



Oregon State Public Health Laboratory (OSPHL) Overview

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Get to Know Your Lab...

- Review OSPHL scope and lab services
- How to find what you need
 - Available tests
 - Ordering test kits
 - Specimen collection and storage
- Intro to packaging and shipping specimens

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Question:

Have you worked with OSPHL?

How often?

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OSPHL Scope and Services

- Laboratory Compliance (CLIA, ORELAP)
- Laboratory Operations (e.g., receiving, data entry, test kits)
- Administration, Policy, and Informatics
- General Microbiology
- Virology and Immunology
- Newborn Screening

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General Microbiology

- Bacteriology
 - Culture (isolation and reference testing)
 - Biothreat agents
- Foodborne outbreak support
(bacterial subtyping)
- Tuberculosis testing
 - QuantiFERON®
 - TB susceptibility testing
- Water microbiology
- Special projects

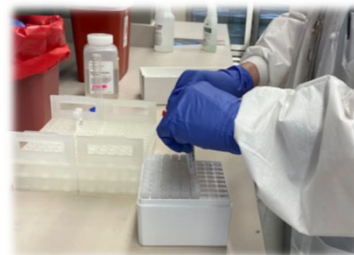


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Virology and Immunology

- Sexually transmitted infections (STIs)
 - Chlamydia, gonorrhea, HIV, hepatitis
- Norovirus and other gastrointestinal viruses
- Influenza, SARS-CoV-2, and other respiratory viruses
- Viral biothreat agents
- Special projects



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Newborn Bloodspot Screening

- Screening for heritable disorders
 - Hemoglobinopathy Screening (e.g. Sickle Cell Disease)
 - Endocrine Screening (e.g. Hypothyroidism)
 - Metabolic Screening (e.g. PKU)
 - Severe Combined Immunodeficiency (SCID) Screening
 - Cystic Fibrosis Screening
 - Lysosomal Storage Disorders
 - Spinal Muscular Atrophy (SMA)
- Regional testing program
 - Oregon, New Mexico, Navajo Nation, some military bases
- Screen for over 40 disorders per specimen



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How to Find Answers to Your Questions

OSPHL Test Menu

www.healthoregon.org/labtests

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Oregon State Public Health Laboratory
Laboratory Services

[Home](#) > [Public Health Division](#) > [Oregon State Public Health Laboratory](#)

Oregon State Public Health Laboratory

The Oregon State Public Health Laboratory (OSPHL) has been actively protecting the public's health since 1903 by supporting state and local infectious disease control efforts, preventing metabolic disorders detectable at birth, and assuring the quality of testing in clinical and environmental laboratories.

Communicable Disease Testing

The Communicable Disease Testing section provides screening, diagnostic and reference testing (virology, immunology and microbiology) for communicable diseases.

- Submitting Samples
- Search our Lab Test Menu**
- Test Request Forms and Collection Kits

Clinical Laboratory Regulation

The Oregon Laboratory Compliance Section contracts with the Centers for Medicare and Medicaid Services to carry out the Clinical Laboratory Improvement Amendments (CLIA). This section also oversees Health Screen Testing permits (HST), and Substance of Abuse (SOA) registrations in Oregon.

Environmental Laboratory Accreditation (ORELAP)

The Oregon Environmental Laboratory Accreditation Program (ORELAP) accredits qualified environmental testing laboratories in Oregon and throughout the country to national standards.

- ORELAP and Cannabis Testing
- Find Labs, Methods and Analytes
- Drinking Water Testing



- Search our Lab Test Menu
- Submitting Specimens for Zika Virus Testing
- Communicable Disease Services Billing Information
- Accessing OSPHL Test Results
- View our CLIA and CAP Certificates

[Contact Us](#)

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Test Menu Search

A to Z Listing of Lab Tests

Tip: Use the search box to locate your test. For example, search for "Newborn" to see a list of all newborn screening tests.

Please note: If the Test Details page you have selected does not print correctly, try using another browser such as Chrome or Internet Explorer.

The Oregon State Public Health Laboratory follows mandatory reporting guidelines as required by Oregon Administrative Rule 333-018.

Test Name	Search Terms
BioFire FilmArray Multiplex Gastrointestinal PCR Panel	Adenovirus F40/41; Astrovirus; Campylobacter (jejuni, coli, and upsaliensis); Clostridium difficile (toxin A/B); Cryptosporidium; Cyclospora cayetanensis; E. coli O157; Entamoeba histolytica; Enterobacteriaceae (EPEC); Enteropathogenic E. coli (EPEC); Enterotoxigenic E. coli (ETEC) It/st; Giardia lamblia; Norovirus GI/GII; Plesiomonas shigelloides; Rotavirus A; Salmonella; Sapovirus (I, II, IV, and V); Shiga-like toxin-producing E. coli (STEC) stx1/stx2; Shigella/Enteroinvasive E. coli (EIEC); Vibrio (parahaemolyticus, vulnificus, and cholerae); Yersinia enterocolitica
Norovirus Real-Time RT-PCR	Astrovirus; Calicivirus; Norovirus (I and II); Sapovirus; Rotavirus; Gastrointestinal Viruses

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Norovirus, Real-Time RT-PCR	
Updated	4/1/2025
Search Terms	Astrovirus; Calicivirus; Norovirus (I and II); Sapovirus; Rotavirus; Gastrointestinal Viruses; Norwalk
How to Order	<p>On the Virology/Immunology Test Request Form (OHA0042), in the "Molecular" section, check the "MOL NOV: Norovirus RT-PCR" box.</p> <p>If the specimen is associated with an identified outbreak, include the outbreak number in the Outbreak Number box on the Test Request Form.</p> <p>If the specimen is associated with a study, include the study identification in the Study box on the Test Request Form.</p>
Availability	With approval from the Acute and Communicable Disease Program or Local Public Health Authorities
Performed	As needed
Time to Reporting	Within 7 working days after receipt of specimen
Public Health Data	Data from norovirus testing and genetic sequencing are shared with the Centers for Disease Control and Prevention (CDC) as part of the CaliciNet Surveillance Network .
CPT Code	87798 87798 repeated for each additional gastrointestinal pathogen test performed

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Specimen Collection Details	
Collection	<p>Ideally, collect specimens in the acute phase of illness while stool is still liquid or semi-soft (typically up to 72 hours after symptom onset). Specimens may be collected up to 14 days after symptom onset; sensitivity decreases 7-14 days after illness onset but can remain detectable.</p> <p>Preferred specimen types:</p> <ul style="list-style-type: none"> Raw stool in a clean, screw-top plastic container Stool in Cary Blair enteric pathogen transport media <p>Acceptable specimen: Vomit in a clean screw top plastic container.</p>
Optimal Volume	<p>Solid or Liquid Stool; Vomit - 5 gm or 5 mL</p> <p>Stool in Cary Blair enteric pathogen transport media to the fill line on vial (approx. 5 gm or 5 mL)</p>
Minimum Volume	<p>Solid Stool - 2 gm</p> <p>Liquid Stool; Vomit - 2 mL</p> <p>Approx. 1.0 mL stool in Cary Blair enteric pathogen transport media</p>
Handling	Store all specimen types at refrigerated temperatures (2-8°C) pending transport. Transport as soon as possible after specimen collection. Avoid extreme temperatures.
Transport	<p>Package all specimen types with fully frozen ice packs to maintain refrigerated temperatures during transport.</p> <p>Raw stool or vomit: Specimens should be received at OSPHL within 5 days of collection.</p> <p>Stool in Cary Blair: Specimens must be received at OSPHL within 4 days of collection.</p> <p>Avoid extreme temperatures.</p>
Rejection Criteria	<p>Raw stool and vomit: Specimens received more than 10 calendar days after specimen collection.</p> <p>Stool in Cary Blair: Specimens received more than 4 days after specimen collection.</p> <p>Specimens are subject to the requirements of the OSPHL Specimen Submission Policy (pdf).</p>
Comments	<p>Original material submitted for testing is retained for 7 calendar days after receipt at the laboratory.</p> <p>Norovirus is a primary cause of viral gastroenteritis. Other gastrointestinal viruses (astrovirus, sapovirus, and rotavirus) will only be tested upon request and approval from state or local public</p>

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Method Details

Methodology

Performance Specifications

Real-Time Reverse-Transcription Polymerase Chain Reaction

Method Performance Specifications determined by the Centers for Disease Control and Prevention (CDC). Please contact the CDC for specifications if needed.

Change Log

4/1/2025

Review as new; Comprehensive changes

5/23/2023

Edit How to Order, CPT Code, Comments

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Section	What it tells you	Section	What it tells you
Updated	Last changed date	Minimum Volume	Minimum sample size
Search Terms	Other names for the test	Handling	Storage conditions
How to Order	Forms to fill out	Transport	Shipping conditions and maximum time frame
Availability	Who can order/approval steps	Rejection Criteria	Invalidating factors
Performed	When this test is performed at the lab	Comments	Other notes
Time to Reporting	How long results will take	Methodology	Specific type of testing
CPT Code	Service code	Performance Specifications	Details about the testing
Collection	What sample type, what type of container to use, etc.	Change Log	List of past updates
Optimal Volume	Ideal sample size		

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Exercise

Measles PCR Test Menu Page

www.bitly.com/measles2



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Example – Measles Investigation

It is Friday at 2:00pm. You've just been notified of need to collect a specimen from a patient with symptoms consistent with measles. Rash onset was Wednesday.

Questions	Answers
Who can be tested?	
When should I collect the sample?	
What do I need for testing?	
How should I store the sample?	
How long is the sample viable?	
How should I ship the sample?	

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Measles Investigation - Questions

Questions	Answers
Who can be tested?	
When should I collect the sample?	
What do I need for testing?	
How should I store the sample?	
How long is the sample viable?	
How should I ship the sample?	

What else do we need to know?

- What day to collect sample
- How to transport sample – shipping conditions

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It is Friday at 2:00pm. You've just been notified of need to collect a specimen from a patient with symptoms consistent with measles. **Rash onset was Wednesday.**

You contact the Oregon ACDP epidemiologist for approval. Testing is approved, but **Saturday specimen transport and testing is not approved.**

The specimen cannot be collected until after your Friday courier pick-up.

The next available pick-up would be on Monday and the specimen wouldn't be delivered until Tuesday morning.

- When do you decide to collect the sample?
- Are there any special considerations?
- Are there any other options?
- Any other steps you should take before leaving for the weekend?
 - See if you have collection kits
 - Order a courier pickup

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How to Get the Tools

Ordering Collection Kits

<http://bitly.com/PHLStockOrder>

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Ordering Supplies and Collection Kits



Oregon State Public Health Laboratory Stockroom Order – Form 71-54

www.bitly.com/PHLStockOrder

Instructions: Please fill out completely. Write legibly and use numerals (e.g., 1, 2) for quantities.
Consider supply expiration dates when choosing quantities. Fax completed form to 503-693-5600.
 Call 503-693-4100 with questions.

Facility Name: _____ Telephone: _____

Street Address: _____ City, State, Zip: _____

(no PO boxes)

Contact Name: _____ Contact Phone: _____

*** Collection Kits:**

- Contain biohazard specimen bag, absorbent square, and media or specimen collection device.
- Do not automatically include Test Request Forms.
- ☐ Please include Test Request Forms with my order.
- ☐ Don't include forms. Our facility orders testing electronically, or I will use the fillable PDF or print my own forms from the OSPHL website: www.bitly.com/phl-forms.

Collection Kits*	Form #	# of Kits	Media Only	Quantity
For All Clients:			Cary Blair – Bacterial Enteric Stool	
Chlamydia/gonorrhea (CT/GC)			Regan Lowe – Pertussis	
Multitest Swab (vaginal)	42		Universal Transport Media (UTM) – Respiratory Viruses	
Unisex Swab (cervical, urethral, rectal, pharyngeal)	42		Saline transport media – COVID-19	
Urine	42		Courier Supplies	Quantity
Virology / Immunology Blood	42		Gel/Ice Packs	
			Transport Manifest (1 page to be copied)	

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Test Request Forms

GENERAL MICROBIOLOGY REQUEST
Oregon State Public Health Laboratory (OSPHL)
7202 NE Evergreen Pkwy, Suite 100, Hillsboro, OR 97124
Information: 503-693-4100

PATIENT INFORMATION
*Patient last name, first, middle initial: _____
*Date of birth (mm/dd/yyyy): _____ *Sex/gender: ☐ Female ☐ F to M ☐ Male ☐ M to F Patient ID/Chart number: _____
Race: ☐ American Indian or Alaska Native ☐ Asian ☐ Hispanic or Latino
☐ Black or African American ☐ White ☐ Not Hispanic or Latino
☐ Native Hawaiian or Other Pacific Islander ☐ Unknown
☐ Multi-race ☐ Other ☐ Unknown ☐ Declined ☐ Declined
Patient street address: _____
City: _____ State: _____ ZIP: _____
*County of Residence: _____ Outbreak number: _____

PATIENT INSURANCE INFORMATION
*Insurance/Health plan name: _____ ☐ None ☐ Policy no./Member ID: _____

SPECIMEN / ISOLATE INFORMATION
*Date of collection: _____ Time of collection (##:##): _____ ☐ AM ☐ PM Illness onset date: _____
*Original specimen source: ☐ Blood ☐ Nasopharyngeal swab ☐ Sputum ☐ Stool ☐ Urine ☐ Wound ☐ CDT (Culture-Independent Diagnostic Test) — Was the initial test performed on a C

VIROLOGY/IMMUNOLOGY REQUEST
Oregon State Public Health Laboratory (OSPHL)
7202 NE Evergreen Pkwy, Suite 100, Hillsboro, OR 97124
Information: 503-693-4100

PATIENT INFORMATION
*Patient last name, first, middle initial: _____ *Submitting facility: _____
*Date of birth (mm/dd/yyyy): _____ *Sex/gender: ☐ Female ☐ F to M ☐ Male ☐ M to F Patient ID/Chart number: _____
Race: ☐ American Indian or Alaska Native ☐ Asian ☐ Hispanic or Latino
☐ Black or African American ☐ White ☐ Not Hispanic or Latino
☐ Native Hawaiian or Other Pacific Islander ☐ Unknown
☐ Multi-race ☐ Other ☐ Unknown ☐ Declined ☐ Declined
Patient street address: _____
City: _____ State: _____ ZIP: _____
*County of Residence: _____ Outbreak number: _____ Study: _____

PATIENT INSURANCE INFORMATION
*Insurance/Health plan name: _____ ☐ None ☐ Confidential ☐ Policy no.: _____ Group ID: _____
Diagnosis/ICD-10 code for test: _____ Public Health Program eligible patient (for participating locations only): ☐ STD Program ☐ RH Program ☐ Other _____
Copy results to: ☐ County of Residence ☐ State Public Health ☐ Other Public Health: _____

SPECIMEN INFORMATION
*Date of collection: _____ Time of collection (##:##): _____ ☐ AM ☐ PM Hospitalized? ☐ Yes ☐ No Pregnant? ☐ Yes ☐ No ☐ Unknown Illness onset date: ☐ Acute ☐ Convalescent
*Specimen source: ☐ Blood ☐ Urine ☐ Swab ☐ Stool ☐ Serum ☐ Other: _____
If the source is a swab, please specify type: _____

www.bitly.com/phl-forms

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Example – GI Outbreak

- You have a report of a gastroenteritis outbreak and you need to collect specimens for lab testing. You realize you don't have any collection kits!
- Steps:
 - 1. Check the test menu for what you need to know
 - 2. Order collection kits based on testing required
 - 3. Arrange specimen transport to lab (we'll get to this soon!)

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GI Outbreak Specimens

Organism(s) Suspected	Type	Test to Order	Specimen *
Astrovirus; Calicivirus; Norovirus; Sapovirus; Rotavirus	Viral	Viral Gastroenteritis Panel, RT-PCR	Raw stool in collection cup
Salmonella; Shigella; E. coli O157; STEC; Campylobacter	Bacterial	Enteric Pathogen Culture	Stool in Cary Blair
Bacillus cereus; Staphylococcus aureus; Clostridium perfringens; Listeria monocytogenes	Bacterial	Referral Testing to CDC	Depends on organism suspected

*Find complete instructions on our Lab Test Menu at www.healthoregon.org/labtests

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Oregon State Public Health Laboratory

Stockroom Order – Form 71-54

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Consider supply expiration dates when choosing quantities. **Fax completed form to 503-693-5600.**
Call 503-693-4100 with questions.

Facility Name: _____	Telephone: _____
Street Address: _____ <small>(no PO boxes)</small>	City, State, Zip: _____
Contact Name: _____	Contact Phone: _____

*** Collection Kits:**

- Contain biohazard specimen bag, absorbent square, and media or specimen collection device.
- **Do not automatically include Test Request Forms.**

☐ Please include Test Request Forms with my order.

☐ Don't include forms. Our facility orders testing electronically, or I will use the fillable PDF or print my own forms from the OSPHL website: www.bity.com/phi-forms.

Collection Kits*	Form #	# of Kits
For All Clients:		
Chlamydia/gonorrhea (CT/GC)		
Multitest Swab (vaginal)	42	
Unisex Swab (cervical, urethral, rectal, pharyngeal)	42	
Urine	42	
Virology / Immunology Blood (Hepatitis, HIV, syphilis, serology)	42	
Tuberculosis		
Sputum, NAAT (respiratory specimens)	60	
QuantIFERON	60	
For LPHAs, Outbreaks, Public Health Partners:		
Pertussis	60	
Enteric Outbreak Stool Collection		
Viral – Raw Stool Collection Kit	42	
Bacterial – Cary Blair Collection Kit	60	
Respiratory Illness		
Regular Swab with UTM ¹ (rH/Covid)		
Nasopharyngeal swab with UTM ¹ (rH/Covid)		
Water Microbiology		

Media Only	Quantity
Cary Blair – Bacterial Enteric Stool	
Regan Lowe – Pertussis	
Universal Transport Media (UTM) – Respiratory Viruses	
Saline transport media – COVID-19	
Courier Supplies	
Gel/Ice Packs	
Transport Manifest (1 page to be copied)	
Forms Only	
Virology/Immunology (Green) #42	
General Microbiology (Red) #60	
Stockroom Request #71-54	
Environmental Water #01	
Public Drinking Water #50	
Miscellaneous	
6 mL Vacutainer Tubes (Red top / 100/box)	<input type="checkbox"/> Tubes <input type="checkbox"/> Boxes
Blue (water only) Mailing Containers	
OSPHL Use Only	
Filled by: _____	Date: _____

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Common GI Outbreak Kits

- Test Kit Contents:
 - Citizen Instructions
 - Specimen Container
 - Toilet Liner
 - Paper Bowl
 - Spoon
 - Gloves
 - Gauze Pad
 - Lab Slip
 - Alcohol Pad
 - Specimen Transport Bag
 - Absorbent Material
 - Paper Sack



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GI Outbreak Kits

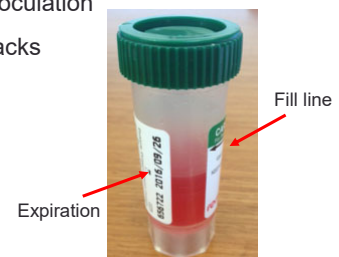
Viral

- Raw stool in specimen collection container
 - Refrigerate after collection
 - Ship with ice packs



Bacterial / Unknown

- Cary Blair transport media
 - Check expiration date and color
 - Transfer some specimen into this media container to the fill line.
 - Refrigerate after inoculation
 - Transport on ice packs



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Get it to the Lab!

Packaging and Shipping Specimens

<http://bitly.com/phl-courier>

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Labeling Specimens

- Labeling the specimens
 - Two unique patient identifiers matching the test request form.
 - Do not cover patient information.
 - Leave the expiration date uncovered.
 - Leave viewing space to allow contents to be seen.



www.bitly.com/SpecimenCriteria

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Packaging Basics: Triple Packaging



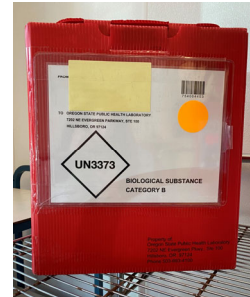
Primary

+



Secondary

+



Tertiary

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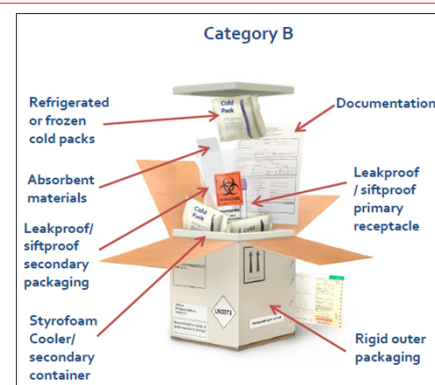
Transporting Specimens

- Shippers of infectious substances are subject to regulations from:
 - U.S. Department of Transportation (DOT)
 - U.S. Postal Service (USPS)
 - International Air Transport Association (IATA)
- Shipping training is required if you classify, package, label, or transport infectious material

Some training resources:

- Free, online training from CDC (www.cdc.gov/labtraining)
- Instructor-led, virtual shipping training courses from Saf-T-Pak and APHL
- Free, regional, in-person or virtual shipping training courses available

Contact OSPHL LRN Coordinator for inquiries



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Let's Pack a Cooler!

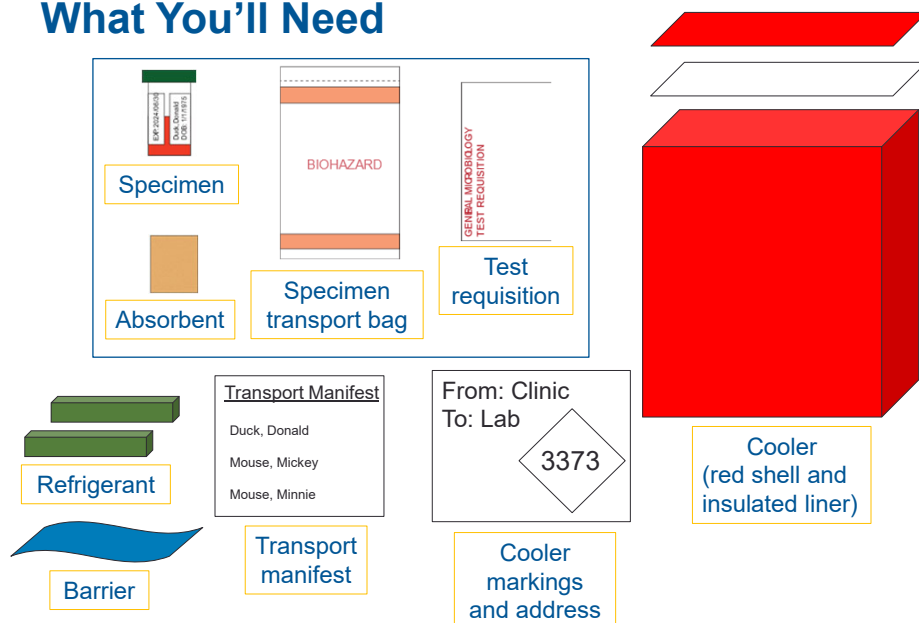
Things to keep in mind:

- Always abide by transportation regulations
- These steps are for ground transport, Category B shipments (ex. with the OSPHL contracted couriers)
 - Air transport? Different rules
 - Category A? Different rules
 - Shipping with FedEx or UPS? Different rules
- Cooler is the term we use at OSPHL. Room temperature samples can also go in them – just don't add ice!

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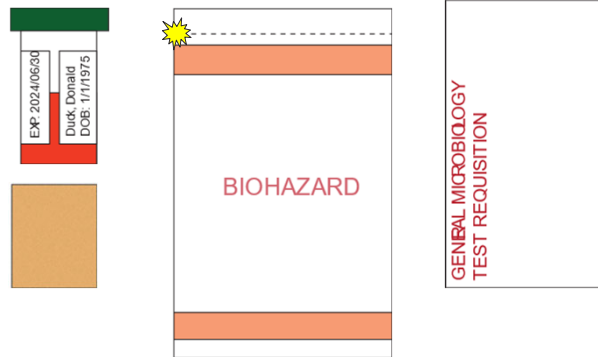
What You'll Need



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1. Labeled specimen container into specimen transport bag
2. Absorbent material into specimen transport bag
3. Close specimen transport bag
4. Test requisition in outer pouch of specimen transport bag



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5. Gather all specimens with same temperature requirements
6. Create Transport Manifest for shipment



A Transport Manifest tells the recipient what is included in the shipment. It should include:

- Shipping facility
- Shipping date
- List of specimens in shipment

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7. Gather transport cooler
8. Add refrigerant and barrier to cooler if needed
9. Add samples to cooler
10. Cover with cooler lid
11. Place manifest on lid
12. Close red lid
13. Flip address label to outbound side facing



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Packing a Cooler Summary (Ground transport - Category B)

1. Labeled specimen container into specimen transport bag
2. Absorbent material into specimen transport bag
3. Close specimen transport bag
4. Test requisition in outer pouch of specimen transport bag
5. Gather all specimens with same temperature requirements
6. Create Sample Manifest for shipment
7. Gather transport cooler
8. Add refrigerant and barrier to cooler if needed
9. Add samples to cooler
10. Cover with cooler lid
11. Place manifest on lid
12. Close red lid
13. Flip address label to outbound facing side

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Ordering a Courier Pick Up

Visit <http://bitly.com/phl-courier>

Courier Service

- Communicable Disease Testing
- Test Menu Search
- Test Request Forms and Collection Kits
- Billing Information
- MU: Electronic Orders and Results
- Submitting Samples
- Courier Service**
- Specimen Shipping and Transport (non-courier)

Oregon State Public Health Laboratory Contracted Courier Service

Courier Changes Beginning June 1, 2023

The OSPHL provides courier service for many locations that submit specimens to our laboratory. Beginning with specimens picked up June 1, 2023, OSPHL will transition courier services to DASH Delivery and STAT Courier using a new, regional courier services model. Senvoy, LLC will no longer be OSPHL's contracted courier service. Information about the change for communicable disease testing submissions can be found in our [April 25, 2023](#) and [May 30, 2023](#) client letters.

Request As Needed/On-Call Pick Up
OSPHL Courier Order Request Form

Training on June 1st Courier Changes

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Ordering a Courier Pick Up

- Place orders at least 1 business day in advance if possible.
- Couriers is OSHA bloodborne pathogen trained.
- Couriers are HIPAA Business Associates with OSPHL.

OSPHL Courier Order Request Form

Please use this form to request a courier pick up specimens at your facility. Most requested services will be scheduled for pick up the business day following the request.

OSPHL will respond to your request within 1 working day by emailing order information to the requestor and/or point of contact.

You can find answers to questions about specimen collection, handling, storage, and transport conditions on our [Lab Test Menu](#). You can reach OSPHL with routine requests at osp.hl.courier@odhsoha.oregon.gov or 503-693-4100 for urgent needs.

All specimens must be accompanied by an OSPHL Test Request Form, available at www.bitly.com/phl-forms.

Enter your email address *

What is your facility name? *

What is your facility's address? *
 Include suite number, if applicable.

Facility City *

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We're Here to Help!

Give us a call!

503-693-4100

- Main webpage – www.healthoregon.org/phl
- Test menu – www.healthoregon.org/labtests
- Stockroom orders – <http://bitly.com/PHLStockOrder>
- Test requests forms – <http://bitly.com/phl-forms>
- Courier requests – <http://bitly.com/phl-courier>