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Texas Department of State Health Services

## Introduction to NEDSS COVID Training

#### Public Health Informatics & Data Exchange Group

Laboratory and Infectious Disease Services Division

# Objectives



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### **Objectives:**

- Learn NEDSS Terminology
- Understand roles and responsibilities
- Understand queues and work-flow
- Able to perform data entry
- Understand NEDSS functionality
- Able to locate tools and resources available

# What is NEDSS?



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## • NEDSS is the National Electronic Disease Surveillance System

a. Assists local, state and territorial public health departments manage reportable disease data

 b. Sends nationally notifiable disease (NND) data to the CDC

# What is NBS?



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## • NBS is the NEDSS Base System

- a. NBS is the software application developed by the CDC to facilitate NEDSS compliant reporting of Nationally Notifiable Diseases
- b. NBS is the set of standards for the disease surveillance system

# Who uses NBS?

#### Map of Health Departments currently using NBS





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Currently, 26 health departments (20 states; Washington, DC; CNMI; Guam; Puerto Rico; RMI; and U.S. Virgin Islands) use NBS to manage public health investigations and transfer general communicable disease surveillance data to CDC.

# What is NBS-TX?



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## NBS-TX is our specific install of the system that includes: a. 254 counties b. Providers in Texas c. Over 100 reportable conditions

## **NBS-TX**



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• NEDSS was implemented in Texas in 2004.

 There are over 70 local health departments and DSHS Regional offices that use NEDSS in Texas.

## **Provides National Standards**



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 NBS facilitates adoption of national consensus standards a. Including vocabulary standards such as: 1. LOINC 2. SNOMED **3. RXNORM** b. Messaging standards 1. HL7 2. CSV

This ensures that state data shared with CDC are submitted quickly, securely and in an understandable format.





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- Patient record like a comprehensive medical record.
- Ability to merge duplicate patient records to maintain one unique record.
- Reports that may be customized and saved for future use.
- Ability to transfer to other jurisdictions in Texas.
- Real-time data entry (no uploading or refreshing)
- Page builder to customize investigations.
- Workflow Decision Support (WDS)

## Terminology



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**Events:** all types of surveillance information associated with a patient and can be viewed in the Events tab of the patient record.

- a. <u>Observations</u>: refers to type of surveillance information most likely to trigger an investigation, specifically:
  - I. Lab Reports
  - **II.** Morbidity Reports
- b. Investigations: surveillance information relating to the determination of an NND (Nationally Notifiable Disease)



## Terminology



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c. Treatments: medical care provided to a patient for an illness d. Vaccinations: vaccinations that are relevant to an investigation e. Notifications: electronic messages sent to CDC reporting a verified case of a NND



## Terminology



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- <u>PAM</u>: program area module that supports extended investigation functionality specific to certain conditions
- Provider: all persons in NBS-TX, except the patient, such as physicians, investigator, etc.
- ELR: Electronic Lab Report; Reporting facilities register with DSHS and go through extensive testing and validation to send electronic messages that are imported into NEDSS for public health intervention.

## **NEDSS Homepage** Dashboard



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Home   Data Entry   Merge Patients   Open Investigations   Reports   System Management			Help   Logout			
Release 6.0.9-GA Dashboard			User : Pamela Stuart			
Patient Search	My Queues	•	Notices	⊡		
Search Demographics         By default, search uses 'Starts With'. To search using 'Contains', enter % at start of text or use Advanced Search)         Last Name:         First Name:         DOB:         DOB:         Current Sex:         Search Identifiers         Event ID Type:         Patient ID(s):         (Separate IDs by commas, semicolons, or spaces)         Search         Clear	<ul> <li>Open Investigations (957)</li> <li>Approval Queue for Initial Notifications (629)</li> <li>Updated Notifications Queue (150)</li> <li>Rejected Notifications Queue (127)</li> <li>Documents Requiring Security Assignment (35404)</li> <li>Documents Requiring Review (14266)</li> </ul>		Monday, June 14, 2021 NEDSS was upgraded to 6.0.9. Please email NEDSS@dshs.texas.gov if you have any problems.			
Cases created - Last 7 Days			My Reports	-		
200 su 150 167 147 143 143 143 144 14			There are no private reports available.			

# **Patient Search**



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- Search patient names or NEDSS unique identifiers such as Investigation ID or Lab ID.
- The default search operator uses "starts with". You can choose Advanced Search to change the operators.

Patient Search		•
Search Demo	graphics (By default, search uses 'Starts With', To search using	
Last Name:	Contains', enter % at start of text or use Advanced Search	)
First Name:		
DOB:		
Current Sex:	~	
Search Ident	ifiers	
Event ID Typ	De:	
Patient ID(	s):	
	(Separate IDs by commas, semicolons, or spaces)	
	Search Clear Advanced Search	

# **Patient ID Search**



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Patient Search		-
<u>Search Demo</u>	graphics (By default, search uses 'Starts With'. To search using 'Contains', enter % at start of text or use Advanced Search)	
Last Name:		
First Name:		
DOB:		
Current Sex:	~	
Search Ident	ifiers	
Event ID Ty	be:	
Patient ID(	s):	
	(Separate IDs by commas, semicolons, or spaces)	
	Search Clear Advanced Search	

For Patient ID Search: Enter Patient ID value in *Patient ID(s)* field. Search

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# **Event ID Search**



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Patient Search	⊡
Search Demogr	aphics
(B) 'Co	/ default, search uses 'Starts With'. To search using ontains', enter % at start of text or use Advanced Search)
Last Name:	
First Name:	
DOB:	
Current Sex:	~
Search Identifi	ers
Event ID Type	:
Patient ID(s)	:
	(Separate IDs by commas, semicolons, or spaces)
	Search Clear Advanced Search

You can also search using NEDSS unique IDs.

Event Type ID Prefix:

- Investigation CAS
- Lab Report OBS
- Notification NOT
- Vaccinations INT

# **Event ID Search**



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### To search Event IDs:

- Choose the *Event Type*
- Once you have selected *Event Type*, *Event ID* will appear
- Enter the value in *Event ID*
- Choose Search

Patient Search	
Search Demogr	aphics
	(By default, search uses 'Starts With'. To search using 'Contains', enter % at start of text or use Advanced Search)
Last Name:	
First Name:	
DOB:	
Current Sex:	✓
Search Identifie	
Event ID Type	e: Lab ID
Event II	):
Patient ID(s	):
	(Separate IDs by commas, semicolons, or spaces)
	Search Clear Advanced Search





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#### There are 4 Graphs:

- 1. Cases Created Last 7 Days
- 2. Labs Created Last 7 Days
- 3. Confirmed Case Counts

#### 4. Cases Assigned Last 14 Days



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## Notices



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#### Important information for NEDSS users will be placed on the Notice Board by NEDSS Team.

# **My Reports**



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My Reports will display your private reports that you customized and saved as *Private* for future use and easy access.



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#### **My Queues**

- Open Investigations (978)
- Approval Queue for Initial Notifications (690)
- Updated Notifications Queue (156)
- Rejected Notifications Queue (96)
- Documents Requiring Security Assignment (35201)
- Documents Requiring Review (16032)

- The queues were designed to help public health staff develop efficient work-flows to access the latest incoming lab reports.
- All queues have sorting and filtering capabilities.
- The number in parenthesis is the number of messages in the queue.

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- Open Investigations: All investigations that have an investigation status of "open" will appear in this queue until status is manually changed to "closed". When staff determines case status, the investigation should be "closed".
- 2. <u>Approval Queue for Initial</u> Notifications: Notifications will appear in this queue for DSHS Central Office staff only to review. They can approve or reject the notification based on the information in the investigation and/or associated lab report.

#### My Queues

- Open Investigations (978)
- Approval Queue for Initial Notifications (690)
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- Documents Requiring Review (16032)



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### 3. <u>Updated Notifications Queue</u>:

(\* For DSHS Central Office Staff Only)

- Messages will appear in this queue when a user updates an investigation that has been previously approved and sent to CDC.
- If *Case Status* changed, it will be highlighted in red.
  - Remove messages from the queue by clicking check boxes and then *Remove*.

#### My Queues

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### 4. <u>Rejected Notifications Queue</u>:

- Notifications rejected by DSHS Central Office staff will appear in this queue.
- Reasons for rejection can be found in the *Comments* column.
- The only way to remove a message from this queue, is to create a new notification.
  - Users should resolve and generate a new notification.

#### My Queues

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### 5. Documents Requiring Security Assignment:

#### (\*PHID Staff only)

- Lab Reports missing Jurisdiction and/or program area assignment
- Reviewed by PHID Staff and resolved as needed.
- Please do not attempt to access or resolve.

#### **My Queues**

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### 6. <u>Documents Requiring Review</u>:

- All lab and morbidity reports will enter this queue and wait for public health staff to review and decide if it should be investigated or not.
- Choosing an action below will remove from the queue.
  - Mark as Reviewed
  - Create an Investigation

#### My Queues

- Open Investigations (978)
- Approval Queue for Initial Notifications (690)
- Updated Notifications Queue (156)
- Rejected Notifications Queue (96)
- Documents Requiring Security Assignment (35201)
- Documents Requiring Review (16032)

# \* There is a visual limit of 2500 and the oldest lab reports will be displayed first.

## **Documents Requiring Review Queue**



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# Users have two options when reviewing lab reports in DRR Queue:

				View File   Return to	cuments Requiring Review   Vie	ew Events
Mark as Reviewed	Transfer Ownership	Edit	Delete	Create Investigation	Associate Investigations	Print

- Mark as Reviewed After review, staff should mark as reviewed if no investigation is needed. The lab report will be removed from the queue but will remain in the patient record.
- <u>Create an Investigation</u> After review, staff should create an investigation if an investigation will be started. The lab report will auto-associate with the investigation and will be removed from the queue.

## **Managing Associations**



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- Associations are how the system organizes relevant documentation for an investigation.
- There are ways to automatically associate an event with an investigation.
- If you do not have the option to auto-associate, you can use the *Manage Associations* option on the *View Investigation* page.





Another way to associate a lab report with an investigation is to choose *Associate Investigations* from the View Lab Report page.

## **Associate Investigations**



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#### All the investigations in the patient record will be displayed. Use the check boxes to associate with the appropriate investigation and Submit.

							Remove All Filters/Sorts
Associate	Start Date	<u>Status</u>	Condition 🗸	CaseStatus 🗸	Jurisdiction	Investigator	~
<	07/07/2021	Closed	Pertussis	Confirmed	Williamson CO & Cities PH Dist		
	07/07/2021	Closed	Hepatitis C Virus Infection, chronic or resolved	Probable	Williamson CO & Cities PH Dist		
	07/07/2021	Closed	Lyme disease	Confirmed	Williamson CO & Cities PH Dist		
	07/07/2021	Closed	Neisseria meningitidis, invasive (Mening, disease)	Confirmed	Williamson CO & Cities PH Dist		
	07/06/2021	Closed	Salmonella, non-Paratyphi/non-Typhi	Confirmed	Williamson CO & Cities PH Dist		







- All events are assigned a jurisdiction and program area.
- Jurisdiction is based on patient address. If patient address is not provided, jurisdiction will be determined based on provider address. If provider address was not provided, jurisdiction will be based on lab or reporting facility address.
- If you need to see an event and are unable, you can email <u>NEDSS@dshs.texas.gov</u> and it will be transferred to your jurisdiction.

## **Common Errors to Avoid**



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<ul> <li>Make sure the lab report is in the correct program area.</li> </ul>
<ul> <li>Make sure a good patient record search is performed to avoid duplicates.</li> </ul>
<ul> <li>Make sure the appropriate lab report is associated with the investigation.</li> </ul>
<ul> <li>Make sure to close the investigation once case status has been determined.</li> </ul>
<ul> <li>Make sure the notification is created.</li> </ul>

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## **Common Errors to Avoid (cont.2)**



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- 1. Hard Copy Lab Report:
  - Perform Patient Record Search
  - If you locate the patient record, review Events tab to make sure the lab report is not already in the patient record.
  - If the lab report is not in the patient record, choose Add in the Lab Report section.
  - Create investigation from lab report.
- 2. Documents Requiring Review Queue:
  - Mark as Reviewed OR
  - Create Investigation



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## **NEDSS Demo**

## **Demonstration in NEDSS**

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# **Resources and Tools**

### NEDSS Login Page Documentation>User Resources

- Data Entry Guidelines 2021
- Epi Case Criteria Guide 2021
- Outbreak Naming Guidelines
- Program Areas in NEDSS
- NEDSS Training Videos

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## **Contact Info**



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# For all NEDSS-related issues: <u>NEDSS@dshs.texas.gov</u>

### COVID-19 case investigations: <u>Coronavirus-EAIDU@dshs.texas.gov</u>