

Rocky Mountain Spotted Fever: An Update from Arizona



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Overview

- What is RMSF
- History of RMSF in AZ
- What makes RMSF in AZ so different
- State level support
- Moving forward

Rocky Mountain Spotted Fever (RMSF)

- Tick borne pathogen caused by *Rickettsia rickettsii*
- Typical symptoms: fever, headache, abdominal pain, vomiting and muscle pain
 - Rash may or may not develop
- **DOXYCYCLINE** is the first line treatment for both adults and children

History of RMSF in AZ



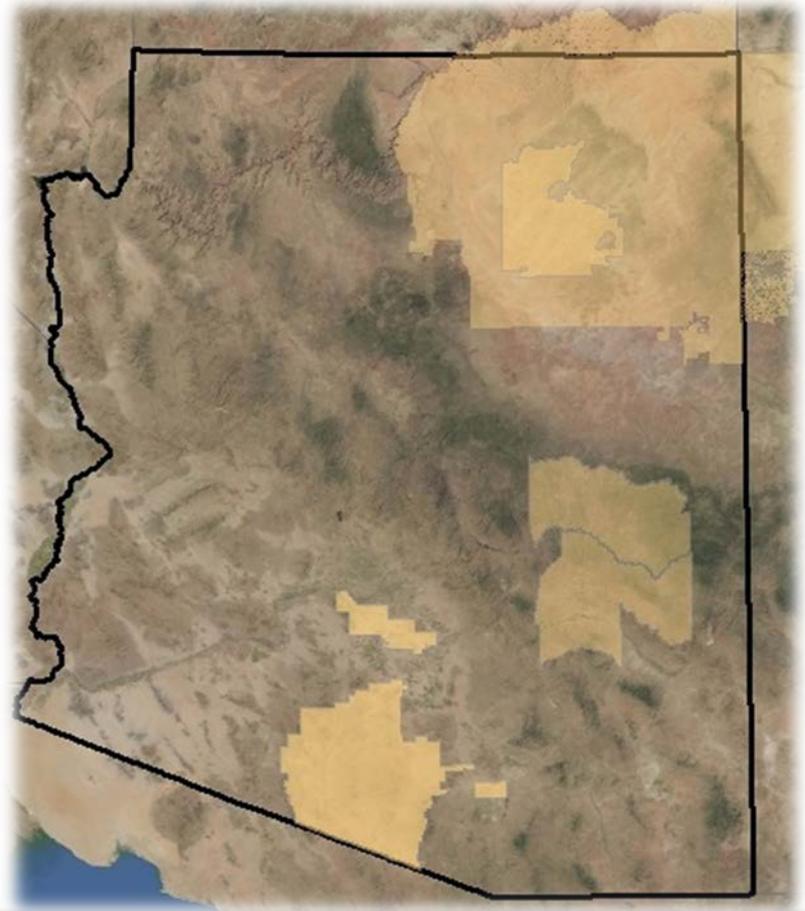
250+ cases 2003-2012

19 fatalities

6 different reservation areas

What makes RMSF in AZ so Different?

- New tick vector
- Seasonality in AZ
- Tribal lands
- During 2010-2011
>200X the national
RMSF incidence
- Age distribution
- Convalescent specimen
follow up



The Primary U.S. Tick Vectors of RMSF



Dermacentor variabilis
American dog tick



Dermacentor andersoni
Rocky Mountain wood tick



Photos and maps courtesy of CDC

The Primary AZ Tick Vector of RMSF



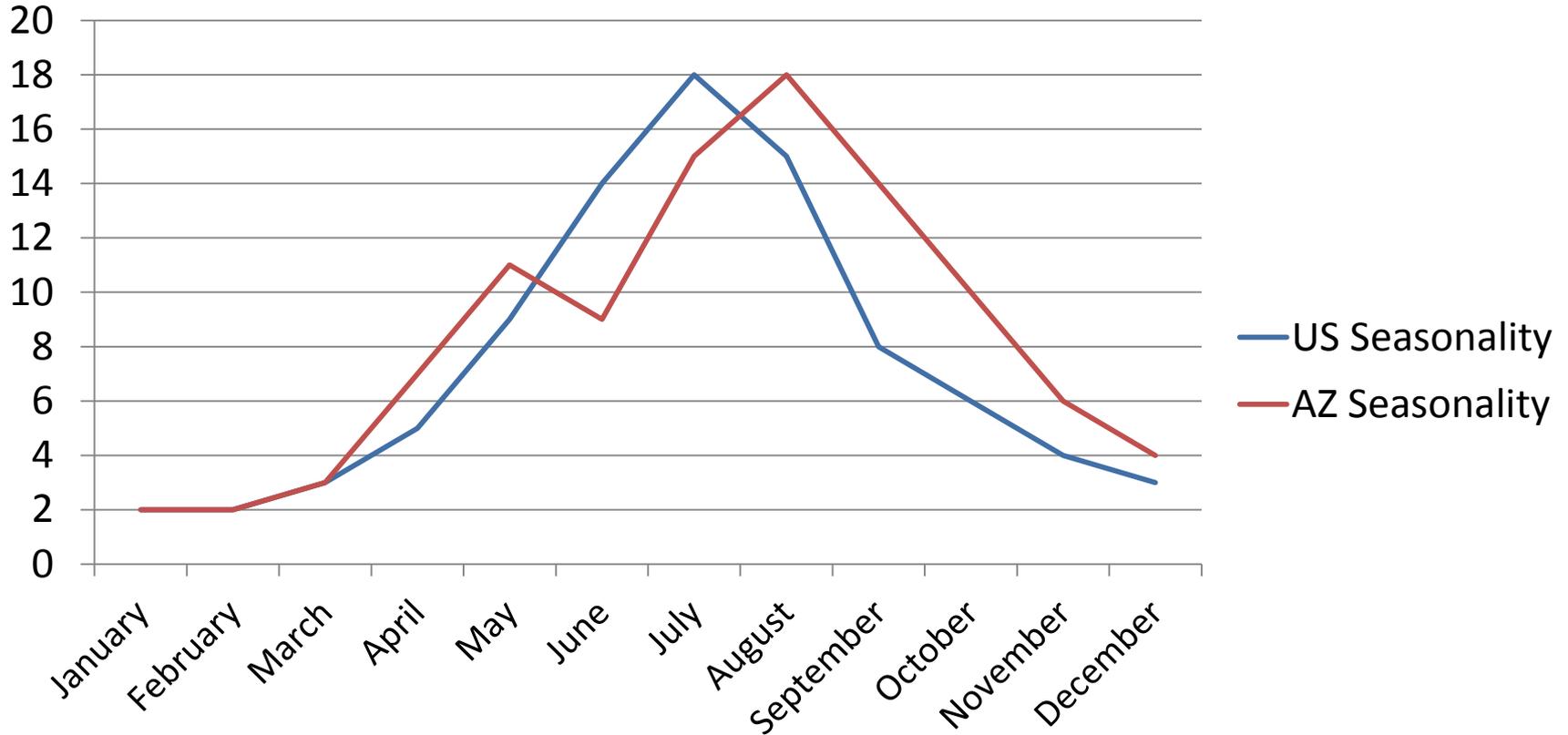
Rhipicephalus sanguineus
Brown dog tick



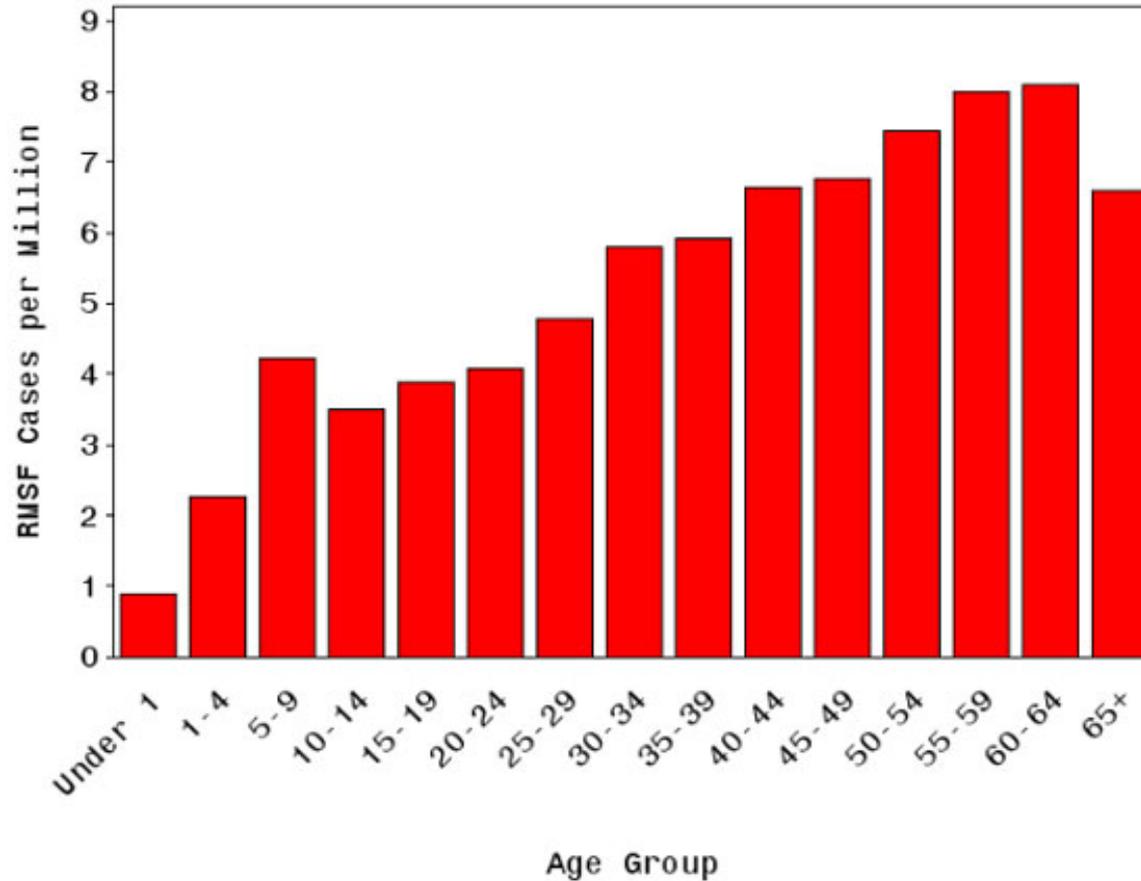
Photos and maps courtesy of CDC

Seasonality

Peak of disease activity corresponds with peak of tick activity

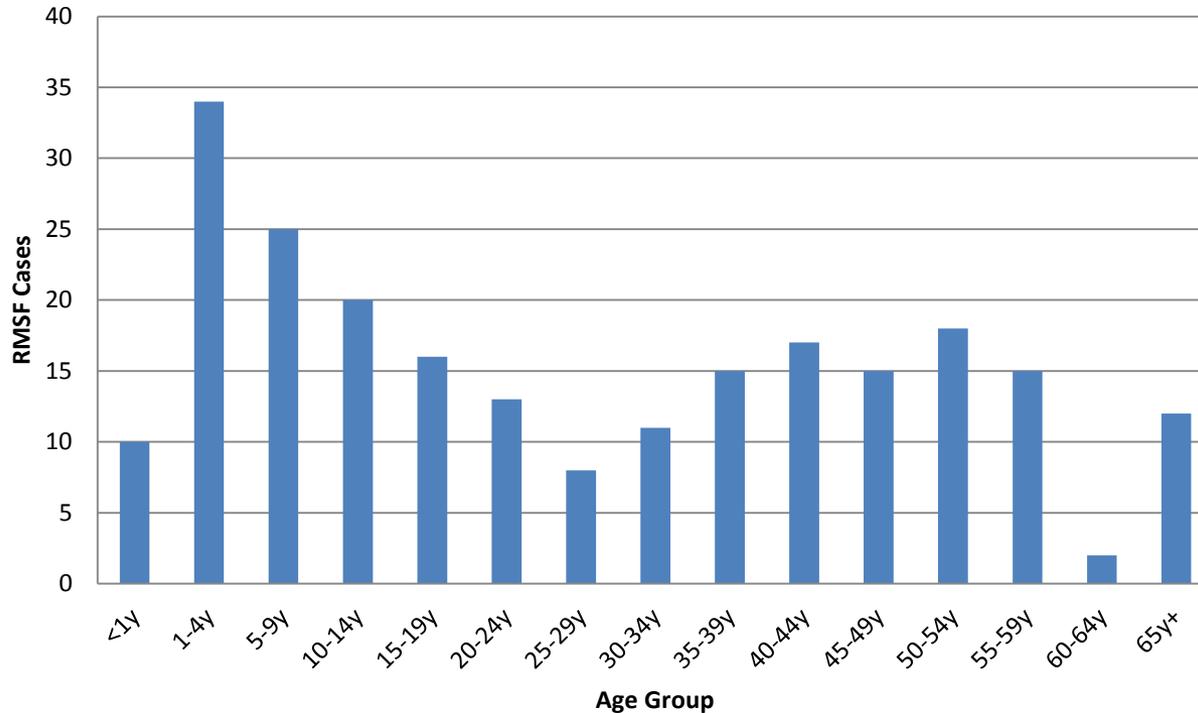


2000-2010 RMSF Age Distribution in the U.S.

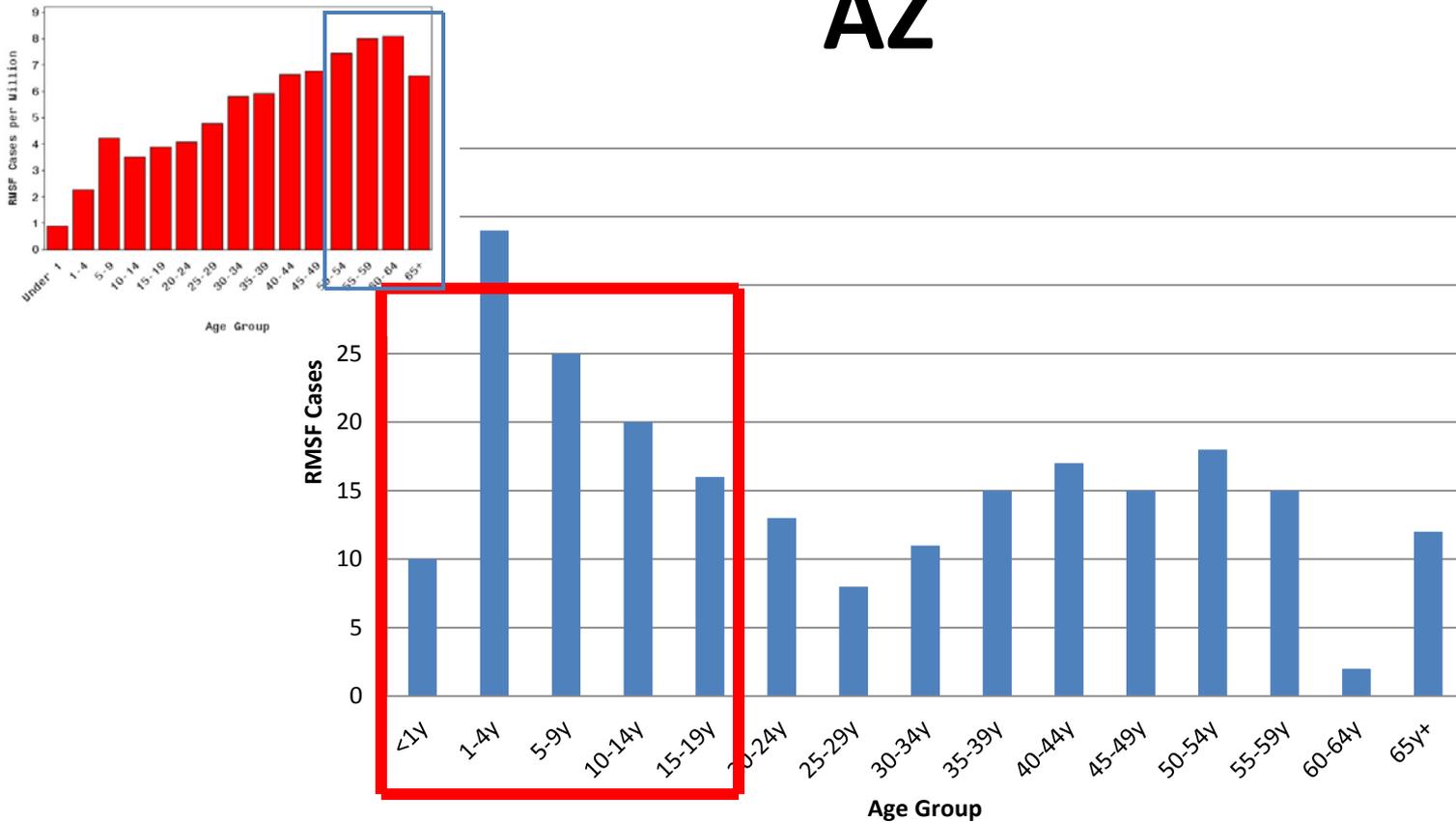


Graph courtesy of CDC

2002-2012 RMSF Age Distribution in AZ



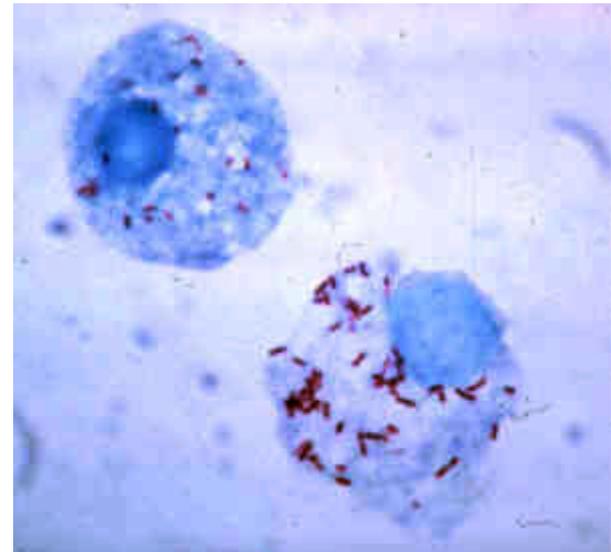
2002-2012 RMSF Age Distribution in AZ



45%

Convalescent Specimen Follow Up

- Paired samples
 - Acute: taken within the first week of illness and will almost always be negative
 - Convalescent: taken 2-4 weeks later
 - Produce a four-fold rise in antibody titers



State Level Support

Statewide Meetings

ARIZONA STATEWIDE TRIBAL, INDIAN HEALTH SERVICE,
ARIZONA DEPARTMENT OF HEALTH SERVICES, CENTERS FOR DISEASE CONTROL AND PREVENTION
2/17/12 ROCKY MOUNTAIN SPOTTED FEVER MEETING REPORT

PREPARED BY
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**2ND ARIZONA STATEWIDE TRIBAL
INDIAN HEALTH SERVICE,
ARIZONA DEPARTMENT OF HEALTH SERVICES,
CENTERS FOR DISEASE CONTROL AND PREVENTION
ROCKY MOUNTAIN SPOTTED FEVER MEETING**

**CLIFF CASTLE CASINO AND HOTEL
YAVAPAI-APACHE NATION
CAMP VERDE, ARIZONA**

NOVEMBER 9, 2012

8:15 AM – 4:30 PM



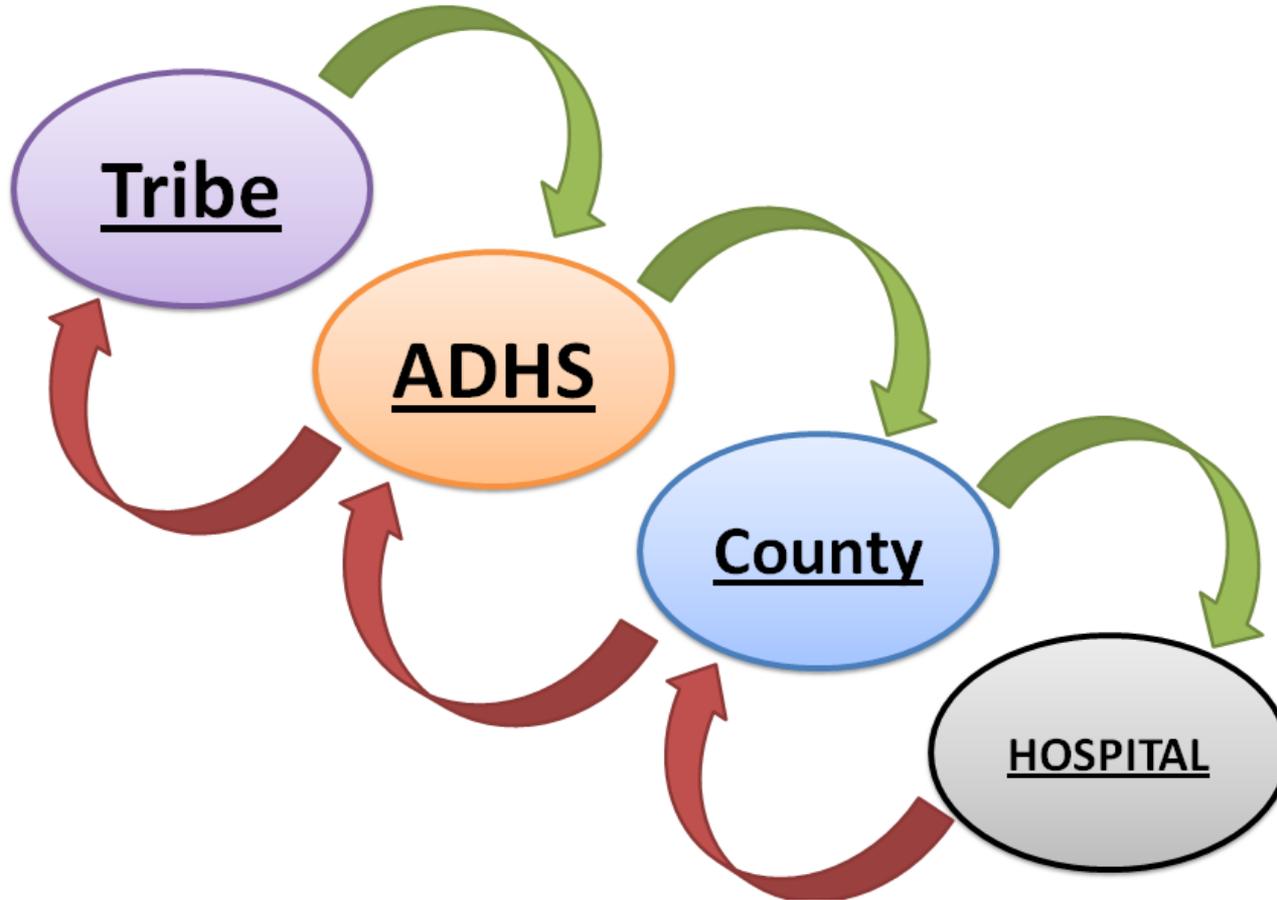
Health and Wellness for all Arizonans

azdhs.gov



State Level Support

Transfer Protocol



State Level Support *Educational Campaigns*

You Can Prevent
Rocky Mountain
Spotted Fever (RMSF)



KNOW THE SIGNS

(FEVER, HEADACHE, SPOTS)

INSPECT YOUR BODY

COLLAR DOGS

KILL TICKS IN YARDS



Protect Your Family From
Rocky Mountain Spotted Fever



Keep Ticks Off Children

Ticks can spread Rocky Mountain spotted fever. A tick bite can make you sick. To help you and your family stay healthy, keep ticks off children. Spray children with insect repellent before they go outside.

Check for Ticks on Children
Check these parts of your child's body for ticks:

- In and around the hair
- In and around the ears
- Under the arms
- Inside belly button
- Between the legs
- Back of the knees

**TICK CONTROL
PRODUCT LIST**



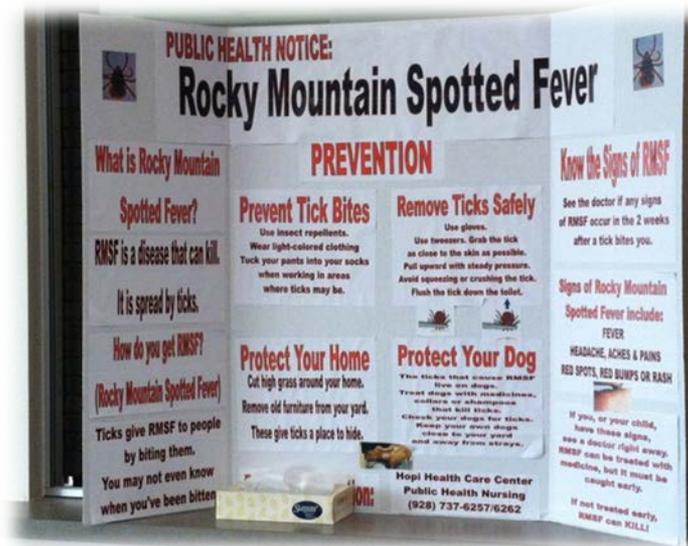
A Homeowner's Guide to Killing Ticks...

Inside homes
Outside homes
On Dogs

azdhs.gov

Moving Forward

- Continuation of ALL efforts:
 - RMSF statewide plan
 - Educational campaigns
 - Transfer protocol
 - State surveillance
 - Statewide meetings



Questions?

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