Current State of Tuberculosis

Epidemiology Overview

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TB Skin Test Practicum

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Guam
Objectives

Describe current epidemiology of TB

- Epidemiology of TB in the world
- Epidemiology of TB in the United States
- Epidemiology of TB in the US Pacific Islands
- Epidemiology of TB in GUAM
TB is *Still* a Big Problem...

- 2 billion people estimated to be infected with TB worldwide

- Approximately 10.4 million new cases of TB/year (up from 9.6 million)

- Leading cause of death worldwide from any single infectious agent - 1.8 million people were estimated to die from TB (0.4 million HIV+) (up from 1.4 million)
  - 35,000 people each week
  - 4,000 people each day
  - 1 person every 20 seconds

- The toll of TB on the Global Economy is 12 billion dollars/year
• Six countries accounted for 60% of the new cases on TB in 2015: India, Indonesia, China, Nigeria, Pakistan and South Africa.
WHO Global TB Report 2016

**FIG. 3.3**
Estimated TB incidence rates, 2015

[Map showing estimated TB incidence rates worldwide]
Incident of MDR/RR-TB in 2015

**FIG. 3.20**
Estimated incidence of MDR/RR-TB in 2015, for countries with at least 1000 incident cases. Areas that are not applicable are in grey.
TB In The United States
Reported Tuberculosis (TB) Cases
United States, 1982–2015*

*As of June 9, 2016.
## TB Morbidity United States, 2010–2015

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>11,159</td>
<td>3.6</td>
</tr>
<tr>
<td>2011</td>
<td>10,510</td>
<td>3.4</td>
</tr>
<tr>
<td>2012</td>
<td>9,942</td>
<td>3.2</td>
</tr>
<tr>
<td>2013</td>
<td>9,550</td>
<td>3.0</td>
</tr>
<tr>
<td>2014</td>
<td>9,406</td>
<td>2.9</td>
</tr>
<tr>
<td>2015</td>
<td>9,557</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Cases per 100,000 population; as of June 9, 2016.*
Epidemiology of TB in the US Pacific Islands

Pending to gather and analyze data
- The current population **173,936**
- The population density 323 per Km² (836 people per mi²).
- Total land area is 540 Km² (208 sq. miles)
- Median age is 30.4 years

*based on the latest United Nations estimates*
Epidemiology of TB in GUAM

TB Rate by 100,000 population
Source: World Health Organization, Global Tuberculosis Report
Epidemiology of TB in GUAM

Working in most recent data
TB Still a Problem in GUAM

GUAM

- “Active case of tuberculosis at Agueda Johnston Middle School”, Pacific Daily News, Jan 25, 2017 An Agueda I. Johnston Middle School student was found to have an active case of tuberculosis, according to the Guam Department of Public Health and Social Services on Wednesday........(NOTE: there are 7 more related articles/reports)

- “Benavente Middle student has active tuberculosis”, Pacific Daily News, Feb 17, 2017 A Vicente S.A. Benavente Middle School employee has an active case of tuberculosis, the Department of Public Health and Social Services and the Guam Department of Education announced Friday........
Thank you!

Any Questions?