



Global Public Health Issues

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Learning Objectives

1. Name three major global public health communicable disease threats
2. Know the importance of travel history when investigating reports of communicable disease
3. Identify two reasons why chemoprophylaxis for malaria may fail

INFECTIOUS DISEASE THREATS TO GLOBAL PUBLIC HEALTH

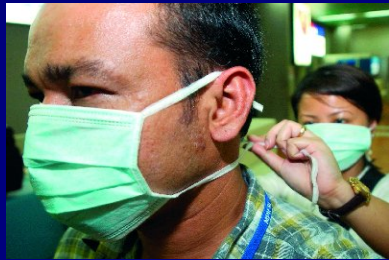


- ❑ HIV/AIDS
- ❑ Tuberculosis
- ❑ Malaria

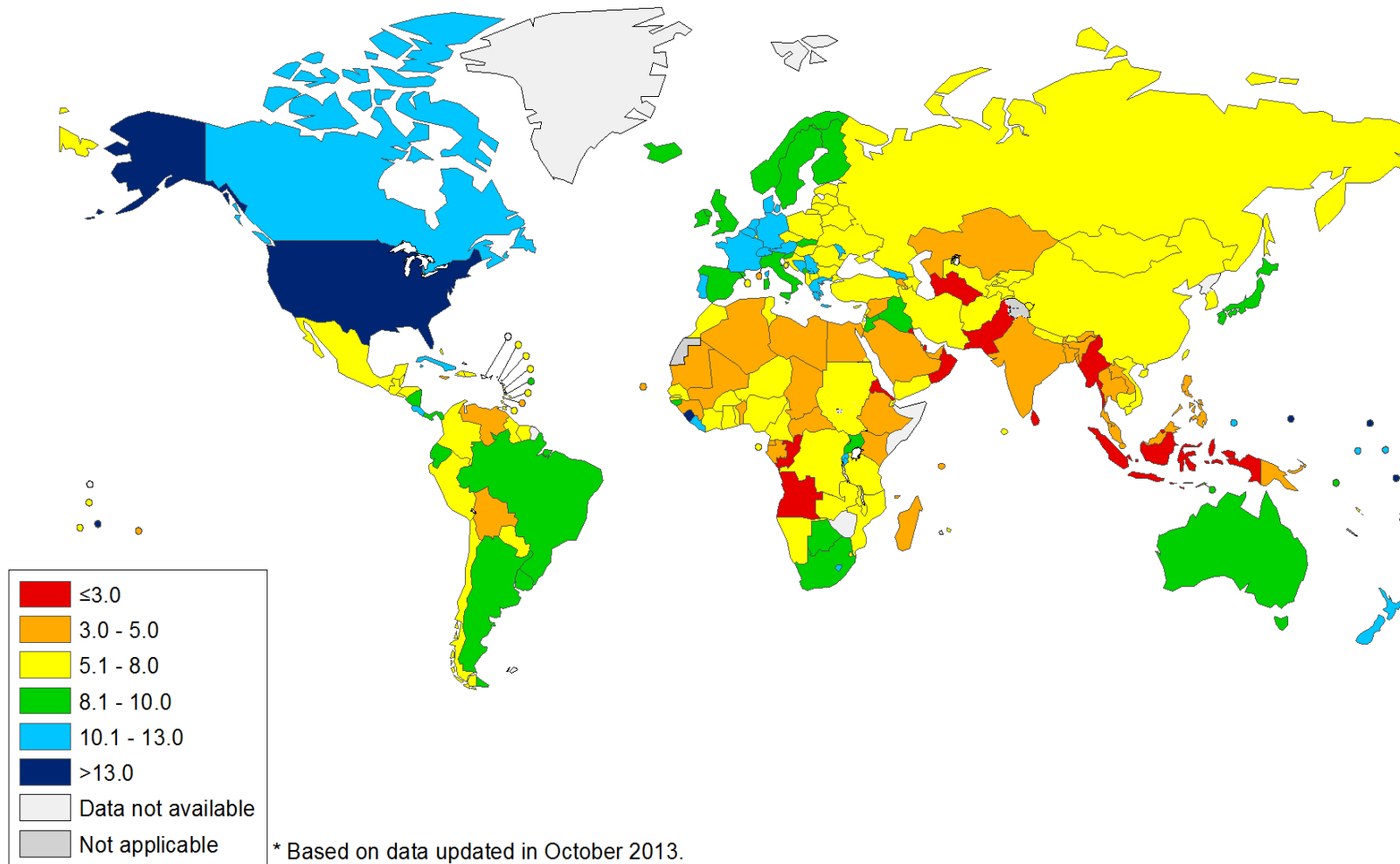


New and Emerging Threats

- ❑ SARS
- ❑ Pandemic Influenza
- ❑ Bioterrorism



Total expenditure on health as a percentage of the gross domestic product, 2011 *



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Global Health Observatory, WHO
 Map Production: Public Health Information
 and Geographic Information Systems (GIS)
 World Health Organization



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HIV/AIDS

GET REAL.

GET TESTED.

GET TREATMENT.



Malawi AIDS Orphans

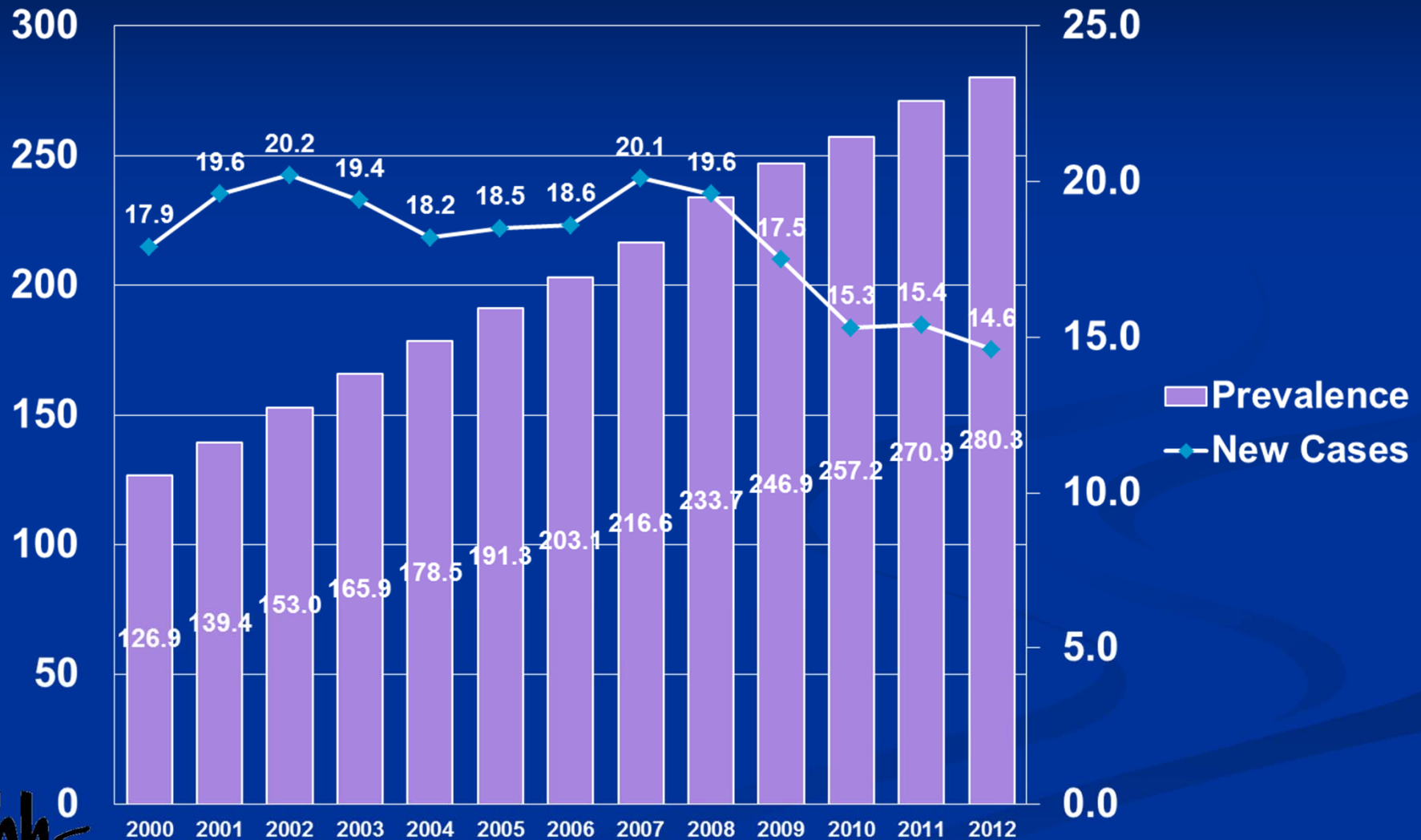
This image was originally posted to [Flickr](https://www.flickr.com/photos/khym54/) by khym54 at <http://flickr.com/photos/51132506@N00/145558686>

Adults and children estimated to be living with HIV | 2012



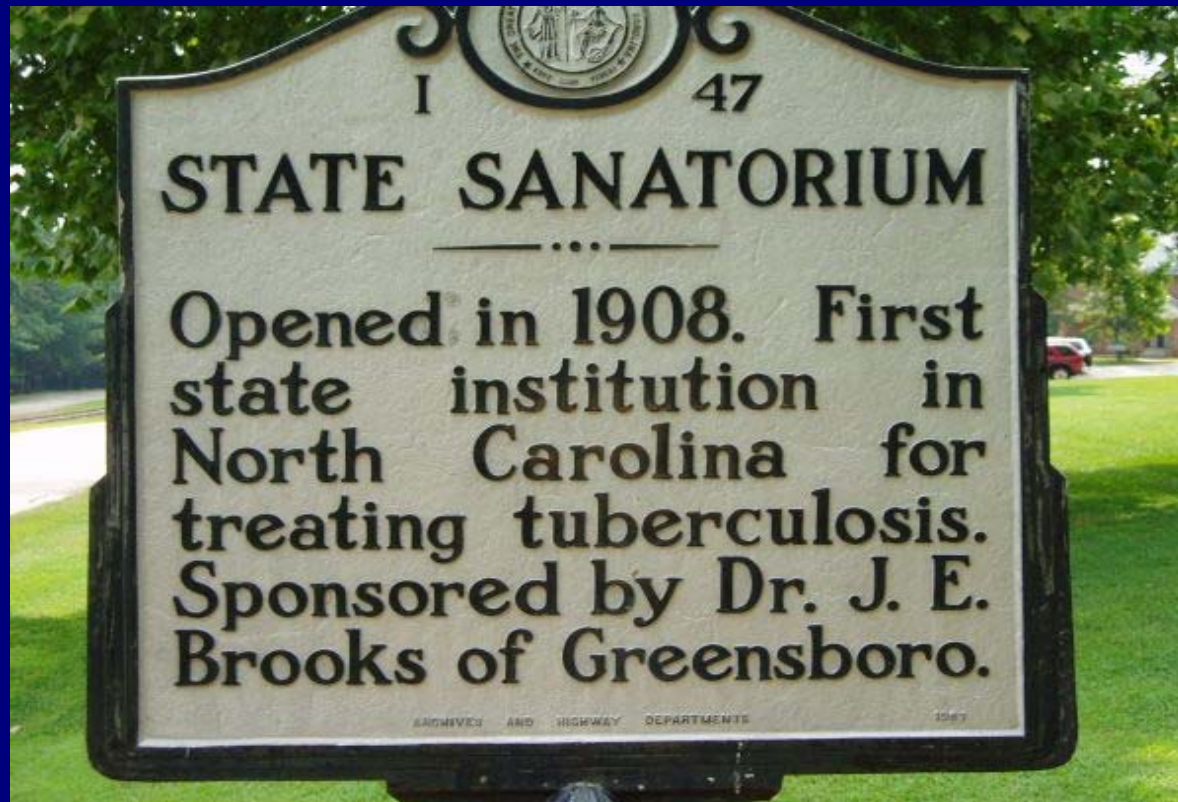
Total: 35.3 million [32.2 million – 38.8 million]

NC HIV Disease Rates (per 100,000), 2000-2012

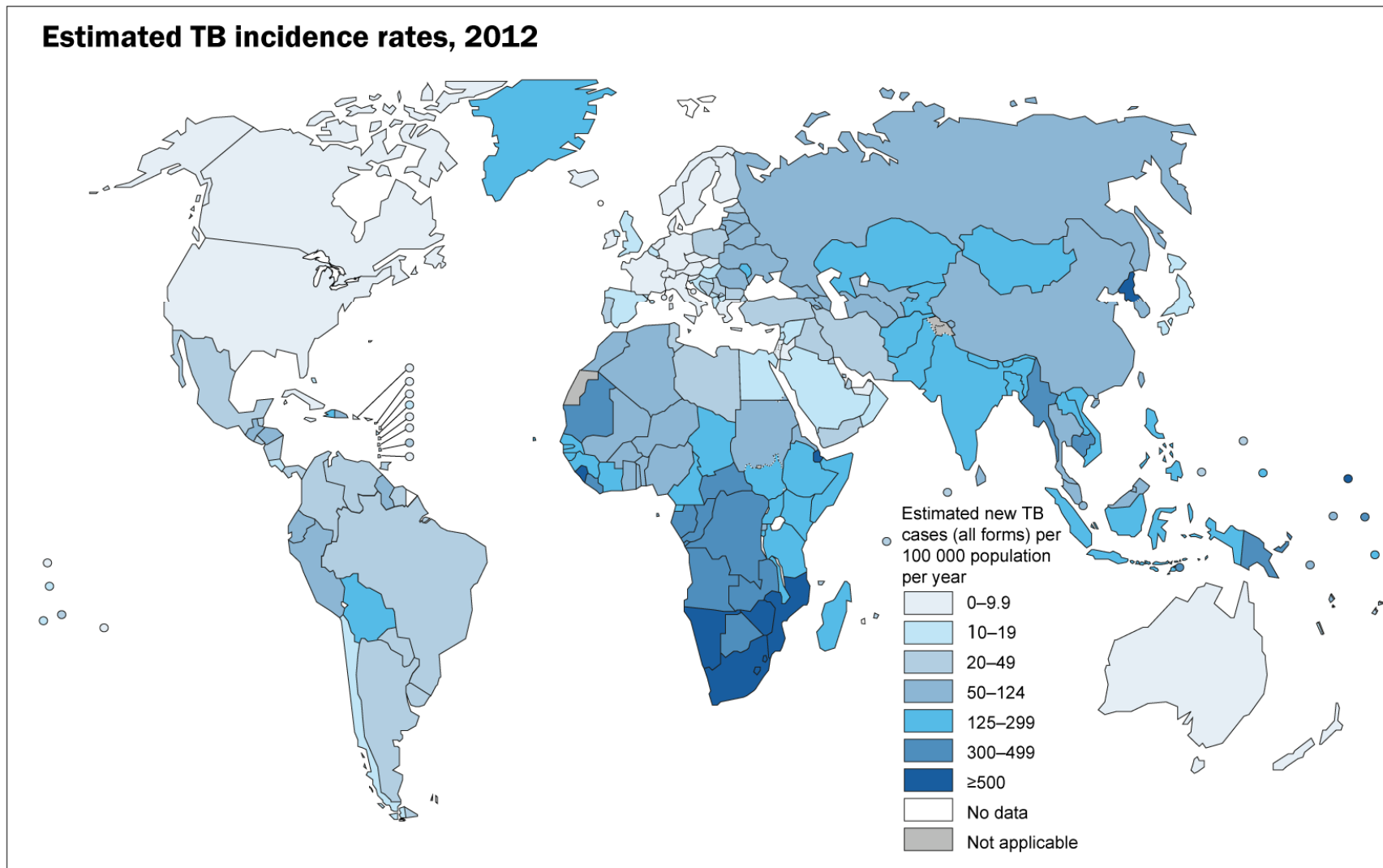


Communicable Disease Surveillance Unit

Tuberculosis McCain Hospital



Estimated TB incidence rates, 2012



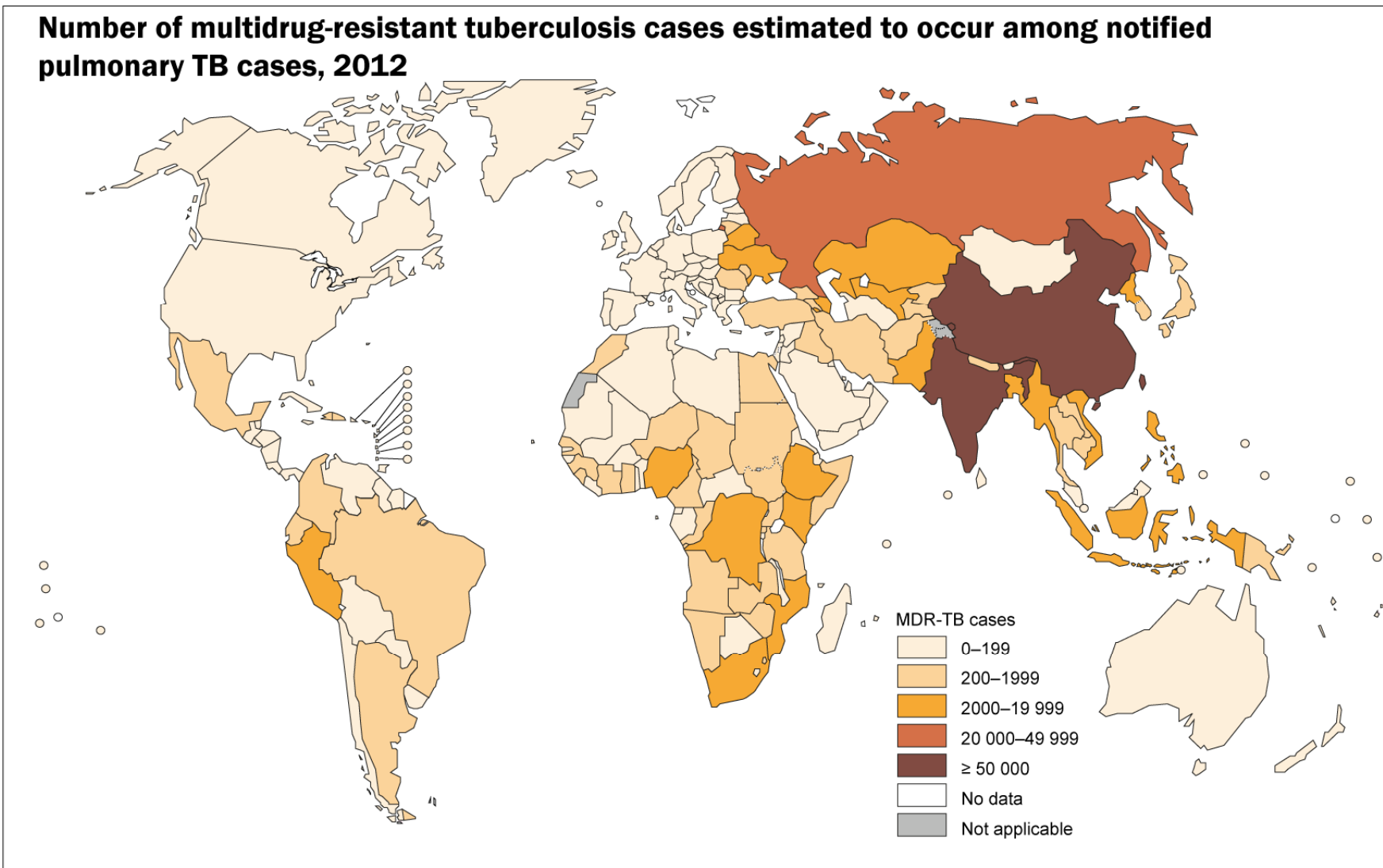
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Data Source: *Global Tuberculosis Report 2013*. WHO, 2013.

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Number of multidrug-resistant tuberculosis cases estimated to occur among notified pulmonary TB cases, 2012



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Data Source: *Global Tuberculosis Report 2013*. WHO, 2013.

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North Carolina Tuberculosis Cases for US Born and Foreign Born Persons: 1993 - 2012

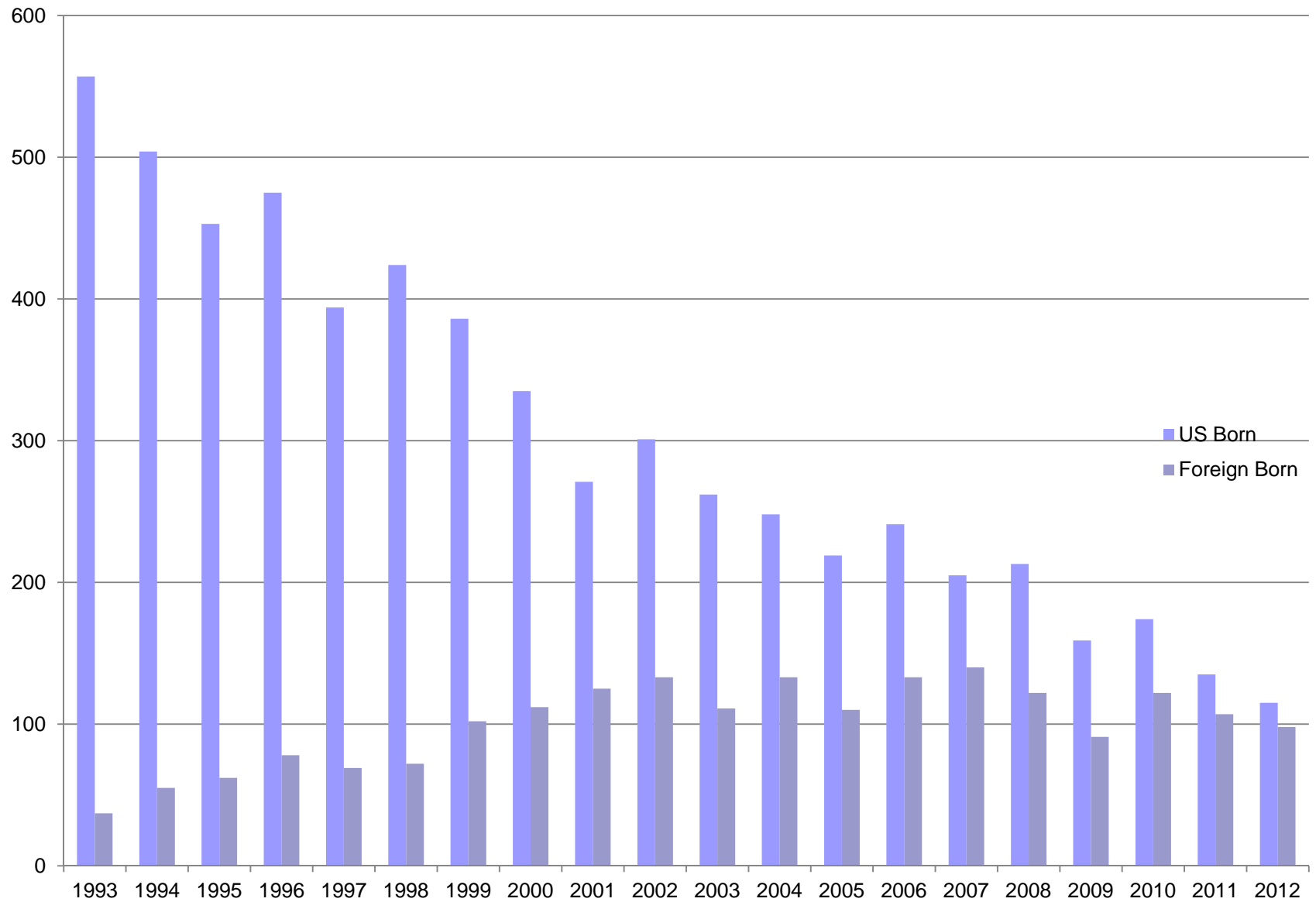
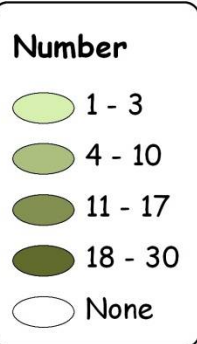
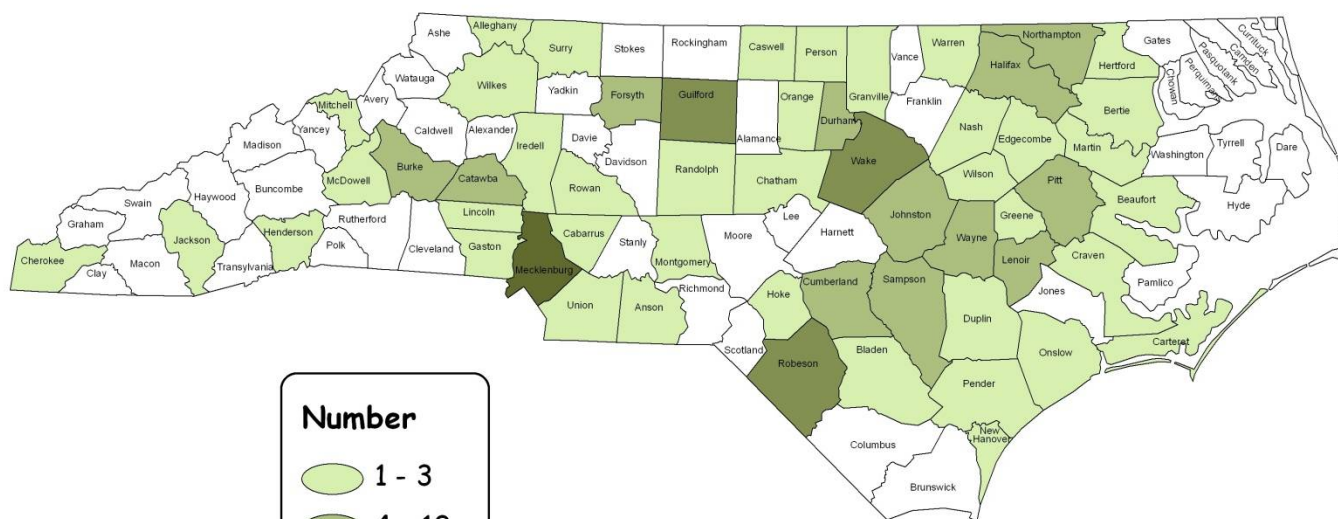


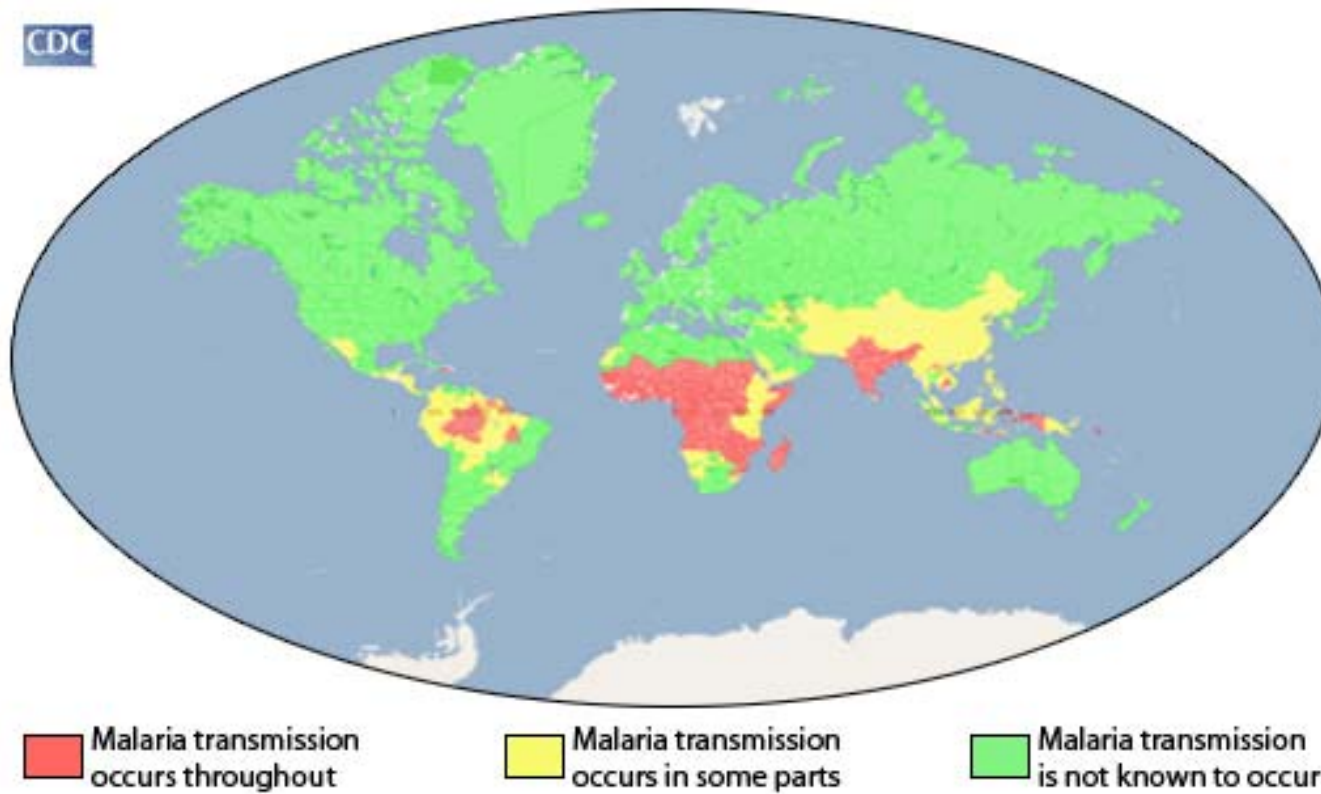
Figure 3. North Carolina 2012 Tuberculosis Cases by County



Malaria



Geographical Distribution of Malaria, 2013



Malaria epidemics in Africa



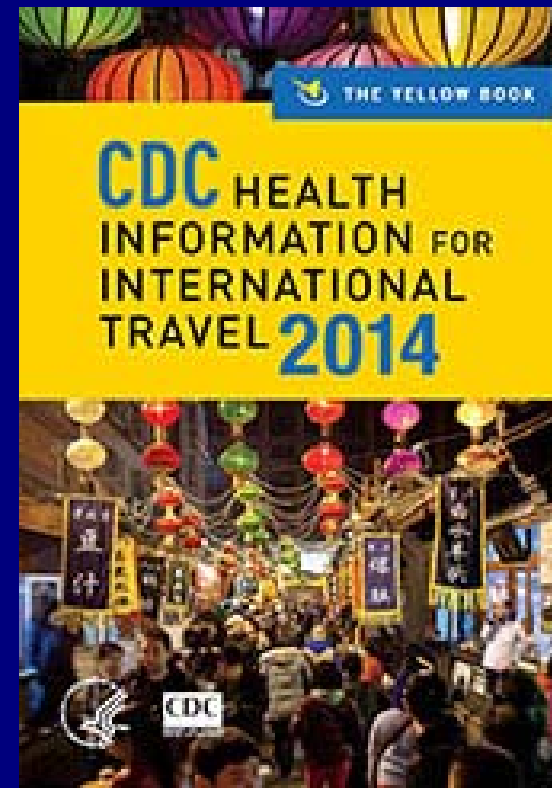


Malaria in North Carolina

- No endemic cases
- Travelers
 - What countries
 - Antimalarial chemoprophylaxis
 - Resistance
 - Barriers to taking prophylaxis

CDC 2010 Yellow Book

The Yellow Book is published every two years by CDC as a reference for those who advise international travelers about health risks. The Yellow Book is written primarily for health professionals, but others find it very useful.





NC Public Health Responses

Severe Acute Respiratory
Syndrome (SARS)

2003

Influenza Pandemic

2009 - 2010



NC Communicable Disease Nurses

Contributions to Emerging Infections

Orange County Public Health Nurse

SARS

Craven County

Pandemic H1N1 Cluster Investigation



References

<http://www.cdc.gov/malaria/>

<http://www.cdc.gov/nchstp/od/nchstp.html>

<http://www.cdc.gov/nchstp/tb/default.htm>

<http://www.who.int>

<http://ncmuseumofhistory.org/exhibits/healthandhealing/topic/13/>