

Collateral Damage

Fade up on aerial shots of mi

NARRATION:

01:10

In the middle of the Pacific Ocean there's a small country made up of a chain of islands, with white sand beaches and an aqua green lagoon...

Footage of Lagoon

The Marshallese people have made their home here for many centuries. But in the last 60 years something has gone terribly wrong in the Marshall Islands.¹

Today the tuberculosis rate here is 23 times that of the United States.² Other infectious diseases also run rampant.³

There are many reasons why the health of the Marshallese people is compromised. Their long relationship with the United States may be one.

Waterfront perspective of Ebeye

One of the islands –Ebeye – is a mile long and an eighth of a mile wide⁴ – but it's home to about 10,000 people⁵ -- making it more densely populated than Manhattan.⁶

Street shots of Ebeye

This crowded environment is ideal for the spread of infectious diseases like tuberculosis.

IRENE PAUL: V/O

02:31

You cannot build anything anymore on Ebeye

LOWER THIRD:

**IRENE PAUL
Assistant Secretary of Health
Republic of the Marshall Islands**

IRENE PAUL: O/C

it's crowded..So if somebody in the family has TB of course it's eventually going to spread to everybody in the house in a short period of time.

¹ Nuclear testing began in the 1946 (see fact 34); US occupation began in 1944 (see fact 16)

² "Trends in Tuberculosis—United States, 2005," CDC, 3/24/06; "Tuberculosis in the US-affiliated Pacific Island Jurisdictions (USAPI), 2005; Confirmation from Dr. Leonard Mukasa, TB Epidemiologist, Arkansas Department of Health & Human Services; Johnson, Giff, "Marshalls Top Northern Pacific in Tuberculosis," *Pacific Islands Report*, May 15, 2006; Marshall Islands Journal News, May 12-14, from yokwe.net

³ Beatty, et al. *An Outbreak of Vibrio cholerae 01 Infections on Ebeye Island*, *Clinical Infectious Diseases* 2004; 38:1-9; Hyde et al. *Measles Outbreak in the Republic of the Marshall Islands, 2003*, *International Journal of Epidemiology*, 2003, 35 (2): 299

⁴ "Core Document forming part of the reports of States Parties: Marshall Islands," United Nations, International Human Rights Instruments, 01/10/98, HRI/CORE/1/Add.95; 2006 Community Survey Report, Economic Policy, Planning & Statistics Office, Office of the President, October, 2006; Google Earth

⁵ "Core Document forming part of the reports of States Parties: Marshall Islands," United Nations, International Human Rights Instruments, 01/10/98, HRI/CORE/1/Add.95; 2006 Community Survey Report, Economic Policy, Planning & Statistics Office, Office of the President, October, 2006; Confirmation from Carl Hacker, EPPSO, 3/8/07

⁶ Manhattan, current population = 1,593,200; square miles = 23; density = 69.27; Ebeye current population = 10,000; square mile = .14; density = 71.42

Rihna James & Molly May get in truck

IRENE PAUL: V/O

02:44

So if somebody is diagnosed with TB, our staff will go out to the neighbors and even to the same household and start giving them medication right away.

Driving shots of MI neighborhoods

RIHNA JAMES, VO:

From this side all the way to the other side...this is where TB never goes away.

LOWER THIRD:

RIHNA JAMES
TB Program Coordinator
Kwajalein Atoll Health Care Bureau

RIHNA JAMES, OC:

One of the reasons I guess is because the houses are very close together...and so many people in one house there'll be like 20 or more than 20 individuals in each house.

NARRATION:

03:16

Like everywhere else in the world, the frontline soldiers in the fight against TB are public health outreach workers like Rihna James and Molly May.

Everyday they drive the streets of Ebeye tracking their patients to make sure they're taking their TB medications.

RIHNA JAMES, VO:

They don't have money to come to the hospitals...

RIHNA JAMES, OC:

but we have to make sure they bring the medicine, so that's why we go to those who cannot come.

May and James distribute medication

NARRATION:

03:47

The Marshallese are hardly alone in suffering high rates of TB. It's a disease that shows up wherever people are poor.⁷

Globe animation

Public health experts estimate that one third of the earth's population, about two billion people, carry the bacterium that causes TB.⁸

NYC Crowd shots

⁷ "Addressing Poverty in TB Control," WHO, 2005; "The world-wide increase in tuberculosis: how demographic, HIV infection and increasing numbers in poverty are increasing tuberculosis," Peter DO Davies, *Annals of Medicine*, Vol 35, Issue 4 June 2003; Infectious Disease, Global Health Council; Bone, Angie et al., "Stop TB: Guidelines for Social Mobilization," WHO, 2001

⁸ World Health Organization, Fact Sheet No. 104, Revised March 2006; The Global Fund, World TB Day 2005; WHO TB Fact Sheet, World TB Day 2007

But most of those people will never become sick. Their immune systems will keep the disease in check.⁹

Kill or Cure archival footage

However, about 9 million people each year *do* become sick with this potentially deadly lung ailment...¹⁰

Often because they live in conditions of poverty that compromise their immune systems and undermine their body's ability to fight it off.¹¹

Tracking shot of MI streets

And because it's airborne, TB can spread rapidly among people who live in crowded urban environments.

JIM YONG KIM: V/O
What tuberculosis needs to

04:44

LOWER THIRD: JIM YONG KIM, MD
Harvard University,
Brigham and Women's Hospital

JIM YONG KIM: O/C
flourish in a person's body is a broken down immune system. So just the stress itself of poverty can contribute to the likelihood of developing active tuberculosis.

Kill or Cure B-Roll

JIM YONG KIM: V/O
And malnutrition. We know that people living in poverty are malnourished. And there's nothing like malnourishment to decrease the immune response enough to let tuberculosis flourish.¹²

TB workers in Ebeye continue treating patients

RIHNA JAMES: V/O
We have one patient here. And door opens to the other door and we just treated the other one on this side and then now we're coming to this side. She was starting to lose weight,

05:09

RIHNA JAMES: O/C

⁹ Email verification from Norman H Edelman, Chief Medical Officer, American Lung Association, 12.10.07; Email verification from Glenn Thomas, Communications Officer, WHO Stop TB Dept, 12.12.07

¹⁰ World Health Organization, Fact Sheet No. 104, Revised March 2006; The Global Fund, World TB Day 2005; WHO TB Fact Sheet, World TB Day 2007

¹¹ Jim Kim interview; "Addressing Poverty in TB Control," WHO, 2005; "The world-wide increase in tuberculosis: how demographic, HIV infection and increasing numbers in poverty are increasing tuberculosis," Peter DO Davies, *Annals of Medicine*, Vol 35, Issue 4 June 2003; Tuberculosis Risk Factors, The Mayo Clinic

¹² Tuberculosis Risk Factors, The Mayo Clinic; Tuberculosis Fact Sheet No. 104, WHO, March 2006; Center for Urban and Regional Policy; Infectious Disease, Global Health Council; Bone, Angie et al., "Stop TB: Guidelines for Social Mobilization," WHO, 2001

and then chest pain, and SOP, shortness of breath. And she doesn't feel well. She feels weak all the time. So she was actually admitted in the hospital and they referred her to us.

Drive-by streets of Ebeye

NARRATOR 05:48

To successfully cure tuberculosis requires completing a full course of treatment on schedule - up to four different drugs a day, every day, for six months.¹³

If patients fail to complete their drug regimen, the disease can come back in a drug-resistant form...far more dangerous.¹⁴

Close-Up of Rihna driving; Rihna and Molly visit toddler patient

RIHNA JAMES, VO:

She says she's doing good. She got some, she has TB of the lymph nodes, swelling of the stomach.

Archival footage of Marshallese navigators

NARRATION: 07:03
The Marshallese were once known as the master navigators of the Pacific. They created stick charts, their own unique navigational aids, to plot their way through almost a million square miles of ocean.¹⁵

For centuries the Marshallese lived like other indigenous peoples in the Pacific.

Archival shots of traditional foods

NEAL PALAFOX: V/O

07:33

The traditional diet was breadfruit, and it was taro, a lot of naturally-grown crops. It was a lot of fish; it was bananas, and fruit crop; and just were loaded with natural, you know,

NEAL PALAFOX: O/C

vitamins and minerals, that you know, over thousands of years that's what these people subsisted on.

Scenes of present day MI life

Narration: 07:51
Today much of that cultural legacy is lost to centuries of colonization by other countries.^{15A}

Archival footage of American troops

¹³ "Treatment of Tuberculosis," American Thoracic Society, CDC, and Infectious Diseases Society of America, 52(RR11);1-77, 6/20/03

¹⁴ "Multi-Resistant Tuberculosis (MDR TB), CDC Fact Sheet, January 2007; "Tuberculosis, Drug- and multidrug-resistant tuberculosis (MDR-TB)," World Health Organization; "Modern Menace: Emerging & Re-Emerging Infectious Diseases," Health Media Lab

¹⁵ Republic of the Marshall Islands Economic Report," *Bank of Hawaii*, Winter 1995-96; Marshall Islands Statistics, Economic Policy, Planning & Statistics Office

^{15A} Embassy of the Republic of the Marshall Islands website, <http://www.rmiembassyus.org/History.htm>.

But when the United States took the Marshall Islands from the Japanese in 1944, it triggered changes no one could have foreseen.¹⁶

Lagoon at sunset

The islands remained under US control until the late-1970s, when the Republic of the Marshall Islands became an independent nation.¹⁷

Aerial of Ebeye/Kwaj

But the US military has never left one island: Kwajalein, home of the Ronald Reagan Ballistic Missile base; a facility the US considers vital to its national security. This is where the controversial “Star Wars” anti-missile program carries out its testing.¹⁸

B-Roll of Kwajalein life

About 1700 mostly American defense contractors and their families live on Kwajalein in a suburban environment - ¹⁹with a golf course, a country club, a small department store, and access to state of the art healthcare.

More than 1100 Marshallese people work on Kwajalein.²⁰ The army base is one of the few large employers in the nation.²¹

Ebeye B-Roll

But only a few Marshallese contractors are allowed to live on Kwajalein.²²

Commuters board ferry

Each day the Marshallese employees take a ferry home to the neighboring island of Ebeye.

A divide that takes only 30 minutes to cross, but one that separates two worlds of wealth and health.²³

Still of Julie Kroeker and friends

¹⁶ Embassy of the Republic of the Marshall Islands website, <http://www.rmiembassyus.org/History.htm>; *Marshall Islands Chronology, 1994-1990, Prepared by: Ann C. Deines, David I. Goldman, Ruth R. Harris, Laura J. Kells, History Associates Inc., Prepared for the U.S. Department of Energy, Under Contract No. DE-AC08-87 NIO594, p 3* <http://worf.eh.doe.gov/ihp/chron/>

¹⁷ US Dept. of State, Marshall Islands Profile, RMI independence, May 5, 1979, Confirmed by representative at the RMI Embassy, 12/6/07

¹⁸ Ronald Reagan Ballistic Missile Defense Test Site, <http://www.smdc.army.mil/RTS.html>; *Solomon Report, 1963. Report by the U.S. Government Survey Mission to the Trust Territory of the Pacific Islands, Anthony M. Solomon appointed by President John F. Kennedy, p S-2, S-3*

¹⁹ Confirmation from Dr. Eric Lindborg, Chief Medical Officer, Kwajalein Hospital, 1/22/07 (officially 1700 living on Kwaj)

²⁰ Confirmation from Dr. Eric Lindborg, Chief Medical Officer, Kwajalein Hospital & Christine Bowman, RMI Relations Specialist, 1/22/07; Wypijewski, JoAnn. “This is Only a Test: Missile Defense Makes its Mark in the Marshall Islands,” *Harper’s Magazine, December, 41-51*

²¹ EPPSO Statistical Yearbook, 2004YB – Labour, www.spc.int/prism/country/mh/stats/Publication/publications.htm

²² Fallout: the Experiences of a Medical Team in the Care of a Marshallese Population Accidentally Exposed to Fallout Radiation, Robert A. Conard, Brookhaven National Laboratory, September 1992 p. 36; Confirmation from Julie Kroeker on 12/11/07

²³ Confirmation from Julie Kroeker on 12/11/07

Julie Kroeker is an American anthropologist who lived in the Marshall Islands for three years.

JULIE KROEKER: V/O 09:52
When you're on that ferry

JULIE KROEKER: O/C
going from Kwajalein, the base to Ebeye, the island,

JULIE KROEKER: V/O
I just can't believe it sometimes. This relationship is so powerfully unequal.

NARRATION 10:11
Though Ebeye is just three miles from the US military base on Kwajalein²⁴, the contrast between the two islands is an everyday reminder of how inequities in wealth affect people's health.

Shots contrasting Kwajalein and Ebeye

The health of Americans living on Kwajalein is similar to what you'd expect for a middle class American neighborhood...²⁵

While on the other Marshall Islands the indicators are very different.

On average, Americans live to 77.5 years old. In the Marshall Islands longevity is 62 years.
²⁶

Split screen: 77.5 years, 62 years

Infant mortality in the US is 7 deaths per thousand. In the Marshall Islands it's 52 deaths per thousand.²⁷

Split screen: 7 per thousand, 52 per thousand

In the US, 7 percent of the population has diabetes. In the Marshall Islands it's about 30 percent.²⁸

²⁴ Confirmation from Dr. Eric Lindborg, 6/12/07

²⁵ Confirmation from Dr. Eric Lindborg, 1/22/07

²⁶ "Human Development Report 2006," United National Development Program; "The World Health Report 2006," World Health Organization

**Please note that the UNDP does not publish life expectancy data for the Marshall Islands. The WHO reports US life expectancy at 77.5 for 2004 which matches the UNDP 2004 figure. Liliana Carvajal of UNDP (liliana.carvajal@undp.org, 212-906-3673) confirmed on March 5th, that we can use WHO data for MI in place of UNDP data b/c WHO reports US life expectancy data the same.

²⁷ - "Human Development Report 2006," United Nations Development Program, (United States Infant Mortality Rate in 2004 – 7 per 1,000 births); Marshall Islands, Millennium Development Goal Indicators, United Nations, <http://mdgs.un.org> (Infant Mortality Rate, 2004, 52 per 1,000 births)

²⁸ -"Total Prevalence of Diabetes & Pre-diabetes," printed 1/19/2007, American Diabetes Association; Williams, Deanna Perez & Hampton, Ann, "Barriers to Health Services Perceived by Marshallese Immigrants," *Journal of Immigrant Health*, Vol 7, No. 4, Oct 2005; Yamada, S, Dodd, A, et al, "Diabetes mellitus prevalence in out-patient Marshallese adults on Ebeye Island, Republic of the Marshall Islands," *Hawaii Medical Journal*, Feb 2004, 63(2):45-51; "Diabetes Wellness Center Opens in Marshall Islands' Capital," US Embassy, Majuro, Marshall Islands, Jan 19, 2007, www.yokwe.net/index.php?name=News&file=article&sid=1367; WHO does not list current stats

Split screen: 7 percent and 30 percent

And the rate of Tuberculosis in the Marshall Islands is 23 times that of the US.²⁹

Split screen: 5 per 100,000, 112 per 100,000

Dr. Neal Palafox in office with patient

DR. NEAL PALAFOX V/O: **11:15**
They have probably the worst of both worlds. They have a lot of the developing country illnesses –

DR. NEAL PALAFOX O/C:
you know, all the infectious diseases you find in Africa and places in Asia and India.

NARRATOR: **11:52**
Dr. Neal Palafox is a family practitioner who researches health issues that affect the islanders.

DR. NEAL PALAFOX: V/O
Then they have

DR. NEAL PALAFOX: O/C
the illnesses that interface with Westernizing countries.

DR. NEAL PALAFOX: V/O
Heart disease, for instance, is the number one cause of death; a lot of high blood pressure, strokes. And then in between they have malnutrition.³⁰ So, they have

DR. NEAL PALAFOX: O/C
a spectrum of illness which represents both worlds, which makes it a very

DR. NEAL PALAFOX: V/O
difficult situation.

B-Roll of Marshallese with water supplies

NARRATION: **11:57**
For most of Ebeye's 10,000 residents, the chores of daily life are made difficult by a neglected infrastructure that can't handle the over crowding.

Ebeye is plagued by power outages and water shortages.

B-roll of Dise washing dishes

DISE LANGRUS: V/O (SUBTITLES) **12:15**
Two weeks ago, We had a power outage for two weeks straight.

²⁹ (see fact 2) "Trends in Tuberculosis—United States, 2005," CDC, 3/24/06; "Tuberculosis in the US-affiliated Pacific Island Jurisdictions (USAPI), 2005; *Dr. Leonard Mukasa, TB Epidemiologist, Arkansas Department of Health & Human Services*; Johnson, Giff, "Marshalls Top Northern Pacific in Tuberculosis," *Pacific Islands Report*, May 15, 2006; Marshall Islands Journal News, May 12-14, from yokwe.net

³⁰ WHO, Mortality Country Fact Sheet, Marshall Islands, 2006

LOWER THIRD: DISE LANGRUS

DISE LANGRUS: O/C (SUBTITLES)

And if there's no power, no water. And imagine what we went through

NARRATION:

12:38

Dise Langrus has lived on Ebeye for over 30 years.³¹

The water shortages mean Dise and other residents often can't do their laundry on Ebeye.³²

Dise and others board the boat to Kwaj.

Instead, they take a water taxi or ferry to the American base, Kwajalein, where they can do laundry as long as they have a special permit and can pay the price.³³

DISE LANGRUS: O/C (SUBTITLES)

13:03

If we ride the taxi from here to Kwajalein – for two people it's \$8 and then we do laundry for \$20. That is why we don't go to Kwajalein and do laundry all the time.

NARRATION:

13:28

For the people of the Marshall Islands like Dise there's another fact of life besides poverty that has profoundly affected their health.

Archival shots of nuclear explosion

Between 1946 and 1958, 67 nuclear devices were detonated on and around the northernmost Marshall Islands.³⁴

Measured in tons of TNT, it was the most extensive nuclear weapons testing ever carried out by the United States.³⁵

TONY DEBRUM: V/O

14:11

The yield of those tests has been estimated at one point seven Hiroshima shots...

LOWER THIRD :

TONY DE BRUM

Former Minister of Foreign Affairs & Health
Republic of the Marshall Islands

TONY DEBRUM: O/C

Every day...every day for twelve years.³⁶

³¹ Confirmation per Scout Notes from Producer Kim Bassford

³² "Ebeye Residents Face Daily Hardships, *The Kwajalein Hourglass*, Vol 46, No. 66, August 23, 2006;

Interview with Major David Coffey, by Nic Maclellan, "Marshall Islands: US tightens rules at Kwajalein military base," Radio Australia, Pacific Beat, October 18, 2004, Dise's interview

³³ Ibid

³⁴ - Nuclear Issues, Republic of Marshall Islands Embassy, <http://www.rmiembassyus.org/Nuclear>; Cancer in the US Associated Pacific Islands (UASPI): history and participatory development, *Pacific Health Dialog*, Vol. 11, No. 2, 2004, pp 8-13; Tony DeBrum Describes Impact of US Nuclear Testing in Marshall Islands, August 8, 2005, yokwe.net

³⁵ "US Nuclear Testing Program in the Marshall Islands," www.nuclearclaimstribunal.com

³⁶ Cancer in the US Associated Pacific Islands (UASPI): history and participatory development, *Pacific Health Dialog*, Vol. 11, No. 2, 2004, pp 8-13

Bravo explosion

NARRATION: 14:18
The largest explosion took place March 1, 1954.³⁷ Code-named Bravo, it was a 15-megaton hydrogen bomb equivalent to 1000 Hiroshimas.³⁸

A miscalculation caused radioactive fallout to drift onto two inhabited atolls.³⁹ More than 200 men, women and children were on those atolls.⁴⁰

CU Dise

Among them was Dise Langrus, a 4 year old growing up on Rongelap.⁴¹

CU Dise's hands, Superimposed - Dise, children and archival ftg of nuclear tests

DISE LANGRUS: V/O 15:06
Young people at the time were saying that they thought the powder that was falling was from heaven.

Palm trees burn in nuclear blast, Nuclear smog swirling, Superimposed nuclear fallout, Dise rubs her face

DISE LANGRUS: V/O
They rubbed their faces, hands and legs with it. And that's how they got skin burns from the fall out.

Archival footage of armed forces inspecting Marshallese

NARRATION: 15:34
They were treated and then tracked to study the effects of nuclear fallout on human beings.⁴²

Among them was Dise's father.

Dise and Abbaca look at pictures of Dise's father

These are photos of her father Dise has never seen before.

³⁷ *Race for the Superbomb: The "Bravo" Test*, American Experience, <http://www.pbs.org/wgbh/amex/bomb/peopleevents/pandeAMEX51.html>; www.atomicarchive.com

³⁸ Nuclear Issues, Republic of Marshall Islands Embassy, <http://www.rmiembassyus.org/Nuclear>

Race for the Superbomb: The "Bravo" Test, American Experience, <http://www.pbs.org/wgbh/amex/bomb/peopleevents/pandeAMEX51.html>

³⁹ - Nuclear Issues, Republic of Marshall Islands Embassy, <http://www.rmiembassyus.org/Nuclear>, *Race for the Superbomb: The "Bravo" Test*, American Experience website; www.atomicarchive.com

-Deines, Ann C., Goldman, David I., et al., *Marshall Islands Chronology: 1944-1990*, History Associates Incorporated, Prepared for the US Dept of Energy, <http://worf.eh.doe.gov/ihp/chron/>

⁴⁰-Deines, Ann C., Goldman, David I., et al., *Marshall Islands Chronology: 1944-1990*, History Associates Incorporated, Prepared for the US Dept of Energy, <http://worf.eh.doe.gov/ihp/chron/>; National Cancer Institute, National Institutes of Health, Dept of Health and Human Services, "Estimation of the Baseline Number of Cancers Among Marshallese and the Number of Cancers Attributable to Exposure to Fallout from Nuclear Weapons Testing Conducted in the Marshall Islands," Prepared for the Senate Committee on Energy and Natural Resources, Sept 2004; Lauerma, John F., Reuther, Christopher, "Trouble in Paradise," *Environmental Health Perspectives*, Vol. 105, No. 9. (Sep., 1997), pp. 914-919

⁴¹ Confirmation per Scout notes from Producer Kim Bassford

⁴² Footage in show demonstrates this

ABBACA V/O: 15:57
It looks like he's been treated for burns around his ear and...

Archival footage of relocation

NARRATION: 16:15
To make way for the testing, US military authorities moved hundreds of Marshallese people off their home islands and resettled them on different islands.⁴³

These dislocations triggered a chain of events that tore apart Marshallese culture and that continues to undermine their health.

NEAL PALAFOX: V/O 16:37 When
you move people off their islands where they live to do the testing,

LOWER THIRD: NEAL A. PALAFOX, MD
Chair, Dept. of Family Medicine
Univ. Hawaii School of Medicine

NEAL PALAFOX: O/C
you break down their entire community structure. What is the impact on health?
You know, the stress issues.

NEAL PALAFOX: V/O
You contaminate their lands; they can't grow things that they used to eat. They get more diabetic, because you know, they're eating a western diet. They weren't urbanized. But when you urbanize, infectious diseases tend to take off.

NEAL PALAFOX: O/C
Because TB is transmitted person to person, very close, very crowded.

Street shots of Ebeye, kids at landfill

NARRATION: 17:16
The changes on Ebeye began in 1951, when US military authorities re-settled about 600 people from Kwajalein to Ebeye to make way for the military base.⁴⁴

In the decades since, thousands more Marshallese have settled here...hoping to get a job at the military installation.⁴⁵ Now, almost one-fifth of the nation's population lives on Ebeye.⁴⁶

And the small island can't absorb them.

⁴³ Nuclear Issues, Republic of Marshall Islands Embassy, <http://www.rmiembassyus.org/Nuclear> (see Fact 34)

⁴⁴ Wypijewski, JoAnn. "This is Only a Test: Missile Defense Makes its Mark in the Marshall Islands," *Harper's Magazine*, December, 41-51; "Ebeye Case Study: Pacific Islanders Helping One Another," Pacific Regional Consultation on Water in Small Island Countries, Prepared by the American Samoa Power Authority, July 29-Aug 3rd, 2002; Confirmation from Cris Lindborg, Director, Marshall Islands Cultural Center, 7/27/07 & 12/10/07

⁴⁵ -"Core Document forming part of the reports of States Parties: Marshall Islands," United Nations, International Human Rights Instruments, 01/10/98, HRI/CORE/1/Add.95. (see fact 4); Graham, Ben & Paul, Charles, "A Statistical Overview of Ebeye, Part One: Educational Attainment, Employment & Wages," *Insular Areas Statistical Enhancement Program*, <http://www.pacificweb.org/DOCS/rmi/pdf/Ebeye%20Part%203.pdf> (see fact 21)

⁴⁶ WHO, Marshall Islands Fact Sheet, 2006

People wait to use the latrine.

In one part of Ebeye residents don't even have indoor toilets...

Abbaca talks to children

Abbaca Anjain Maddison grew up on Ebeye before it became so crowded. She's now a senator in the Marshall Islands parliament.⁴⁷

Shots of latrine facility.

ABACCA ANJAIN-MADDISON: V/O

18:08

Right here is the public toilets and these individual units are assigned to individual families. Top of the toilets, they're open. Even at nighttime they have to use the toilet, they have to use it in the dark.

LOWER THIRD:

ABACCA ANJAIN-MADDISON
Senator
Republic of the Marshall Islands

ABACCA ANJAIN-MADDISON: O/C

There's no sink to wash their hands so everyone is responsible to leave the toilet and go to their houses to wash their hands.

NARRATION:

18:43

There are many reasons for the slums on Ebeye. Most agree that a leading factor is the lure of jobs at the US base on Kwajalein.

TONY DEBRUM: O/C

18:54

The health problems that one would witness on Ebeye in Kwajalein are a result of the military base being there and the political decision to accommodate the military base being there. Because military bases attract people who seek jobs and as long as the people who are attracted to a military base cannot be accommodated in a better situation

Children walk through Landfill.

TONY DEBRUM: V/O

you're going to have the social problems of Ebeye. Providing more doctors or nurses on Ebeye is not going to solve that problem. There has to be a political decision made.

NEIL PALAFOX: V/O

19:44

There's always been questions of corruption at this level, that level, misspent monies,

NEIL PALAFOX: V/O

and certainly there's even been talk about the US government and the Auditor General's report that the US government didn't do its homework in monitoring monies.⁴⁸

⁴⁷ Confirmation per Scout Notes from Producer Kim Bassford

⁴⁸ "US economic assistance to two Micronesian nations: Aid impact, dependency and migration," Emil Friberg et al., *Asia Pacific Viewpoint*, Vol. 47, No. 1, April 2006; Johnson, Giff, "The Challenge ahead for

A dumptruck unloads at the Landfill, shots of children

NEIL PALAFOX: V/O Poverty creates a dynamic in individuals where they feel they don't control their lives or any things that occur in their lives. You don't feel that you have the ability to move where you have to move. If you feel that the environment controls you, as opposed to you being able to control your destiny. And I think that's what's happened a lot in Ebeye and other places in the Pacific where

NEIL PALAFOX: O/C
there's been this level of poverty that's been

Kids playing in pipe water.

NEIL PALAFOX: V/O
introduced, because of the dynamics that have occurred.

NARRATION: 20:37
So in a place like Ebeye where poverty is so deeply entrenched, how do you eradicate tuberculosis?

One thing is certain. It will take more than drugs.

It will take an improvement in living conditions; alleviating crowding so one infected person doesn't infect others; improving nutrition so people's immune systems have the strength to fight off the disease.

Still of children outside TB sanatorium

NARRATION: 21:08
We know this by looking at the history of tuberculosis in the United States.

Still of urban slums, TB patients

In the early 1900s tuberculosis was a leading killer in America's crowded urban slums.⁴⁹

There was no drug treatment available and there wouldn't be for many decades to come.⁵⁰ TB victims often suffered a painful death, removed from their families to avoid spreading the disease.

But then, something unexpected happened. TB death rates in American cities began to decline.

the Marshalls: How to marshall support for development," *Pacific Magazine*, February 1, 2002; The Creation of a Colony: The Paradox of Economic Aid to Micronesia by Francis X. Hezel, SJ, <http://www.micsem.org/pubs/articles/economic/frames/creatcolofr.htm>

⁴⁹"Achievements in Public Health, 1900-1999: Control of Infectious Diseases," MMWR Weekly, CDC, July 30, 1999, 48(29); 621-629; 1900-1940, National Office of Vital Statistics, December 1947; Death Rate by Race and Sex: 1900-1970, US Public Health Service; Tuberculosis Cases, 1953-2005, CDC; Scommegna, Paola, "Clean Water's Historic Effect on US Mortality Rates Provides Hope for Developing Countries," Population Reference Bureau

⁵⁰ - "Achievements in Public Health, 1900-1999: Control of Infectious Diseases," MMWR Weekly, CDC, July 30, 1999, 48(29); 621-629; "No R&D in 30 years," Global Alliance for TB Drug Development

GRAPH (TB Deaths per 100,000)

Between 1900 and 1940 the TB death rate dropped 76 percent, even though drugs to treat the disease had not yet been invented.⁵¹

Horse-drawn ambulance still

What made the difference? Aggressive public health policies made sure infected people were removed and isolated so they couldn't spread the disease.

Stills of child workers, improved public housing

Equally important, social reforms brought better housing, better nutrition, the abolition of child labor, and a general improvement in the quality of living.⁵²

TB Death Chart

With the advent of antibiotics in 1944 the death rate declined even further.⁵³

LOWER THIRD: JIM YONG KIM, MD
Harvard University
Brigham and Women's Hospital

JIM YONG KIM: O/C **22:35**
Both of those things are important for tuberculosis. Improve the overall living conditions and nutritional status and as soon as someone gets sick with tuberculosis, treat them.

TB outreach workers with patient in Ebeye

RIHNA JAMES: V/O **22:46**
It's like a very shameful thing. Once you get TB, they, they don't want people to know, they don't want to come to the hospital. It's gradually going down, but

LOWER THIRD: RIHNA JAMES
TB Program Coordinator
Kwajalein Atoll Health Care Bureau

RIHNA JAMES: V/O
I think it's not, it's not going to go away like all of the sudden.

Shots of Ebeye streets

⁵¹ Vital Statistics Rates in the US 1900-1940, US Department of Commerce Report (dropped 76.4%); 1900-1968, US Public Health Service, Vital Statistics of the United States, 1968, vol 2, part A, 1969-1970, unpublished data, provided to Sally Soliai by Karen Denise Thompson from the Census Bureau, Oct 18th, 2006; CDC, "Table 1: TB Cases, US 1953-2005," www.cdc.gov/tb/surv/surv2004/PDF.Table1.pdf

⁵² Bone, Angie et al., "Stop TB: Guidelines for Social Mobilization," WHO, 2001; "Combatting Tuberculosis and Homelessness: Recommendations," National Health Care for the Homeless Council, <http://www.nhchc.org/Publications/Tuberculosis.pdf>

⁵³ "Tuberculosis in History: Age of Optimism," Focus on TB, National Institute of Allergy and Infectious Diseases, National Institutes of Health, 2/28/06; "The Pharmaceutical Century: The Decades of Drug Discovery, 1940s" American Chemical Society, <http://pubs.acs.org/journals/pharmcent/Ch3.html>; "Brief History of Tuberculosis," University of Medicine and Dentistry, New Jersey, <http://www.umdnj.edu/~ntbcweb/history.htm>

NARRATION: **23:04**
Social and political reforms have been slow to come to the Marshall Islands.

For many Marshallese, there's another option:

Springdale strip mall highway

Springdale, Arkansas, near the Oklahoma border.

Tyson Factory & BBQ

An estimated 10,000 Marshall Islanders have migrated here,⁵⁴ ever since one Marshallese man arrived in the 1980s and got a job at Tyson Foods.⁵⁵

The Marshallese can live and work in the US freely, without a visa, under the terms of our special treaty.⁵⁶

Jobs are plentiful in the food processing plants and the cost of living in Springdale is relatively low.⁵⁷

Carmen with patients in office; Baseball game; Tyson Factory

Carmen Chong Gum: V/O **23:56**
Life in Arkansas is much

Carmen Chong Gum: O/C
easier, healthier.

Mother: V/O & O/C
My kids can get a better education

Johnny Chong Gum: O/C
Looking for the good life and the futures...

NARRATION: **24:11**
But even though the Marshallese here can leave the impoverished conditions of their homeland behind, they can't leave behind the effects of having lived in poverty.

Not surprisingly, the rates of TB and other infectious diseases among the Marshallese in the US are far above the national average.⁵⁸

Springdale TB Outreach workers drive streets

⁵⁴ CDC Preventive Health & Health Services Block Grant Report: Messages from Across America, July 2006, "estimated 10,000"; "Marshallese flock to Northwest Arkansas," by Giff Johnson, *Marshall Islands Journal*, December 27, 2003, www.yokwe.net,

⁵⁵ "Culture abundant in northwest Arkansas," *North West Arkansas News*, 12/11/07; "Marshallese Flock to NW Arkansas," by Giff Johnson, yokwe.net

⁵⁶ US Citizenship and Immigration Services, Fact Sheet, Feb 11th, 2005

⁵⁷ ACCRA Cost of Living Index 2005, ACCRA, Louisville, KY, 40206-6749; Springdale Chamber of Commerce, www.springdale.com/working/; US Dept. of Labor, Bureau of Labor Statistics

⁵⁸ "Trends in Tuberculosis—United States, 2005," CDC, 3/24/06; "Tuberculosis in the US-affiliated Pacific Island Jurisdictions (USAPI), 2005; Confirmation from Dr. Leonard Mukasa, TB Epidemiologist, Arkansas Department of Health & Human Services;

NARRATION: 24:39
So in Springdale, as in Ebeye, public health workers drive the streets to make sure their patients maintain the rigorous medication schedule required to cure TB.

Public Health nurse Sandy Hainline believes the high disease rate results from the pressures of making a new life in an unfamiliar place.

SANDY HAINLINE: V/O 25:03
It's stressful living here. They're coming from a nice, tropical climate. They get here and they have to deal with work schedules, with traffic.

LOWER THIRD: SANDY HAINLINE
Nurse Coordinator
Marshallese Outreach Program, AR

SANDY HAINLINE: O/C 25:13
The cold is a serious issue for them, They just are not used to dealing with cold weather at all and most of them work in the poultry plants where it's wet and cold at all times. And after about two years of being constantly stressed they break down into tuberculosis or other diseases.

Marshallese at BBQ, dissolve to archival shots of exile

NARRATION: 25:36
For 60 years the Marshallese have been living with the effects of massive dislocation and cultural disruption, largely a result of helping the US maintain a strategic military presence in the Pacific.

The Marshallese people have paid a high price for that relationship in their economic well-being and their legacy of illness.

Shots of children in MI waters; Aerial of Ebeye

Now there's a growing awareness that just as the Marshallese people didn't create these problems, they won't be able to solve them without help.

JIM YONG KIM: V/O 26:15
I often tell my students

JIM YONG KIM: O/C
that 50 years from now, we will be judged on the basis of what we do for the poorest and the most marginalized people on the planet today

Kids jump from boat into water.

JIM YONG KIM: V/O 26:33
We have more than enough resources to provide treatment, prevention, and to transform the economic and social conditions that give rise to the diseases of poverty like tuberculosis that are so prevalent today.

Kids jump into water. Fancy boat crosses in the background while kids play in foreground.

Fade to black

END 26:56