

Steps to Sharing With NESIIS

The process for sharing data electronically with NESIIS is as follows:

1. If vendor has previously worked with NESIIS, they should contact the Help Desk with information specific to the new site they are working with. E-mail & phone number are at the bottom of this page.
2. If the vendor has not worked with NESIIS before, provider begins by visiting the Meaningful Use web page and filling out the survey in Step 1. Go to: <http://dhhs.ne.gov/mu>
3. NESIIS Help Desk determines contact info of responsible person, then e-mails data exchange specs the extract will have to match. Specs are also located in a link from the above-referenced web page. **Note: HL7 version is 2.4 is fine for new setups, but at this time will not meet Meaningful Use requirements moving forward. Version 2.5.1 is recommended, but we will work with both.**
4. Person responsible for implementation is then provided the following steps to successfully getting data into the NESIIS Production environment:
 - a) Help Desk will provide vendor with required Org Code and values for batch or message segments (BHS-4, FHS-4, MSH-4 & BHS-6, FHS-6, MSH-6).
 - b) Vendor should submit CVX/CPT codes table to NESIIS Help Desk for accuracy review.
 - c) Initial test message can be a batched or individual file and should be fake data, e-mailed directly to Help Desk contact who reached out initially. Help Desk will review file for possible errors, then test through manual data exchange into Testing environment of NESIIS.
 - d) Feedback on test file, including screen capture of NESIIS-generated response and text response file NESIIS creates is e-mailed to vendor.
 - i. If test file was for an individual message and was fine, vendor will be asked to submit a file containing all imms the practice would administer, within one file. This is to assure that when Production data exchange is enabled, data quality is not compromised.
 - ii. If test file needs adjustments, vendor will be asked to correct and re-submit file(s) for testing until satisfactory results are reached.
 - e) Upon completion of base testing, testing via an automated connection, PHINMS or SOAP Web Services, will be initiated. See PHINMS & Web Services info later in this document for details.
 1. After setup is complete, testing using fake data in either batched or individual records is performed simply to assure links are working.

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7. Upon successful completion of automated testing with fake data, Production data exchange is turned on and allowed. **Vendors and clients who complete successful testing for data exchange are expected to begin submitting Production data shortly after completion.** This is to maintain integrity of the process and time undertaken to this point to assure successful data exchange and is in line with Meaningful Use expectations.
8. DHHS will then request a historical load of data from the vendor for loading into NESIIS. The purpose of this is to provide as complete a record as possible for other providers, parents and school nurses who access the information daily.

PHINMS

What Is It?

- Public Health Information Network Messaging System (PHINMS)
- Developed by the CDC, it's free and in use as the primary data transport protocol for all Wisconsin-based immunization information systems (IIS), of which there are approximately 20 at the present time.

Why Do It?

- Right now this is the only communication method available to automatically submit HL7 data to NESIIS

Is Another Service Going to Be Available?

- Yes. In the Spring of 2013 NESIIS will be enhanced to accept data through SOAP Web Services. Details and specifications will be online at: <http://dhhs.ne.gov/mu>

Normal Steps in Setup:

1. Determination of who is responsible for install (vendor or site)
2. DHHS e-mails contacts on State of Nebraska team who support PHINMS
3. State team member responds to client with an e-mail, then follows up with testing and configuration, even providing configuration files if needed. Below is standard text used:

[Name of Contact},

You will need to install PHINMS software for sending us data. Below are the PHINMS download instructions.

You can download the PHINMS client software from the following site. Please let me know if you have problems downloading.

https://dhhs-nedss.ne.gov/PHINMS-2.8.01_SP1-install.exe

It will ask you for a party ID and domain name during the install. You can use the following for this:

PartyId: phinms.[org-specific naming info].org

Domain: [org-specific domain info created].org

Once you install it, you can login to the PHINMS console (Start > All Programs > PHINMS_2.8.01 > PHINMS Console) using:

UserID: system

Pwd: Phinms123

Once you have it installed, let me know, and I'll send some configuration instructions to connect it to our receiver.

Please let me know if you have any questions or concerns.

4. Once this is complete, DHHS configures NESIIS to accept PHINMS connections into the Testing environment for this client & advises vendor to drop an extract into the PHINMS test folder.
5. Once the test is confirmed positive, vendor & client are notified a move to Production is allowed, where they will now need to push extracts to the Live PHINMS folder, & DHHS configures Production environment to accept PHINMS connections for this client.

Contact Info: dhhs.nesiis@nebraska.gov or 1-888-433-2510

NESIIS Web Services

Background:

Web Services is a messaging and technology standard that provides the ability for systems to communicate across enterprise boundaries in a language neutral manner. NESIIS now has a web-service interface that allows providers to send and receive HL7 messages in real-time. With real-time data exchange, up-to-date health information is immediately available to health care providers using NESIIS, improving the information used in making clinical decisions.

To use web services you must have a URL to a web server and the knowledge of what messages can be received at that server. Some servers will require a username and password; additional parameters may also be required. Some software requires a wsdl this can be obtained by using the URL and concatenating “?wsdl” to the end.

When an HL7 message is created and sent to the Web-Service server, it will be processed and a message will be returned. These messages are Simple Object Access Protocol (SOAP) messages and are constructed and decoded by third party software. Each message will include a command or response. A response will typically include an optional piece called a “payload” of information.

NESIIS Web-service Information:

NESIIS has 2 message types that can be used:

- connectivityTest
- submitSingleMessage

The connectivityTest consists of one required parameter:

- echoBack – Will contain the message to be returned if the message was successfully received, validating the connection was successful.

The submitSingleMessage consists of 4 required parameters:

- username – Supplied by NESIIS staff after manual testing is complete.
- password – Supplied by NESIIS staff after manual testing is complete.
- facilityID – Supplied by NESIIS staff.
- hl7Message – Sender supplies this information. This is an HL7 message using versions v2.3.1, v2.4, or v2.5.1. (**Note:** web-services does not accept batch files.)

The URLs used by NESIIS are:

- UAT region: <https://testnesiis-dhhs-testwebservice.ne.gov/uat-webservices/cdc>
- Production region: <https://nesiis-dhhs-webservice.ne.gov/prd-webservices/cdc>

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In order for a provider/vendor to utilize NESIIS Web-services, they will need to contact the NESIIS Help Desk. The NESIIS staff will then provide the appropriate WS User Name, WS Password, facilityID, and the URL to the Web-service server. Organizations must have a program that can make web service requests. In most cases, providers will be able to utilize their current immunization software.

Note:

NESIIS cannot configure the providers' software as it is nearly impossible to have all of the knowledge needed to configure every piece of web service software made.

An example SOAP request:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:urn="urn:cdc:iisb:2011">
  <soap:Header/>
  <soap:Body>
    <urn:submitSingleMessage>
      <!--Optional:-->
      <urn:username>IRPH</urn:username>
      <!--Optional:-->
      <urn:password>Help1</urn:password>
      <!--Optional:-->
      <urn:facilityID>IRPH</urn:facilityID>
      <urn:hl7Message>MSH|^~\&|IRPH|IRPH|||20110322|TEST|VXQ^V01|52|P|2.4
QRD|20110322|R|||52|||0^RD|^test^test^^^^^^^^^^^^^|VXI|SIIS
QRF|MA0000|||~20000101~~~~~
</urn:hl7Message>
    </urn:submitSingleMessage>
  </soap:Body>
</soap:Envelope>
```

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An example Response message:

```
<S:Envelope xmlns:S="http://www.w3.org/2003/05/soap-envelope">
  <S:Body>
    <S:Fault xmlns:ns4="http://schemas.xmlsoap.org/soap/envelope/">
      <S:Code>
        <S:Value>S:Receiver</S:Value>
      </S:Code>
      <S:Reason>
        <S:Text xml:lang="en">Your Response Message here</S:Text>
      </S:Reason>
    </S:Fault>
  </S:Body>
</S:Envelope>
```