

***Rickettsia* spp. PCR Testing at the DSHS Austin Laboratory**

Detects and Differentiates between *Rickettsia rickettsii* and *R. prowazekii*
*****Intended for Symptomatic Patients Only*****

A Completed G-2V Submission Form Must Accompany Every Specimen

Whole Blood

Use EDTA Whole Blood Tube (Purple/Lavender Top)

Minimum Volume 1.5 mL whole blood

Ensure tubes are inverted at least 8–10 times to allow proper mixing.

Ensure specimen collection tubes are not expired.

Collection Timeframe Collect in the acute phase of disease (14 days of onset or while patient is febrile). Collect specimen within 72 hours of patient beginning antibiotic treatment; within 48 hours is preferred.

Specimen Storage and Shipping

- If specimens will arrive at the lab within 7 days of collection, store and ship cold at 2°C–8°C.
- If specimens will arrive more than 7 days after collection, store and ship frozen at or below -20°C for up to 60 days after collection.
- Ship specimens overnight.
 - Keep refrigerated specimens cold with frozen gel packs.
 - Keep frozen specimens frozen with dry ice.
- Maximize insulation by packing any empty space around specimens with absorbent packing material.



Purple/Lavender EDTA Tube

Shipping *Rickettsia* Clinical Specimens to the Laboratory

Ship as Category B Biological Substance, UN3373

Specimens must be:

- **Triple Packaged** to withstand shock, pressure changes, leaks, and other ordinary handling conditions while in transit.
- **Packaged with Enough Absorbent Material** such as paper towels that can soak up the entire contents of the specimen container.
- **Shipped with Adequate Refrigerant/Dry Ice** to keep specimen cool or frozen for up to 48 hours. Use multiple frozen cold packs.

Ensure all tubes are securely closed to prevent leaks!

Secure tube lids shut by wrapping in paraffin film (e.g., Parafilm).

Ensure outer mailer is properly labeled, especially if shipping on dry ice.

Visit DSHS' online [Specimen Shipping and Mailing Guidance](#) for more details on shipping Category B substances to the Laboratory.



***Rickettsia* spp. IgG Antibody Testing by Indirect Fluorescence Antibody at the DSHS Austin Laboratory**

For Detection of Antibodies to *Rickettsia rickettsii* and *R. typhi*

A Completed G-2A Submission Form Must Accompany Every Specimen

Serum Specimens

Use Serum Tube (Red Top Tube) or Serum Separator Tube with Clot Activator (Gold, or Red-Gray “Tiger” or “Speckle” Top Tubes)

- Ensure Gold/Tiger top tubes are **fully inverted at least five times** after collection to allow proper clotting.
- Allow blood to clot for a **minimum of 30 minutes** before centrifugation.
- For Red Top Tubes, allow blood to clot for 60 minutes before centrifugation. Transfer serum to a plastic, screw top transport tube.



Red Top Serum Tube



Gold Top and Tiger Top Tubes

Minimum Volume 1 mL serum

- **Ensure specimen collection tubes are not expired.**

Storage and Shipping

- If specimens will be received at the lab within 48 hours of collection, store and ship cold at 2°C–8°C.
- If specimens will arrive more than 2 days after collection, transfer serum in serum separator tubes to a plastic, screw top transport tube and store/ship specimen frozen at or below -20°C.
- Ship specimens overnight.
 - Keep refrigerated specimens cold with ice packs.
 - Keep frozen specimens frozen with dry ice.
- Maximize insulation and cushioning by packing any empty space around specimens with absorbent packing material.



***Rickettsia* Questions?**

DSHS Regional Zoonosis Control: [Contact Information - Zoonosis Control Branch | Texas DSHS](#)

***Rickettsia* IgG Antibody Testing:** 512-776-7657, 512-776-2505 or serological.analysis@dshs.texas.gov

Submitter ID Numbers/ Submission Forms: 512-776-7578 or LabInfo@dshs.texas.gov

Overnight Shipping Address: Walter Douglass, Texas Dept. of State Health Services, Public Health Laboratory Division, 1100 W. 49th Street Austin, TX 78756-3199

Specimen Submission Guidance for Submitting Rickettsial Specimens to the DSHS Laboratory

How Do I Update my Submitter Information with DSHS?

- **Update** your contact information by filling out a [Submitter ID Request Form](#) and emailing it to LabInfo@dshs.texas.gov or faxing it to (512) 776-7533.
 - DSHS cannot update contact information without a completed form.
 - Please **do not manually correct** contact details in Section 1 of submission form!

How Do I Obtain New or Updated Master Submission Forms?

- **Request** master submission forms by emailing the Laboratory Reporting Team at LabInfo@dshs.texas.gov or calling (512) 776-7578 or 1 (888) 963-7111 ext. 7578.
- **Submit** PCR assay specimens with **G-2V** Submission Forms.
- **Submit** IFA assay specimens with **G-2A** Submission Forms.
- **Please do not use sample watermarked submission forms from the DSHS website.**
 - Specimens received with sample watermarked submission forms cannot be tested.

What Rickettsial Specimens Should be Sent to CDC?

In Texas, routine diagnostic samples should be sent to the DSHS Austin Laboratory or a commercial laboratory for testing. If the test is not commercially available or not conducted by the DSHS Laboratory, please consult with DSHS Regional Zoonosis Control **before** submitting rickettsial specimens to CDC.

What Do I Do With a Positive Typhus Test Result?

- **Notify** your local health department (LHD) within one week of a positive result. If you do not have an LHD, report to the Regional DSHS Zoonosis Control Office.
- **Refer** to reporter responsibilities at <https://www.dshs.texas.gov/notifiable-conditions> and [TX Reportable Conditions Job Aid](#). **Please do not submit notification reports to the Laboratory!**

Rickettsia Questions?

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Rickettsia IgG Antibody Testing: 512-776-7657, 512-776-2505 or serological.analysis@dshs.texas.gov
Rickettsia PCR Testing: 512-776-7594, 512-776-2452 or viral.isolation@dshs.texas.gov
Submitter ID Numbers/ Submission Forms: 512-776-7578 or LabInfo@dshs.texas.gov
Overnight Shipping Address: Walter Douglass, Texas Dept. of State Health Services, Public Health Laboratory Division, 1100 W. 49th Street Austin, TX 78756-3199



DSHS Laboratory Submission Form Guidance for Submitting Rickettsial Specimens to the DSHS Laboratory

Label Specimen With Unique Identifiers

Every specimen must have at least **two unique patient identifiers** on its label.

1 Snow, John
2 DOB: 02/19/1993
3 06161858

Three patient identifiers provided on this label:

1. Name
2. Date of Birth
3. Medical Record Number

Provide Patient Identifiers in Sections 2 and 3 of Forms G-2A and G-2V

Patient identifiers on specimen label and submission form **must match**.

Date of Collection must be provided in Section 3 of each form.

SECTION 2. PATIENT					
NOTE: Patient name on specimen MUST match name on this form exactly. Name mismatches will be rejected. e.g., Partial name on specimen label but full name is provided. Specimen container must have two (2) unique identifiers that match this form exactly. e.g., D					
** REQUIRED	Last Name **	Snow		First Name **	John
	Address **			39 Broad Street	
	City **	State **	Zip Code **	Pregnant? ☐ Yes ☐ No ☐	
	DOB (mm/dd/yyyy) **	Sex **	Ethnicity:	☐ Hispanic ☐ Non-Hispanic	

Select Test Type

Check "Rocky Mountain Spotted Fever & Typhus Fever Panel IgG" in **Sect. 6 of G-2A**.
Write "*Rickettsia*" into "Other" field in **Sect. 7 of G-2V**.

Select Payor Source

Check the appropriate payor source on the submission form.

- Select "Zoonosis" only if a public health epidemiologist requested the specimen be sent to the Laboratory.

SECTION 3. SPECIMEN			
NOTE: If the 'Date of Collection' field is not completed, the specimen will be rejected.			
ID	Date of Collection (mm/dd/yyyy) **	Time of Collection **	Col
	12/21/2023	☒ AM ☐ PM	
	Unique Identification Number ** e.g., MRN / Alien # / Accession ID	Comments or Additional ID e.g., CDC ID, Previous DSHS Spec	
	06161858		

Select Specimen Type in Section 3

Check "Serum" in Form G-2A.

Check "Blood" in Form G-2V.

Questions About . . .

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Submitter ID Numbers or Submission Forms: 512-776-7578 or LabInfo@dshs.texas.gov

** REQUIRED	☐ Medicaid (2)	☐ Medicare (8)
	Medicaid/Medicare #:	
	☐ Submitter (3) ☐ BIDS (1720) ☐ BT Grant (1719) ☐ HIV / STD (1608) ☐ IDEAS (1610)	☐ Immunizations (1609) ☐ Private Insurance* (4) ☐ TIPP (5144) ☐ Zoonosis (1620) ☐ Other: _____

