

IMPACT ON NAVAJO NATION

20TH Anniversary of Hantavirus – the 1993 Outbreak Response



Herman Shorty, Director
Office of Environmental Health
Navajo Division of Health



For

2013 ARIZONA INFECTIOUS DISEASE TRAINING & EXERCISE

July 24, 2013

Black Canyon Conference Center - Phoenix



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Impact was Tremendous:

- * Loss of Family Members / Community Members
- * Unexplained Loss (Why)
- * Unfair & Insensitive Media Conveyance (Sensationalism)
- * Economic Impact (Tourism)
- * Changed Things: Protocols; Informational (Clinical, Health & Safety, Manufacturing, etc.)
- * Cultural Affirmation



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Unfair & Insensitive Media Conveyance (Sensationalism):

- * “The Mystery Illness”
- * “The Four Corners Disease”
- * “Navajo Flu”
- * “Navajo Disease”



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Unfair & Insensitive Media Conveyance (Sensationalism): The Results

- * It created a climate where Navajo were turned away from restaurants and Navajo Children were asked for health certificates when arriving at summer camps.
- * Children on out of state school field trips were turned away at there destinations: Amusement Parks, Hotel, etc., cancelled through no fault of there own.
- * Prejudice / Discrimination unfairly upon the innocent.



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Unfair & Insensitive Media Conveyance (Sensationalism): The Results



“*ATTENTION* If you have fever along with muscle aches and pains, please stay in your car and we examine you there.”



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Response:

- * Epidemiological
- * Survey Questionnaire Format Adjustment
- * Survey Team Protocol Adjustments
- * Insertion of Tribal Liaisons
- * Field Investigation
- * Confirmation = Validity of Approach
- * Training of Others



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Field Investigation: Trapping, Collection of tissue samples (“Slicing & Dicing”)





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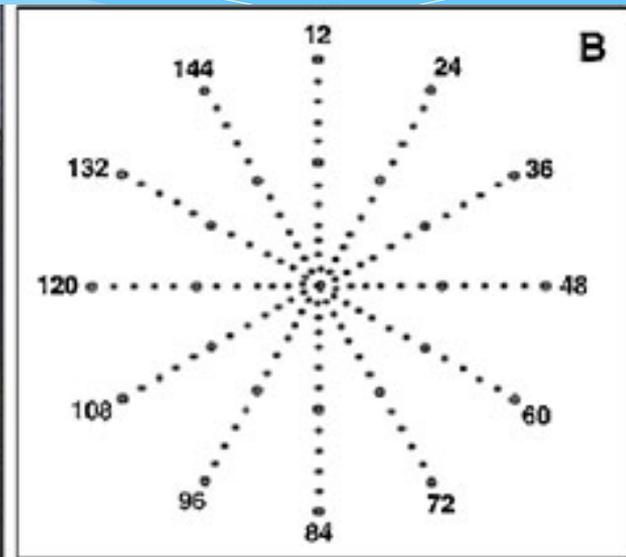


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- A. Characteristics of landscape and vegetation near Fort Lewis trapping web "A," southwestern Colorado. Photo courtesy of C. Calisher.
- B. Schematic representation of a trapping web showing the relative locations of the 148 trap stations. Small circles indicate the location of one Sherman trap, larger circles, one Sherman plus one Tomahawk trap. Diameter of the web was 200 m. After Parmenter et al.

Source: Parmenter CA, Yates TL, Parmenter RR, Mills JN, Childs JE, Campbell ML, et al. Small mammal survival and trapability in mark-recapture monitoring programs for hantavirus. *J Wildl Dis* 1998;34: 1-12.



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Unsung Heroes: There were plenty

- * Clinicians and Health Care Professionals,
- * CHR's (Community Health Representatives)
- * Health Education Programs
- * Public Health Nursing
- * Environmental Health Offices



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Unsung Heroes: The real heroes

- * Control homes (home sites/campsites);
- * Two per case homes;
- * One at or within a mile; &
- * One at or within five miles
- * Each subject to the same protocol of the case home site.



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Changed Things: Protocols; Informational (Clinical, Health & Safety, Manufacturing, etc.)

- * Greatly improved or opened avenues for communication & sharing of information in the medical & clinical community.
- * Mobile Home Construction Industry (Reduced larger diameter drilled holes for plumbing & electrical or fillings to reduce rodent entry points)



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Changed Things: Protocols; Informational (Clinical, Health & Safety, Manufacturing, etc.)

- * Changes in operational procedures:
- * Utility workers (Phone, Electrical, etc.)
- * National Parks Services,
- * Small Mammal Trapping Programs, e.g., Los Alamos Laboratory's trapping in canyons in close proximity , etc.
- * New clean-up and monitoring messages.



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Thank you

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