

Spotted Fever Group Rickettsiosis Specimen Collection Guidance

ANTIBIOTIC THERAPY SHOULD NEVER BE DELAYED IN ORDER TO OBTAIN SPECIMENS

Whole Blood for PCR Testing (*Rickettsia rickettsii*, *R. prowazekii*, other species)

Specimen collection	Forms to be completed	Storing and packaging	Shipping
<p>Timing:</p> <ul style="list-style-type: none"> At \geq 3 days after symptom onset and before or within 24 hours of initiation of antibiotic therapy In severely ill patients, before or within 24 hours of antibiotics being started Testing most sensitive in 1st week of illness <p>Amount:</p> <ul style="list-style-type: none"> Collect 3 ml of WHOLE blood Absolute minimum is 1 ml <p>Container:</p> <ul style="list-style-type: none"> Lavender top (K2 EDTA) tube <p>Labelling:</p> <ul style="list-style-type: none"> Affix a label to the specimen with: patient's full name, DOB, date/time of specimen collection and type of specimen <p style="color: red;">Collect acute-phase serum for serology testing when whole blood collected. Send to commercial lab. Collect a convalescent serum 2-4 weeks later.</p>	<ol style="list-style-type: none"> NJDOH Spotted Fever Group Rickettsiosis Investigation Worksheet NJ DOH Request for Bacterial or Viral Culture or Parasitic Identification (Bact-109 form) <p style="text-align: center; color: red;">FAX BOTH COMPLETED FORMS to NJDOH Communicable Disease Service at: 609-826-4874</p>	<ul style="list-style-type: none"> Include the 2 completed forms in the shipping box When possible, ship the box overnight to NJ PHEL[†] <u>on the same day specimen is collected</u> with refrigerated & frozen cold packs - refrigerate for 1-2 hours prior to shipping If specimen is collected on a Friday or cannot be shipped on the same day, refrigerate at 2-8^o C (36-46^o F) and ship the box with cold packs OVERNIGHT to PHEL on Monday or on the day after the specimen is collected Package as a Category B infectious substance 	<ul style="list-style-type: none"> Ship as a Category B infectious substance NJ PHEL receives specimens Monday-Friday (8 AM-4:30 PM) excluding holidays.^{††} Do not ship on Fridays, unless by special arrangement. Ship to: NJ Public Health and Environmental Laboratories, Specimen Receiving Unit, 3 Schwarzkopf Drive, Ewing, NJ 08628 ATTN: Dr. Sherman Hom PHONE: 609-530-8385

Swab of Eschar at Tick Bite Site for *Rickettsia* PCR Testing

Specimen collection	Forms to be completed	Storing and packaging	Shipping
<p>Timing:</p> <ul style="list-style-type: none"> Before or within 24 hours of initiation of antibiotic therapy Testing is most sensitive during 1st week of acute illness <p>Preparing site:</p> <ul style="list-style-type: none"> Disinfect area; remove disinfectant with sterile gauze soaked in sterile saline. <p>Accessing the skin site:</p> <ul style="list-style-type: none"> Use sterile tweezers to lift scab partially or completely. If the scab detaches, place it into the empty sterile container <p>Obtaining the swab specimen:</p> <ul style="list-style-type: none"> Sample the ulcerated area with a dry sterile cotton swab. Rotate the swab vigorously on the area, while applying steady gentle pressure <p>Placing swab into the sterile container:</p> <ul style="list-style-type: none"> If necessary, snap the swab stick at least 2 inches above cotton swab to fit in container NOTE: Swab should be sent dry; do not immerse swab in saline solution <p style="color: red;">Collect acute-phase serum for serology testing at time of swab collection. Send to commercial lab. Collect a convalescent serum 2-4 weeks later.</p>	<ol style="list-style-type: none"> NJDOH Spotted Fever Group Rickettsiosis Investigation Worksheet NJ DOH Request for Bacterial or Viral Culture or Parasitic Identification (Bact-109 form) <p style="text-align: center; color: red;">FAX BOTH COMPLETED FORMS to NJDOH Communicable Disease Service at: 609-826-4874</p>	<ul style="list-style-type: none"> Include the 2 completed forms in the shipping box When possible, ship the box overnight to NJ PHEL[†] <u>on the same day specimen is collected</u> with refrigerated & frozen cold packs - refrigerate for 1-2 hours prior to shipping If specimen is collected on a Friday or cannot be shipped on the same day, refrigerate specimen at 2-8^o C (36-46^o F) and ship the box with cold packs OVERNIGHT to PHEL on Monday or on the day after the specimen is collected Package as a Category B infectious substance 	<ul style="list-style-type: none"> Ship as a Category B infectious substance NJ PHEL receives specimens Monday-Friday (8 AM-4:30 PM) excluding holidays.^{††} Do not ship on Fridays, unless by special arrangement. Ship to: NJ Public Health and Environmental Laboratories, Specimen Receiving Unit, 3 Schwarzkopf Drive, Ewing, NJ 08628 ATTN: Dr. Sherman Hom PHONE: 609-530-8385



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Punch Biopsies of Rash or Eschar Lesions for *Rickettsia* Testing (by PCR, cell culture isolation, or IHC staining depending on size/state of tissue)

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<p>Timing:</p> <ul style="list-style-type: none"> • Before or within 24 hours of initiation of antibiotic therapy <p>Type of biopsy specimen:</p> <ul style="list-style-type: none"> • Skin biopsies should be taken from the site of rash or eschar • Fresh, non-frozen tissue is preferred • NOTE: formalin fixation may limit sensitivity of molecular detection • Optimal tissue is a punch biopsy of skin > 4 mm that includes the central aspect of the lesion (<i>i.e.</i>, macule, petechia or eschar) <p>Container</p> <ul style="list-style-type: none"> • Place the specimen on a sterile gauze pad that has been moistened lightly with sterile saline • Place in a dry sterile specimen collection cup • Do not immerse the tissue in saline <p>Collect acute-phase serum for serology testing at time of tissue biopsy. Send to commercial lab. Collect a convalescent serum 2-4 weeks later.</p>	<p>1. NJDOH Spotted Fever Group Rickettsiosis Investigation Worksheet</p> <p>2. NJ DOH Request for Bacterial or Viral Culture or Parasitic Identification (Bact-109 form)</p> <p style="text-align: center;">FAX BOTH COMPLETED FORMS to NJDOH Communicable Disease Service at: 609-826-4874</p>	<ul style="list-style-type: none"> • Include the 2 completed forms in the shipping box • When possible, ship the box overnight to NJ PHEL[†] <u>on the same day specimen is collected</u> with refrigerated & frozen cold packs - refrigerate for 1-2 hours prior to shipping • If the specimen is collected on a Friday or cannot be shipped on the same day, refrigerate the specimen at 2-8^o C (36-46^o F) and ship the box with cold packs OVERNIGHT to PHEL on Monday or on the day after the specimen is collected • Package as a category B infectious substance 	<ul style="list-style-type: none"> • Ship as a Category B infectious substance • NJ PHEL receives specimens Monday-Friday (8 AM-4:30 PM) excluding holidays.^{††} Do not ship on Fridays, unless by special arrangement. • Ship to: NJ Public Health and Environmental Laboratories, Specimen Receiving Unit, 3 Schwarzkopf Drive, Ewing, NJ 08628 ATTN: Dr. Sherman Hom PHONE: 609-530-8385

[†]NJ PHEL – New Jersey Public Health and Environmental Laboratories

^{† †} State of New Jersey Holidays: <http://www.state.nj.us/nj/about/facts/holidays/>

NJDOH Spotted Fever Group Rickettsiosis Investigation Worksheet:
http://www.nj.gov/health/cd/documents/topics/vectorborne/sfgr_investigation_worksheet5.07.18.pdf

NJDOH Request for Bacterial or Viral Culture or Parasitic Identification (Bact-109 form):
<http://www.nj.gov/health/forms/bact-109.pdf>

**New Jersey Department of Health Vectorborne Disease Program
Communicable Disease Service
Phone: 609-826-5964
Fax: 609-826-4874**