Migrant Farmworkers and Tuberculosis
• Eastern Panhandle West Virginia & Shenandoah Valley
• Shenandoah Community Health Center & Community Health Centers in WV
• Migrant Farmworkers, Immigrants
• Outreach Efforts
• Tuberculosis control
Eastern Panhandle

• Geography
• Relationships
• Medical Care
Eastern Panhandle
• Eastern Panhandle
• some demographic differences from other parts of WV
• that influence public health and health care delivery
• Population growth is one of the major features of Martinsburg and the Eastern Panhandle.

• It is an issue for all areas within 1 and a half to 2 hours or more drive from the major population settings.

• Suburban expansion effects the health of much the nation with
  • Obesity
  • Traffic accidents and deaths

• With regard to this talk Replacement of farmlands and orchards by suburban developments.
Shenandoah Valley- Interstate Highway 81 night
Berkeley County, West Virginia population

Year

Population

1920

20,000

1930

30,000

1940

40,000

1950

50,000

1960

60,000

1970

70,000

1980

80,000

1990

90,000

2000

100,000

2010

120,000
Distance to State Capitals

Hours from Martinsburg

- Harrisburg, PA 96 mi 1.60
- Annapolis, MD 110 mi 1.83
- Richmond, Va 159 mi 2.77
- Dover, DE 165 mi 2.97
- Trenton, NJ 219 mi 3.47
- Manhattan, NY 267 mi 4.25
- **Charleston, WV** 290 mi 4.63
- Raleigh, NC 312 mi 5.17
- Albany, NY 385 mi 5.85
Distance to Tertiary Medical Centers

From Martinsburg

<table>
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<tr>
<th>Miles</th>
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<tr>
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<td></td>
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<tr>
<td>University of Penn. Hershey</td>
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<tr>
<td>Virginia</td>
<td></td>
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<tr>
<td>University of Virginia Charlottesville</td>
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Variation of distance to Tertiary Care within Eastern Panhandle

- Harpers Ferry
  - Johns Hopkins 68 mi 1 hr 12 min
  - WVU Morgantown 166 mi 2 hr 48 min

- Martinsburg
  - Johns Hopkins 87 mi 1 hr 33 min
  - WVU Morgantown 137 mi 2 hr 33 min

- Berkeley Springs
  - Johns Hopkins 106 mi 1 hr 46 min
  - WVU Morgantown 117 mi 1 hr 56 min
Medical Care = Hospital Chains

• ** WVU
  – Jefferson Memorial Hospital**
  – City Hospital
  – Physician practices
    • Harpers Ferry Family Medicine
    • Many physicians in Martinsburg

• Virginia
• Valley Health
  – Winchester Medical Center
  – Warren Memorial Front Royal 180 bed hospital and nursing home
  – Shenandoah Memorial Hospital, Woodstock Virginia. 25 bed
  – Page Memorial Shenandoah, Luray, Va **
  – Hampshire Memorial Romney, WV **
  – War memorial Berkeley Springs, WV **

• Maryland
  Meritus (Washington County Hospital)
  Frederick Memorial
  Cumberland

• ** Critical Access Hospital
West Virginia University Healthcare
Valley Health Systems - Virginia
Maryland Hospitals
Maryland Hospitals, WVU Healthcare, Valley Health and Inova Fairfax
Shenandoah Community Health Center

- 40 years
- Migrant Health Care
- Gradual growth
- Primary care
- 200+ employees
Migrant Health Act

• President John F. Kennedy signed into law the Migrant Health Act on September 25, 1962
"Domestic agricultural migrants and their families--numbering almost one million persons--have unmet health needs far greater than those of the general population."
John F. Kennedy
Special Message to the Congress on National Health Needs.
February 27, 1962

• “Their poor health not only affects their own lives and opportunities, but it is a threat to the members of the permanent communities through which they migrate.”
Shenandoah Community Health Center- History

• 1973: Services initiated as a migrant health center
• 1976: Became a comprehensive health service
• 1988: Initiated midwifery services and hired an OB/GYN
• 1999: Established Behavioral Health services to expand access to behavioral health services
Shenandoah Community Health Center - History

• 2004: Primary care office in Winchester, Virginia to improve access for settled Hispanic population
• 2005: Consolidated Berkeley County sites into new building for more accessible and coordinated primary care
• 2005: Behavior Health office in Charles Town.
• 2009: Healthy Smiles Dental Clinic
2005 Consolidated Berkeley County sites into newly constructed Shenandoah Community Health Center
SCHC Martinsburg and Migrant Outreach Vans
Winchester, Virginia primary care office of Shenandoah Community Health -since 2004
Primarily to serve the growing Hispanic population
Shenandoah Valley Medical Services

- Pediatrics
- Family Practice
- Internal Medicine
- Gynecology and prenatal and delivery services
- Behavioral Health Services
- Migrant Outreach
- Homeless Outreach
- Nutritional Counseling

- Dental Services
- Interpretive services
- Education
- Wellness Screening
- Diagnostic Laboratory
- Transportation
- Limited Pharmacy
- Pharmaceutical assistance
- Limited radiology
WHO is SVMS?

• A staff of over 250 clinicians and support staff

• provide over 130,000 health care services a year to people in all walks of life and ability to pay.

• A volunteer Board of Directors that commits over 1000 hours a year working to ensure the community has access to the quality primary health care they need.

• Providers of over $3.7 million annually in vouchers for nutritional support.

• Operates a Community Kitchen that prepares over 14,000 meals annually.
Inpatient Hospital Care
Berkeley Medical Center - University Healthcare
(Formerly City Hospital)

Internal Medicine usual 18-22 inpatient census
Pediatrics 1-5 newborn census daily
  1-2 older children census daily
Midwifery- Ob-Gyn
deliveries 700+ per year
surgeries
Community Health Centers

- Federally Qualified Health Center (FQHC)
- Private not-for-profit
- Volunteer Board of Directors Governing Body
- At least 50% of Board of Directors must be users of the health care services
- Board members or immediate family cannot be employees
Financial Advantage of FQHC

• Grant from
  – HRSA (Health Resources and Services Administration)
  – BPHC (Bureau of Primary Health Care)
• Medical Liability Insurance (FTCA) Federal Tort Claims Act
• Medicaid and Medicare Cost-based reimbursement
• Federal Loan Repayment of Student Loans
• 340B Drug Pricing
Our Migrant Population
Our season

• The major harvest is from the end of July to the end of October
• Season is dependent upon the weather
• Some workers stay year round at the camps
  – We screen them throughout the year
• The type of crop to be harvested determines when the workers arrive
  – Workers arrive in April to harvest the watercress
  – Peaches are thinned in mid-spring - harvest in July
  – Apple harvest starts around Labor Day
Farm worker Population

**Seasonal Farm Worker**
- An individual whose principal employment [51% of time] is in agriculture on a seasonal basis
- Who has been so employed within the last twenty-four months.”
- Will stay in the area the rest of the time doing other types of labor

**Migrant Farm worker**
- Is an individual who meets the same definition but establishes for the purposes of such employment a temporary abode
- Will move up or the migrant stream to pick the produce where it is needed
Migrant Populations

– Estimated over 3 million migrant and seasonal farm workers in the United States
– Average farm worker age is 31
– 80% are men
– 84% speak Spanish
– Medium level of education is 6th grade
– According to the National Agricultural Workers Surveys
  • ¾ of US farm workers earn less than $10,000 a year and 3 out 5 farm worker families have incomes below the poverty level.
Migrant Farm Workers in the Shenandoah Valley are part of the Eastern Migrant Stream.

Southern Florida is primary Winter home base for most Migrant Farm Workers who remain in US.
Cultural Groups

- Hispanic - largest
  - Mexican-Americans and Mexicans - majority
    - Central Americans
    - Puerto Ricans
- Haitians
- Jamaicans H2A non-immigrant visa
- Few Appalachian White
H2A Visa contract Farm Workers flown from Jamaica to Florida
Our Service Area

• We are part of the East Coast Stream
  – Our service area covers from the 3 counties in the Eastern Panhandle down to the 3 counties in Virginia
  – The area covers over 90 miles from Shenandoah Community Health Center down our furthest camp which is located near Timberville, VA. This camp is just north of Harrisonburg Virginia.
  – We use the 81 corridor
Our Team

- **Interpreters**
  - Haitian Creole
  - Spanish
- **Drivers**
  - 2 drivers
- **Nurses**
  - RN’s
  - Bilingual ideal

- **Lead RN**
- **Lead interpreter**
- Each team member has a specific role
Our Challenges

• Logistical Challenges
  – Driving conditions
  – Mechanical problems
  – Coordinating staff from various work places
  – Interpretive staff speak the wrong because of changes in camp demographics
  – Staff becoming sick while out

• Safety Issues
  – Migrants are inebriated
  – Sexual harassment
  – Fights at the camp
  – Police presence
  – Prostitution
  – Drug dealing
  – Cock fighting
Mode of Transportation

- Use vans with the capability to carry up to 15 passengers
- We also use a modified recreational vehicle to provide mobile clinic services to the more remote camps in our southern service area
Registration
Vital Signs
Medical Problems

- In preventive care and public health despite the knowledge that efforts need to be on prevention when a person presents with a problem requiring intervention the focus shifts.
- Each year special cases capture the attention of the staff.
Health Education

2012 Eye problems - pterygium

2013 Dental Health
Prevni twou nan dan timoun ki akòz bibwon.


Yele dlo nan jì pou li li gen menm sik.

Pour timoun gen; selman bòl yon dlo nan bibwon jìle pou manje.
Dental Care

Woodstock, Virginia
Screening

• General Checklist
Health Screening

• Initial Demographics and consent form
  – Done by our interpretive staff
• Systems Review Health Screening
  – Done by our interpretive staff
  – Circle any problem the migrant has complained off
• Problem focused
  – RN will then review the health screening sheet
  – Focus on the problems stated
  – Do vital signs
  – Provide Education
  – Provide OTC per standing orders
  – Make clinic appts. for follow-up with PCP
TB

• Symptom based screening
  – Complains of respiratory problems
    • More detailed questions: f/u with TB Symptom checklist
  – Bring into clinic to be evaluated by Primary Care Provider
    • Chest x-ray
    • Plant PPD
    • Blood work

• If anyone test positive for TB we then will report to health department.
  – Based on Health Department recommendation will screen whole camp
Screening

• General Checklist
• Pulmonary Checklist
Testing for Tuberculosis

- Skin Test  Tuberculin Skin Test
  PPD
- Blood Test  Quantiferon Gold
  TB Spot
- Chest X-ray
- Sputum Stain and Cultures
Reasons not to Test

• Difficulty contacting patient in 48-72 hours to read skin tests
• False positive rate due to prior BCG vaccination or non-tuberculous mycobacterium infection
• Shortage of tuberculin material
Reasons not to do blood test

- Cost
  - $70 \times 100 = $7,000
  - $70 \times 600 = $42,000
- Exact time frame when submitting specimens
Reasons not to do chest x-ray

- Difficulty transporting patients to get chest x-ray
- Cost of x-ray
- Slow turn around (sometimes) for official reading
- Difficulty following up with abnormal x-rays
Will the test result change management of patient?

- If positive PPD or blood test and negative symptoms and chest x-ray
- Treat as latent TB
- Many months of treatment
• Farmworkers leave the community in a few weeks.
  – Most do not know a forwarding address or community
  – Might not have convenient access to health care after leaving
  – Could dispense full treatment but then they will not be followed for adherence or toxicity of medication
Prevention and Control of Tuberculosis in Migrant Farm Workers Recommendations of the Advisory Council for the Elimination of Tuberculosis
• The services of highest priority that should be available to all workers and their families, are:
  – Detection and diagnosis of those persons with current symptoms of active TB.
  – Appropriate treatment for those persons with disease.
  – Contact investigation and appropriate preventive therapy for those persons exposed to infectious (sputum positive) TB.
  – Screening and appropriate preventive therapy for workers who may be immunosuppressed, including those with HIV infection.
The second priority is screening and appropriate preventive therapy for children of migrant and seasonal farm workers.
• The third priority is widespread tuberculin skin-test screening of workers and families, followed by appropriate preventive therapy.
TB Net

- TBNet is a multi-national tuberculosis patient tracking and referral project designed to work with mobile, underserved populations
- 17 years of operation TBNet has enrolled thousands of patients and
- worked with almost 3,000 clinics in U.S. and over 70 countries.
- In 2010 TBNet received the 2010 Border Models of Excellence in Tuberculosis Surveillance and Control award from the U.S.–México Border Health Com
Poultry industry

“processing” plants

Harrisonburg, Virginia
Moorefield, WV
Substantial improvements in TB control among foreign-born persons in the United States can be made now.

LTBI testing and treatment among foreign born persons needs to be more widely implemented,

but even when it cannot be fully implemented, its yield can be higher by focusing on the highest risk populations of foreign-born persons first.
Homeless Outreach
Homeless

Homeless is generally defined as a person who “lacks a fixed, regular and adequate night-time residence.”

- 1.7 million call the streets their home across the United States.
- A point and time study conducted in 2010 here in the Eastern Panhandle of West Virginia found there were approximately
  - 362 persons without any regular shelter and
  - 52 unsheltered people
Medical Reserve Corps

- The MRC consists of medical and non-medical volunteers who
- contribute to local health initiatives, (such as activities meeting the Surgeon General’s priorities for public health)
- supplement existing response capabilities in time of emergency
  - provides the structure necessary to
  - pre-identify,
  - credential,
  - train,
  - activate medical and public health volunteers.
Profile:
The Eastern Panhandle Medical Reserve Corps provides the three counties of the Eastern Panhandle of West Virginia (Berkeley, Morgan, and Jefferson) with a ready corps of medical and public health volunteers to assist in cases of disaster or times of increased need or medical surge. Key agencies engaged in the formation of the EP_MRC are the three county health departments, Shenandoah Valley Medical System, City Hospital, the Office of Emergency Services, local chapter of American Red Cross, The United Way, Blue Ridge Community and Technical College, James Rumsey Technical Institute, Shepherd University and the Eastern Division of WVU Health Sciences Center. Planned trainings include Basic Disaster Life Support training, NIMS/ICS 100, 200, 700 & 800, Psychological First Aid, MRC 101, MRC 201, CPR and AED training. Planned activities include Community Events such as the MOM dental Clinic, Health Fairs, Flu Clinics, Relay for Life, County Fairs, partner disaster drills, POD drills, and other partner and community events as identified.

Community/Jurisdiction Served:
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<th>City Name</th>
<th>Program Name</th>
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Thurs 10/10 Betnanye 9-12 leave @ 9:30am

Thurs 10/17 Rescue Mission 1-3pm leave @ 12:30pm

Thurs 10/24 Hospitality 1-3pm leave @ 12:30pm

Wed 10/30 St Luke's 9:30 - Noon leave @ 9:15am

Thurs 10/31 Rescue Mission 1-3pm leave @ 12:30pm