Activity IV.27
- ILI Activity Overview IV.27
- Data Collection IV.28
- Example Influenza Surveillance Report Forms IV.30
- References IV.33

Subsection d) Laboratory Surveillance IV.34
- Laboratory Surveillance Overview IV.34
- Coordinating Laboratory Surveillance IV.35
- How to Obtain Laboratory Data IV.38

Subsection e) NREVSS IV.39
- NREVSS Overview IV.39
- How to Use NREVSS Data IV.41
- NREVSS Data Dictionary IV.45

Subsection f) Influenza-Associated Pediatric Mortality IV.47
- Influenza-Associated Pediatric Mortality Overview IV.47
  o Influenza-associated pediatric mortality surveillance IV.47
Subsection g) Novel/Variant Influenza

- Novel/Variant Influenza Overview

Subsection h) Influenza-Associated Pregnant/Postpartum Mortality

- Influenza-Associated Pregnant/Postpartum Mortality Overview

Subsection i) Other Surveillance Activities

- Other Surveillance Activities Overview
  - Outbreak Investigations
    - Enhanced influenza surveillance
    - Active influenza surveillance
  - Absenteeism surveillance
  - Syndromic surveillance
    - Hospital/emergency room visit based syndromic surveillance systems
    - Medication based syndromic surveillance
    - Internet search based surveillance
    - Self-report surveillance
  - Border Influenza Surveillance Network

Section V: Recruitment and Retention of Influenza Surveillance Reporters

- Recruitment and Retention of Influenza Surveillance Reporters Overview
- Reporters to Consider for Recruitment
  - Healthcare providers
  - Hospitals
• Laboratories V.4
• Schools V.5
• Steps for Recruiting V.6
• ILINet Recruitment V.10
  o ILINet recruitment process V.10
• Retention of Influenza Surveillance Reporters V.11
• Sample Tools V.12
  o Example healthcare provider/hospital letter V.12
  o Example of ILINet recruitment handout V.13
  o Example NREVSS recruitment handout V.14
  o Example influenza reports V.15

Section VI: Laboratory Support
• Viral Transport Medium VI.2
  o Receiving and storing DSHS VTM VI.3
• Ordering Supplies VI.4
• Testing Performed by Austin VI.6
  o Summary of DSHS influenza testing methods VI.8
• Specimen Collection VI.9
• How to Submit Specimens VI.11
  o Specimen storage VI.11
  o Specimen shipping VI.11
  o Specimen rejection VI.13
• LRN Overview VI.14
• Frequently Asked Questions VI.15
Section VII: Influenza Outbreaks

- Outbreaks Overview
- Why Conduct an Outbreak Investigation?
- Which Outbreaks Should Be Investigated?
- What is an Outbreak?
- Outline of an Outbreak Response
- Basic Information to Collect
- Case Definitions
- Line Lists
- Epi Curves
  - Instructions for creating a basic epi curve using Microsoft Excel 2010
  - Other outbreak graphs
- Case Confirmation
- Basic Control Measures for Influenza
  - General recommendations for the public
  - General recommendations for long-term care facilities
  - General recommendations for schools
  - Use of antivirals for prophylaxis
  - Environmental cleaning information
  - Notes on using these recommendations for non-influenza outbreaks
- Resources and Training
References VII.28

Section VIII: Glossary and Acronyms
- Glossary VIII.1
- Acronyms VIII.3

Appendix
- DSHS Contact Information A.2
  - DSHS Central Office Influenza Surveillance Team A.2
  - DSHS Laboratory A.2
  - DSHS Regional Influenza Surveillance Coordinators A.3
- LRN Contact Information A.4
- Where to Find Influenza Data A.5
- Recommended Influenza Resources A.6
- Nasopharyngeal Swab Collection for Influenza A.7
- Investigation and Report Forms A.8