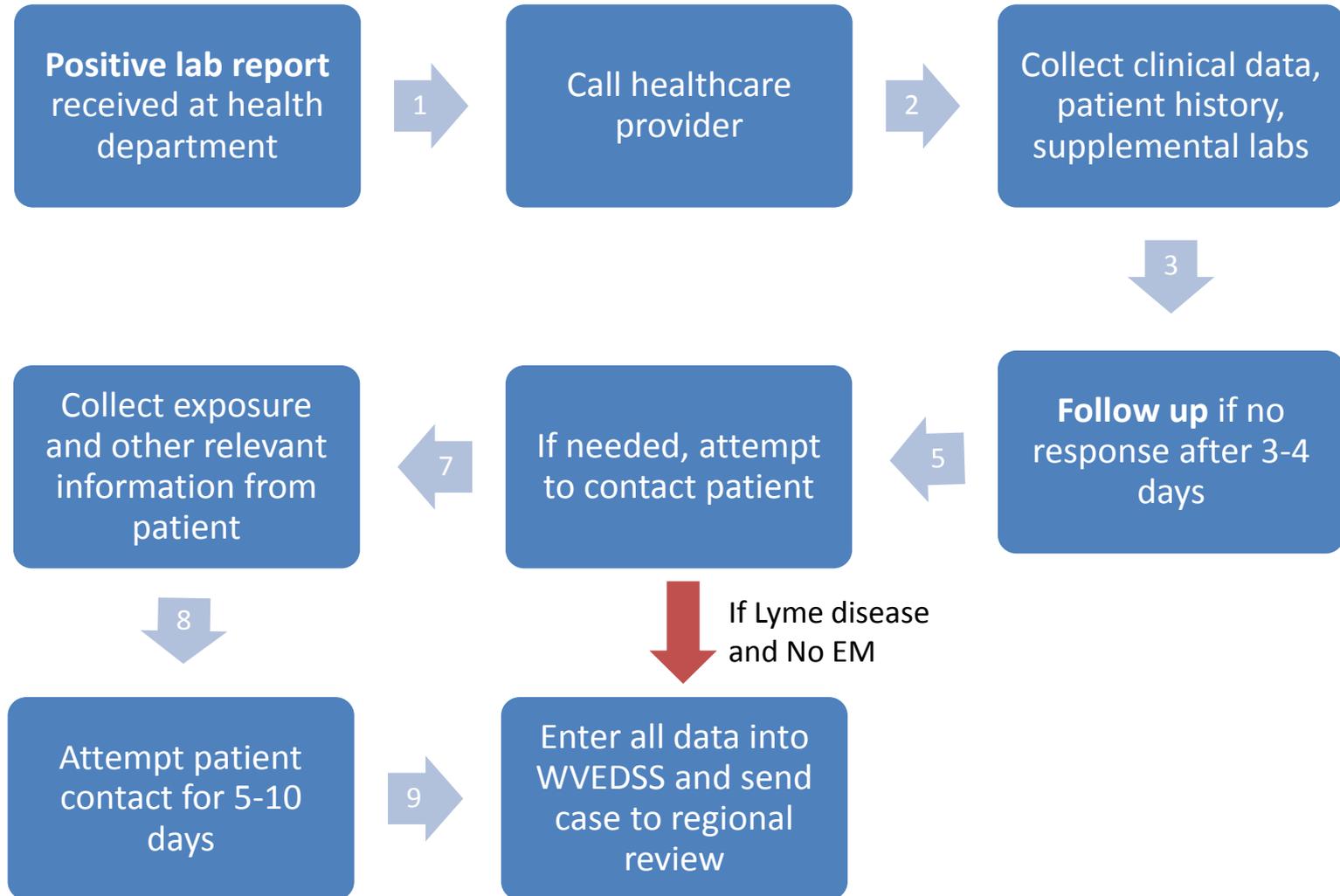


# Tickborne Disease Case Ascertainment Exercise

First Quarter DIDE Training  
Zoonotic Disease Program

# Case Investigation Procedure



# Case #1 Lab Report

RMSF, IgG, IFA

016173

1:128

Infection:

Present or Past 1:16 - 1:64

Recent

>=1:128

Approximately 9% of specimens positive by EIA screen  
will be negative by IFA.

# Case #1 – Additional Information

- Patient is 34 year old male, Mercer co. resident
- PC to provider/patient and learn following info
  - Patient hospitalized in renal failure, on dialysis
  - Onset 8/02 with rash on arms and legs, headache, myalgia, nausea, vomiting, fever of 103°F
  - Volunteer firefighter, fought brush fires before onset
  - No travel history, no history of tick bite

# Case #1 – Case Classification

- Does patient have clinical evidence?

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- Does laboratory result meet confirmatory or supportive criteria?

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- Is this a confirmed or probable case?

---

# Case #2 Lab Report

EHRlichia chaffeensis DNA REAL-TIME PCR

EHRlichia chaffeensis DNA

DETECTED (A)

REFERENCE RANGE: NOT DETECTED

# Case #2 Additional Information

- Patient is 61 year old female, Monongalia county resident
- PC to provider/patient and learn following info
  - Lone star tick bite in VA two weeks before onset
  - Onset of 8/10 with fever of 104°F, rash, headache
  - Symptoms improved dramatically with doxycycline

# Case #2 – Case Classification

- Does patient have clinical evidence?

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- Does laboratory result meet confirmatory or supportive criteria?

---

- Is this a confirmed or probable case?

---

# Case #3 Case Report

**West Virginia Bureau for Public Health  
Confidential Reportable Disease Case Report**

*[Send completed card to local health department. Keep a copy for your records.]*

**Please Print and Complete Each Question:**

Disease Name: <u>Lyme Disease</u>		Symptom Onset Date: <u>6/15/2010</u>	
Patient's Name (Last, First): <u>Doe, Johnny</u>	Date of Birth: <u>6/1/01</u>	Sex: <input checked="" type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Unknown	Race/Ethnicity (mark one or more): <input checked="" type="radio"/> White <input type="radio"/> Black / Afr. Amer. <input type="radio"/> Hispanic <input type="radio"/> Asian <input type="radio"/> Amer. Ind. or Alaskan Native <input type="radio"/> Nat. Hawaiian or other Pac. Isl. <input type="radio"/> Unknown
Parent's Name--if child (Last, First): <u>Doe, Jane</u>	Age: <u>9</u>		
Address: <u>123 Main Lane</u>	City: <u>Martinsburg, WV</u>	State: <u>WV</u>	Zip: <u>25401</u>
		County: <u>Berkeley</u>	Phone: <u>(304) 123-4567</u>
Was patient hospitalized? <input checked="" type="radio"/> No <input type="radio"/> Yes If yes, Facility: _____		Did patient die? <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/> Yes, Date of Death: <u>  /  /  </u>	
How was diagnosis made? <input checked="" type="radio"/> Clinical <input type="radio"/> Laboratory <input type="radio"/> Both	Laboratory tests, dates and results (culture, serology, etc.). <b>Attach copies.</b>  <u>None</u>	Laboratory Name:  Phone: (    )    -	

# Case #3-Clinical

- Patient is 9 YO male, Berkeley Co. resident
- PC placed to physician listed on disease report
  - Patient presented with EM under right axilla
    - Measured approximately 12x14cm
  - Rash onset was 6/15/2010
  - Also c/o fever, fatigue, myalgias

# Case #3-Epi

- Is it necessary to interview patient to determine if there was a history of exposure to tick habitats in an endemic county in the 30 days prior to symptom onset?
-

# Case #3-Epi

- Phone call to patient's parents:
  - No travel history outside Berkeley County
    - Neighborhood has open fields and nearby forests
    - Case plays outdoors frequently
  - No history of tick bite
  - Corroborated 6/15/2010 onset date

# Case #3-Summary

- Does patient have clinical evidence?
- 

- Exposure to tick habitats in endemic county within 30 days of illness onset?
- 

- If this is a case, how should it be classified?
-

# Case #4-Lab

<i>Lab Number</i>	<i>Collection Date</i>	<i>Test Name</i>	<i>Result</i>
UA9306507	7272009	B.BURGDORFERI AB (IGM) QL WB	NEGATIVE
UA9306507	7272009	B.BURGDORFERI AB IGG (QUAL)WB	POSITIVE

# Case #4-Clinical

- Patient is 64 YO female, Logan Co. resident
- PC placed to healthcare provider on lab report
  - Patient presented 7/27/2009
  - Complaints of recurrent arthritis in knees past 6 weeks
    - Objective swelling of large joints documented
  - Concurrent fatigue, low-grade fever and myalgias
  - No EM

# Case #4-Epi

- Is it necessary to interview patient to determine if there was a history of exposure to tick habitats in an endemic county in the 30 days prior to symptom onset?
-

# Case #4-Summary

- Does patient have clinical evidence?
- 

- Does laboratory result meet confirmatory criteria?
- 

- If this is a case, how should it be classified?
-

# Case #5-Lab

TEST NAME	TEST NUM	RESULTS
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Lyme IgM WB Interp.	163639	Positive
Criteria for positivity are those recommended by CDC/ASTPHLD p23=Osp C, p41=flagellin		

# Case #5-Clinical

- Patient is 35 YO female, Wood Co. resident
- PC to healthcare provider listed on lab report
  - Presented with history of malaise, fatigue, myalgias, arthralgias x6 months
  - No EM
  - Physician-diagnosed as Lyme disease

# Case #5-Epi

- Is it necessary to interview patient to determine if there was a history of exposure to tick habitats in an endemic county in the 30 days prior to symptom onset?
-

# Case #5-Summary

- Does patient have clinical evidence?
- 

- Does laboratory result meet confirmatory criteria?
- 

- If this is a case, how should it be classified?
-

# Case #6-Lab

<i>Lab Number</i>	<i>Collection Date</i>	<i>Test Name</i>	<i>Result</i>	<i>Date of Report</i>
QB0573417	6222010	B.BURGDORFERI AB (IGM) QL WB	POSITIVE	6252010
QB0573417	6222010	B.BURGDORFERI AB IGG (QUAL)WB	NEGATIVE	6252010
QB0573417	6222010	LYME DISEASE ANTIBODIES EIA	Greater than 5.00	6252010

# Case #6-Clinical

- Patient is 57 YO male, resident of Mineral Co.
- PC to healthcare provider listed on lab result
  - Multiple EM documented, plus fever and fatigue
    - Largest was 12x18cm on lower back
  - EM onset date was 6/4/2010

# Case #6-Epi

- Is it necessary to interview patient to determine if there was a history of exposure to tick habitats in an endemic county in the 30 days prior to symptom onset?
-

# Case #6-Epi

- After multiple attempts, patient finally returns call
- Patient has no travel history outside of home county (Mineral) in the 30 days prior to onset
- Recalls finding a tick on body after doing yard work around home one week prior to illness

# Case #6-Summary

- Does patient have clinical evidence?
- 

- Does laboratory result meet confirmatory criteria?
- 

- Exposure to tick habitats in endemic county within 30 days of illness onset?
- 

- If this is a case, how should it be classified?
-

# Case #7-Lab

Date Specimen Collected: 11/18/2008

Date of

Test Name

Result

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LYME DISEASE ANTIBODIES EIA

2.64

B.BURGDORFERI AB IGG (QUAL)WB

POSITIVE

B.BURGDORFERI AB (IGM) QL WB

NEGATIVE

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# Case #7-Clinical

- Patient is 75 YO female, Mineral Co. resident
- PC to healthcare provider listed on lab report
  - “Chronic progressive arthritis”
    - No preceding history of recurrent, brief attacks of large joint swelling
  - Reported onset 5-10 years ago
  - No EM documented by physician
  - Physician-diagnosed as Lyme disease

# Case #7-Epi

- Is it necessary to interview patient to determine if there was a history of exposure to tick habitats in an endemic county in the 30 days prior to symptom onset?
-

# Case #7-Summary

- Does patient have clinical evidence?
- 

- Does laboratory result meet confirmatory criteria?
- 

- If this is a case, how should it be classified?
-