Navajo Nation FAD Task Force
Activation
RMSF PREVENTION
(Rocky Mountain Spotted Fever)
UPDATE
July 24, 2013

Navajo Veterinary & Livestock Program

Glenda Davis, CVT, MBA
Program Manager

Chinle – (928) 674-2069
Shiprock – (505) 368-1007
Tse Bonito – (505) 371-5214
FAD Task Force Activation – Mobilize Navajo Nation for RMSF Prevention

- December 2011 – Invitation by AZDHS as a team member for RMSF state wide meeting planning team
- January 13, 2012 – Foreign Animal Disease primary & secondary core teams activated
- CDC, AZ State Health Department, Indian Health Services – Rocky Mountain Spotted Fever Training, Chandler, AZ – February 13-15, 2012
- 1st Arizona State-Wide Meeting on RMSF – February 17, 2012
- First FAD Task Force meeting – February 21, 2012
- Received support from the NN OPVP – Rex Lee Jim on February 22, 2012
FAD Task Force Activation - Mobilize Navajo Nation for RMSF Prevention

- CDC EpiAid request planning (Conference Call) – March 19, 2012
- May 9, 2012 – Navajo Nation Animal Control Proclamation
- NN OPVP – Rex Lee Jim update RMSF May 15, 2012
- Signed CDC EpiAid Request, May 16, 2012 – Deployment in two weeks – May 16, 2012
  - Meet & Greet – July 16, 2012
  - RMSF Summit – July 17, 2012
  - Canine Serology Sampling – June 7 – August 9, 2012
  - Final Report – October 4, 2012
- I.H.S. Clinical Rounds - Rocky Mountain Spotted Fever (RMSF) Webinar  All healthcare providers Navajo Nation
- 2nd Arizona State-Wide Meeting on RMSF – November 9, 2012
- NNVMU, NNACP & NNHEP field work June 3 – Sept 30, 2013
NN Emergency Response Plan to a Foreign Animal Disease – RCAU-43-04

Legislation to address the prevention, planning, response and recovery against a foreign animal disease within the borders of the Navajo Nation, enacted August 24, 2004
Unified Command Concept

NAVAJO NATION EMERGENCY RESPONSE
TO A FOREIGN ANIMAL DISEASE TASK FORCE COMMAND
FAD Task Force

- Navajo Division of Health
  - Navajo Epidemiology Center
  - Navajo Health Education
  - Community Health Representatives
- Navajo Nation Veterinary & Livestock Program
- Navajo Housing Authority
- Fish & Wildlife
  - Animal Control
- Environmental Protection Agency
  - Pesticide Program
- Department of Resource Enforcement
- Navajo Area Indian Health Service
Rocky Mountain Spotted Fever

- Caused by the bacterium *Rickettsia rickettsii*
- Symptoms - fever, headache, abdominal pain, vomiting, and muscle pain. A rash may develop, but is often absent in the first few days, and in some patients, never develops.
- RMSF is a serious illness that can be fatal in the first eight days of symptoms if not treated correctly (doxycycline within 5 days)
Navajo Nation – Tick & pet issues

Courtesy of Joe Begay, NNACP

Courtesy of Wilmer Woody, NHA Pesticide Program
Rocky Mountain Spotted Fever (RMSF)

- *Rickettsia rickettsii*, tick-borne pathogen
- Acute presentation: Fever, headache, rash (humans)
- Rapidly progressive disease with respiratory, gastrointestinal, and neurologic manifestations
- Multisystem organ failure, death (in 1-10%)
2012 NHA Sites

"Target the Tick"
Rocky Mountain Spotted Fever Prevention

WELLNESS AND DOG DIP SITES:
Open to the General Public and Surrounding Communities

- Tohatchi NHA
  - July 7 • (505) 235-3724
- Ganado NHA
  - June 14 • (928) 755-6432
- Crownpoint NHA
  - June 25 • (928) 674-8322
- Chinle NHA
  - June 28 • (928) 755-5152
- Pinon NHA
  - June 7 • (928) 637-2795
- Navajo NHA
  - July 7 • (505) 772-1712
- Shiprock NHA
  - July 18 • (505) 368-7184

- Ojo Amarillo NHA
  - July 25 • (928) 990-3011
- Dilon NHA
  - July 25 • (928) 697-4464
- H. Defiance NHA
  - August 8 • (520) -735-6271
- Kayenta NHA
  - August 9 • (520) 729-5600
- J. City NHA
  - August 9 • (520) 729-6709

NNVLP Discounts
$5 Distemper or Rabies Shots
$5 Dog Dip $5 Deworming

CDC EpiAid Serology
- Voluntary blood draw for dogs
- Exchange tick collar
- Complete questionnaire

For more information contact NHA P.O. Box 920 in Holbrook, Arizona, 86025 or call 520-871-6695.
June 29, 2012

Prevention and Public Health Education on Rocky Mountain Spotted Fever

THE SALTATION PRESIDENT

The Navajo Nation recognizes the importance of Public Health Education on the Rocky Mountain Spotted Fever.

WHEREAS, the Navajo Nation, through its Emergency Preparedness Program, has adopted policies and procedures to prevent and control the transmission of Rocky Mountain Spotted Fever;

WHEREAS, the Governor of the Navajo Nation, in consultation with the Public Health Department, has determined that public awareness and education are essential to preventing the spread of Rocky Mountain Spotted Fever;

WHEREAS, the Public Health Department has identified a need for increased public awareness and education on Rocky Mountain Spotted Fever;

NOW, THEREFORE, I, ALLEN SHAYEH, President of the Navajo Nation, do hereby proclaim this day as Public Health Education on Rocky Mountain Spotted Fever.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of June, 2012.

ALLEN SHAYEH
President of the Navajo Nation
RMSF Summit

2012 ROCKY MOUNTAIN SPOTTED FEVER SUMMIT
FREE EVENT ***OPEN TO THE PUBLIC*** FREE EVENT
EDUCATION ONLY    NO VETERINARY SERVICES

When: TUESDAY, JULY 17, 2012
8:00 am - 5:00 pm
Where: TSE BONITO, NM
@ NAVAJO DEPT. OF TRANSPORTATION
Senator Pinto Conference Room

Topics:
- Partnership between Navajo Nation and CDC
- Current information on RMSF
- Medical update (Human)
- Veterinarian update (Animal)
- Pet owner update/ responsibilities
- Home assessment (internal/external)
- Debris removal/ Community clean up
- Foreign Animal Disease Task Force Panel Q & A

Sponsored by: Foreign Animal Disease Task Force
For more info: NN Veterinary & Livestock  Navajo Epidemiology Center  Navajo Health Education
(928) 871-6613  (928) 871-4254  (928) 871-6562
## 2012 Dog Wellness Clinics

### NHA Communities
- JUNE 7 - Dilcon NHA
- JUNE 11 - Pinon NHA
- JUNE 13 - Ganado NHA
- JUNE 14 - Crownpoint NHA
- JUNE 25 - Chinle NHA
- JULY 2 - Tohatchi NHA
- JULY 12 - Navajo NHA
- JULY 18 - Shiprock NHA
- JULY 19 - Pinehill NHA
- JULY 23 - Ojo Amarillo NHA
- AUGUST 6 - Kayenta NHA
- AUGUST 8 - Tuba City NHA
- AUGUST 9 - Ft. Defiance NHA

### Chapter Houses
- JUNE 13 – Nageezi Chapter
- JUNE 21 – Dennehotso Chapter
- JULY 20 – Jeddito Chapter
- JULY 24 – Hard Rock / Hopi
- JULY 26 – Kaibeto Chapter
- JULY 27 – Wide Ruins Chapter

**Total = 19 sites**
Veterinary Services

Vaccinations
- Distemper
- Rabies
- Deworming

Dog Dips
Blood Collection

Hair trim

Blood draw
### Dog Serosurvey

**Dog Owner**: ______________________________________

**Contact #**: __________________

**Chapter**: ____________  **Community**:__________________

**Sample Number**: _______________

**Date of Collection**: _______________

**Source of Dog**:  
- □ NHA Site  
- □ IHS Rabies Clinic  
- □ Chapter Site  
- □ Door to Door

**Location of Dog**:  

**Physical House Address (NO P.O. BOX)**: _______________________________

**Where did you get from/ How long ago?**: _______________________________

**Has the Dog ever been taken out of the community?**  
- □ Yes  
- □ No

**If Yes; When/ Where?**: _____________________________________________

### Physical Characteristics:

**Dog Name**: __________________

**Dog’s Health**:  
- □ Healthy  
- □ Sick

**Age**:  
- □ Less Than 2 years (puppy)  
- □ More Than 2 years (adult)

**Breed**: _________________  
**Color**: _________________

**Dog contained (fenced/ leashed)**:  
- □ Yes  
- □ No

**Dog allowed in house**:  
- □ Yes  
- □ No

**Dog spayed/neutered**:  
- □ Yes  
- □ No
Seropositive Dogs

Tested 337 dogs and found 54 were positive for RMSF

Dog blood test shows if the dog has been exposed to the RMSF bacteria at sometime in the dog’s life, which could be a day, a week, or a year before the dog’s blood was tested

The positive RMSF dogs healed from the bacteria and are healthy dogs, similar to how humans heal from a cold
Serology Study Results

Table 1. Demographic, health, and housing information on sampled dogs.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>114/334</td>
<td>34%</td>
</tr>
<tr>
<td>More than 2 years</td>
<td>220/334</td>
<td>66%</td>
</tr>
<tr>
<td><strong>Breed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified mix</td>
<td>85/337</td>
<td>25%</td>
</tr>
<tr>
<td>Heeler/mix</td>
<td>43/337</td>
<td>13%</td>
</tr>
<tr>
<td>Pitbull/mix</td>
<td>43/337</td>
<td>13%</td>
</tr>
<tr>
<td>Labrador/mix</td>
<td>24/337</td>
<td>7%</td>
</tr>
<tr>
<td>German Shepard/mix</td>
<td>17/337</td>
<td>5%</td>
</tr>
<tr>
<td>Husky/mix</td>
<td>17/337</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Health status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy</td>
<td>323/334</td>
<td>97%</td>
</tr>
<tr>
<td>Dog is fenced or leashed</td>
<td>208/332</td>
<td>63%</td>
</tr>
<tr>
<td>Dog is allowed inside house</td>
<td>137/332</td>
<td>41%</td>
</tr>
<tr>
<td>Dog taken out of community</td>
<td>75/322</td>
<td>23%</td>
</tr>
</tbody>
</table>

Dog spayed, neutered* 
85/219 39%

*Dilkon, Pinon, Ganado, Nageezi, and Crownpoint excluded
### Serology Study Results

Table 2. Number positive from highest to lowest by sampling site

<table>
<thead>
<tr>
<th>Sampling Site</th>
<th># Positive/ # Sampled</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shiprock</td>
<td>14 / 20</td>
<td>70%</td>
</tr>
<tr>
<td>Wide Ruins</td>
<td>2 / 6</td>
<td>33%</td>
</tr>
<tr>
<td>Ojo Amarillo</td>
<td>6 / 20</td>
<td>30%</td>
</tr>
<tr>
<td>Fort Defiance</td>
<td>5 / 19</td>
<td>26%</td>
</tr>
<tr>
<td>Jeddito</td>
<td>2 / 8</td>
<td>25%</td>
</tr>
<tr>
<td>Kaibeto</td>
<td>4 / 16</td>
<td>25%</td>
</tr>
<tr>
<td>Tohatchi</td>
<td>5 / 20</td>
<td>25%</td>
</tr>
<tr>
<td>Kayenta</td>
<td>4 / 20</td>
<td>20%</td>
</tr>
<tr>
<td>Hopi Nation</td>
<td>1 / 8</td>
<td>13%</td>
</tr>
<tr>
<td>Crownpoint</td>
<td>2 / 20</td>
<td>10%</td>
</tr>
<tr>
<td>Dilkon</td>
<td>2 / 20</td>
<td>10%</td>
</tr>
<tr>
<td>Navajo</td>
<td>2 / 20</td>
<td>10%</td>
</tr>
<tr>
<td>Pinon</td>
<td>2 / 20</td>
<td>10%</td>
</tr>
<tr>
<td>Ganado</td>
<td>1 / 20</td>
<td>5%</td>
</tr>
<tr>
<td>Pinehill</td>
<td>1 / 20</td>
<td>5%</td>
</tr>
<tr>
<td>Tuba City</td>
<td>1 / 20</td>
<td>5%</td>
</tr>
<tr>
<td>Chinle</td>
<td>0 / 20</td>
<td>0%</td>
</tr>
<tr>
<td>Dennehotso</td>
<td>0 / 20</td>
<td>0%</td>
</tr>
<tr>
<td>Negeezi</td>
<td>0 / 20</td>
<td>0%</td>
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</tbody>
</table>
Geographic Distribution of Seropositive Dogs
<table>
<thead>
<tr>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education in schools: SH, FD, TC, CR, CH</td>
<td>HEHS Delegates on Radio</td>
<td>RMSF Education of communities</td>
<td></td>
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<tr>
<td>NHA MOU: SN, Tick Collars &amp; Vax Scheduling</td>
<td>KTNN RADIO FORUM</td>
<td>KTNN RADIO FORUM</td>
<td>KTNN RADIO FORUM</td>
<td>KTNN RADIO FORUM</td>
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<tr>
<td>NHA Compliance to pet policy</td>
<td>Reports to Public Safety, HEHS &amp; RD Committees</td>
<td>NEW PET POLICY LEGISLATION</td>
<td>Begin Education</td>
<td></td>
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<tr>
<td>NN Animal Laws &amp; Regulation Amendments</td>
<td>Address Enforcement Issue on pets</td>
<td>NHA VAX &amp; DIP SITES</td>
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<tr>
<td>Meet with NHA Board</td>
<td>NHA Budget to Board from NHA Pest Prog</td>
<td>First Preventick Collar 04/01/13</td>
<td>Second Preventick Collar 06/30/13</td>
<td>Third Preventick Collar 08/01/13</td>
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<tr>
<td>NN Executive Order</td>
<td>Speakers Office involvement with pet laws / policy</td>
<td>BEGIN MOBILE SPAY &amp; NEUTER SURGERIES - $10 / NNTIMES A</td>
<td></td>
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<tr>
<td>Executive Director Mtg / Chief of Staff</td>
<td>Order Supplies</td>
<td></td>
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<tr>
<td>PCQ for Personnel Hire</td>
<td>RADIO ADS</td>
<td>NN TIMES ADVERTISEMENTS</td>
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<tr>
<td>Purchase Vet Mobile Unit</td>
<td>Print all brochures / posters</td>
<td>NNA CO x2 Training</td>
<td>Pet Carnival SN SITE: 150 SX / Kayenta</td>
<td>Pet Carnival SN SITE: 150 SX X2 SITES</td>
<td>Pet Carnival SN SITE: 150 SX / NTC</td>
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<tr>
<td>Four animal surrender sites</td>
<td>Four animal surrender sites</td>
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<td>Four animal sweeps</td>
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**FAD TASK FORCE**

**2013 RMSF ACTION TIMELINE**
NN FAD Task Force Planning for 2013 RMSF Prevention finalized March 6, 2013

1. Enhance Healthcare Provider Awareness of RMSF Risks in Communities Served
2. Educate Healthcare Providers about RMSF Recognition, Diagnosis, and Treatment
3. Continue the Navajo Nation RMSF Outreach Education
4. Encourage Appropriate Use of Tick Control Products to Reduce Tick Exposures
5. Encourage Dog Population Control and Improve Dog Health in the Navajo Nation
1. Enhance Healthcare Provider Awareness of RMSF Risks in Communities Served

2. Educate Healthcare Providers about RMSF Recognition, Diagnosis, and Treatment

- Letters to NN Health care providers from Jonathan Hale, Chair, NN Health, Education & Human Services Committee
- I.H.S. Webinar education
- ECHO conference calls and education
- Membership on FAD Task Force for RMSF Prevention
CDC Algorithm

Patient Presents with Fever
Temperature $> 100^\circ F$
or
History of Subjective Fever

Fever $> 2$ days

No

Educate Patient & Follow-up Next Day

Yes

Any 1 of the following:
- Rash?
- Low Sodium?
- Low Platelets?
- Elevated AST or ALT?
- Recent Exposure to Ticks or Untreated Dogs?

Yes

Doxycycline & RMSF Labs

No or Unknown
Continue the Navajo Nation RMSF Outreach Education

- FAD Task Force approved educational tool box
- PPT Presentations
- Handouts
- Flyers
- KTNN Forums
- Radio announcement
- On site education at all NNVMU animal wellness SN sites
- RMSF education delivery at all community events
Evidence Based Practice

8 priority communities first, then other communities

- Shiprock, Wide Ruins, Ojo Amarillo, Fort Defiance, Jeddito, Kaibeto, Tohatchi, Kayenta

Address schools, chapter houses, NHA communities

Explain the CDC Report

- The dogs that are positive for RMSF are HEALTHY and should not be killed or abandoned
- TICKS are the vector, DOGS are the sentinels
- Stray dog overpopulation is the UNDERLYING PROBLEM
- Explain current NN Dog laws (13 N.N.C. § 1701-1712)
CDC Epi-Aid Report Recommendations (4-5)

4. Encourage Appropriate Use of Tick Control Products to Reduce Tick Exposures
5. Encourage Dog Population Control and Improve Dog Health in the Navajo Nation

- NNVLP NNVMU Vaccination – Wellness Clinics & Spay / Neuter of Dogs & Cats
- Coordination with
  - NNACP on 3yr rabies vaccinations & NN animal licenses
  - NNHEP, PHN, CHR on-site RMSF education at all vaccination clinics
NN Veterinary Mobile Unit
Arrival May 13, 2013
2013 Spay Neuter Sites

THE NAVAJO NATION

Approved by the FAD Task Force March 6, 2013
Contact: Glenda Davis, Program Manager - NNVLP
(505) 371-5218
NNHEP: RMSF Education & Prevention
NNACP: Rabies Vax & Animal Licenses – Day 1
First Day at Chapter
-Vaccination / Wellness Clinic
-Schedule surgeries by appt
Partnerships:
Animal Organizations for Surgeons
Dine College & Navajo Technical College
ASPCA spot on tx
CDC 5mo tick collars

Day 2
Preform surgeries on all pets scheduled from vaccination & wellness day
THANK YOU

Glenda Davis, Program Manager, NNVLP
Team Lead, FAD Task Force
(505) 371-5214
glendadavis@navajo-nsn.gov