

# Hitting the Bullseye on Pediatric Lyme Disease

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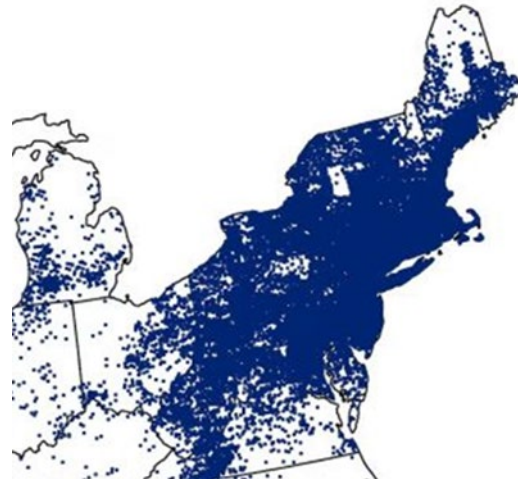
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USACS



# Disclosures

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No financial disclosures



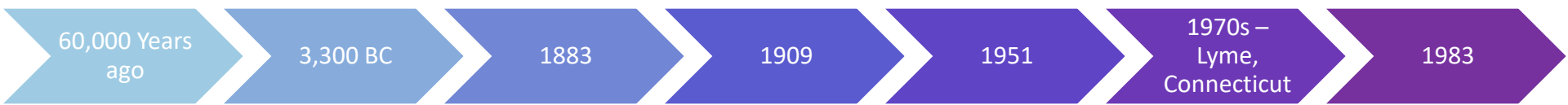
# Objectives

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1. At the conclusion of this presentation, attendees should be able to define Lyme disease.
2. At the conclusion of this presentation, attendees should be able to summarize the best testing and screening for Lyme in pediatric patients.
3. At the conclusion of this presentation, attendees should be able to summarize the pediatric treatment for Lyme disease and when to initiate prophylaxis.

# Where Did Lyme Disease Come From?

- A. Lyme, Connecticut in 1975
- B. Evolving with humans since the beginning of life
- C. In the Mid-20<sup>th</sup> century, the Pentagon was researching tick-based bioweapons and created Lyme Disease
- D. I don't know and why are you asking...?



# The Real Story of Lyme

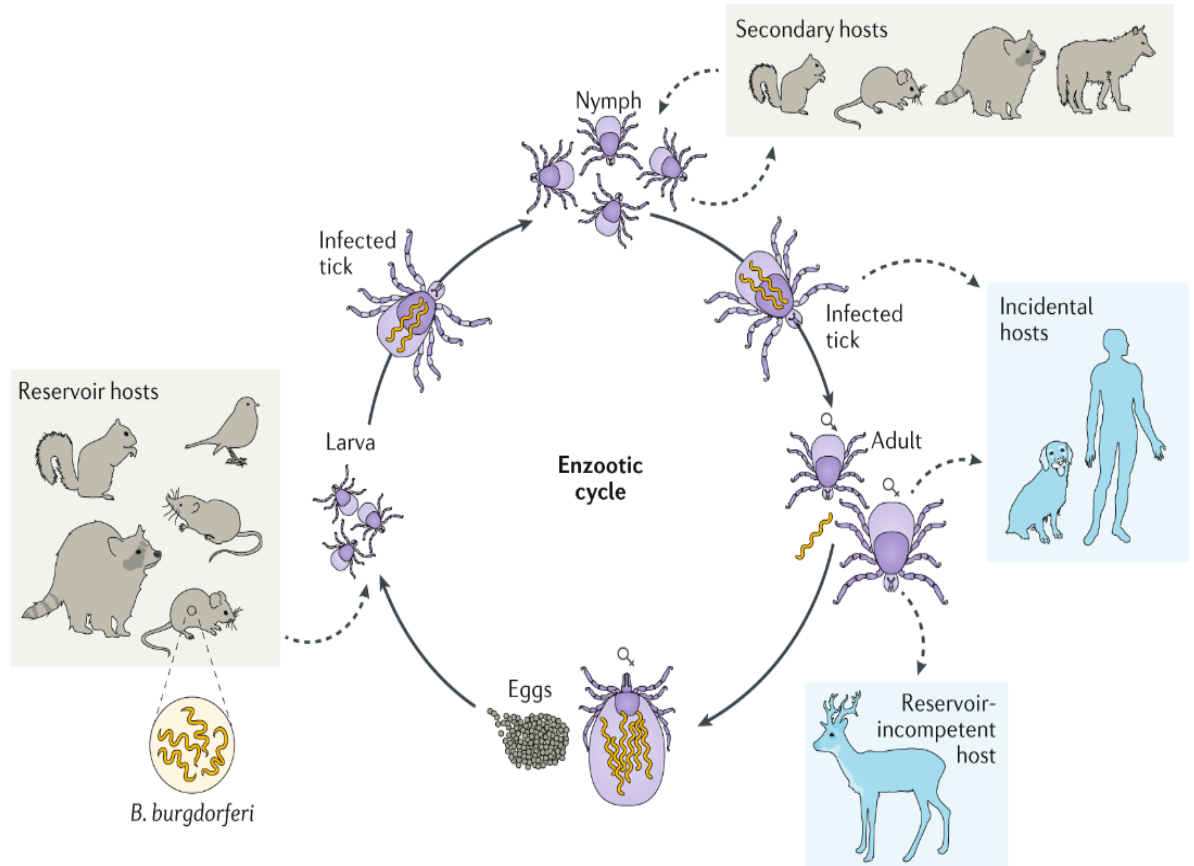
Lyme Disease Bacteria  
*Borrelia burgdorferi*



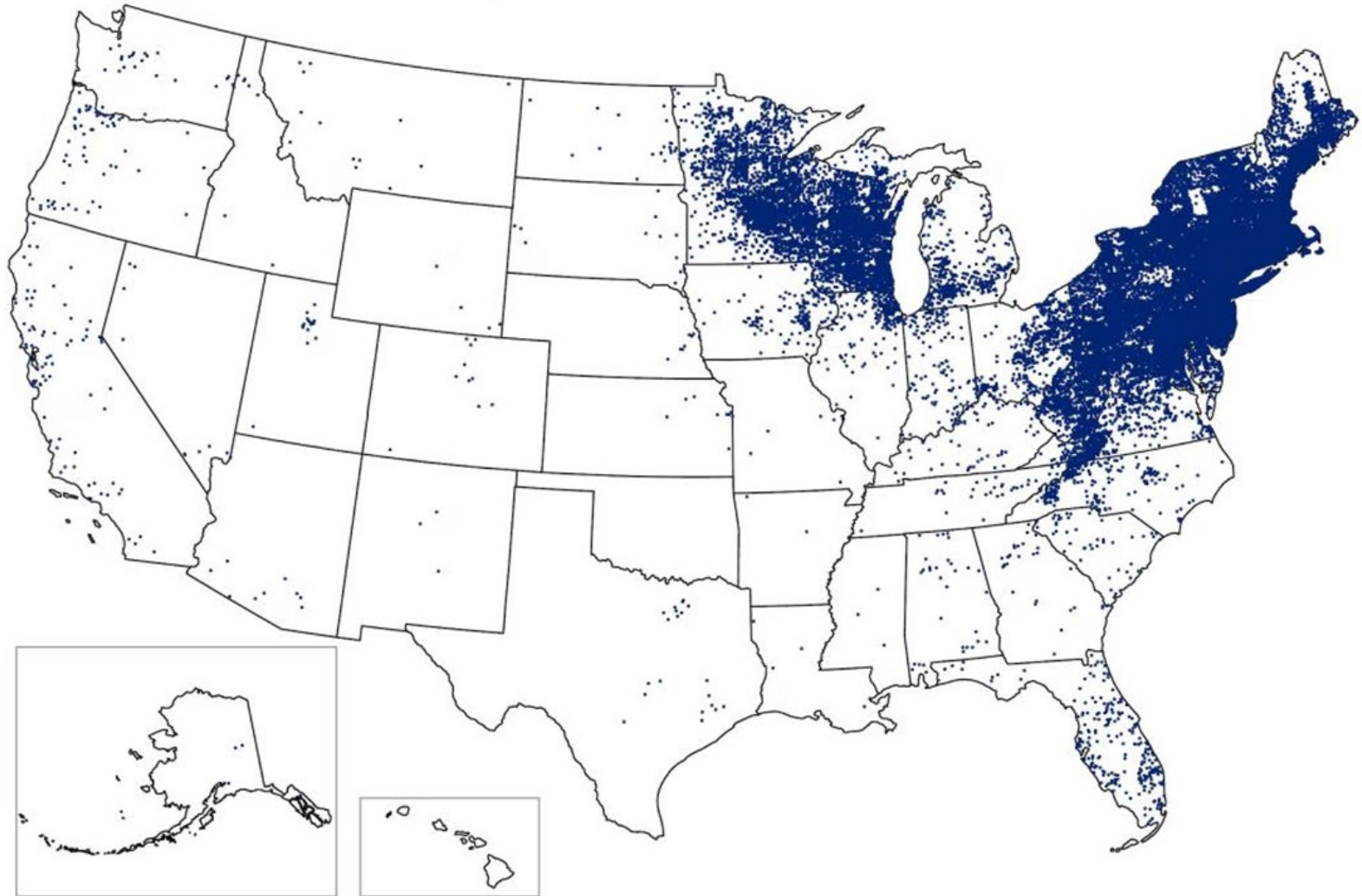
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# Getting Nerdy About Ticks!

## Life Cycle of the Tick



# Reported Cases of Lyme Disease -- United States, 2022



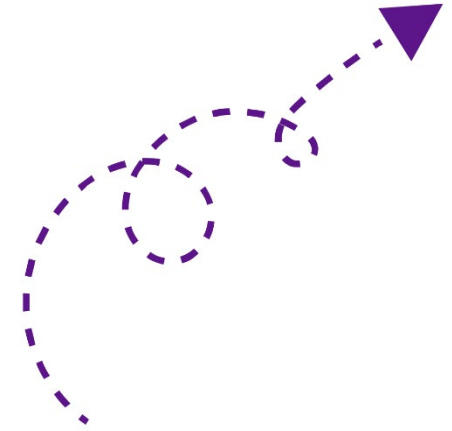
1 dot placed randomly within county of residence for each case





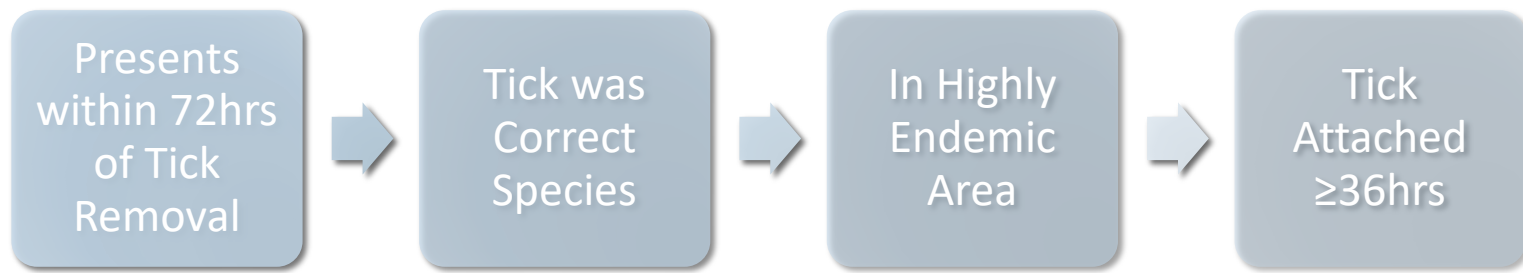
Case #1

# Tick Bite



# Prophylactic Antibiotic Criteria

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## Case # 2

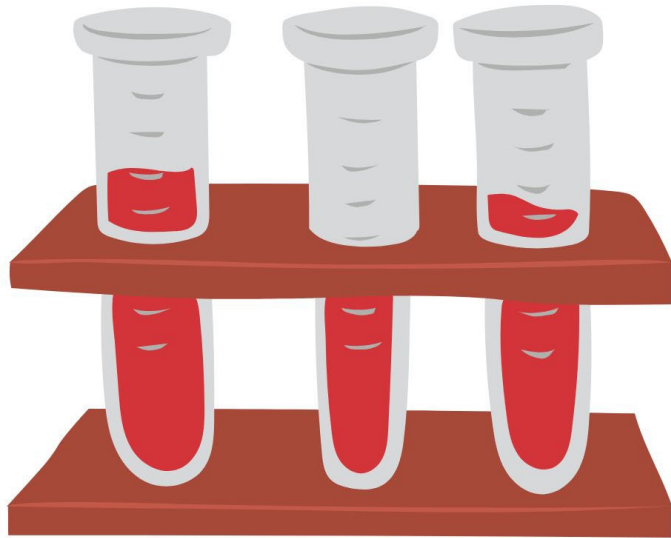
# Erythema Migrans?

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All These Are EM!





## Case # 3

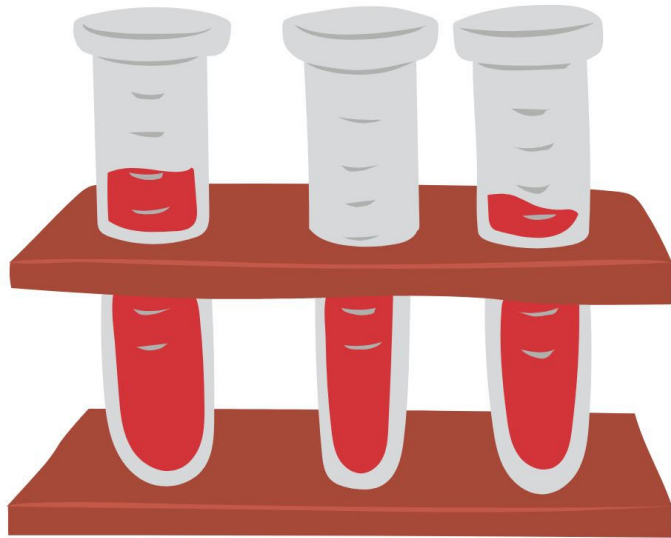


# Early Disseminated Lyme

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## 3 Types:

1. Multiple EM
2. Neurological
3. Carditis





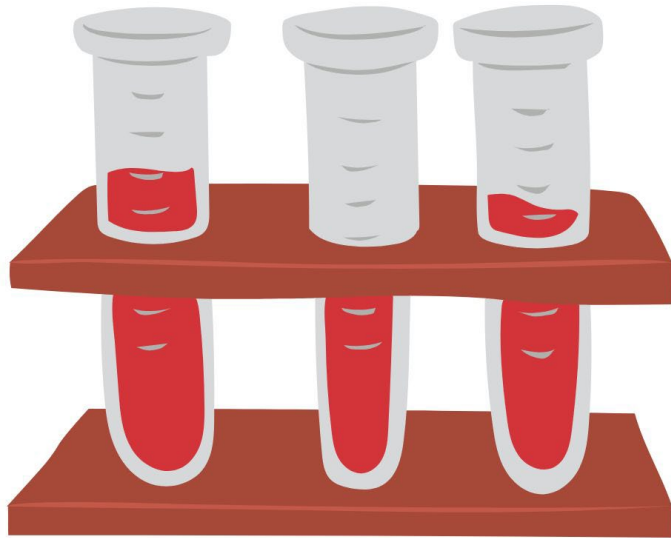
## Case # 4



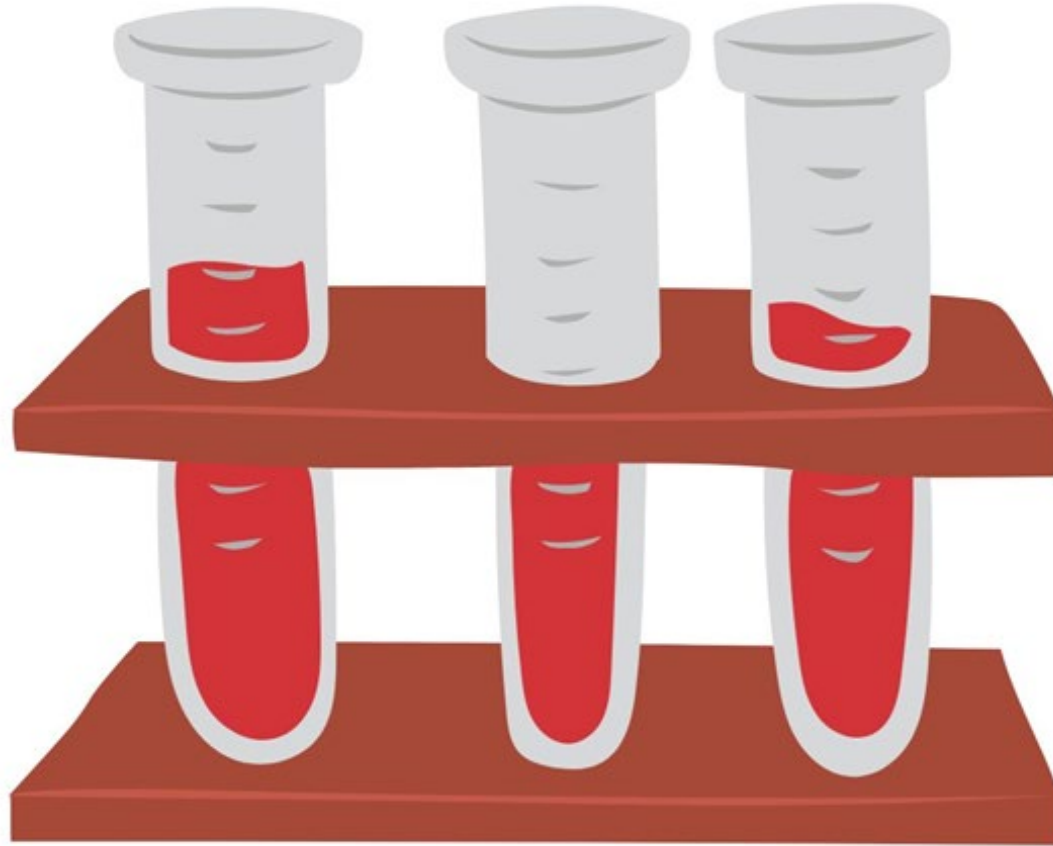
Transient Synovitis?

Septic Arthritis?

Lyme Arthritis?







# To Review...

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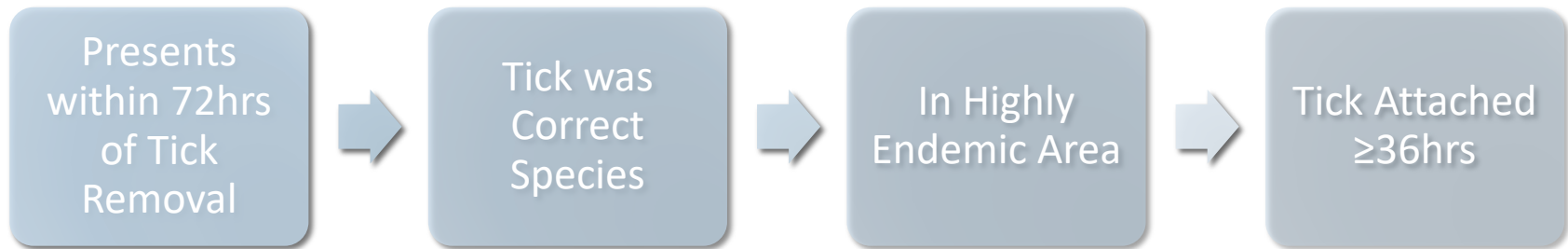
1. Lyme's disease is ancient
2. Lyme's disease is global
3. Lyme disease rates are only increasing

AND ...



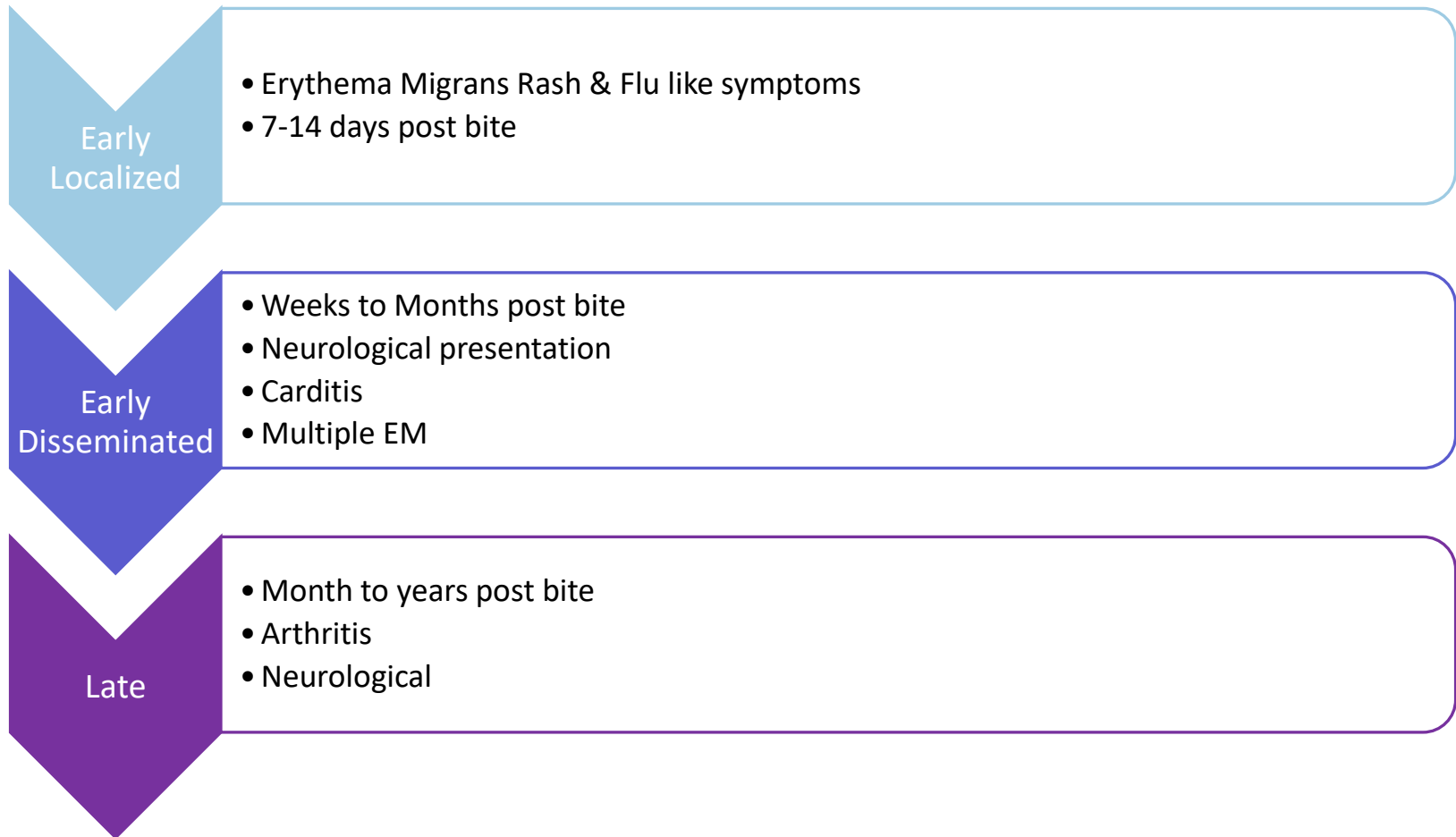


# Prophylactic Antibiotic Criteria

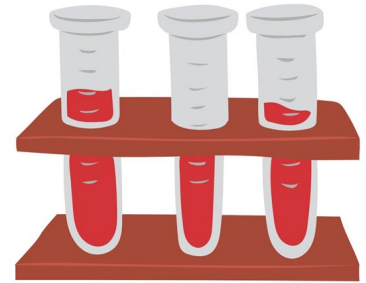


If all the above criteria are met, then treat with single dose of doxycycline at 4.4mg/kg (max dose 200mg)

# Staging



# Testing



Early  
Localized

- Clinical Dx
- High risk False Neg

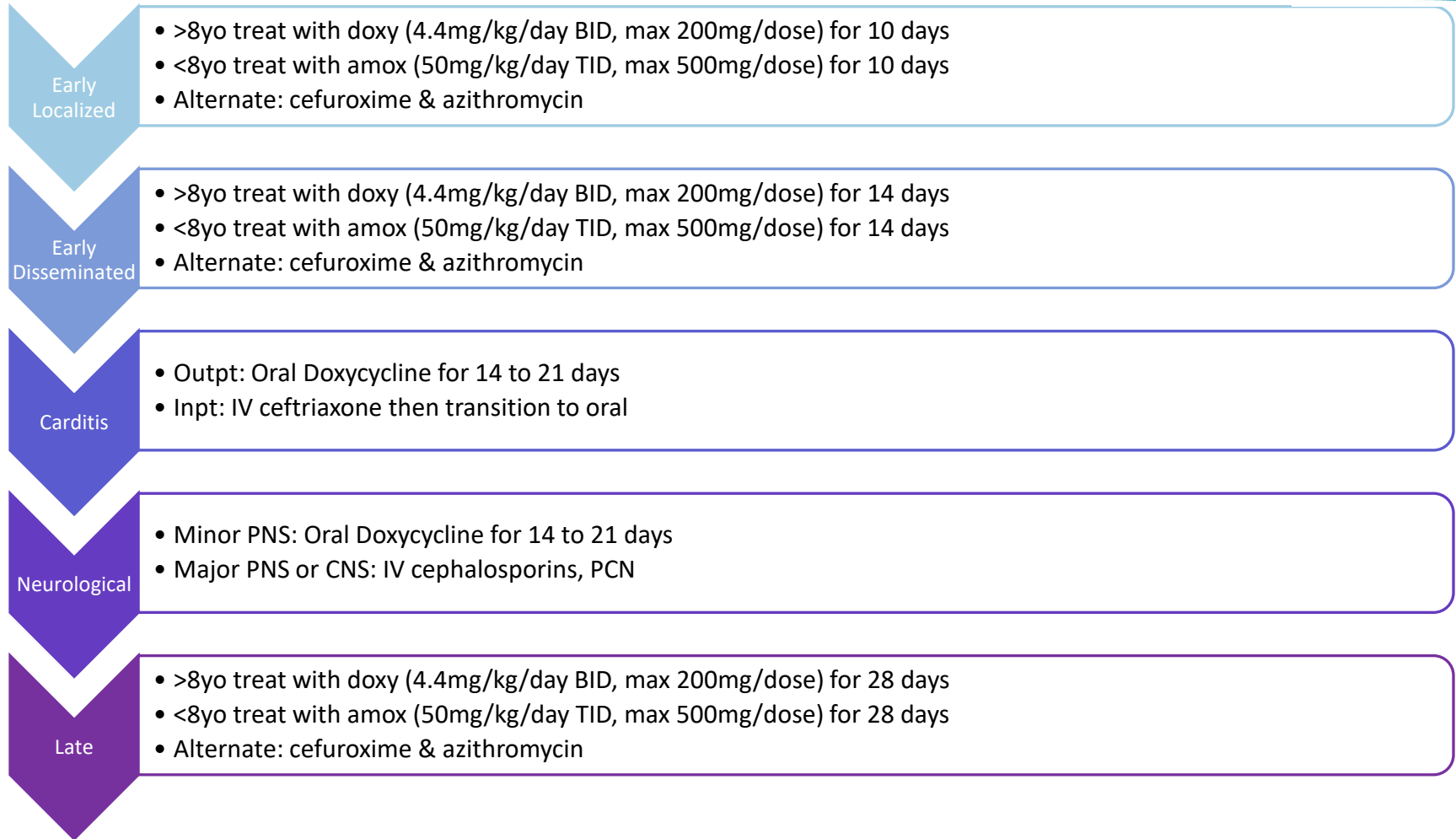
Early  
Disseminated

- Clinical Dx & modified algorithm testing

Late

- Either Algorithm

# Pediatric Treatment





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# Handout



THANK YOU!

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