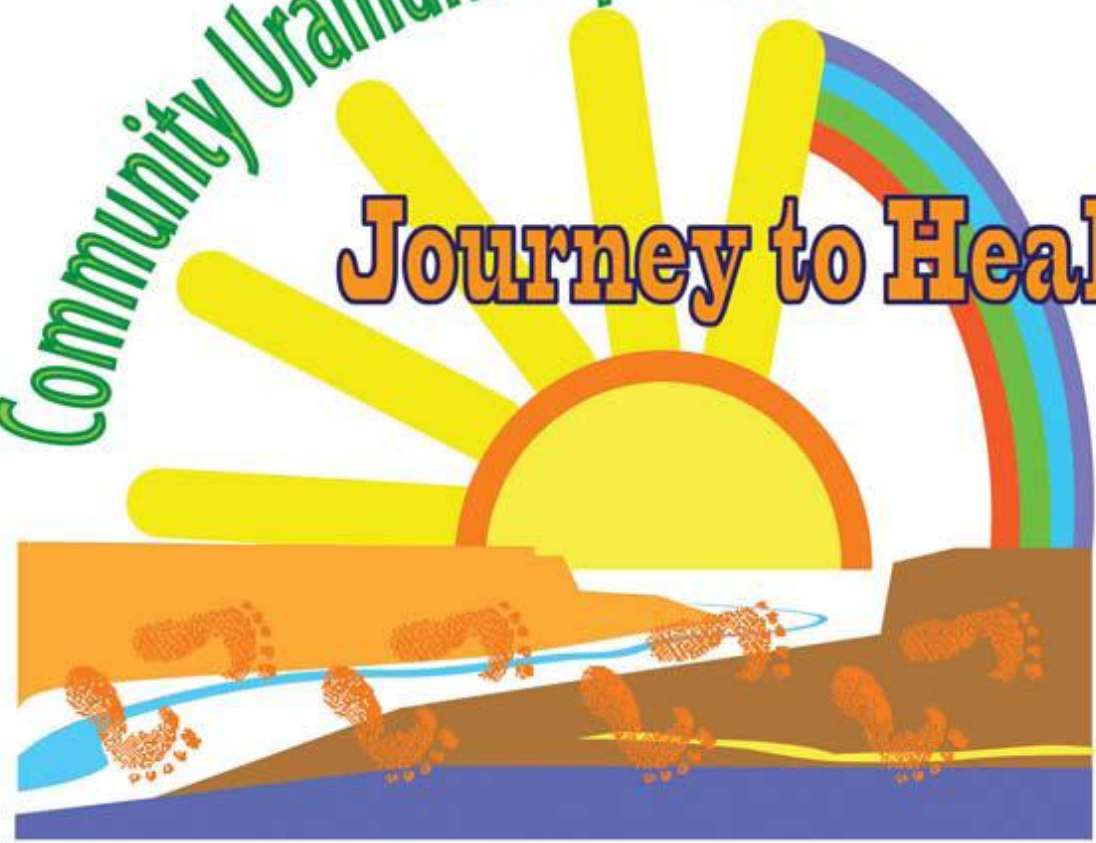


US EPA ARCHIVE DOCUMENT

Community Uranium Exposure

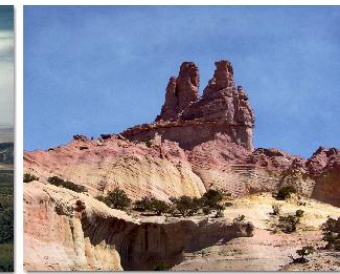
Journey to Healing



# A Quick Trip Through History:

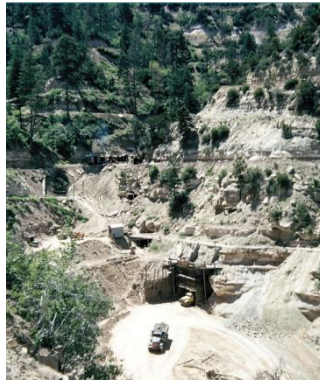


- Long Long LONG ago uranium became part of the earth and a lot ended up close to the earth's surface in what is now the southwest of the United States.



# Uranium Mining on Navajo Nation

- 1940s to 80s uranium mining and milling on Navajo Nation--last mine closed 1982



- Miners, millers, their families and friends worked hard to receive recognition and compensation—1990 RECA (Radiation Exposure Compensation Act), RESEP (Radiation Exposure Screening and Education Program)

BUT

What about everybody else living in the midst of  
all this uranium?

--naturally occurring

--from mining and milling activity



Churchrock leaching pond



Crownpoint milling site



Mexican Hat tailings pile

# There was work going on:

- EPA—US and Navajo Nation water sampling
- US Army Corps of Engineers mapping
- AML reclamation of mines
- NAIHS providing health care
- Dine College Uranium Education Program, UNM DiNEH project
- grassroots organizations such as Southwest Research and Information Center, ENDAUM, Forgotten People and Red Water Pond Road Association

BUT the work wasn't well coordinated and federal agencies weren't fully aware of each others efforts so...



# The 5 Year Plan

- 2008 Congress via the Waxman committee mandated 5 federal agencies to make a 5 year plan to address community uranium exposure and organize efforts.



- Navajo Area Indian Health Service one of the agencies.
- It is a 5 year plan but the work will continue well past the five years....

# Navajo Area Indian Health Service

- Initially work done to develop a screening tool to determine exposure that would be used in clinics.
- Realization that one more screening in busy clinics was not going to be adequate to address the scope of the issue.
- January 2010: Re-organized into a centralized program—program director detailed, Shiprock Service Unit agreed to house the program within the Health Promotion Disease Prevention department....



# Community Uranium Exposure—Journey To Healing was born!

Planning team committed to making program community and public-health based, including:

- ❖ Community input into planning
- ❖ Reporting back to communities—ongoing dialog
- ❖ Increase health care access by using mobile unit/field clinics—take screening to the patients
- ❖ Include health education –uranium specific and general
- ❖ Include health promotion information and activities
- ❖ Health screening—open to all, determine exposure, general health screening with attention to kidney, liver, thyroid—looking for the possible footprints left behind by uranium

- ❖ Medical monitoring of those determined to be exposed in past or currently—create patient registries in RPMS at each IHS service unit or 638 facility, case management in collaboration with local providers
- ❖ Provide individuals and communities information to stop or minimize current exposure
- ❖ Work with communities and other agencies to prevent future exposure
- ❖ Health care provider education
- ❖ Collaboration with traditional Navajo medicine people
- ❖ Collaboration with researchers

# CUE-JTH Events So Far:

## Community Conversations

Facilitated world café process

Churchrock Chapter January 13, 2010

Cove Chapter March 16, 2010

Black Falls April 18, 2010

Cameron Chapter April 19, 2010

Sanostee Chapter June 2, 2010

Baca/Prewitt/Haystack Chapter Aug 4, 2010

Crownpoint Chapter August 9, 2010



## Health Screening and Education Events

Cove Chapter April 29, 2010

Sanostee Chapter July 7, 2010

Baca Chapter August 30, 2010



## Health Screening in collaboration with DiNEH Project Study

Crownpoint Tech College July 19, 2010

Crownpoint IHS Clinic August 9, 2010

## Provider Education

Navajo Nation Museum, Window Rock June 30, 2010



# Two main premises of public health:

- 1) Ask people what they need and listen because they know.
- 2) An ounce of prevention is worth a ton or two of cure.

# So we asked and here is what we heard at the Community Conversations:

## **Health concerns:**

Lung problems

Diabetes

Thyroid problems

Liver problems

Eye/vision problems

High blood pressure

Joint problems/arthritis

Headaches

Skin problems

Foot sores

Loss of hair—young

Depression

PTSD

Anxieties

Seizures

Alzheimer's/dementia

Heart problems in children

Children have stomach bleeding

Birth defects

Child with kidney problems

Digestive problems

Loss of appetite

## Health Concerns (con't)

Cancers: “Too many cases of cancer in community”

- bladder
- stomach
- skin
- thyroid
- “in head”
- prostate
- breast
- uterus

Livestock concerns:

- fertility problems
- miscarriages
- deformities
- discoloration of intestines

“All my siblings died, only one left” (2 different middle-aged men in different communities)

“Too many funerals”

“5 of 6 children (in one family) have severe health problems— bloating skin, bone diseases”

## Vehicles of exposure:

- Water, water, water—contaminated wells, runoff, waste water
- Drank/drink herbs that grew/grow near uranium
- Ate/eat meat from livestock which graze on waste and tailings piles and that drank/drink contaminated water
- Dust on miner's clothing—family members did laundry
- Drank water in mines, cooked and washed with it too—miners and their families
- Built with materials from mines & mills—homes, livestock pens, grills, knife sharpening slabs
- Cannot see outcrops without instruments—don't know they are there

## Vehicles of exposure (con't):

- Erosion—water and wind-- exposing uranium and moving waste piles
- Played/play on mine waste piles and in washes that run from and through piles, waste water ponds or ones created in abandoned mine pits
- Plants and farm produce irrigated with contaminated water and grown in contaminated soil
- 4 wheelers riding over waste and tailing piles—lots of dust

“I miss playing outside. I miss playing in the mud.”

“Why didn’t contractors tell community it was a health hazard?”

“If told it was dangerous back then we would have moved.”

Family that moved temporarily: “Children don’t get sick as often—not coughing constantly.”



## **What needs to happen now and in the future related to**

**health:** Participants see the big picture right away without any prompting and they come up with excellent ideas for that ounce of prevention!

### Clinical:

- proper health assessment
- health screening tool to identify exposure
- health screening-- find problems early
- real doctors—not interns and residents
- doctors specialized in uranium, cancer, diabetes
- uranium/cancer specific clinic facility
- more advanced technology to diagnose the people exposed

## Clinical (con't):

- more research
- comprehensive health survey-EVERYONE...prenatal, infants, children, adolescents, adults, elderly
- clinic in community
- home visits by nurse
- CHR in each chapter within certain radius of mine/mill site or contaminated water do door to door health assessment—hair, urine, water samples
- effective interpretation between providers and Navajo-speaking patients
- workshop with Traditional medicine people (combining Western & Native healing to address health)

## Community:

WATER!! (one of the most common topics)

- good clean uncontaminated water for people and livestock
- access to fresh water
- dig a well that is not contaminated
- roads graded so EPA water trucks can deliver to homes
- local water source—we will haul from there
- clean water so do not have to haul water from far away

## Community (con't):

### Mine and mill sites:

- close up mines, cover open mines
- fence off mine areas to keep people and livestock out
- signs to warn people of uranium
- get rid of the uranium by cleaning it up
- need clean dirt
- future mining—we the community people need to make the decision



### Education:

- educate children/students about uranium; start young--prevention
- more of these gatherings to give out information
- educate doctors about uranium
- communication from health officials
- what are the symptoms of uranium exposure?

## Some additional quotes from the community conversations:

“Land board member needs to be involved so they can educate the public where to graze and should require meat testing for contaminants.”

“Health studies to convince the government that they should not allow companies to mine.”

“All levels of government need to listen.”

“Virtually everyone agreed that doctors who are committed and knowledgeable and know culture are needed.”

“Use this information in a proactive way – many peoples’ experience is not being listened to.”

“Thanks for coming out to us....We need people to come out here to where we live, what we are going through.”

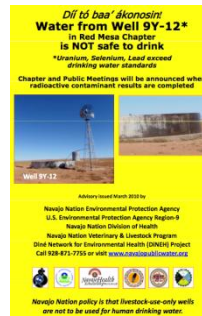
“This was good for the community members since it gave them an opportunity to think and voice their concerns. More meetings like this since they’re informal are good.”

# Our Ounces of Prevention

## Next Steps and Suggestions for Stakeholders



- ❖ Filtering of local water sources—find low tech, low cost, low maintenance, highly effective methods--??mycology, filters, reverse osmosis
- ❖ Fence mill, mine, and tailing pile sites
- ❖ Signs at contaminated sites to warn people
- ❖ Education everywhere possible about uranium, where it is, and how to prevent exposure



- ❖ Education of health care providers—federal, tribal and traditional—on issue of community uranium exposure
- ❖ Medical monitoring program with uranium exposure screening, patient registries and case management at each IHS and 638 facility on Navajo Nation
- ❖ A comprehensive health survey
- ❖ A local uranium and cancer center staffed with specialists



Thank you for listening and thank you for your interest in this important topic.



And in the words of two participants:  
Words need to turn into action.  
Future will be good.



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