

**Connect Virginia**  
Advancing Virginia's Health Care

# **PUBLIC HEALTH REPORTING ONBOARDING GUIDE**

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## PUBLIC HEALTH REPORTING INTRODUCTION

ConnectVirginia is the statewide HIE for Virginia and provides transport of messages to public health to meet Meaningful Use requirements. Currently, ConnectVirginia supports submissions of immunization data (VIIS), syndromic surveillance data, electronic lab reporting, and Cancer data through the Pathway. ConnectVirginia now supports the bidirectional immunization reporting for Stage 3 of Meaningful Use as well.

All public health reporting submissions are transferred to the Virginia Department of Health in a secure manner. ConnectVirginia is responsible for helping organizations establish their secure connections. The content (payload) for public health messages is defined by VDH. All providers intending to electronically submit via ConnectVirginia must be registered in VDH's electronic [MU Registration System](#). VDH requires additional MOUs for providers/practices submitting immunization and syndromic surveillance data. VDH validates the message structure and content of public health reporting messages and provides corresponding MU attestation documentation based on achieved progress.

More information about public health reporting, including message content specifications for MU Stage specifications can be found on VDH's [Meaningful Use](#) website. Questions about MU can be sent to [MeaningfulUse@vdh.virginia.gov](mailto:MeaningfulUse@vdh.virginia.gov).

## PUBLIC HEALTH REPORTING ONBOARDING PROCESS

Onboarding to ConnectVirginia's Public Health Reporting Service is a multi-step process that must be coordinated with VDH.

1. **ALL** Eligible Professionals (EPs), health systems, etc. **MUST** register with VDH to indicate the public health reporting objectives they plan to use to attest for MU. The website for registration is here: <https://www.vdh.virginia.gov/meaningfuluse/MU2/Login/Login.aspx>
2. VDH will provide practices with the MOUs necessary for submitting immunization and syndromic surveillance data.
3. VDH will perform message structure validation for messages submitted via email by the practice or the practice's vendor. **Message structure validation generally utilizes test (non-Protected Health Information (PHI) containing) data.**
4. Each practice must sign and return the ConnectVirginia Public Health Reporting Agreement (in the Appendix, or can be downloaded from [connectvirginia.org](http://connectvirginia.org)).
5. While in the message structure validation stage, the practice should set up the secure transport with ConnectVirginia (either HTTPS or SFTP) in preparation for the message content validation phase. **The message content validation phase requires data from the practice's production environment to be sent via ConnectVirginia.**
6. Once structural testing is complete, VDH will approve message content validation for message sent via the secure transport provided by ConnectVirginia. VDH will notify the ConnectVirginia

and the onboarding participant (or EHR vendor) when the message content validation step has been completed.

7. When notified to do so by VDH, ConnectVirginia will coordinate with the onboarding participant to move their transmissions from the testing environment (TEST) to the production environment (PROD). VDH will change the provider status to “In Production” and supply the provider practice appropriate documentation for MU attestation activities.

## SETTING UP PUBLIC HEALTH REPORTING TRANSPORT

1. Each participant/EHR vendor must obtain an OID to identify their organization, if they do not already have one, and provide this OID to ConnectVirginia. An OID is a unique identifier for the organization – it looks similar to: 2.16.840.1.113883.3.9 Your organization or vendor may already have one, if not, you can register for one here: <http://www.hl7.org/oid/index.cfm>. Currently HL7 charges \$500 per OID for nonmembers.
2. With your EHR vendor, determine the type of connection to be established – HTTPS or SFTP. See the specifications and required information for both types of transport below.
3. Submit your signed Public Health Reporting Agreement, identify the type of transport you wish to set up, and supply the required information to [support@connectvirginia.org](mailto:support@connectvirginia.org).
4. ConnectVirginia will issue the appropriate credentials and information to connect to the TEST endpoint at VDH. Although you or your vendor may test connectivity at any time, **VDH must authorize** the practice/vendor to utilize the HIE for message content testing (see step 6 above).
5. Once content testing is complete and VDH instructs, ConnectVirginia will provide the practice/vendor the PROD information.

## HTTPS SPECIFICATION

- ConnectVirginia provides two endpoints for submission of all types of public health report data using HTTPS – one endpoint for TEST and one endpoint for PROD
- The POST request is used to submit the report data; the report (HL7 message data) is submitted in the **body** of the POST request.
- Customized HTTP headers are used to indicate to ConnectVirginia who the submitting organization is and what type of report is being submitted.
- The following custom headers must be provided on the HTTPS request for public health report processing to function properly:
  - **medfx-custom-oid**: OID identifying the sending organization. This OID must be acquired by the practice or vendor and provided to ConnectVirginia during the application process.

- **medfx-transaction-id:** Unique identifier provided by the submitting entity to identify the transaction for audit and response purposes. Each request provided to ConnectVirginia must contain a unique identifier within the scope of the organization making the request.
- **medfx-phr-type:** Indicates the type of public health report being submitted.

Valid Report Types for the *medfx-phr-type* header are:

- **IMM** - Immunization
- **ELR** - Electronic Lab Report (for Hospitals and Labs only)
- **ELReICR** - Electronic Case Reporting (coming soon)
- **SYND** - Syndromic Surveillance
- **CANREG** - Cancer Registry
- **NBSORDERS** - Newborn Screening

Organization authentication and authorization is provided by the ConnectVirginia issued client certificate. This certificate must be provided as part of the HTTPS POST request to ConnectVirginia on every transaction. ConnectVirginia forwards acks and nacks from VDH indicating successful (or unsuccessful) messages

## SETTING UP HTTPS TRANSPORT

1. Send a request to [support@connectvirginia.org](mailto:support@connectvirginia.org) to set up a HTTPS account for your practice. You **must** include the following items in your request:
  - A signed ConnectVirginia Public Health Reporting Agreement
  - Your organization's/practice's OID (vendor hubs should have their own OID)
  - A valid domain name (must end in an internet extension) for the environment from which the connection will be made
  - Preferred file format for the SSL client certificate - .pem or .p12
  - Contact information for the appropriate technical resource(s)
2. ConnectVirginia will execute and return the Public Health Reporting Agreement
3. ConnectVirginia will issue SSL client certificates and the TEST endpoint via secure email
4. Once you have a test message with the custom headers ready, please notify ConnectVirginia at [support@connectvirginia.org](mailto:support@connectvirginia.org) when you are ready to verify connectivity.

## HTTPS – TIPS AND FAQs

- Uses a HTTPS POST request with custom headers
- Here are the custom headers
  - ★ **medfx-custom-oid** Your organization's OID that you provide to ConnectVirginia

- ★ **medfx-transaction-id** Unique identifier that can be used for auditing, monitoring, or troubleshooting transactions.
- ★ **medfx-phr-type** the type of report/data. Valid values are
  - **IMM** - Immunization
  - **ELR** - Electronic Lab Report (for Hospitals and Labs only)
  - **ELReICR** - Electronic Case Reporting (coming soon)
  - **SYND** - Syndromic Surveillance
  - **CANREG** - Cancer Registry
  - **NBSORDERS** - Newborn Screening
- **The format of the file name is as follows: (phr-type)~(transactions-id).extension**
  - The extension of the file name cannot be .out or .err
  - Any other extension will work. Ex. .hl7, .txt, .in, etc.

Example filenames:

  - ELR~1234567890.in
  - IMM~B4E1682D-BDB8-401B-9005-5A78FAB33FAA.txt
  - SYND~AA3719193.hl7
- The HL7 message data are in the **body** of the request, **not** the headers
- ConnectVirginia will provide you an endpoint for VDH content TEST. You need to submit data from **YOUR PRODUCTION ENVIRONMENT** for content testing. After VDH validates your message content and approves you for production, we will provide an endpoint for VDH PROD.
- Each type of data must be validated before you are approved to send to PROD. This means you may have data feeds for both TEST and PROD at the same time depending on where you are in content validation and testing with VDH.
- ConnectVirginia forwards acks and nacks from VDH indicating successful (or unsuccessful) messages.
- PHRS uses port 13000 – be sure your firewall allows this connection.
- What we need from you – your OID and a valid domain name, as well as your preferred file format (.pem or .p12/.pfx to issue your certificates).
- What we provide to you – SSL certificate and TEST/PROD endpoints

1. **Do I need an SSL Certificate?** Yes, ConnectVirginia will issue you a certificate once you provide us with an OID, a domain name and your preferred format (.pem or .p12).
2. **What is an OID and where can I get one?** An OID is a unique identifier for your organization – it looks something like this: 2.16.840.1.113883.3.9 Your organization may already have one, if not, you can register for one here: <http://www.hl7.org/oid/index.cfm>. Currently HL7 charges \$500 per OID to non-members.
3. **Why do I need a domain name?** We tie your SSL certificate to your domain name to verify your identity when you submit data. Your domain name **MUST** end in an internet extension such as **abchospital.com or provider.net**.
4. **How do I create custom headers?** Header fields are colon-separated name-value pairs in clear-text string format, terminated by a carriage return (CR) and line feed (LF) character sequence. How you accomplish this depends upon your software. The most common error is forgetting the colon.
5. **I've installed my certificates, what do I need to do next?** If you have a test message with the customized headers ready, you can test your connectivity by sending a message to the test endpoint. **Please notify ConnectVirginia at [support@connectvirginia.org](mailto:support@connectvirginia.org) & your VDH contact before sending a test message.** You can also test connectivity using telnet or an internet browser. If telnet does not work, you most likely have a firewall issue.
6. **How do I test connectivity with a browser?** Import the P12 file into in either **Chrome** or **Firefox** and browse to the test endpoint. You might get a certificate warning, but you can click proceed. At that point you should get the following error: *Exception: Custom Transaction Id argument from message header is NULL. Expecting 'medfx-transaction-id' header.* If you get that error, you successfully connected to our server.
7. **How will I know if I have connected successfully?** If you receive an ack, you have connected successfully with a properly formatted HL7 message. If you receive a nack, you have connected successfully, but your message (in the body) is not formatted correctly per the VDH specs.
8. **What is this HTTPS 500 error?** This most often means that your certificates are not installed correctly or that your headers are not formatted correctly – see Q 11.
9. **What if I have questions about the HL7 message content, or my MU attestation status or MU documentation?** Use your VDH contacts for MU questions. You should already be working with them on validating your message structure using test data sent to them via email.
10. **Can I test my headers before I send a message through?** [Httpbin.org/post](http://Httpbin.org/post) lets you send an HTTP Post request and returns your request so you can verify it is properly formatted. Here is a response from a properly formatted ELR message:

```
{
  "args": {},
  "data": "MSH|^~\&|QA^1.234.1^ISO|SAMPLE
LABORATORY^34D0932172^CLIA|VDHELRL|VDH^2.16.840.1.113883.3.3556^ISO|20140101210443||ORU
^R01^ORU_R01|@No-CC_1400226988|P|2.5.1|||AL|NE|||PHLabReport-
Ack^2.16.840.1.114222.4.10.3^ISO\nSFT|ORION HEALTH|4.1.1|RHAPSODY
CONNECT|0100101||20120926\nPID|1||ABC-458^^^SAMPLE
```

```

LABORATORY&1.234.1&ISO^MR||LAST^FIRST||19000115|F||1234
ST^^CITY^VA^16850|||||0\nPV1|1|O||||12345^LAST^FIRST||||||OS|||||||
|||201312310000\nORC|RE||Z1234567^SAMPLE
LAB^1.234.1^ISO||||||1234567890^LAST^FIRST^MIDDLE^^^^^CMS&2.16.840.1.113883.19.4.6&ISO^
^^^NPI|^WPN^PH^^1^703^1234567|||||SAMPLE LAB|1234 MAIN ST
^^CITY^VA^24018|^WPN^PH^^1^703^1234567|123 MAIN STREET^^CITY^VA^16850\nOBR|1||
Z1234567^SAMPLE^1.234.1^ISO|13955-0^Hepatitis C virus Ab [Presence] in Serum by
Immunoassay^LN^HCABS^Hepatitis C Ab
Screen^L||201301011155|||||201301011155||1234567890^LAST^FIRST^MIDDLE^^^^^CMS&2.16.8
40.1.113883.19.4.6&ISO^^^NPI|^WPN^PH^^1^703^1234567||123L34567890|
Z1234567||201301011155|SP|F|HBABC&HCABS|||||3978\nOBX|1|CWE|13955-0^Hepatitis C virus
Ab [Presence] in Serum by Immunoassay^LN^HCAB^Hepatitis C Ab Screen^L|1|11214006^(Note) Reactive
Screen^SCT^^^^^(Note) Reactive Screen|NEG|||F||201301011155||123^FAKE^FAKE
FAKE^^^^^CLIA&1.3.6.2.3.0.0000.0.1234.1&ISO^^^^EN||201301011155|||FAKE LAB
^L^^^^CLIA&1.3.6.2.3.0.0000.0.1234.1&ISO^XX^^34D1234567|123 MAIN STREET-Ste.
000^^CITY^VA^16850\nNTE|1|L|Results
checked\nSPM|1|^T1610713&FAKELAB&1.234.1&ISO||119364003^Serum specimen
(specimen)^SCT|||||||201312310000|201312310000",
"files": {},
"form": {},
"headers": {
"Accept-Encoding": "gzip,deflate",
"Connection": "close",
"Content-Length": "1567",
"Content-Type": "application/soap+xml;charset=UTF-8;action=\"urn:ReceiveELR\"",
"Host": "httpbin.org",
"Medfx-Custom-Oid": "1.3.6.1.4.1.39899",
"Medfx-Phr-Type": "ELR",
"Medfx-Transaction-Id": "e835bfdc-0b92-4f32-bab0-180eff347a72",
"User-Agent": "Apache-HttpClient/4.1.1 (java 1.5)",
"X-Request-Id": "52b49d0d-f944-4fba-8a1c-26c8c01a3925"
},
"json": null,
"origin": "174.79.162.2",
"url": "http://httpbin.org/post"
}

```

11. Do you have a sample message that processes correctly? Yes, here an ELR message:

```

POST https://edge-uat.connectvirginia.org:13000/phr HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: application/soap+xml;charset=UTF-8;action="urn:ReceiveELR"
medfx-custom-oid: 1.2.3.4.5.
medfx-phr-type: ELR
medfx-transaction-id: e835bfdc-0b92-4f32-bab0-180eff347a70
Content-Length: 1567
Host: edge-uat.connectvirginia.org:13000
Connection: Keep-Alive

```



User-Agent: Apache-HttpClient/4.1.1 (java 1.5)

```
MSH|^~\&|QA^1.234.1^ISO|SAMPLE
LABORATORY^34D0932172^CLIA|VDHELRL|VDH^2.16.840.1.113883.3.3556^ISO|2014010121044
3||ORU^R01^ORU_R01|@No-CC_1400226988|P|2.5.1||AL|NE|||||PHLabReport-
Ack^^2.16.840.1.114222.4.10.3^ISO
SFT|ORION HEALTH|4.1.1|RHAPSODY CONNECT|0100101||20120926
PID|1||ABC-458^^^SAMPLE
LABORATORY&1.234.1&ISO^MR||LAST^FIRST||19000115|F|||1234
ST^^CITY^VA^16850|||||0
PV1|1|O|||||12345^LAST^FIRST|||||||||OS|||||||||||||||||201312310000
ORC|RE||Z1234567^SAMPLE
LAB^1.234.1^ISO|||||1234567890^LAST^FIRST^MIDDLE^^^^^CMS&2.16.840.1.113883.19.
4.6&ISO^^^^NPI|^WPN^PH^^1^703^1234567|||||SAMPLE LAB|1234 MAIN ST
^^CITY^VA^24018|^WPN^PH^^1^703^1234567|123 MAIN STREET^^CITY^VA^16850
OBR|1|| Z1234567^SAMPLE^1.234.1^ISO|13955-0^Hepatitis C virus Ab [Presence] in Serum by
Immunoassay^LN^HCABS^Hepatitis C Ab
Screen^L|||201301011155|||||201301011155||1234567890^LAST^FIRST^MIDDLE^^^^^CM
S&2.16.840.1.113883.19.4.6&ISO^^^^NPI|^WPN^PH^^1^703^1234567||123L34567890|
Z1234567||201301011155||SP|F|HBABC&HCABS|||||3978
OBX|1|CWE|13955-0^Hepatitis C virus Ab [Presence] in Serum by
Immunoassay^LN^HCAB^Hepatitis C Ab Screen^L|1|11214006^(Note) Reactive
Screen^SCT^^^^^(Note) Reactive Screen||NEG||||F|||201301011155||123^FAKE^FAKE
FAKE^^^^^^CLIA&1.3.6.2.3.0.0000.0.1234.1&ISO^^^^EN|||201301011155||||FAKE LAB
^L^^^^CLIA&1.3.6.2.3.0.0000.0.1234.1&ISO^XX^^34D1234567|123 MAIN STREET-Ste.
000^^CITY^VA^16850
NTE|1|L|Results checked
SPM|1|^T1610713&FAKELAB&1.234.1&ISO||119364003^Serum specimen
(specimen)^SCT|||||||||201312310000|201312310000
```

12. **Who do I contact in case I have problems connecting?** [support@connectvirginia.org](mailto:support@connectvirginia.org)

13. **What do I do after making a successful connection?** VDH will notify you when your message is approved to be sent through ConnectVirginia for content validation. After your content has been validated, you will get a PROD endpoint. If you have any problems with your public health transporting service connection, contact [support@connectvirginia.org](mailto:support@connectvirginia.org) during regular business hours (M-F 9-5 EST).

## SFTP SPECIFICATION

- When you SFTP into ConnectVirginia, you will be presented with 3 directories:
  - **aphmd-in** – input directory - where you drop your HL7 files.
  - **aphmd-out** – output directory – for responses (acks/nacks) or messages from VDH
  - **aphmd-err** – error directory – for other errors
- All public health reporting files are placed in the same folder (in)

- Each filename must be formatted with the **PHR type** and a **Transaction ID**
- **VALID PHR types** are:
  - **IMM** - Immunization
  - **ELR** - Electronic Lab Report (for Hospitals and Labs only)
  - **ELReICR** - Electronic Case Reporting (coming soon)
  - **SYND** - Syndromic Surveillance
  - **CANREG** - Cancer Registry
  - **NBSORDERS** - Newborn Screening
- **Transaction ID** is a unique identifier provided by the submitter to identify the transaction for audit and response purposes
- **The filename must be formatted as: {phr-type}~{transaction-id}.extension**
  - The extension of the file name CANNOT be .out or .err
  - Any other extension will work. Ex. .hl7, .txt, .in, etc.
  - Example filenames:
    - IMM~B4E1682D-BDB8-401B-9005-5A78FAB33FAA.txt
    - SYND~AA3719193.hl7

## SETTING UP SFTP TRANSPORT

1. Send a request to [support@connectvirginia.org](mailto:support@connectvirginia.org) to create an SFTP account for your practice. You must include the following items in your request:
  - An executed ConnectVirginia Public Health Reporting Agreement
  - Your practice's OID (vendor hubs should have their own OID)
  - All **public** IP addresses of the server(s) uploading the SFTP Messages (all need to be received so firewall permissions can be installed or you will receive error messages)
  - Contact information for the appropriate technical resource(s)
2. ConnectVirginia will execute and return the Public Health Reporting Agreement
3. ConnectVirginia will send you a Username and Password and the TEST Hostname and Port via secure email
4. Once you have a test message ready, please notify ConnectVirginia at [support@connectvirginia.org](mailto:support@connectvirginia.org) when you are ready to test connectivity.

## SFTP-TIPS AND FAQs

- Information we need from you to set up your account:
  - Organization Name
  - Organization OID
  - **Public** IP Address of server uploading SFTP Messages
- Here is what we will provide to you when your account is created:
  - Username & Password
  - Hostname & Port (one for content testing (TEST) and one for production (PROD))
- What you need to know about submitting your public health reporting files:
  - When you SFTP into ConnectVirginia, you will be presented with 3 directories:
    - **aphmd-in** – input directory - where you drop your HL7 files.
    - **aphmd-out** – output directory – for responses or message from VDH
    - **aphmd-err** – error directory – for other errors
  - **All** public health reporting files are placed in the **same** folder (in)
  - Each filename **must** be formatted with the PHR type **and** a Transaction ID
  - VALID PHR types are:
    - **IMM** - Immunization
    - **ELR** - Electronic Lab Report (for Hospitals and Labs only)
    - **ELReICR** - Electronic Case Reporting (coming soon)
    - **SYND** - Syndromic Surveillance
    - **CANREG** - Cancer Registry
    - **NBSORDERS** - Newborn Screening
  - Transaction ID is a unique identifier provided by the submitter to identify the transaction for audit and response purposes
- The filename **must** be formatted as: **{phr-type}~{transaction-id}.extension**
  - The extension of the file name **CANNOT** be **.out** or **.err**
  - Any other extension will work. Ex. .hl7, .txt, .in, etc.
  - Example filenames:
    - ELR~1234567890.in
    - IMM~B4E1682D-BDB8-401B-9005-5A78FAB33FAA.txt
    - SYNDSURV~AA3719193.hl7
- Each type of data must be validated for structure (via email using test data with VDH) before you are approved to send data to VDH for content testing in TEST. Then, each type of data must be approved to move into PROD. This means you may have SFTP accounts for both TEST and PROD at the same time depending on where you are in content validation and testing with VDH.
- ConnectVirginia forwards acks and nacks from VDH indicating successful (or unsuccessful) HL7 message processing – these will be in the **out** directory.
- SFTP uses port 22– be sure your firewall allows this connection

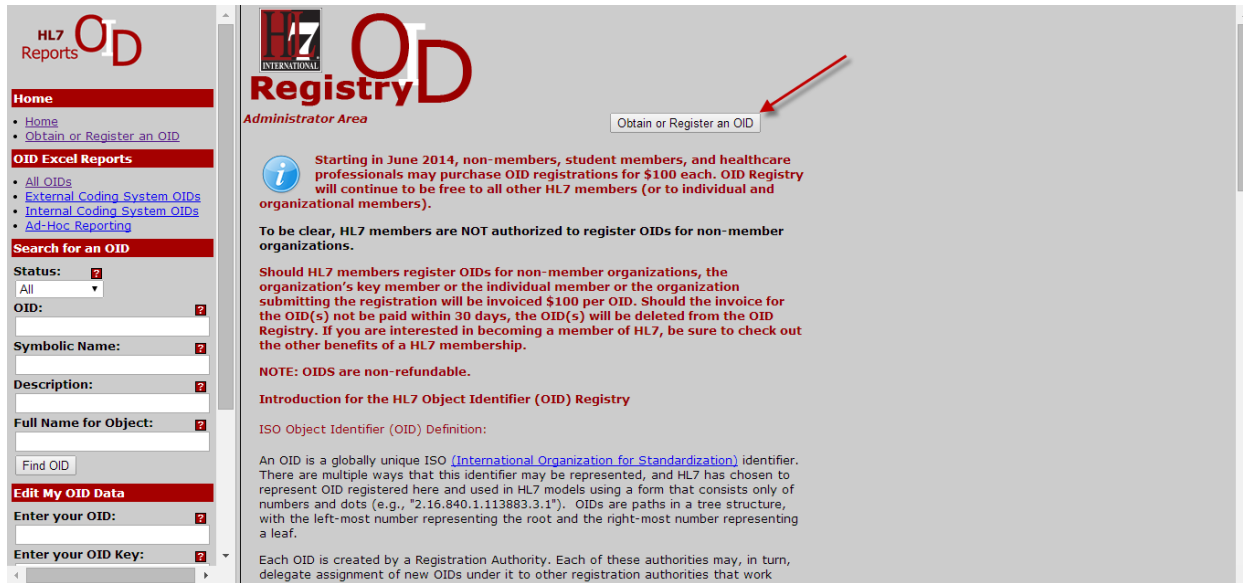
1. **What is an OID and where can I get one?** An OID is a unique identifier for your organization – it looks something like this: 2.16.840.1.113883.3.9 Your organization may already have one, if not, you can register for one here: <http://www.hl7.org/oid/index.cfm>. Currently HL7 is charging \$500 per OID for nonmembers. **It takes about one business day to receive your OID via email.**
2. **How will I know if I have connected successfully? Please notify us at [support@connectvirginia.org](mailto:support@connectvirginia.org) before sending a test message.** Check the out directory. If you receive an ack, you have connected successfully with a properly formatted HL7 message. If you receive a nack, you have connected successfully, but your HL7 message is not formatted correctly per the VDH specs. If you do not receive an ack or nack, check the err directory for any other errors.
3. **What if I have questions about the HL7 message content, or my MU attestation status or MU documentation?** Use your VDH contacts for MU questions. You should already be working with them on validating your message structure using test data sent to them via email.
4. **Who do I contact in case I have problems connecting?** [support@connectvirginia.org](mailto:support@connectvirginia.org)
5. **What do I do after making a successful connection?** VDH will notify you when your message is approved to be sent through ConnectVirginia for content validation. After your content has been validated, you will get a PROD hostname/port. If you have any problems with your public health transporting service connection, contact [support@connectvirginia.org](mailto:support@connectvirginia.org) during regular business hours (M-F 9-5 EST).
6. **What if I'm already sending data directly to VDH?** All existing direct connections to VDH will be transferred to ConnectVirginia. Generally, data are sent to the TEST folder for a period of time until VDH verifies that the data can be sent to the PROD folder.
7. **This is my first time attempting to log in with credentials but I'm getting a time out error. What is the cause and resolution?** This error usually occurs when you are attempting to access from an IP addresses that firewall permissions have not been established for. Please send [support@connectvirginia.org](mailto:support@connectvirginia.org) all of the public IP addresses of the server(s) SFTP messages will be sent from.

## OTHER RESOURCES

Still have questions? Also included in this Guide are FAQ sheets for both types of transport, as well as a guide with instructions for registering an HL7 OID. Other questions about transport/connectivity can be sent to [support@connectvirginia.org](mailto:support@connectvirginia.org). MU questions and questions about the data standards should be directed to [meaningfuluse@vdh.virginia.gov](mailto:meaningfuluse@vdh.virginia.gov).

## OID Instructions

<http://www.hl7.org/oid/index.cfm> \*It takes about one business day to receive your OID via email\*\*



**Administrator Area**

**Obtain or Register an OID**

Starting in June 2014, non-members, student members, and healthcare professionals may purchase OID registrations for \$100 each. OID Registry will continue to be free to all other HL7 members (or to individual and organizational members).

To be clear, HL7 members are NOT authorized to register OIDs for non-member organizations.

Should HL7 members register OIDs for non-member organizations, the organization's key member or the individual member or the organization submitting the registration will be invoiced \$100 per OID. Should the invoice for the OID(s) not be paid within 30 days, the OID(s) will be deleted from the OID Registry. If you are interested in becoming a member of HL7, be sure to check out the other benefits of a HL7 membership.

**NOTE: OIDS are non-refundable.**

**Introduction for the HL7 Object Identifier (OID) Registry**

ISO Object Identifier (OID) Definition:

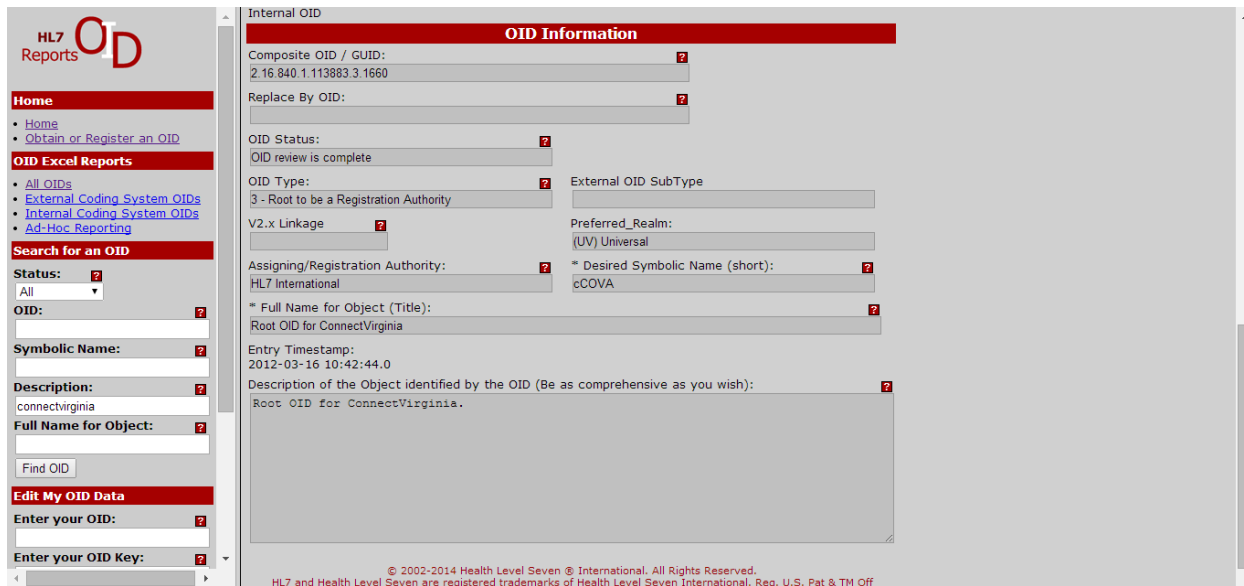
An OID is a globally unique ISO ([International Organization for Standardization](#)) identifier. There are multiple ways that this identifier may be represented, and HL7 has chosen to represent OID registered here and used in HL7 models using a form that consists only of numbers and dots (e.g., "2.16.840.1.113883.3.1"). OIDs are paths in a tree structure, with the left-most number representing the root and the right-most number representing a leaf.

Each OID is created by a Registration Authority. Each of these authorities may, in turn, delegate assignment of new OIDs under it to other registration authorities that work

You must purchase a coupon for an OID and create a user account in the next steps.

Follow the on-screen instructions for Submitter Information, Contact Information, and Responsible Body Portions.

### Register for an Internal OID



**Internal OID**

**OID Information**

Composite OID / GUID: 2.16.840.1.113883.3.1660

Replace By OID:

OID Status: ?  
OID review is complete

OID Type: ? 3 - Root to be a Registration Authority

External OID SubType

V2.x Linkage: ?

Preferred\_Realm: (UV) Universal

Assigning/Registration Authority: ? HL7 International

\* Desired Symbolic Name (short): ? cCOVA

\* Full Name for Object (Title): ?  
Root OID for ConnectVirginia

Entry Timestamp: 2012-03-16 10:42:44.0

Description of the Object identified by the OID (Be as comprehensive as you wish): ?  
Root OID for ConnectVirginia.

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The OID Type should be 3 - Root to be a Registration Authority (this will allow you to create sub OIDs if you need other OIDs for different parts of your organization)

The External OID Sub Type and V2.x Linkage fields can remain blank

Preferred Realm should be (UV) Universal

Desired Symbolic Name – a short version of a name, something to identify you i.e. We could have chosen “CVA” or connectvirginia as well.

Full name – the complete name of your Organization – i.e. ConnectVirginia HIE, Inc.

Description can be “Root OID for [Your Organization]”

**\*\*It takes about one business day to receive the email with your OID\*\***