

Instructions for Running VPD Data Quality Assurance and VPD Rejected Notifications Report in NBS

To ensure high-level data quality, it is important that quality assurance procedures be routinely conducted on data entered into NBS. It is highly recommended that these QA procedures be run on at least a monthly basis. This report may be used to assess data quality of a contractor during an Immunization Contractor Site Review.

In order to run the appropriate reports in NBS, you must have access rights to the Immunizations, Varicella, Respiratory, and Hepatitis A program areas. If you have issues with access rights, please send questions to the NEDSS office by emailing NEDSS@dshs.state.tx.us.

Please note that the individual(s) completing these instructions should have basic knowledge of working with Microsoft Excel. These instructions were written using Microsoft Excel 2003, adjustments may be needed if using a newer version. If you need any assistance, please contact Rachel Wiseman at 512-458-7111 x2632 or Lucille Palenapa at x6611. You may also send questions or comments to rachel.wiseman@dshs.state.tx.us or lucille.palenapa@dshs.state.tx.us .-

NBS Report

QA VPD Report

Examine default reports section under Private Reports in NBS. Do you have the report titled Triannual Immunization Report listed?	Please follow instructions below.
No	Begin instructions with A. under Report Setup.
Yes	Begin instructions with B. under Report Setup.

Report Setup

A. Saving from Public to Private Reports Section (This step only needed upon first time running report.)

- In the NBS *Public Reports* section, run the report, *VPD Triannual/Site Visit Report*. In the upper right hand corner of the new screen, select the *Run* button. Next, hit *Save As New* button.
- In the new screen, be sure that *Private* is selected as the report design. Enter *Triannual Immunization Report* in the *Report Name* field. Choose *Default Report Section* in the area entitled *Report Section*. Then hit the *Save* button. The following screen that appears will be the default NBS Reports page.



B. Running Report from Private Reports Section

- Under *Private Reports*, expand the *Default Reports Section*. *Triannual Immunization Report* should be listed. Examine each filter and assure proper selections have been made. Run the report *Triannual Immunization Report*.

- **Basic Filter** – All VPD conditions should be pre-selected: *Diphtheria; Haemophilus influenzae type b (Hib); Hepatitis A, Hepatitis B, Viral Infection Perinatal; Hepatitis B virus infection, Chronic; Hepatitis B, Acute; Measles (Rubeola);, Mumps; Neisseria meningitidis, invasive (Mening. Disease); Pertussis; Poliomyelitis, Paralytic; Poliovirus infection nonparalytic; Rubella; Rubella, Congenital Syndrome (CRS); Streptococcus pneumoniae, invasive disease (IPD); Tetanus, and Varicella.*

Advanced Filter – This report utilizes an advanced filter to exclude all Not a Case status investigations and cases with MMWR Years of 2011 or 2012. *Case Status Not Equal “N” AND (MMWR Year Equals “2011” OR MMWR Year Equals “2012”)*

- If present, remove all lines listing Phc Add time specifications in the *Basic Filters Selected Plus* box. The *Remove* button is the second button located in the vertical column to the right of the text box.
- Add in Case Status Not Equals to “N”
- MMWR year specifications should follow Case Status.
- Please be sure that your criteria follow the exact order of the formula below. The *Basic Filters Selected Plus* box below *Advanced Criteria List* should be listed as follows:

Case Status Not Equals “N”
AND
(
MMWR Year Equals 2011
OR
MMWR Year Equals 2012
)

- **Column Selection** – *PHC Add Time, MMWR Year, MMWR Week, Condition, Person Name, Birth Time, Street Address 1, Street Address 2, City, County, Zip Code, Current Sex Code, Concatenated Race Description, Ethnic Group, Jurisdiction, Case Status, Investigation Status Code, Event Date, Condition Description, Diagnosis Date, Person Local Id, Age Category Code, Age Reported, Age Reported Unit Code, Concatenated Race Category Code, Ethnic Group Indicator, Investigation ID, Investigation ID2, Report Date, First Notification Date, and First Notification Sent Date.*

- Export the file.
- Save as *QA_VPD mmddyy.cvs*.
- Open and save as an Excel file (*QA_VPD mmddyy.xls*).
- Rename main worksheet in *QA_VPD mmddyy.xls* as *QAMain mmddyy*.
 - Go to *Event Date (Column D)* field and reformat column through a right-click on column, select *Format cells*, go to *Number* tab, and choose *Date* under category. In the right hand drop down box, select first option with *MM/DD/YYYY (*3/14/2001)* format.
 - You can apply the last formatting action by selecting other date columns and then pressing *F4*. Reformat the remaining date columns *Birth Time (Column G)*, *Diagnosis Date (Column V)*, *Report Date (Column Z)*, and *First Notification Date (Column AA)*.
- Create nine new worksheets entitled *MMWR, Case Status, NoNotif, PtDOB, PtAddress, PtCounty, PtSex, PtRace, and PtEthnicity*.
- Save changes.

QA Main 111910 / MMWR / CaseStatus / NoNotif / PtDOB / PtAddress / PtCounty / PtSex / PtRace / PtEthnicity /

QA Data Procedures:

QA VPD Report- QA_VPD mmddyy.xls

- ☆ Review and assure that all 2011 cases are entered and are identified as 2011 by *MMWR Year* and *Event Date*. (This portion is most critical during 2nd Triannual period when 2011 data is still being entered along with 2012.)
 - Identify cases that occurred in the calendar year of interest (2011) and assure that all cases are tagged with that MMWR year.
 - Format Event Date field and select MM/DD/YYYY.
 - Sort by *MMWR Year* and *Event Date*.
 - Examine records with *MMWR Year* = 2011.
 - Examine any records with an event date earlier or later than 2011. You will need to manually go into NBS to make corrections or add a diagnosis date so the event date will be within the calendar year and as close to the onset as possible.
 - **Do not edit MMWR Year to a previous year.** Note that any records that have *MMWR Year* = 2009 did not get counted in a previous year. For cases that occurred in 2009 but were not counted in 2009 due to *MMWR Year* error, change the status to “Not a Case” with a comment “Entered after deadline for 2009 cases.”
 - Examine records with *MMWR Year* = 2012.
 - If the event date is in 2011, edit the *MMWR Year* in NBS to 2011 and the *MMWR Week* to 52.
 - Also, examine records with *MMWR Year* = 2012 and an *Event Date* other than an onset date in 2012 to assure that the case does not have evidence that the onset was in 2011 such as a specimen collection date. (Click on Data, Filter, AutoFilter and select the following filters - *MMWR Year* = 2012, Onset Date custom, greater than 12/31/2011)
 - Copy and paste any problem cases into *MMWR* worksheet to create a list of cases you will need to manually go into NBS to review/update. After correcting, please resubmit notification for those cases.
- ☆ Assure that all records have a final Case Status (C or P) that meets the case definition for that classification.
 - Assure that all cases have an appropriate final *Case Status*.
 - Sort *QAMain mmddyy* worksheet by *Case Status* and *Condition* or filter on *Case Status* (custom filter of “does not equal C” AND “does not equal P”).
 - Review any records that are Suspect, Unknown, or blank.
 - Copy and paste any problem cases into *CaseStatus* worksheet. Please note that suspect, unknown, or blank are not acceptable as final case status for any VPD condition. Remember to resubmit notification in NBS after updating.
 - You will need to manually review in NBS any records that are Probable for conditions that do not have a defined Probable status. See the Epi Case Criteria Guide or list below for guidance.
 - Filter on *Case Status* equals Probable and edit any incorrectly labeled investigation records to the appropriate final status in accordance with the list below. (For example, when filtering for P- there should not be any Varicella cases or Hepatitis A, acute cases as there is not a Probable case status for either condition. You will have to edit those patient investigations and resubmit notification for those cases.)

Condition	Possible Case Status
Haemophilus influenzae, type B (Hib)	C or P
Hepatitis A, acute	C
Hepatitis B, acute	C
Hepatitis B, chronic	C or P
Hepatitis B Viral Infection, Perinatal	C
Measles (Rubeola)	C
Mumps	C or P
Neisseria meningitidis, invasive	C or P
Pertussis	C or P
Rubella	C
Congenital Rubella Syndrome (CRS)	C or P
Strep pneumoniae, invasive	C
Tetanus	P
Varicella (Chickenpox)	C

☆ All records with *Case Status* of C or P have had a notification created and submitted through NBS

- Assure that a notification has been created for each confirmed and probable case.
 - Sort by *Last Notification Sent Date* and *Last Notification Date* and review for incomplete records.
 - If both dates are filled in, the process is completed.
 - If there is a *Last Notification Date* and no *Last Notification Sent Date*, then the notification needs to be approved (Central Office).
 - If both dates are blank, no notification has been created. You will need to go to that patient record and create a notification.
 - Copy any problem cases over to the *NoNotif* tab to create a list needing manual review in NBS. Remember to resubmit notification in NBS after updating.

☆ Each record has *DOB (Birth Time)* or *age (Age Reported)* that is reasonable for the condition

- Missing DOB
 - Filter *QAMain mmddyy* worksheet by *Birth Time*, select (*Blanks*).
 - Copy and paste all missing records into *PtDOB* worksheet. You will need to manually update these records with appropriate DOB in NBS.
 - If the date of birth is entered on the *Demographic* tab, copy it into the *Patient* tab of the investigation.
 - Review the case investigation notes for the DOB and if still missing, contact the reporting provider to obtain it.
- Age Validity
 - Sort *QAMain mmddyy* worksheet by *Birth Time*.
 - Look at the earliest birth dates and verify data for those as needed. (i.e., DOB in 1909- is this accurate or a typo?)
 - Calculate age from *Birth Time* from *Event Date*.
 - Create a new column and title it *Age Validity*.
 - Format the cells in the column as numbers with no decimals.
 - Use the formula $=Event\ Date - Birth\ Time$, i.e. $=D2 - G2$ and copy it down through the *ED-BD* column through the rows that have a *Birth Date* value.
 - Sort on *ED-BD*.
 - Look for negative numbers (*Birth Time* after *Event Date*) and correct dates.
 - Examine cases where $ED - BD = 0$ (*Birth Time* = *Event Date*) for validity issues. Typing an event date in the date of birth field is a common data entry error so these records should be reviewed for accuracy of date of birth.

- Examine other ages as appropriate. (e.g. Examine all acute hepatitis B cases less than 730 days to determine if they should be reentered as perinatal hepatitis B or there is a date error.)
- Copy and paste any age problem records into PtDOB worksheet to be marked for manual update.

☆ Each record has a patient address.

- Missing or Erroneous Data – *Patient Address*
 - Patient Address –
 - Filter QAMain *mmddy worksheet* for *Street Address* by selecting (*Blanks*).
 - Copy any blanks into *PtAddress* worksheet to create a list needing manual updating in NBS.

☆ Each record has an appropriate *County* selected and it is consistent with address and jurisdiction.

- Missing or Erroneous Data – *County*
 - County –
 - Filter the QAMain *mmddy worksheet* for *County* field, select (*Blanks*).
 - Copy all records with blank county and paste to *PtCounty* tab to mark for needed manual editing.
 - Make a Pivot Table of *County* in QAMain *mmddy worksheet*.
 - Select *County* as the row variable and *Jurisdiction* as the column variable.
 - Examine your jurisdiction's records that have counties listed that are outside of your jurisdiction.
 - Correct the *County* field, if appropriate, or transfer the *Jurisdiction* (notifies the receiving jurisdiction and share written records with them).

Note: During data closeout at the end of the year, a process that finds possible miss-assigned counties, miss-spelled cities, and incorrect zip codes will be run at Central Office and a list of potential errors will be sent to you.

☆ Each record has sex assigned (*Current Sex Code = F, M, or U-preferably F or M*)

- Missing or Erroneous Data – *Current Sex Code*
 - Sex – filter for blanks on *Current Sex Code*.
 - Copy and paste any blanks into *PtSex* tab to create a list needing manual followup in NBS.
 - Fill in M or F or Unknown on the patient demographic tab of the investigation (*Current Sex Code* may be filled in on the *Demographics* tab, but also needs to be added into the investigation).

☆ Each record has patient race assigned (*Concatenated Race Description = American Indian or Native Alaskan, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, or Unknown*)

- Missing or Erroneous Data – *Concatenated Race Description*
 - Race – filter for blanks on *Concatenated Race Description*
 - Copy and paste any blanks into *PtRace* tab to create a list needing manual followup in NBS.
 - Fill in appropriate race on the patient demographic tab of the investigation (*Race* may be filled in on the *Demographics* tab, but also needs to be added into the investigation).

☆ Each record has ethnicity assigned (*Ethnic Group = Hispanic or Latino, Not Hispanic or Latino, or Unknown*)

- Missing or Erroneous Data – *Ethnicity*
 - Ethnicity – filter for blanks on *Ethnic Group*.

- Copy and paste any blanks into *PtEthnicity* tab to create a list needing manual follow-up in NBS.
 - Fill in appropriate ethnicity on the patient demographic tab of the investigation (*Ethnicity* may be filled in on the *Demographics* tab, but also needs to be added into the investigation).

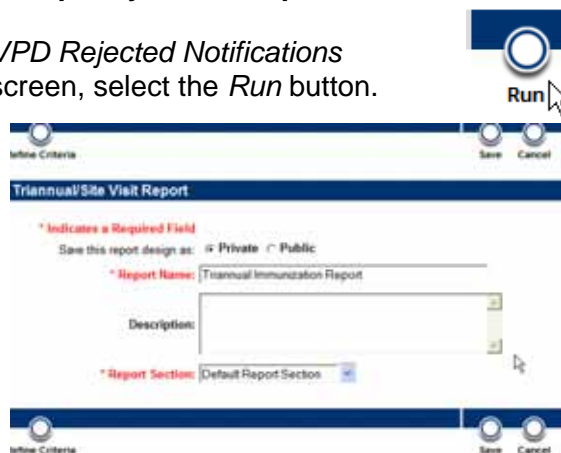
VPD Rejected Notifications Report

Examine default reports section under Private Reports in NBS. Do you have the report titled <i>VPD Rejected Notifications Report</i> listed?	Please follow instructions below.
No	Begin instructions with C. under Report Setup.
Yes	Begin instructions with D. under Report Setup.

Report Setup

C. Saving from Public to Private Reports Section (This step only needed upon first time running report.)

- In the NBS *Public Reports* section, run the report, *VPD Rejected Notifications Report*. In the upper right hand corner of the new screen, select the *Run* button. Next, hit *Save As New* button.
- In the new screen, be sure that *Private* is selected as the report design. Enter *VPD Rejected Notifications Report* in the *Report Name* field. Choose *Default Report Section* in the area entitled *Report Section*. Then hit the *Save* button. The following screen that appears will be the default NBS Reports page.



D. Running Report from Private Reports Section

- Go to your Private Reports Section in NBS, run the report entitled *VPD Rejected Notifications Report*.
- Examine each filter and assure proper selections have been made. You may need to make adjustments to the *Advanced Filter*.
 - **Basic Filter** – All VPD conditions should be pre-selected: *Diphtheria; Haemophilus influenzae type b (Hib); Hepatitis A, Hepatitis B, Viral Infection Perinatal; Hepatitis B virus infection, Chronic; Hepatitis B, Acute; Measles (Rubeola);, Mumps; Neisseria meningitidis, invasive (Mening. Disease); Pertussis; Poliomyelitis, Paralytic; Poliovirus infection nonparalytic; Rubella; Rubella, Congenital Syndrome (CRS); Streptococcus pneumoniae, invasive disease (IPD); Tetanus, and Varicella.*
 - **Advanced Filter** – *Investigation Case Status Not Equals “Not a Case” AND (MMWR Year Equals “2011” OR MMWR Year Equals “2012”)*
 - Please be sure that your criteria follow the exact order of the formula below. The *Basic Filters Selected Plus* box below *Advanced Criteria List* should be listed as follows:


```
Investigation Case Status Not Equals “Not a Case”
AND
(
MMWR Year Equals 2011
OR
MMWR Year Equals 2012
)
```

- **Column Selection** – *Condition Code, Condition Name, Investigation Case Status, Investigation Local ID, Investigation Status, Jurisdiction Name, MMWR Week, MMWR Year, Notification Comments, Notification Creation Date, Notification Status, Patient First Name, Patient Last Name, Patient Local ID*
- Export the file.
- Save as *VPD_RejectedNotif mmddyy.csv*.
- Open and save as an excel file, *VPD_RejectedNotif mmddyy.xls*.
 - The listed cases are notifications which were rejected by Central Office either because pertinent information was missing or because the case did not meet criteria for the selected case status. Please refer to comments section for indications as to why notification was rejected. Manually review, edit or update each investigation in the line listing. After updating the investigations, be sure to resubmit notifications in order to remove the cases from the rejected notification listings.
 - It is helpful to have a copy of the Epi Case Criteria guide (<http://www.dshs.state.tx.us/idcu/investigation/forms/EpiCaseGuide.pdf>) to refer to case definitions and case status criteria. You may also wish to refer to the VPD Guidelines (http://www.dshs.state.tx.us/idcu/health/vaccine_preventable_diseases/resources/vpd_guide.pdf) or the NBS Data Entry Guidelines (https://txnedss.dshs.state.tx.us:8009/PHINDox/UserResources/Data_Entry_Guidelines_2007.pdf).