

A Primer for Lone Ranger Epidemiologists

In Texas Counties

Monty G. Gomez, MPH and Pamela Stuart

Introduction

Welcome to the complex network of an Epidemiologist. There are several systems that you should be aware of for they can be beneficial throughout your journey. Your day to day duties will involve several existing agencies and include other network connections that you will build with time. In some cases you may be establishing a foundation for future growth of a department centered on Public Health Surveillance. As each jurisdiction defines its own interpretation of what an Epidemiologist does, do not be discouraged if you are unable to keep up with larger jurisdictions. When you encounter direct opposition or failure, look on your achievements day by day as a slow and steady race toward over quality improvement.

Listed in the remaining pages of this document you will find sources of information on specifics such as testing, reporting, training, and data tracking systems. You will also find direct phone numbers and websites to help you find the right answers quickly. I recommend that you establish an electronic contacts list if one is not readily available as this could be easy to filter, update, and share.

You are not expected to immediately know all of the answers to every question you are asked but in time you will be better at finding them. Work closely with your Regional office as they will assist you in finding help as they may be more versed in the particulars of your county. You are not alone in this endeavor. Together with the State and Regional Department of State Health Service offices we will make a broader and more accurate net of surveillance to protect the future of our residents.

Monty G. Gomez, MPH
Hays County Local Health Department

A Primer for Lone Ranger Epidemiologists in Texas Counties

- I. Introduction to DSHS structure
 - a. Health Service Regions
 - i. HSR and County Maps - <http://www.dshs.state.tx.us/regions/default.shtm>
 - ii. HSR and LHD Coverage Map
http://www.dshs.state.tx.us/uploadedImages/Content/Regional_and_Local_Health/rls/rlhs-map-big.jpg
 - iii. County/FIPS/HSR Map List - http://www.dshs.state.tx.us/chs/info/info_txco.shtm
 - b. Central Office
 - i. DSHS Interactive Organization Chart - <http://www.dshs.state.tx.us/orgchart/default.shtm>
 - ii. Disease Control and Prevention Division Organization Chart
<http://www.dshs.state.tx.us/orgchart/pps.shtm>
 - iii. Infectious Disease Control Unit webpage - <http://www.dshs.state.tx.us/idcu/>
 - iv. Contaminated Sharps Injury -
http://www.dshs.state.tx.us/idcu/health/infection_control/bloodborne_pathogens/links/
 - v. EAID Call List- <http://www.dshs.state.tx.us/idcu/about/DiseaseCallList.pdf>
 - vi. Health Care-Associated Infections (HAI) - http://www.dshs.state.tx.us/idcu/health/infection_control/hai/
 1. Multidrug-Resistant Organisms (MDRO)
http://www.dshs.state.tx.us/idcu/health/antibiotic_resistance/
 2. Preventable Adverse Events (PAE) (*NEW)
<http://www.dshs.state.tx.us/IDCU/health/preventable-adverse-events/pae.aspx>
 - vii. Immunization Branch - <http://www.dshs.state.tx.us/immunize/default.shtm>
 1. HSR Immunization Managers - <http://www.dshs.state.tx.us/immunize/contact.shtm>
 2. * **Appendix C:** State Office Call List by Program (graphics)
 - viii. Laboratory - <http://www.dshs.state.tx.us/lab/default.shtm>
 1. Contacts - http://www.dshs.state.tx.us/lab/mrs_contacts.shtm
 2. * **Appendix A:** Microbiology Contact List – (graphics)
 3. Lab Operations Unit - <http://www.dshs.state.tx.us/lab/lou.shtm>
 - ix. Local Mental Health Authorities - <http://www.dshs.state.tx.us/mhcommunity/LPND/LMHAs/>
 - x. Emergency Preparedness and Response - <http://www.dshs.state.tx.us/commprep/about.aspx>
 1. Public Health Emergency Preparedness Branch -
<http://www.dshs.state.tx.us/commprep/phep/program/>
 2. Health Care Systems Branch - [http://www.dshs.state.tx.us/commprep/hcsp/Hospital-Preparedness-Program-\(HPP\).pdf.aspx](http://www.dshs.state.tx.us/commprep/hcsp/Hospital-Preparedness-Program-(HPP).pdf.aspx)
 3. Response and Recovery Unit -
<http://www.dshs.state.tx.us/commprep/response/ToolsInfo.aspx>
 - xi. Zoonosis - <http://www.dshs.state.tx.us/idcu/health/zoonosis/disease/>
 1. HSR Contacts - <http://www.dshs.state.tx.us/idcu/health/zoonosis/contact/>
 2. * **Appendix B:** HSR and State Office Contacts (graphics)
 3. Vector Control - <http://www.dshs.state.tx.us/idcu/disease/arboviral/westNile/>
 - II. People to find and get to know in your local health department
 - a. Public Information Officer – Your Local Representative – May contact you to write articles
 - b. Safety Officer – Your Local Representative – May contact you to provide Blood-Borne Pathogens Training, First-Aid Training, CPR Training, etc.
 - i. Blood-Borne Pathogens Training Resources
<https://www.osha.gov/SLTC/bloodbornepathogens/otherresources.html>
 - ii. First-Aid/CPR Training - <http://www.redcross.org/take-a-class>
 - c. Specialty diseases (e.g. TB, STDS) – Your Local Representative – It may be You
 - i. HIV/STD

1. Reporting - <http://www.dshs.state.tx.us/hivstd/healthcare/reporting.shtm>
 2. Topics and Information - <http://www.dshs.state.tx.us/hivstd/topics.shtm>
 3. News and Events - <http://www.dshs.state.tx.us/hivstd/default.shtm>
 4. Contact List - <http://www.dshs.state.tx.us/hivstd/info/contact.shtm>
- ii. Tuberculosis
 1. News and Announcements - <http://www.dshs.state.tx.us/idcu/disease/tb/>
 2. Reporting Laws- <http://www.dshs.state.tx.us/idcu/disease/tb/reporting/>
 3. Case Definition - <http://wwwn.cdc.gov/NNDSS/script/casedef.aspx?CondYrID=876&DatePub=1/1/2009%2012:00:00%20AM>
 - iii. Refugee Health - http://www.dshs.state.tx.us/idcu/health/refugee_health/
 - iv. Hansen's Disease - <http://www.dshs.state.tx.us/idcu/disease/hansens/>
- d. Emergency Preparedness
 - i. Prepare for an Emergency - <http://www.dshs.state.tx.us/prepare-for-an-emergency.aspx>
 - ii. Plans, Guides, and Checklist - http://www.dshs.state.tx.us/preparedness/e-prep_public.shtm
 - iii. Local Red Cross Look Up - <http://www.redcross.org/find-your-local-chapter>
 - e. Animal Control Officers - Google search – Helpful for investigating zoonoses
 - i. Contact your county office; not all county offices have Animal Control Services
 - f. Animal Welfare
 - i. Texas Animal Health Commission - www.tahc.state.tx.us/
 - ii. Animal Welfare Organizations - <http://www.petfinder.com/awo/index.cgi>
 - g. Immunizations
 - i. CDC Pink Book (13th Edition - 2015) - <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>
 - ii. CDC webpage - <http://www.cdc.gov/vaccines/>
 - iii. DSHS webpage - <http://www.dshs.state.tx.us/immunize/>
- III. Environmental Health / Sanitarians
 - i. DSHS Licensing Public Search (by name or organization)- <https://vo.ras.dshs.state.tx.us/>
 - ii. Environmental Epidemiology - <http://www.dshs.state.tx.us/epitox/default.shtm>
- IV. People to find and get to know in your community
 - a. Law enforcement
 - i. Bloodborne Pathogen Exposure - Post Exposure Prophylaxis for Blood & Body Fluids
http://www.dshs.state.tx.us/idcu/health/infection_control/bloodborne_pathogens/links/
 - b. News Reporters – They Will Find You
 - c. Health care providers - Google search
 - i. Private physicians - Google search
 - ii. Laboratory personnel - Google search
 - iii. Private Lab staff /technicians– Google search
 - iv. Infection preventionists – Google search
 1. NHSN - <http://www.cdc.gov/nhsn/>
 2. APIC – <http://www.apic.org/>
 3. TSICP - <http://tsicp.org/>
 - v. School Nurses – They Will Find You
 1. School nurses (TEA link for identifying schools) - (AskTED)
<http://mansfield.tea.state.tx.us/tea.askted.web/Forms/Home.aspx>
 2. DSHS School Health Program - <http://www.dshs.state.tx.us/schoolhealth/>
 3. DSHS Communicable Disease Chart for Schools and Child-Care Centers -
<http://www.dshs.state.tx.us/Layouts/ContentPage.aspx?PageID=29853&id=8589950217&terms=communicable+disease+chart>

- d. Emergency management
 - i. Local Contacts
 - 1. TX Department of Public Safety - <http://dps.texas.gov/contact.htm>
 - ii. Emergency Notification Systems
 - 1. Amatra - <http://www.amatra.com/>
 - iii. DSHS Regional Advisory Councils (RAC)
 - 1. EMS Trauma System - <http://www.dshs.state.tx.us/emstraumasystems/Etrac.shtm>
 - iv. FEMA - <http://www.fema.gov/>
 - v. BioWatch – ***Appendix D:** Fact sheet (graphic)
 - vi. Emergency Response Guidebook - <http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/ERG2012.pdf>
 - e. Government Policy Makers
 - i. Texas Association of Regional Council - http://www.txregionalcouncil.org/display.php?page=regions_map.php
 - ii. WebEOC – <https://webeoc.dps.texas.gov/> (* secure website)
- V. Disease and Injury Reporting
- a. Code of Federal Regulations
 - i. Public Welfare: Title 45 Subchapter C Part 164 Sub part E - <http://www.gpo.gov/fdsys/pkg/CFR-2002-title45-vol1/xml/CFR-2002-title45-vol1-sec164-512.xml>
 - b. Laws (Chapter 81 and Chapter 98 of Health and Safety Code)
 - i. Chapter 81 – Communicable Disease <http://www.statutes.legis.state.tx.us/Docs/HS/pdf/HS.81.pdf>
 - ii. Chapter 98 – Reporting of Health Care-Associated Infections and Preventable Adverse Events <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.98.htm>
 - c. Texas Administrative Code
 - i. Chapter 97 – Communicable Diseases [http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=97](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=97)
 - ii. Chapter 200 – Reporting of Health Care-Associated Infections and Preventable Adverse Events [http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=200](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=200)
 - d. Texas Notifiable Conditions list
 - i. <http://www.dshs.state.tx.us/idcu/investigation/conditions/>
 - ii. <http://www.dshs.state.tx.us/IDCU/investigation/Texas-Notifiable-Conditions.doc>
 - e. CDC Case Definitions - <http://wwwn.cdc.gov/nndss/conditions/notifiable/2015/infectious-diseases/>
 - f. Outbreak Reporting
 - i. Health Emergency Preparedness and Response Section – <http://www.dshs.state.tx.us/commprep/welcome.aspx>
 - ii. Foodborne and Waterborne – See VI and iii Outbreak Reporting, Foodborne
 - iii. Respiratory Outbreaks - See VI ii Outbreak Reporting, IRID
 - iv. Creating Outbreaks in NEDSS - [Policy on Naming Outbreaks in NBS.doc](#)
 - g. Data systems, Software, and Organizations
 - i. Public Health Information Network - https://www.txphin.org/sign_in
 - ii. Voltage SecureMail (FREE) - <http://www.voltage.com/products/securemail/>
 - iii. 7 – Zip Encryption Software (FREE) - <http://www.7-zip.org/>
 - iv. LabWare - <https://results-web.dshs.state.tx.us:8443/index.jsp>
 - v. CIDRAP - <http://www.cidrap.umn.edu/>
 - vi. EpiX - <http://www.cdc.gov/epix>
 - vii. Epi Info v7 - <http://wwwn.cdc.gov/epiinfo/>
 - viii. ProMed - <http://www.promedmail.org/>
 - ix. APIC - <https://apic.org/Member-Services/Join>
 - x. TEHA - <http://www.myteha.org/Home>

- xi. County Health and Rankings - <http://www.countyhealthrankings.org/app#/home>
- xii. Obituaries - <http://www.legacy.com/NS/>
- xiii. Whitepages - <http://www.whitepages.com/>
- xiv. ImmTrac - <http://www.dshs.state.tx.us/immunize/immtrac/default.shtm>
- xv. NBS (NEDSS Base System)
 - 1. Login Page – <https://txnedss.dshs.state.tx.us:8009/login/login.asp>
(NOTE: You will not be able to access until you have attended the Introduction to NBS and completed the certification. Your IT staff will work with the NEDSS Office and the DSHS NOC to configure workstations at that time. Once you receive your login and password, you will be able to access online.)
 - 2. Intro training - Contact Pamela Stuart at Pamela.stuart@dshs.state.tx.us or (512) 776-6528
 - 3. Reports Training - Contact Pamela Stuart at Pamela.stuart@dshs.state.tx.us or (512) 776-6528
 - 4. Help and Information - Contact NEDSS at nedss@dshs.state.tx.us
 - 5. About NEDSS - <http://www.dshs.state.tx.us/nedss/about.shtm>
 - 6. * **Appendix E:** Program Areas in NBS (graphics)
 - 7. * **Appendix F:** Frequently Asked Questions (graphics)
<https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/FAQ.mht>
 - 8. NBS User Resources - <https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/>
(NOTE: You will not be able to access until you have attended the Introduction to NBS and completed the certification. Your IT staff will work with the NEDSS Office and the DSHS NOC to configure workstations at that time. Once you receive your login and password, you will be able to access online.)
 - 9. * **Appendix G:** Incubation Periods (graphics)
<https://txnedss.dshs.state.tx.us:8009/nbs/incubation.pdf>
(NOTE: You will not be able to access until you have attended the Introduction to NBS and completed the certification. Your IT staff will work with the NEDSS Office and the DSHS NOC to configure workstations at that time. Once you receive your login and password, you will be able to access online.)
 - 10. NEDSS Resources
 - a. Epi Case Criteria Guide (Rev 2015) -
<https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/Epi%20Case%20Criteria%20Guide%202015.pdf>
 - b. Data Entry Guidelines (Rev April 2015) -
<https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/NBS%20Data%20Entry%20Guide%202015.pdf>
- VI. Outbreak investigations resources (written guidance, how to report) (Ask each SME)
 - i. Vaccine Preventable Diseases - <http://www.dshs.state.tx.us/idcu/investigation/>
 - ii. Invasive and Respiratory Infectious Diseases - <http://www.dshs.state.tx.us/idcu/investigation/>
 - iii. Foodborne Illness- http://www.dshs.state.tx.us/idcu/health/foodborne_illness/
 - 1. Investigation forms - <http://www.dshs.state.tx.us/idcu/investigation/>
 - 2. CDC NORS - http://www.cdc.gov/nors/pdf/NORS_CDC_5213.pdf
 - iv. HAI - http://www.dshs.state.tx.us/idcu/health/infection_control/hai/
- VII. * **Appendix H:** Acronyms/Glossary (graphics)
- VIII. * **Appendix I:** Medical Terminology Abbreviations (graphics)
- IX. * **Appendix J:** List of References (graphics)

Appendix A:

Dr. Liz Delamater, Branch Manager - 7592 (cell-634-6734)			
ACD Line 458-3956		Supervisor On-call (Micro)- 699-7152	
Administrative Support			
Tammy Campos/Admin Asst. III	7599	Carol Meredith/Admin Asst II	7581
		Candace Rogers/ Admin I	7591
Mycobacteriology/Mycology Group		Serological Analysis Group	
Denise Dunbar (Group Manager)	7342	Pushker Raj (Group Manager)	7760
Ken Jost - Tuberculosis Applications Scientist	7580	HIV/STD Team	
TB Diagnostic Team		Dawn Dutelle - Team Lead	7657
Claudia Sandoval - Team Lead	7586	Amanda Harmon	2449/2403
Jamie Stuart Open - Micro I	2046	Martin Morales	2449/2403
Rinku Damani	2046	Marvin Coombs	2449/2403
Baron Andrus	2046	Anthony Torres	2449/2403
Lekha Kumar	2046	Diagnostic Serology Team	
Open Micro III	2046		
Justin Arnold Sam Angulo	2046	Karen Teague - Team Lead	7514
Jill Alexander (HPLC Lab)	2844	Sharlan Simmons	2450
Robert Montoya (HPLC Lab)	2844	Jing Li	2450
TB Reference Team		Shashikant Patel	2450
Jan Owen - Team Lead	2687	Randy Busse	2450
Michael Payne Patrick Callaghan	2699	Eva Weston	2450
Ben Alpers	2699	Bacteriology/Parasitology Diagnostic Group	
Open - Micro II	2699	Chun Wang (Group Manager)	2552
Kevin Thi	2699	Molecular Biology Team	
Consumer Microbiology Group		Christine Bulot - Team Lead	6510
Monica Kingsley (Group Manager)	7562	Jenny Zhang Michael Saenz	2409/7784
Consumer Microbiology Team		Cara Akrouf	2409/7784
Chris Malota-Team Lead	7611	Xiaoqiang Wu Kathryn Kneupper	2409/7784
Lucy Salgado	6464	Deanne Gehlbach	2409/7784
Andrea Saldana Crystal Ly	6464	Anita Pokharel David Davila	2409/7784
Tom Ridpath	2498	Clinical Bacteriology Team	
Vickie McAlpin	6464	Tamara Baldwin - Team Lead	6189
Stephen Bouldin	6464	Hala Ayad Laura Higgins	7582
Isvara Sattviani	6464	Priti Patel Donna Barker	7582
Natalie Perryman-Hale	6464	Alex Diaz	7582
Michael Orf	6464	Huy Nguyen	7582
Media Prep Team		Crystal Mena	7582
Megan Snyder - Team Lead	7572		7582
William Collins Tammy Edwards	7571	Medical Parasitology Team	
Charles Harris Hong Trinh	7573	Cathy Snider-Team Lead	7560
Julie Le Miriam Udoye Beata Evans	7573	Darshana Patel	2435
Derek Mimbela	2210	Carol Brandt Sue Cloud	2417
Robert Tebeau 7573 Open Micro III	2327	Jeffrey Taylor	2435
Virology Group		Emergency Preparedness Branch	
Martha Thompson (Group Manager)	7515	Rahsaan Drumgoole (Branch Manager)	6171
Viral Isolation Team		Response Coordination Team	
Crystal Van Cleave-Team Lead	7594	3475	
Open Micro I Peter So	2452	Syra Madad - 3535 Cindy Crouch - 3462 Vanessa Telles - 3475	
Jennifer Gonzales	2452	Jill Wallace - 3475 Craig Okikawa - 3530	
Anita Irving	2452	BioThreat Team	
Rabies Identification Team		Erin Swaney-Team Lead BIOTHREAT 247 512/689-5537C	7185
Letha Zuckero - Team Lead	7491	W. Songy 3795 G. Gillispie 3781 M. Mergen 3793	
Callie Lyda	7735	Chemical Threat Team	
Russell McDowell	2453	Derrie Borthwick	7270
Latrisha Lane	2447/2453	Andrew Vinyard Jocelyn Hover-Jeansonne CT Lab	7270
Shirley Hammond Noirin Cullinan-Amma	2447/2453	BioWatch Team	
Danielle Smith	2453	Patricia Powers - Team Lead	2485
Arbovirus-Entomology Team		Ashley Hawes Cassandra Stumbo-Ingles Jai Henry	6761
Jeannie Xiang - Team Lead	7615	MICRO FAX NUMBERS	
Joseph Hancock Michael Bitzer	2454	Microbiological Sciences Branch Fax	
Bethany Bolling	2442	Mycobacteriology/Mycology Group Fax	
Mary D'Anton	2454	Medical Virology Group Fax	
Joanne Day	2454	Lab CHECK IN 7598 (fax 458-7510) Serology CHECK IN 2385	
Hima Rhambhatla	2454	Rabies Necropsy 2447 TFC/BLDG. Emergency 463-3600	
Other Important Numbers			
Lab Supply - 2475 Lab Security Desk-2420		Riley Ryan -7259(cell-512/689-4372)	Ivan Dudick- 6642
Lab Reporting - 7578 Labware Help- 7257		Alicia Schneider - 2415 Jeff - Maintenance-7567	Joe Pumo 6689
IT Help- 7341 4th FLOOR BREAKROOM 3230		Safety/Isaac-2367 (cell 731-1021) IT Li He 3525	Travis Dam 2441
Container Prep- 2936 (fax 458-7672) Media Contact- 7524		Susan Tanksley - 3106 Amy Schlabach - 6191	Kathleen Street 2457
Michelle Castillo - Staff Services Office II	6644	Dwaine Thompson- Executive Assistant - 7th Floor	7415
Marie Price -Environmental - Clerk II - 6th Fl	7587	Cece Arvallo - Admin III - Biochemistry - 2nd Floor	7430
Please email Tammy Campos for any changes.		Open - Admin II - New Born Screening - 3rd Floor	7333

Appendix B:

Department of State Health Services - Zoonosis Control

HEALTH SERVICE REGION 1

6302 Iola Ave.
Lubbock TX 79424
(806) 783-6422 FAX: (806) 783-6424
Karen McDonald, MS – Zoonosis Control Specialist
[Email Address: Karen.Mcdonald@dshs.state.tx.us](mailto:Karen.Mcdonald@dshs.state.tx.us)

HEALTH SERVICE REGION 2

4601 S. First St, Suite L
Abilene, Texas 79605
(325) 795-5857 FAX: (325) 795-5891
Nick Ferguson - Zoonosis Control Specialist
[Email Address: Nicholas.Ferguson@dshs.state.tx.us](mailto:Nicholas.Ferguson@dshs.state.tx.us)

HEALTH SERVICE REGION 4 & 5N

1517 West Front Street
Tyler, Texas 75702
(903) 533-5260 FAX: (903) 533-5383
Christopher Menges, DVM, MVPH – Veterinarian, -5243
Angela Hopkins – Zoonosis Control Specialist, -5212
Samantha Hathcock – Public Health & Prevention Specialist
[Email Address: Chris.Menges@dshs.state.tx.us](mailto:Chris.Menges@dshs.state.tx.us)

HEALTH SERVICE REGION 7

2408 South 37th Street
Temple, Texas 76504-7168
(254) 771-6784 FAX: (254) 773-9358
Melinda Hergert, DVM, MVPH, PhD – Veterinarian, -6789
Melissa Maass – Zoonosis Control Specialist, -6749
Luz Pimentel – Zoonosis Control Specialist, -6762
Jamie Ferguson – Public Health & Prevention Specialist
[Email Address: Melinda.Hergert@dshs.state.tx.us](mailto:Melinda.Hergert@dshs.state.tx.us)

HEALTH SERVICE REGION 9/10

401 E. Franklin St., Suite 210
El Paso, Texas 79901-1206
(915) 834-7780
Kenneth Waldrup, DVM, MS, PhD – Veterinarian, -7782
Jacqueline Mariscal, MPH – Zoonosis Control Specialist
[Email Address: Ken.Waldrup@dshs.state.tx.us](mailto:Ken.Waldrup@dshs.state.tx.us)

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CANYON SUB-OFFICE

WTAMU Box 60968
300 Victory Drive
Canyon, TX 79016
(806) 477-1104 FAX: (806) 655-7159
James Alexander, DVM, MPVM – Veterinarian, -1118
Tonya Finch – Public Health & Prevention Specialist
[Email Address: James.Alexander@dshs.state.tx.us](mailto:James.Alexander@dshs.state.tx.us)

HEALTH SERVICE REGION 3

1301 South Bowen Road, Suite 200
Arlington, Texas 76013
(817) 264-4920 FAX: (817) 264-4925
Shelley Stonecipher, DVM, MPH – Veterinarian, -4529
Naomi Ayala – Zoonosis Control Specialist, -4922
Ron Cornelison – Zoonosis Control Specialist, -4923
Laticia Hernandez – Public Health & Prevention Specialist
[Email Address: Shelley.Stonecipher@dshs.state.tx.us](mailto:Shelley.Stonecipher@dshs.state.tx.us)

HEALTH SERVICE REGION 6 & 5S

5425 Polk Avenue, Suite J
Houston, Texas 77023-1497
(713) 767-3300 FAX: (713) 767-3193
Robert Garrison, MS, DVM – Veterinarian – 3302
Gary Johnson – Zoonosis Control Specialist – 3301
Jael Miller – Zoonosis Control Specialist – 3303
Brittany Singletary - Public Health & Prevention Specialist
[Email Address: Robert.Garrison@dshs.state.tx.us](mailto:Robert.Garrison@dshs.state.tx.us)

HEALTH SERVICE REGION 8

112 Joe Carper Drive, Room 134
Uvalde, Texas 78801
(830) 591-4385 FAX: (830) 278-1831
Edward Wozniak, DVM, MPH, PhD – Veterinarian, -4382
Justin Henefey – Zoonosis Control Specialist, -4383
Sarah Granados – Public Health & Prevention Specialist
[Email Address: Edward.Wozniak@dshs.state.tx.us](mailto:Edward.Wozniak@dshs.state.tx.us)

MIDLAND SUB-OFFICE

2301 North Big Spring Street, Suite 300
Midland, Texas 79705-7649
(432) 571-4118 FAX: (432) 684-3932
Kathy Parker, MPH – Zoonosis Control Specialist
[Email Address: Kathy.Parker@dshs.state.tx.us](mailto:Kathy.Parker@dshs.state.tx.us)

SAN ANGELO SUB-OFFICE

The Ralph Chase Services Building
622 South Oakes, Suite H
San Angelo, Texas 76903
(325) 659-7855 FAX: (325) 655-6798
Richard Klein – Program Specialist
[Email Address: Richard.Klein@dshs.state.tx.us](mailto:Richard.Klein@dshs.state.tx.us)

HEALTH SERVICE REGION 11

601 West Sesame Drive
Harlingen, Texas 78550
(956) 444-3212 FAX: (956) 444-3216
Ronald Tyler, Jr., DVM, MS – Veterinarian, - 3222
Stephanie Johnston, MS - Zoonosis Control Specialist,
- 3221
Leticia Tamayo – Public Health & Prevention
Specialist
[Email Address: Ronald.Tyler@dshs.state.tx.us](mailto:Ronald.Tyler@dshs.state.tx.us)

ZOONOSIS CONTROL BRANCH – CENTRAL OFFICE

Mail Code 1956
P.O. Box 149347
Austin, Texas 78714-9347
(512) 776-7111 or 1-888-963-7111 FAX: (512) 776-7454
Tom Sidwa, DVM, MPH – Manager, (512) 776-6628
[Email Address: Tom.Sidwa@dshs.state.tx.us](mailto:Tom.Sidwa@dshs.state.tx.us)
Emily Cazasos – Program Specialist, (512) 776-2553
Nicole Evert, MS – Epidemiologist, (512) 776-2890
David Florin, MS, PhD – Entomologist, (512) 776-6545
Eric Fonken, DVM, MPAff – Veterinarian, (512) 776-2155
Dan Gawryck – Staff Services Officer, (512) 776-6001
Patrick Hunt – Program Specialist, (512) 776-6270
Bonny Mayes, MA – Epidemiologist, (512) 776-2888
VACANT – Program Specialist, (512) 776-2886
Laura Robinson, DVM, MS – ORVP Director, (512) 776-3306

Attachment C:
Immunization Division

IDP Section Office (T-308/T-310)		IB- HP Contractors (T-111)	
Fax	(512)776-7176	Theresa Veach	6377
Imelda Garcia, Director (iPhone: 461-4479)	7679	Derek Burns & Evan Greene (Work Offsite)	
VACANT (EA)	6380	G-301-A Conference Room	6637
David Chou	3055	IT Help Desk	7341
David Scott	6433	Bad Weather Info	888-839-7464
Jack Sims	6658	DSHS Main Line	(512)776-7111
Jodie Vanyo	2194	Security Desk	7114
Maria Herrera, SSO (iPhone: 705-0288)	2950		
Dr. Lisa Cornelius (iPhone: 484-5397)	6309	IB- (PIET) Public Information, Education & Training Group (T-302)	
		Fax	(512)776-7288
Infectious Disease Control Unit (IDCU) (T310)		VACANT Manager (iPhone: 774-7791)	6021
Fax	(512)776-7176	Alma Thompson	6090
Monica Gamez, Director (iPhone: 826-1985)	6678	Clara Taylor	6530
Christine Contreras, SSO (iPhone: 705-8980)	3811	Meme Estes	3711
Carolynn Kimberly	3394	Veronica Ruiz	6522
Jackie Shaw, (iPhone: 457-9419)	6880	VACANT	6533
Cheryl Rainosek	3321	VACANT	6321
Larry Beard	3470	VACANT	6266
VACANT	7602	VACANT	2924
		VACANT	6479
Immunization Branch (IB) (T-308/T310)		VACANT	6420
1-800-Number	800-252-9152		
Fax	(512)776-7343	IB – (VSG) Vaccine Mgmt. Group & Vaccine OPS Group (G-301-A & G-305)	
VACANT, Branch Manager (iPhone: 705-0277)	6215	Vaccine OPS Group	
Cynthia Marquez, SSO	3747	Barbara Vassell, Manager (iPhone: 423-2047)	6244
Estella Garcia	2042	Alma Chavez	(956) 421-5554
Heather Duncan (iPhone: 415-2453)	6504	Dana Bross	3537
James Ray	6423	Kathleen Ford	3066
Mark Ritter (Federal Advisor)	6432	Kendalyn Stephens	2683
Phil Burger	6204	Randall Crutsinger	6333
Rey Velazquez (iPhone: 484-2720)	6203	VACANT	6496
VACANT (Federal Advisor)	6480	VACANT	3785
VACANT	2194	VACANT	3769
		VACANT	3417
IB – Assessment Compliance & Evaluation Group (ACE) (T-305)		VACANT	6078
Fax	(512)776-7544	VACANT	2222
VACANT, Manager (iPhone: 774-7535)	6469		

Deborah Meischen	6319	<u>Vaccine Mgmt. Group (G-305 & G-301A)</u>	
Erin Gardner.	2985	Vaccine Call Center	888-777-5320
Kenda Deputy	3802	Vaccine Services Group Fax (G-305)	(512)776-7131
Kenzi Guerrero	3949	Vaccine Services Group Fax (G-301-A)	(512)776-7743
Khalilah Loggins	6813	Meredith Sugarman, Manager (iPhone: 517-9847)	6069
Lucille Palenapa	6435	Anne Cortinas	3107
Margaret Horton	6427	Cecilia Haris	6060
Ruthie Benson	6634	Emily Salinas	3540
VACANT	6470	Jamie Hale	7546
VACANT	6401	Rumana Parveen	3948
		Samira Syed	6952
<u>IB - ImmTrac Group (T-301 & T-303)</u>		Stephen Watty	6429
1-800-Number	800-348-9158	VACANT	6426
Fax	(512)776-7790	VACANT	6218
Tamara Lewis, Manager (iPhone: 426-1849)	6454		
Adriana Flores	6594	<u>IDPS - TB/HIV/STD/Unit (ASH 634)</u>	
Ana Thomas	6773	Fax	(512)206-5801
Angela Herrera.	3286	Felipe Rocha, Unit Manager (iPhone: 426-3415)	(512)206-5715
Arthur Lara	3056	Kathie Walden	(512)206-5283
Bradley Walker	6772	Madelin Walls, SSO	(512)206-5897
Christine Robinson	6949		
Dee Pittsford	6402	<u>Division - Disease Control & Prevention (G-401)</u>	(512)776-7729
Jennifer Cavazos	3865	Fax	(512)776-7229
Jerry Peterson	3011	Janna Zumbrun (Assistant Comm)	2406/7679
John Boggs	2709	Daniel Ramirez, SSO	2863
Kevin Allen	6603	Evelyn Hahn	6116
Lauren Campbell	7610	Linda Darlington	2116
Santiago Espinosa	3674	Patty Melchior	2115
Wendy Washington	3015	Paul Normandin	2466
VACANT	3868	Sylvia Lagunas, EA	2174
VACANT	6830		
VACANT	6451		

Attachment D:

HIV/STD Statewide Call List

Program	Manager/Supervisor	Phone	E-mail
DSHS HSR 1 6302 Iola Ave Lubbock, Texas 79424	Elena Rodriguez Katherine Wells	(806) 783-6443 (806)783-6418	Elena.Rodriguez@dshs.state.tx.us Katherine.Wells@dshs.state.tx.us
City of Amarillo DPH 1000 Martin Rd. PO Box 1971 Amarillo, TX 79107	Casie Stoughton Addie Pride	(806) 378-6321 (806) 378-6330	casie.stoughton@amarillo.gov addie.pride@amarillo.gov
Lubbock City HD 806 18th Street Lubbock, TX 79401	Beckie Brawley	(806) 775-2952	BBrawley@mylubbock.us
DSHS HSR 2/3 1301 South Bowen #200 Arlington, TX 76013	Dierdre Joseph	817-264-4771	dierdre.joseph@dshs.state.tx.us
Dallas County HHS 2377 Stemmons Fwy Dallas, TX 75207	La Shonda Worthey Marisa Gonzales Ray Fugate Vacant Monica Tunstle Garrett Felicia Barnett	214-819-2133 214-819-2135 214-819-2169 214-819-1967 214-819-2132 214-819-2131	lworthey@dallascounty.org MEGonzales@dallascounty.org RFugate@dallascounty.org MTGarrett@dallascounty.org FBarnett@dallascounty.org
Tarrant County PHD 1101 South Main Ste 1500 Fort Worth, TX 76104	Mark P. Wilson Brian Barron Elaine Allen Abram Oliver	817-321-4819 817-321-4863 817-321-4862 817-321-4822	mpwilson@tarrantcounty.com babarron@tarrantcounty.com ehallen@tarrantcounty.com ajoliver@tarrantcounty.com
DSHS HSR 4/5N 1517 W. Front Street Tyler, Texas 75702	Charles O'Brien Julie Ryan	903-533-5329 903-533-5307 903-533-5385	charles.obrien@dshs.state.tx.us Julie.Ryan@dshs.state.tx.us
DSHS HSR 6/5S Mail Code 1906 5425 Polk Street, Suite J Houston, Texas 77023	Allison Hesterman Carla Hardnett Bettye Martin	713-767-3421 713-767-3460 713-767-3442	allison.hesterman@dshs.state.tx.us carla.hardnett@dshs.state.tx.us Bettye.Martin@dshs.state.tx.us
Beaumont Office Houston HHS 8000 North Stadium Drive 4th Floor Houston, TX 77054	Shirley Jackson Lupita Thornton Tracy Ford Larry Prescott Michael Henley Deisa Pierre Virginia Doty Emmanuel Katchy Cynthia Johnson Angelita Vasser	409-832-4000 832-393-4299 832-393-4716 832.393.4744 832-393-4583 832-393-4742 832-393-4713 832.393.5237 832-393-4726 832-393-4663	shirley.jackson@dshs.state.tx.us lupita.thornton@houstontx.gov tracy.ford@houstontx.gov larry.prescott@houstontx.gov michael.henley@houstontx.gov deisa.pierre@houstontx.gov virginia.doty@houstontx.gov emmanuel.katchy@houstontx.gov cynthia.johnson@houstontx.gov angelita.vasser@houstontx.com
Galveston County HD 9850 Emmitt F. Lowery Exwy Ste B107 Texas City, Texas 77591	Jim Hilton	409-765-2528	jhilton@gchd.org
DSHS HSR 7 2408 South 37th Street Temple, Texas 76504-7168	Shelly Repp Bree Danner Temporarily Vacant	254-771-6768 254-771-6782 254-771-6781	shelly.repp@dshs.state.tx.us Breanne.danner@dshs.state.tx.us
Austin Travis County DHHS 15 Waller St Austin, Texas 78702	Saeed Azadi Lynda Blakeslee Monique Huffman	512-972-5457 512-972-5567 512-972-5464	saeed.azadi@austintexas.gov Lynda.Blakeslee@austintexas.gov monique.huffman@austintexas.gov
Waco-McLennan County PHD 225 West Waco Drive Waco, Texas 76707	Laurel Churchman Jackie Thompson-Neal	254-750-5499 254-750-5498	laurelc@ci.waco.tx.us jacquelin@ci.waco.tx.us
DSHS HSR 8 7430 Louis Pasteur Dr. San Antonio, Texas 78229	Rita Espinoza	210-949-2196 210-232-0568 cell	rita.espinoza@dshs.state.tx.us
DSHS HSR 8 - Satellite Office 106 E. French St. Cuero, TX 77954	Stacey Hull	361-275-1834 361-212-5277 cell	stacey.hull@dshs.state.tx.us
San Antonio Metro HD 322 W. Commerce San Antonio, Texas 78205	Charlene Ransome Sian Hill Sandy Quintanilla Gloria DeLaGarza Juan Reyna Vacant Christian Watamaleo Erica Jathan Celia Tejeda Richard Condra	210-207-5374 210-207-4237 210-207-8067 210-207-5858 210-207-8830 210-207-8742 210-207-2012 210-207-8845	charlene.ransome@sanantonio.gov sian.hill@sanantonio.gov sandy.quintanilla@sanantonio.gov gloria.delagarza@sanantonio.gov juan.reyna@sanantonio.gov christian.watamaleo@sanantonio.gov ericka.jathan@sanantonio.gov celia.tejeda@sanantonio.gov richard.condra@sanantonio.gov
DSHS HSR 9/10 2301 North Big Spring-Suite 300 Midland, Texas 79705	Oscar Hernandez	432-571-4150	Oscar.Hernandez@dshs.state.tx.us
The City of El Paso DPH 5115 El Paso Dr., Suite B El Paso, Texas 79905	Christina Limon	915-771-1215	LimonCX@elpasotexas.gov
DSHS HSR 11 601 W. Sesame Drive Harlingen, Texas 78550	Richard Anguiano Michael Sanchez	956-444-3260 956-444-3211	Richard.Anguiano@dshs.state.tx.us Michael.Sanchez@dshs.state.tx.us
Corpus Christi/Nueces County PHD 1702 Horne Road Corpus Christi, Texas 78416	Andrea Hanner	361-826-7293	AndreaH@cctexas.com



Office of Health Affairs

BioWatch



Overview

The United States continues to face the risk of a major biological attack that could result in significant loss of human life, severe economic disruption, and substantial damage to our critical infrastructures and key resources. Early detection could mitigate that potential impact. The first indication that the nation has been attacked may come through early detection and warning systems, such as the BioWatch program – the nation’s integrated biodefense network. BioWatch is the only federally-managed, locally-operated, nationwide bio-surveillance system designed to detect the release of select aerosolized biological agents.

Early Detection

One of the BioWatch program’s high priority initiatives is to detect biological agents or pathogens rapidly, in order to save lives and mitigate damage. If a high threat agent of interest is detected on a BioWatch filter, the local laboratory director has a national network of support to turn to, beginning with the Centers for Disease Control and Prevention’s (CDC’s) Bioterrorism Rapid Response and Advanced Technology Laboratory. When the laboratory director verifies that a high threat agent has been detected, a BioWatch Actionable Result (BAR) is declared. The BioWatch Quality Assurance program, implemented in 2011, enhances defensibility and confidence associated with the analytical results.

Guidance and Exercises

Detection technology is only part of the BioWatch program. Just as important are the guidance documents, concepts of operation, and exercises provided by BioWatch in coordination with state and local public health authorities within BioWatch jurisdictions. Guidance and exercises must be integrated into a carefully orchestrated response for the detection technology to be used to its full potential.

Program Structure

BioWatch has initiated and developed collaborative relationships with state and local public health, laboratories, law

enforcement, and environmental health agencies, strengthening our nation’s overall biodefense preparedness. Key partners play pivotal roles to ensure the program’s success.

- **State and local governments** – locally operate the BioWatch program and develop the plans that will enable an effective first response to an act of bioterrorism.
- **Centers for Disease Control and Prevention** – oversees the Laboratory Response Network where BioWatch laboratories that analyze the collected samples are co-located. CDC also acts as a liaison with state and local public health departments.
- **Department of Defense** – supplies critical screening testing materials and technical expertise in detection systems.
- **Environmental Protection Agency** – performs or assists in environmental sampling activities in response to a BioWatch Actionable Result (BAR).
- **Federal Bureau of Investigation** – provides threat assessments and is the lead law enforcement and investigative agency.
- **National Laboratories** – provide technical support, including the development and assessment of new technologies and protocols.

Future Goals

Improvements to existing technologies, processes, and relationships will continue to be important factors as the BioWatch program evolves. Future goals include:

- Continuing to strengthen partnerships with state and local public health authorities and stakeholders.
- Enhancing detection coverage by adding collectors to established and new BioWatch jurisdictions.
- Improving current collection technologies and methods for more rapid detection and greater cost efficiencies.
- Maximizing coordination and collaboration with other agencies and detection programs.
- Improving tools to identify released biological agents to support response operations.

For more information, please contact HealthAffairs@dhs.gov

Appendix F:

Program Areas in NBS

Condition	Program Area
Carbapenem-resistant Enterobacteriaceae (CRE)	Antibiotic Resistance/MDRO
Multi-drug Resistant Acinetobacter (MDR-A)	Antibiotic Resistance/MDRO
Vancomycin-resistant Staphylococcus aureus, coagulase-positive (VRSA)	Antibiotic Resistance/MDRO
Vancomycin-intermediate Staphylococcus aureus (VISA)	Antibiotic Resistance/MDRO
Hepatitis	Hepatitis
Botulism, foodborne	IDEAS - Foodborne
Botulism, infant	IDEAS - Foodborne
Botulism, other/unspecified	IDEAS - Foodborne
Botulism, wound	IDEAS - Foodborne
Cyclosporiasis	IDEAS - Foodborne
Hemolytic uremic syndrome, postdiarrheal	IDEAS - Foodborne
Listeriosis	IDEAS - Foodborne
Salmonellosis	IDEAS - Foodborne
Shiga toxin-producing Escherichia coli (STEC)	IDEAS - Foodborne
Typhoid fever (Salmonella Typhi)	IDEAS - Foodborne
Vibrio spp., non-toxigenic, other or unspecified	IDEAS - Foodborne
Vibrio parahaemolyticus	IDEAS - Foodborne
Vibrio vulnificus infection	IDEAS - Foodborne
Hepatitis A, acute	IDEAS - Hepatitis A, D, E, Other
Hepatitis E, acute	IDEAS - Hepatitis A, D, E, Other
Hepatitis C, acute	IDEAS - Hepatitis C
Creutzfeldt-Jakob disease	IDEAS - Infectious Disease
Influenza A, novel / variant	IDEAS - Infectious Disease
Influenza, human isolates (outbreaks only)	IDEAS - Infectious Disease
Influenza-associated pediatric mortality	IDEAS - Infectious Disease
Malaria	IDEAS - Infectious Disease
Smallpox	IDEAS - Infectious Disease
Yersiniosis	IDEAS - Infectious Disease
Amebic meningitis/encephalitis, other	IDEAS – Meningitis/Invasive Respiratory Disease
Amebic meningoencephalitis, primary (PAM)	IDEAS – Meningitis/Invasive Respiratory Disease
Legionellosis	IDEAS – Meningitis/Invasive Respiratory Disease
Meningococcal disease (Neisseria meningitidis)	IDEAS – Meningitis/Invasive Respiratory Disease

Novel coronavirus	IDEAS – Meningitis/Invasive Respiratory Disease
Streptococcus, invasive Group A (GAS), (<i>Streptococcus pyogenes</i>)	IDEAS – Meningitis/Invasive Respiratory Disease
Streptococcus, invasive Group B (GBS), (<i>Streptococcus agalactiae</i>)	IDEAS – Meningitis/Invasive Respiratory Disease
Amebiasis	IDEAS - Waterborne
Campylobacteriosis	IDEAS - Waterborne
Cholera	IDEAS - Waterborne
Cryptosporidiosis	IDEAS - Waterborne
Shigellosis	IDEAS - Waterborne
Diphtheria	Immunizations
Haemophilus influenzae type b, invasive disease	Immunizations
Hepatitis B, acute	Immunizations
Hepatitis B virus infection, perinatal	Immunizations
Measles (Rubeola)	Immunizations
Mumps	Immunizations
Pertussis	Immunizations
Polio virus infection, nonparalytic	Immunizations
Poliomyelitis, paralytic	Immunizations
Rubella	Immunizations
Rubella, congenital syndrome (CRS)	Immunizations
Strep pneumoniae, invasive disease	Immunizations
Tetanus	Immunizations
Varicella (Chickenpox)	Varicella
Anaplasma phagocytophilum	Zoonosis
Anthrax	Zoonosis
Arbovirus, other	Zoonosis
Babesiosis	Zoonosis
Brucellosis	Zoonosis
Cache Valley Virus	Zoonosis
California serogroup virus	Zoonosis
Chagas disease, acute	Zoonosis
Chagas disease, chronic symptomatic	Zoonosis
Chagas disease, chronic indeterminate	Zoonosis
Chikungunya	Zoonosis
Cysticercosis	Zoonosis
Dengue hemorrhagic fever (includes Dengue shock syndrome)	Zoonosis
Dengue Fever	Zoonosis
Eastern equine encephalitis virus	Zoonosis
Ehrlichiosis chaffeensis	Zoonosis
Ehrlichiosis ewingii	Zoonosis

Ehrlichiosis/Anaplasmosis undetermined	Zoonosis
Encephalitis, Cache Valley	Zoonosis
Encephalitis, Eastern equine (EEE)	Zoonosis
Encephalitis, Japanese	Zoonosis
Encephalitis, Powassan	Zoonosis
Encephalitis, St. Louis (SLE)	Zoonosis
Encephalitis, Venezuelan equine (VEE)	Zoonosis
Encephalitis, West Nile (WNND)	Zoonosis
Encephalitis, Western equine (WEE)	Zoonosis
Encephalitis/ Meningitis, California	Zoonosis
Flavivirus, unspecified	Zoonosis
Hantavirus infection	Zoonosis
Hantavirus pulmonary syndrome	Zoonosis
Japanese encephalitis virus	Zoonosis
Leishmaniasis	Zoonosis
Lyme disease	Zoonosis
Plague	Zoonosis
Powassan virus	Zoonosis
Q fever, acute	Zoonosis
Q fever, chronic	Zoonosis
Rabies, human	Zoonosis
Relapsing Fever	Zoonosis
Spotted Fever Rickettsiosis	Zoonosis
St. Louis encephalitis virus	Zoonosis
T solium-undiff Taenia	Zoonosis
Trichinosis (Trichinellosis)	Zoonosis
Tularemia	Zoonosis
Typhus fever, (endemic fleaborne, Murine)	Zoonosis
Typhus fever, (epidemic louseborne R. prowazekii)	Zoonosis
Western equine encephalitis virus	Zoonosis
Venezuelan Equine virus	Zoonosis
Viral Hemorrhagic Fever	Zoonosis
West Nile Fever	Zoonosis
Yellow fever	Zoonosis

Appendix G:

FREQUENTLY ASKED QUESTIONS about the NEDSS Base System

Question #1:

I was working in NEDSS and got the attached error report. Can you help?

Page 1 of 1

NBS Error page

The NBS encountered an error while processing your request. Please copy the information below this message (or save the message to .pdf using the print functionality) and forward it to your NBS Technical Administrator for review.

You will then need to return to the [NBS Home Page](#) and reprocess your transaction. DO NOT utilize your browser's BACK or REFRESH buttons.

URL: https://txnedss.dshs.state.tx.us:8009/nbs/SelectCondition3.do

Date/Time: Fri Aug 06 12:43:16 CDT 2010

Exception: java.lang.NullPointerException at
gov.cdc.nedss.webapp.nbs.action.util.CommonAction.setBatchObservations(CommonAction.jav
at
gov.cdc.nedss.webapp.nbs.action.investigation.util.nip.pertussis.PertussisInvestigation

Answer:

Unfortunately, with Windows, errors can happen for numerous reasons. So unless you've rebooted your system, logged into NEDSS again, and then are able to reproduce the error there is not much to work with.

If you are able to reproduce the issue on your own workstation and also on another workstation in your area, then we need to consider that it may be something with the NBS, and a step by step procedure of what you were doing, what you entered and the last button pressed is usually very helpful and please send a **screen shot!**

Great troubleshooting tip for Desktop IT support.

Login to the workstation as a user with administrator rights (a user that has never logged into the workstation before) and then login to NEDSS.

NEDSS note:

NEDSS is now run in a cloud environment, once connected, it is the same for everyone. The only differences are your Workstation setup and/or the Network you are coming from.

Question #2:

I get a "**Page cannot be displayed**" when trying to log onto NEDSS? Is NEDSS down?

Answer:

NEDSS is most likely not down, as it has a 99.9% uptime in the last 7 years. Usually the causes are outside the NEDSS network.

If you are logging in from a Local Health Department the NEDSS Base System is an intranet application, not internet, hosted exclusively within the security of the DSHS network.

Currently there is only one way of connecting if you are not already located within the DSHS intranet.

It is possible that there are some LHD's that have TALHO cross-connect still working. This should have already been disconnected, if not, please get #2 done ASAP to make sure you do not have a long period with the inability to connect to NEDSS.

1. (A) Contact your IT Network personnel and find your public facing IP range all the NEDSS users at your facility will be using.
(B) Verify that they have checked their router/switch/firewall to make sure NEDSS traffic is not being routed to a legacy T1/TALHO connect.

*This tends to be the biggest snag, if you have a responsive Network staff this will go smoothly.

Issues that some of our other LHD's found.

- "There was a static route on one of the switches pointing them to an invalid gateway. This department used to have their own internet connection and now they route through us."
- "We put an allow in our Proxy. The proxy was blocking the secure website. thanks for your help."
- "found that our firewall needed to be open inbound and outbound for port 8009."
- "It is an issue with her computer specifically. Other computers on our network can get to the site."

(C) Provide a list of names of the NEDSS users at your facility this range of IP's will benefit.

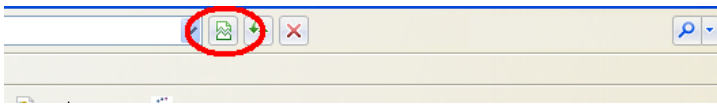
Once you get the three parts of above information, forward that information to nedss@dshs.state.tx.us. On this end our DSHS Network Operations team will configure our network to allow traffic from that range to access NEDSS.

Question #3:

For some reason, when I try to run a report in NEDSS, none of the dropdowns in the Advanced Filter tab are populated and in the bottom left hand corner the message "error on page" appears. Also, nothing happens when I click on the Logic and Value sections of the report criteria. I've deleted cookies, etc. and the problem still exists. Any suggestions? (Also, with Internet Explorer v10 you may get a black screen).

Answer:

This is likely due to the Internet Explorer "Compatibility View" setting. It is the green icon at the top of the page that looks like a torn piece of paper. Click on it and it will turn a shade greyer. This should fix your issue with your reports.



Question #4:

I have tried using Mozilla Firefox and Google Chrome to access the NEDSS Base System, and am having trouble seeing and saving the patient records. Did I break something?

Answer:

You did not break anything; the NEDSS Base System only supports and works with Internet Explorer, version 7 or higher.

Question #5:

The NEDSS system seems really slow today, especially for a large health department like ours. What can you do to speed up the system?

Answer:

Possibilities for slow performance:

1. Local Workstation Virus or Spamware.
2. Local area congestion, local bandwidth maxed out. (streaming video, virus, excessive downloads)
3. Malfunctioning local switch or router.
4. Poorly configured local switch or router.
5. Malfunctioning or low speed NIC (Network Interface Card) on the local workstation
6. Outdated local workstation.

Question #6:

I need to have access to the NEDSS Base System from my computer at home. How can I do this? What else do I need?

Answer:

The NEDSS Base System is an intranet application, not internet, hosted exclusively within the security of the DSHS network. Only computers that are either physically located within or whose network is securely cross-walked to the DSHS network are able to access the NBS.

Question #7:

Each morning, I usually run a private report we created in NBS that lists the new cases for the day. When I ran the report this morning, there were cases listed from yesterday for which I had already approved notification. However, the names on the NBS notifications queue seem to be current. Why is this happening?

Answer

Notifications are still being processed by CDC at the same time the report you run in the morning is created. We have delayed the start time for this process as long as possible so that all reports get completed by morning. Please keep in mind that all reports are a snap-shot, and if the current database does not exactly follow what you are seeing it is likely due to changes that have been made to the system since the creation of the datamart/report.

Question #8:

I am having difficulty running reports. In the past when I exported the report, it would automatically ask me if I want to open the file or save it which allowed me to save it as an excel document with the variables in the appropriate columns. Now when I try to export a report, it automatically opens the report in a web based excel spreadsheet with all of the column variables squished together in one column. It no longer asks me if I want to save or open the file. Any idea why this is happening? Is there a setting I need to change on my computer?

Answer:

Usually this is caused by the file type "CSV" not being associated or incorrectly with Excel within your Windows environment. Go to Windows Explorer (not internet explorer), tools, folder options, file types. Look for CSV and if it's not associated with excel, make Excel the association. If it is associated, delete it, it will have to be re-associated. In NEDSS, do an export, once the report is saved to your hard drive try to open the file and it will query you what to open it with, find Excel. Things may not go exactly as described above, but the issue is with the association, and the way Excel thinks it's supposed to open up an csv, so you might have to play with that until it worked as desired.

Question #9:

I have not been able to print labs using the "print" button in NEDSS. When selected, I receive a pop-up window stating connection errors/issues—which is not the case as far as I can tell. Is this a known issue? Is there anything I can do on my end to fix it?

Answer:

Adobe Acrobat is a very fickle program as it's one of those that work for some and not for others. Click on [F5] and/or [Ctrl]+[F5] if you have a gray screen. If this doesn't fix the issue, either it needs to be upgraded or uninstalled and reinstalled, if that doesn't work, search the Adobe Acrobat site for patches that involve printing problems.

Acrobat 9.4.2: If you are using Acrobat 9.4.2, see [Printing problems | Acrobat 9.4.2 update](#).

Reader 10.1.2: If you recently updated to Reader 10.1.2, first see [Printing issues | Reader 10.1.2](#)

Question #10:

I get this error page when trying to run a report, usually the [Line List of Individual Cases with Program Area and](#)

Resource Not Found

Message: Resource Not Found

Description: The requested resource "/nbs/404.html" could not be found

Sender: org.apache.cocoon.servlet.CocoonServlet

Source: Cocoon Servlet

[Apache Cocoon 2.1.8](#)

[Jurisdiction Security report](#).

Answer:

This is because the report is requesting too much data from the server at one time. Try and refine your report request by not selecting all on the [basic filter] or setting a date requirement on the [advanced filter].

Appendix H:
FDD PAM Condition Incubation Periods

Condition	Incubation Period
Amebiasis (parasite)	4 weeks
Amnesic shellfish poisoning (marine toxin)	24-48 hrs
Anisakiasis (parasite larvae)	14 days
Botulism - Foodborne	12-72 hrs
Botulism - Infant	3-30 days
Botulism - Other (Wound & Unspecified)	N/A
Botulism - Other Unspecified	N/A
Botulism - Wound	N/A
Brucellosis	7-21 days
Campylobacteriosis (bacteria)	2-5 days
Cholera	24-72 hrs
Ciguatera fish poisoning (marine toxin)	2 hrs- 5 days
Cryptosporidiosis	14 days
Cyclosporiasis	14 days
Diarrheal disease, not otherwise specified	N/A
Diphyllobothrium latum (parasite)	3 months
Enterohem. E.coli O157:H7 (bacteria)	1-8 days
Enterohemorrhagic E.coli, shiga + (not serogpd) (bacteria)	1-8 days
Enterohemorrhagic E.coli, shiga + serogp non-O157 (bacteria)	1-8 days
Foodborne illness, not otherwise specified	N/A
Giardiasis (parasite)	14 days
Listeria	9-48 hrs for GI symptoms; 2-6 weeks for invasive disease
Norovirus (virus)	24-48 hrs
Paralytic shellfish poisoning (marine toxin)	30 mins-3hrs
Rotavirus (virus)	1-3 days
Salmonella	1-3 days
Scombroid fish poisoning (marine toxin)	1 min-3 hrs
Shigellosis (bacteria)	24-48 hrs
Staphylococcal enterotoxin (bacteria)	1-6 hrs
Toxoplasmosis (parasite)	6-10 days
Trichinosis (Trichinellosis) (parasite larvae)	4 weeks
Typhoid fever (Salmonella typhi) (bacteria)	1-3 days
Vibrio parahaemolyticus (bacteria)	2-48 hrs
Vibrio spp., non-toxigenic, other or unspecified (bacteria)	2-48 hrs
Vibrio vulnificus infection (bacteria)	1-7 days
Yersiniosis (bacteria)	24-48 hrs

FDD Condition Incubation Periods V2

Appendix I:

ACRONYMS

1. APIC – Association for Professionals in Infection Control and Epidemiology
2. CABGs - coronary artery bypass grafts
3. CDI - *Clostridium difficile* infection
4. CIDRAP – Center for Infectious Disease Research and Policy
5. CLABSI - central line-associated bloodstream infection
6. CMS - Centers for Medicare and Medicaid Services
7. DHQP- Division of Healthcare Quality Promotion
8. DSHS – Department of State Health Services
9. EAIDB – Emerging and Acute Infectious Disease Branch
10. FEMA – Federal Emergency Management Agency
11. FIPS - Federal Information Processing Standards
12. HAI – Healthcare Associated Infections
13. HIV – Human Immunodeficiency Virus
14. HSR – Health Service Region
15. ICD-9-CM - International Classification of Diseases, 9th Revision Clinical Modification
16. IDCU – Infectious Disease Control Unit
17. Imm – Immunization Division
18. ImmTrac – Vaccination tracking system for Texas
19. IPPS - Inpatient Prospective Payment System
20. IRID – Invasive and Respiratory Infectious Disease
21. LHD – Local Health Department
22. LOINC – Logical Observation Identifiers Names and Codes
23. MDRO – Multi Drug Resistant Organism
24. MRSA - methicillin resistant staphylococcus aureus
25. NBS – NEDSS Base System
26. NEDSS – National Electronic Disease Surveillance System
27. NHSN – National Healthcare Safety Network
28. NICU - neonatal intensive care unit
29. NOC – Network Operations Center (DSHS)
30. NORS – National Outbreak Reporting System
31. PAE – Preventable Adverse Events
32. PHEP – Public Health Emergency Preparedness
33. PHIN – Public Health Information Network
34. SHEA - The Society for Healthcare Epidemiology of America
35. SIR - standardized infection ratio
36. STD – Sexually Transmitted Diseases
37. TAC – Texas Administrative Code
38. TB – Tuberculosis
39. TEA – Texas Education Agency
40. TEHA – Texas Environmental Health Association
41. TSICP – Texas Society of Infection Control and Prevention
42. VAE - ventilator-associated event
43. VAP- ventilator-associated pneumonia
44. VPD – Vaccine Preventable Disease
45. WebEOC – Web Based Emergency Operations Center
46. Zoo – Zoonosis Control Branch

Appendix J:

MEDICAL TERMINOLOGY ABBREVIATIONS

The following list contains some of the most common abbreviations found in medical records. Please note that in medical terminology, the capitalization of letters bears significance as to the meaning of certain terms, and is often used to distinguish terms with similar acronyms.

@ —at	BJA —below the knee amputation
A & P —anatomy and physiology	bl —blood
ab —abortion	bl wk —blood work
abd —abdominal	BLS —basic life support
ABG —arterial blood gas	BM —bowel movement
a.c. —before meals	BOW —bag of waters
ac & cl —acetest and clinitest	B/P —blood pressure
ACLS —advanced cardiac life support	bpm —beats per minute
AD —right ear	BR —bed rest
ADL —activities of daily living	BRP —bathroom privileges
ad lib —as desired	BS —breath sounds
adm —admission	BSI —body substance isolation
afeb —afebrile, no fever	BSO —bilateral salpingo-oophorectomy
AFB —acid-fast bacillus	BUN —blood, urea, nitrogen levels
AKA —above the knee	BVM —bag-valve-mask
alb —albumin	bx —biopsy
alt dieb —alternate days (every other day)	c —with
am —morning	C & S —culture and sensitivity
AMA —against medical advice	c-spine —cervical spine
amal —amalgam	CA —cancer
amb —ambulate, walk	CAD —coronary artery disease
AMI —acute myocardial infarction	cal —calorie
amt —amount	CAT —computerized axial tomography
ANS —automatic nervous system	cath —catheter
ant —anterior	CBC —complete blood count
AOx3 —alert and oriented to person, time, and place	cc —cubic centimeters
Ap —apical	CC —chief complaint
AP —apical pulse	CCU —coronary care unit, critical care unit
approx —approximately	CHD —coronary heart disease
aq —aqueous	CHF —congestive heart failure
ARDS —acute respiratory distress syndrome	CHO —carbohydrate
AS —left ear	chol —cholesterol
ASA —aspirin	circ —circumcision
asap (ASAP) —as soon as possible	cl liq —clear liquid
as tol —as tolerated	CNS —central nervous system
ATD —admission, transfer, discharge	c/o —complains of
AU —both ears	COPD —chronic obstructive pulmonary disease
Ax —axillary	CPK —creatine phosphokinase
BE —barium enema	CPR —cardiopulmonary resuscitation
bid —twice a day	CPT —chest physical therapy
bil, bilateral —both sides	CS —central supply
BK —below knee	CSF —cerebrospinal fluid

CT—computer tomography
CVA—cerebrovascular accident (stroke)
CVU—cardiovascular unit
cx—cervix or complaint of
CXR—chest X ray
cysto—cystography
d/c—discontinue
D & C—dilation and curettage
DAT—diet as tolerated
DC—discontinue or discharge
del—delivery
Del. Rm.—delivery room
diff—differential
DNA—deoxyribonucleic acid
DNR—do not resuscitate
DOA—dead on arrival
DOB—date of birth
DPT—diphtheria, pertussis, tetanus
DRG—diagnosis-related grouping
D/S—dextrose in saline
DT's—delirium tremens
DW—distilled water
D5W 5%—dextrose in water
Dx—diagnosis
EBL—estimated blood loss
ECG—electrocardiogram
ED—emergency department
EEG—electroencephalogram
EENT—eyes, ears, nose, throat
EKG—electrocardiogram
EMG—electromyogram
EOA—esophageal obturator airway
ESR—erythrocyte sedimentation rate
est—estimated
ER—emergency room
ET—endotracheal
ETA—estimated time of arrival
etiol—etiology
ETOH—ethyl alcohol, intoxicated
exam—examination
exp—exploratory
ext—external, extract, extraction
FBOA—foreign body obstructed airway
FBS—fasting blood sugar
FBW—fasting blood work
FF (F. FI)—force fluids
FH—family history
FHS—fetal heart sounds
FHT—fetal heart tone

FIFO—first in, first out
FSH—follicle-stimulating hormone
ft—foot
FUO—fever of undetermined origin
Fx—fracture
GB—gallbladder
GI—gastrointestinal
GU—genitourinary
GTT—glucose tolerance test (pancreas test)
gtt(s)—drop(s)
gyn—gynecology
H & H—hemoglobin and hematocrit
HCG—human chorionic gonadotrophin
hct—hematocrit
HDL—high-density lipoprotein
hgb—hemoglobin
HOB—head of bed
hr (h)—hour
HIV—human immunodeficiency virus
H&P—history and physical
HR—heart rate
hs—hour of sleep, bedtime
ht—height
Hx—history
hypo—hypodermic injection
hyst—hysterectomy
IBS—irritable bowel syndrome
I & D—incision and drainage
I & O—intake and output
ICP—intracranial pressure
ICU—intensive care unit
IM—intramuscular
ing—inguinal
inj—injection
IPPB—intermittent positive pressure breathing
irrig—irrigation
IS—intercostal space
isol—isolation
IT—inhalation therapy
IUD—intrauterine device
IV—intravenous
IVF—in vitro fertilization
IVP—intravenous pyelogram
K+—potassium
KCl—potassium chloride
KUB—kidney, ureter, bladder
L—lumbar
L & D—labor and delivery
lac—laceration

lab—laboratory
lap—laparotomy
lat—lateral
LD—lethal dose
LDH—lactic dehydrogenase
LDL—low-density lipoprotein
liq—liquid
LLQ, LLL—left lower quadrant (abdomen), lobe (lung)
LMP—last menstrual period
LOC—level of consciousness
LP—lumbar puncture
lt—left
LUQ, LUL—left upper quadrant (abdomen), lobe (lung)
MA—mental age
MAST—medical antishock trousers
MCI—mass casualty incident
meds—medications
MI—myocardial infarction
MICU—mobile intensive care unit
min—minute
MN—midnight
MOM—milk of magnesia
MRI—magnetic resonance imagery
MS—morphine sulfate, multiple sclerosis
MVA—motor vehicle accident
NVD—nausea, vomiting, diarrhea
Na+—sodium
NaCl—sodium chloride
N/C—nasal cannula
no—complaints
neg—negative
neuro—neurology
NG—nasogastric
NGT—nasogastric tube
nitro—nitroglycerine
NKA—no known allergies
noc (t)—night
NPO—nothing by mouth
NS—normal saline
nsg—nursing
NSR—normal sinus rhythm
NVS—neurological vital signs
O—oxygen
OB—obstetrics
OD—right eye, overdose
oint—ointment
OOB—out of bed
OPD—outpatient department
OR—operating room

ord—orderly
ORTH—orthopedics
ortho—correct, right (bones)
os—mouth
OS—left eye
OT—occupational therapy
OU—both eyes
oz—ounce
p—after
P—pulse
P & A—percussion and auscultation
PAC—premature atrial contraction
palp—palpation
PAR—post-anesthesia room
PAT—paroxysmal atrial tachycardia
pc—after meals
pCO₂—partial pressure of carbon dioxide
PDR—physician’s desk reference
PE—physical exam, pulmonary embolism
PEDS—pediatrics
per—by or through
PERL(A)—pupils equal and reactive to light (and accommodation)
PET—positron emission tomography
PH—past history
pH—hydrogen ion concentration
PID—pelvic inflammatory disease
PKU—phenylketonuria
pm—between noon and midnight
PNS—peripheral nervous system
po—by mouth
post (pos)—posterior
postop, PostOp—postoperative
pp (p.p.)—postprandial (after eating)
pO₂—partial pressure of oxygen
PPD—purified protein derivative (TB test)
preop, PreOp—before surgery
prn—as needed, whenever necessary
pro time—prothrombin time
pt—patient, pint
PT—physical therapy
PTT—partial prothromboplastin time
PVC—premature ventricular contraction
Px—physical exam, prognosis
q—every
qd—every day
qh—every hour
q2h, q3h, ...—every two hours, every three hours, ...
qhs—every night at bedtime

qid—four times a day
qns—quantity not sufficient
qod—every other day
qs—quantity sufficient
r (R)—rectal
R (resp)—respirations, rectal
RAIU—radioactive iodine uptake study
RBC—red blood cell/count
reg—regular
Rh—rhesus
RK—radial keratotomy
RL—ringer’s lactate
RLQ, RLL—right lower quadrant (abdomen), lobe (lung)
RML—right middle lobe (lung)
RO—reality orientation
R/O—rule out
ROM—range of motion
R.R.—recovery room
RUQ, RLL—right upper quadrant, lobe
rt—right
RV—residual volume
Rx—take (prescription)
s—without
S & S—signs and symptoms
ss—1/2
Sats—oxygen/blood saturation level
SA—sinoatrial
SB—small bowel
sc—subcutaneous
SGOT—serum glutamic oxaloacetic transaminase
SGPT—serum glutamic pyruvic transaminase
SIDS—sudden infant death syndrome
Sig:—label/write
SL—sublingual
SMAC—sequential multiple analysis computer
SOB—shortness of breath
spec—specimen
sp. gr.—specific gravity
SQ, sub q—subcutaneous
SSE—soap suds enema
stat—immediately
STD—sexually transmitted disease
STH—somatotrophic hormone
SVD—spontaneous vaginal delivery
SVN—small volume nebulizer
SVT—supraventricular tachycardia
Sx—symptoms
T—temperature, thoracic

T & A—tonsillectomy and adenoidectomy
tab—tablet
tachy—tachycardic
TAH—total abdominal hysterectomy
TB—tuberculosis
TCDB—turn, cough, deep breath
temp (T)—temperature
TH—thyroid hormone
TIA—transient ischemic attack
tid—three times a day
TMJ—temporomandibular joint
tol—tolerated
TPN—total parenteral nutrition
TPR—temperature, pulse, respirations
tr—tincture
trach—tracheotomy, tracheostomy
TSH—thyroid-stimulating hormone
TT—tetanus toxiod
TUR—transurethral resection
TV—tidal volume
TVH—total vaginal hysterectomy
TX—traction
UA—urinalysis
umb—umbilicus
unc.—unconscious
ung—ointment
unk—unknown
ur—urine
URC—usual, reasonable, customary
URI—upper respiratory infection
US—ultrasonic
UTI—urinary tract infection
V fib—ventricular fibrillation
V tach—ventricular tachycardia
vag—vaginal
VC—vital capacity
VD—venereal disease
vit—vitamin
vo—verbal order
vol—volume
V/S—vital signs
WA—while awake
WBC—white blood cell/count
w/c—wheelchair
WNL—within normal limits
wt—weight
y/o—year(s) old

Appendix K:

HELPFUL ONLINE RESOURCES

- DSHS Reporting Forms: www.dshs.state.tx.us/idcu/investigation/forms/
- Guidelines for Investigation & Control of Invasive, Respiratory, Foodborne, and Vaccine-Preventable Diseases: http://www.dshs.state.tx.us/IDCU/health/infection_control/Investigation-Guidance/
- VPD Investigation Forms: www.dshs.state.tx.us/idcu/health/vaccine_preventable_diseases/forms/
- Other Investigation Forms: www.dshs.state.tx.us/idcu/investigation/#
- Notifiable Conditions List: www.dshs.state.tx.us/idcu/investigation/conditions/
- NBS (NEDSS) Data Entry Guidelines (Rev 2015):
<https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/NBS%20Data%20Entry%20Guide%202015.pdf>
- Epi Case Criteria Guide (Rev 2015):
<http://www.dshs.state.tx.us/workarea/linkit.aspx?linkidentifier=id&itemid=8589995012>
- Laboratory Submission Guide: www.dshs.state.tx.us/lab/MRS_labtests_toc.shtm
 - NORS Outbreak Reporting Form: <http://www.cdc.gov/nors/forms.html>
 - Contact the EAIDB Foodborne team for instructions on getting access to NORS.
- CDC Legionellosis Epidemiologic Investigation Tools:
<http://www.cdc.gov/legionella/health-depts/inv-tools.html>
- CDC Legionellosis Hypothesis-Generating Form:
<http://www.cdc.gov/legionella/downloads/hypothesis-generating-questionnaire.pdf>
- CDC Environmental Assessment Form:
<http://www.cdc.gov/legionella/downloads/envirn-assess-instrument.pdf>
- Texas Influenza Surveillance Handbook:
<http://www.dshs.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=8589946469>
- Vaccine Information Sheets: <http://www.dshs.state.tx.us/immunize/literature/litlist.shtm>
- Communicable Disease Chart and Notes for Schools and Child-Care Centers (Stock #6-30)
 - Copies can be ordered at <https://secure.immunizetexasorderform.com/default.asp>

HELPFUL DSHS WEBSITES

- Main Agency Website: www.dshs.state.tx.us/
- Emerging and Acute Infectious Disease Branch: www.dshs.state.tx.us/idcu/health/ideas/
- Hepatitis B Perinatal Prevention Program: www.dshs.state.tx.us/idcu/disease/hepatitis/hepatitis_b/perinatal/
- Immunization Branch: www.ImmunizeTexas.com
- Infectious Disease Control Unit: www.texasdisease.org
- Recommended Immunization Schedules: www.dshs.state.tx.us/immunize/schedule/default.shtm
- School & Child-Care Facility Requirements: www.dshs.state.tx.us/immunize/school/default.shtm
- Texas Administrative Code (TAC), Title 25 Health Services, §§97.1-97.14:
[http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=97](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=25&pt=1&ch=97)
- Vaccine Adverse Event Reporting System (VAERS): www.dshs.state.tx.us/immunize/safety/vaersweb.shtm
- Vaccine Preventable Diseases Main Page: www.dshs.state.tx.us/idcu/health/vaccine_preventable_diseases/
- DSHS Forms and Literature: <http://hhsc.pinnaclecart.com/dshs/>
(Order DSHS forms and literature online and is easy and efficient to use.)
- Immunizations Forms and Literature: <https://secure.immunizetexasorderform.com/default.asp>
(Order forms and literature online without setting up an account and products are FREE.)

HELPFUL CDC WEBSITES

- CDC Vaccines and Preventable Diseases: www.cdc.gov/vaccines/vpd-vac/default.htm
- Manual for the Surveillance of Vaccine Preventable Diseases: www.cdc.gov/vaccines/pubs/surv-manual/index.html
- Morbidity and Mortality Weekly Report (MMWR): www.cdc.gov/mmwr/
- Epidemiology and Prevention of Vaccine Preventable Disease (Pink Book): <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>
- Epidemiology & Prevention of Vaccine-Preventable Diseases 2011 (EpiVac) Web-On-Demand Modules: www.cdc.gov/vaccines/ed/epivac/default.htm
- Recommendations of the Advisory Committee on Immunization Practices (ACIP) Influenza Prevention and Control Recommendations: www.cdc.gov/flu/professionals/acip/index.htm
- Centers for Disease Control and Prevention Pneumococcal Disease information: <http://www.cdc.gov/pneumococcal/clinicians/clinical-features.html>
- Centers for Disease Control and Prevention Group A Streptococcal Disease (GAS) information: <http://www.cdc.gov/groupAstrep/resources.html>