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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, whole genome sequencing
- Tuberculosis testing
 - QuantiFERON®
 - TB susceptibility testing
- Water microbiology
- Special projects

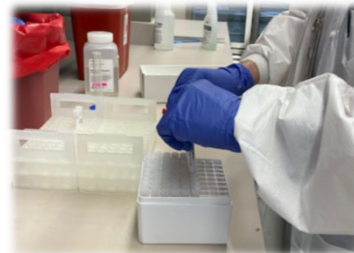


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Virology and Immunology

- 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

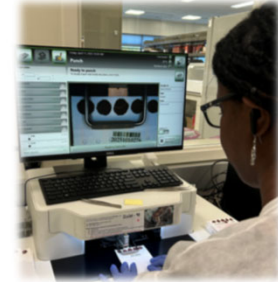


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Newborn Bloodspot Screening

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



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Finding Answers to Your Questions

OSPHL Test Menu

www.healthoregon.org/labtests

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Answers from the Test Menu

Who can be tested?

When should I collect the sample?

What do I need for testing?

How long is it good for?

How should I store the sample?

How do I ship it?

How is it tested?

When do I get results?


Oregon State Public Health Laboratory
Laboratory Services

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.



- 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

Newborn Screening

The Northwest Regional Newborn Screening Program screens newborns for rare but serious health problems like Cystic Fibrosis and other metabolic conditions.

- Provider and Parent Resources
- Collection Kits
- Disorder Fact Sheets

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

[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.

Q X
Sort ▾

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; Enterococci (EAEC); 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 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	<p>Store all specimen types at refrigerated temperatures (2-8°C) pending transport. Transport as soon as possible after specimen collection. Avoid extreme temperatures.</p>
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. Stool in Cary Blair: Specimens must be received at OSPHL within 4 days of collection. Avoid extreme temperatures.</p>
Rejection Criteria	<p>Raw stool and vomit: Specimens received more than 10 calendar days after specimen collection. 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	Real-Time Reverse-Transcription Polymerase Chain Reaction
Performance Specifications	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

<https://bit.ly/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://bit.ly/PHLStockOrder>

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Ordering Supplies and Collection Kits



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

<http://bit.ly/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)	

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

<http://bit.ly/phl-forms>

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

Ethnicity: Hispanic or Latino
 Not Hispanic or Latino
 Unknown
 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
 CIDT (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:

*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

Ethnicity: Hispanic or Latino
 Not Hispanic or Latino
 Unknown
 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:

SPECIMEN INFORMATION
*Date of collection: Time of collection (##:##): AM PM Hospitalized? Yes No Pregnant? Yes No Unknown Illness onset date:

*Specimen source: Blood Urine Swab Stool Serum Other:
If the source is a swab, please specify type:

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
<i>Salmonella</i> ; <i>Shigella</i> ; <i>E. coli</i> O157; STEC; <i>Campylobacter</i>	Bacterial	Enteric Pathogen Culture	Stool in Cary Blair
<i>Bacillus cereus</i> ; <i>Staphylococcus aureus</i> ; <i>Clostridium perfringens</i> ; <i>Listeria monocytogenes</i>	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

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

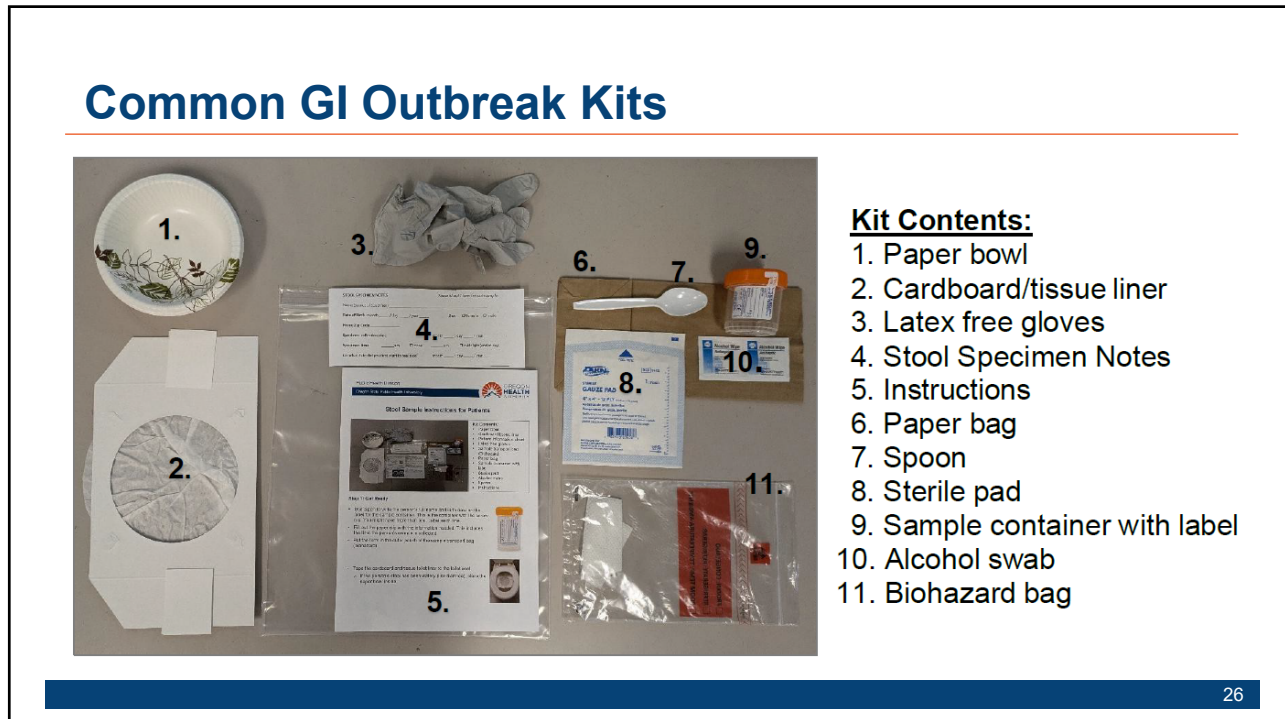
*** Collection Kits:**

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- Do not automatically include Test Request Forms.

Please include Test Request Forms with my order.

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Collection Kits*	Form #	# of Kits	Media Only	Quantity
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Multitest Swab (vaginal)	42		Cary Blair – Bacterial Enteric Stool	
Unisex Swab (cervical, urethral, rectal, pharyngeal)	42		Regan Lowe – Pertussis	
Urine	42		Universal Transport Media (UTM) – Respiratory Viruses	
Virology / Immunology Blood (Hepatitis, HIV, syphilis, serology)	42		Saline transport media – COVID-19	
Tuberculosis			Courier Supplies	Quantity
Sputum, NAAT (respiratory specimens)	60		Gel/Ice Packs	
QuantIFERON	60		Transport Manifest (1 page to be copied)	
For LPHAs, Outbreaks, Public Health Partners:				
Pertussis	60		Forms Only	Quantity
Enteric Outbreak Stool Collection			Virology/Immunology (Green) #42	
Viral – Raw Stool Collection Kit	42		General Microbiology (Red) #60	
Bacterial – Cary Blair Collection Kit	60		Stockroom Request #71-54	
Respiratory Illness			Environmental Water #01	
Regular Swab with UTM ¹ (Flu/COVID)			Public Drinking Water #50	
Nasopharyngeal swab with UTM ² (Flu/COVID)			Miscellaneous	Quantity
Water Microbiology			6 mL Vacutainer Tubes (Red top / 100/box)	<input type="checkbox"/> Tubes <input type="checkbox"/> Boxes
			OSPHL Use Only	
			Filled by: _____	Date: _____



GI Outbreak Kits

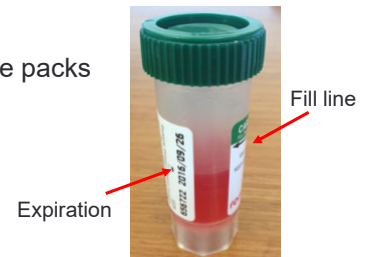
Viral

- 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
 - Transport on ice packs



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Get it to the Lab!

Packaging and Shipping Specimens

<http://bit.ly/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.



<https://bit.ly/specimen-policy>

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Packaging Basics: Triple Packaging



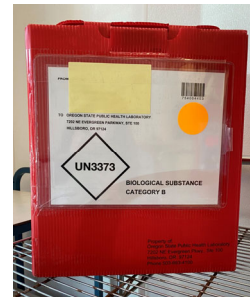
Primary

+



Secondary

+



Tertiary

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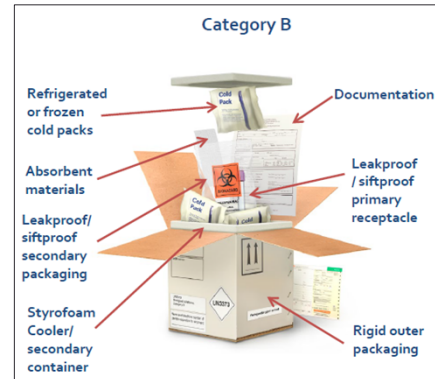
Transporting Specimens

- 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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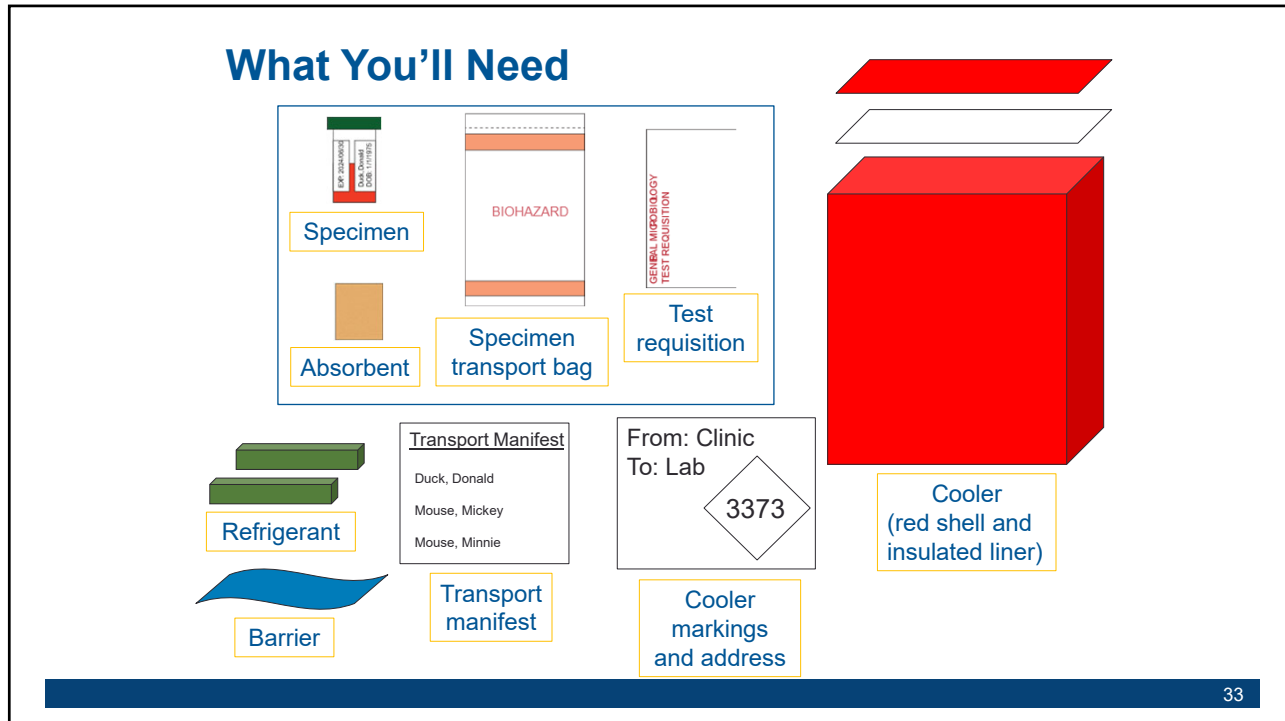
Let's Pack a Cooler!

Things to keep in mind:

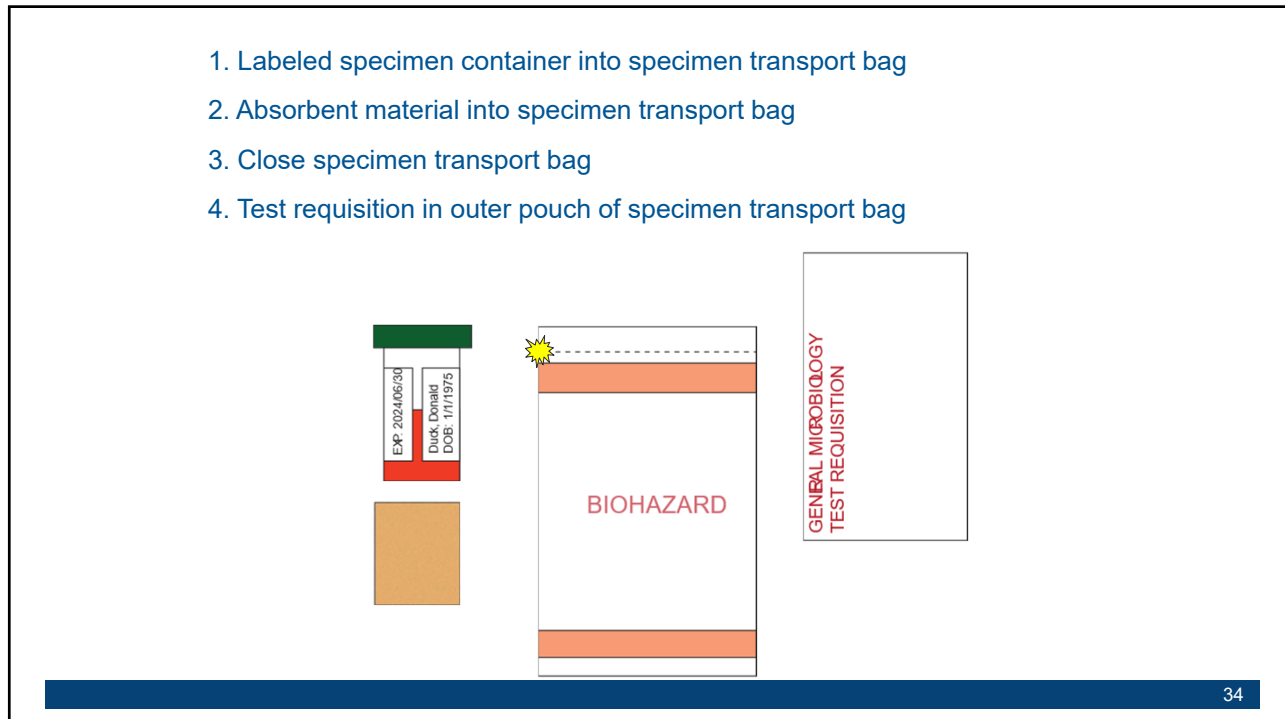
- Always abide by transportation regulations
- These steps are for ground transport, Category B shipments (ex. with the OSPHL contracted couriers)
 - Air transport? Different rules
 - Category A? Different rules
 - Shipping with FedEx or UPS? Different rules
- Cooler is the term we use at OSPHL. Room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

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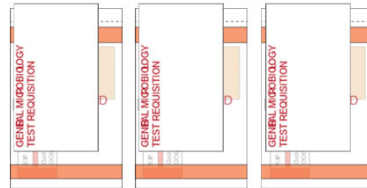


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5. Gather all specimens with same temperature requirements
6. Create Transport Manifest for shipment



Transport Manifest

Duck, Donald
 Mouse, Mickey
 Mouse, Minnie

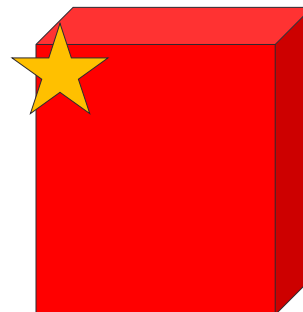
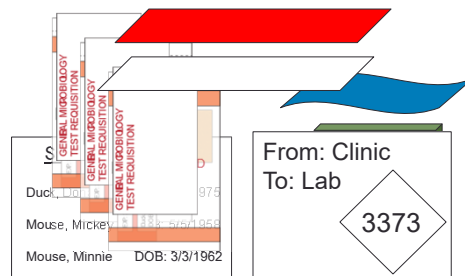
A Transport Manifest tells the recipient what is included in the shipment. It should include:

- 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. Place address label, 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://bit.ly/phl-courier>

Courier Information

The Oregon State Public Health Laboratory (OSPHL) provides courier services to healthcare facilities throughout the state for submission of specimens to our laboratory. This service is found through variety state and federal resources. Facilities are either set up with a scheduled, regular pick up cadence or can request pick-ups on an as-needed basis.

OSPHL has a regional courier services model ([view region map](#)). DASH Delivery provides services in the western and southern areas of the state; STAT Courier provides services in the central and eastern areas of the state.

To schedule an as-needed pick-up, use the link below. For all other courier support, please contact our Courier Support Team at osppl.courier@odhsoha.oregon.gov.

For **urgent** specimen transport needs, please contact OSPHL at 503-693-4100 (regular business hours) or 971-673-1111 (outside business hours).

Request As Needed/On-Call Pick Up

[OSPHL Courier Order Request Form](#)

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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 Request Form

Please use this form to request or cancel a courier pick up specimens at your facility. Most requested services will be scheduled for 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 osphl.courier@odhsoha.oregon.gov or 503-693-4100 for urgent needs.

All specimens must be accompanied by an OSPHL Test Request. For facilities that submit via paper OSPHL Test Request Form, they are available at www.bitly.com/phl-forms.

Enter your email address *

What is the name of your facility? *

Please select from the list. If you do not see your facility on the list, please select Other. Recommended: Instead of searching for the facility on the list, start typing the facility name into the search bar and it will come up.

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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 – <https://bit.ly/PHLStockOrder>
- Test requests forms – <https://bit.ly/phl-forms>
- Courier requests – <https://bit.ly/phl-courier>

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