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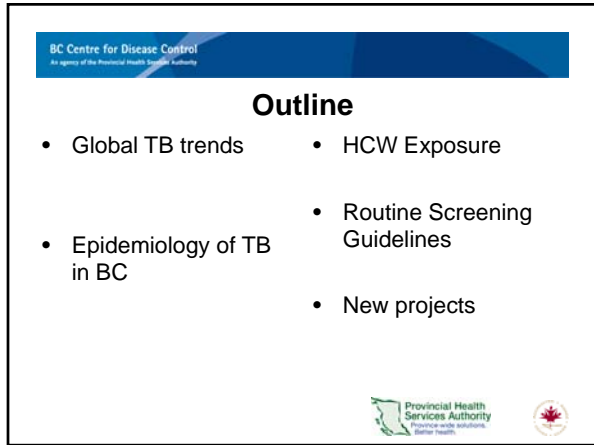
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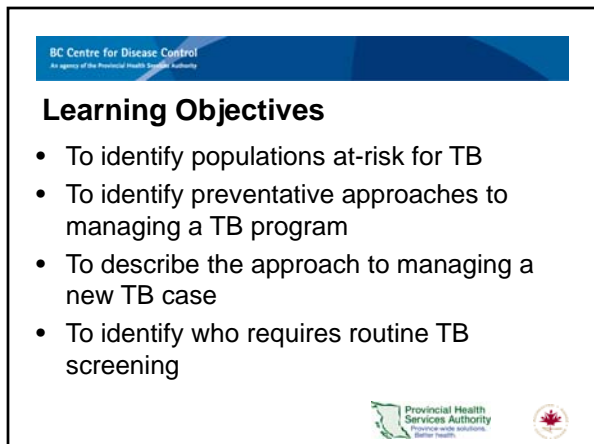
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### Global Epidemiology (2013)

- 9 million new cases, 1.1 million were HIV positive
- 1.5 million deaths, the majority (1.3 million) are HIV negative
- In 2010, there were an estimated 10 million orphans from parents killed by Tuberculosis

© WHO TB Report, 20

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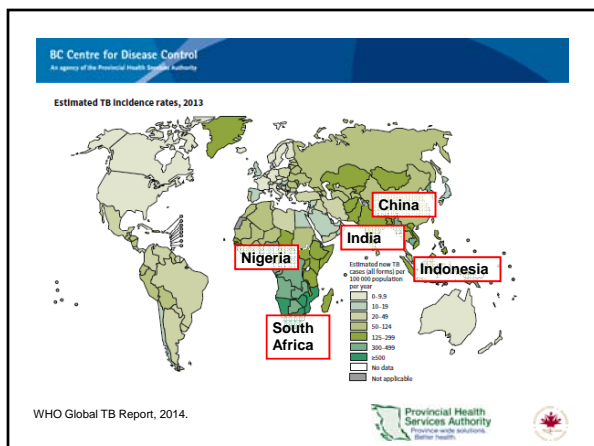
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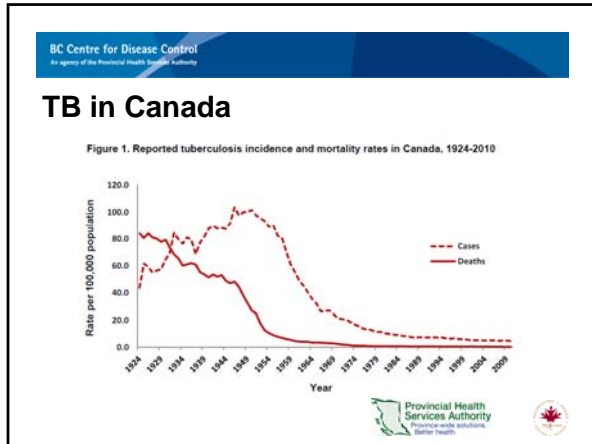
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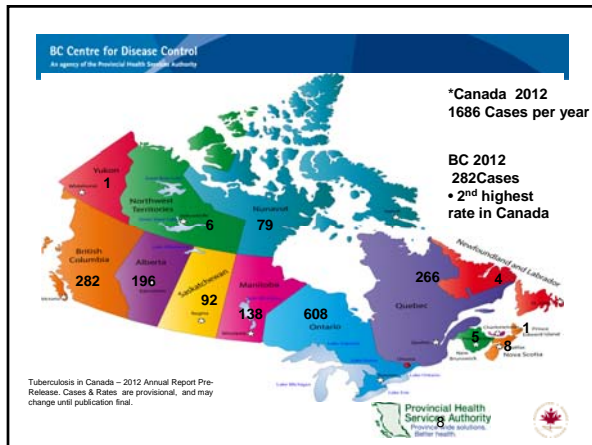
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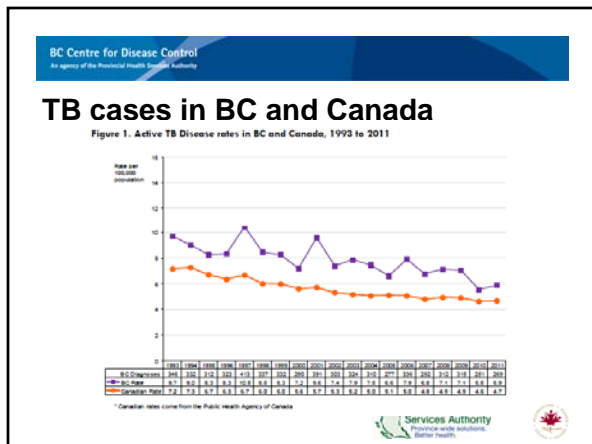
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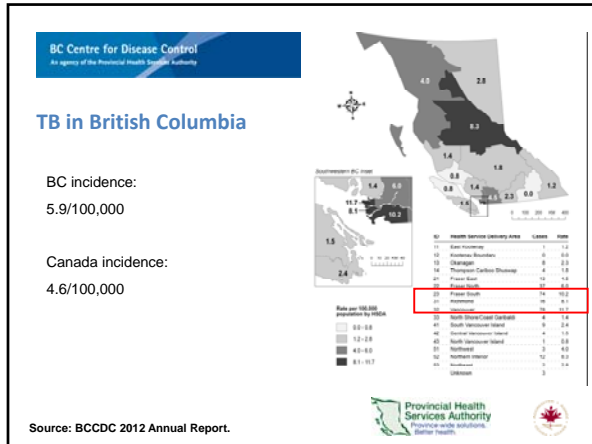
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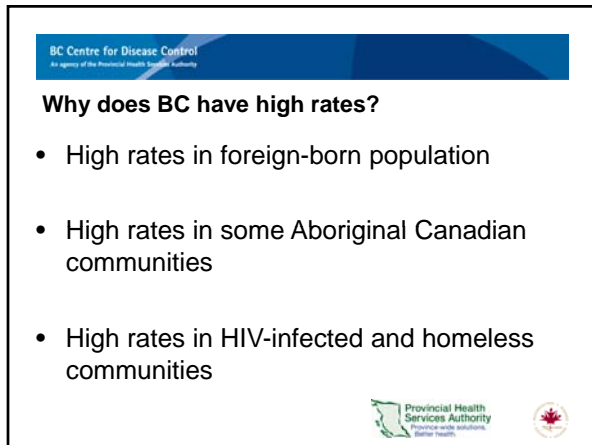
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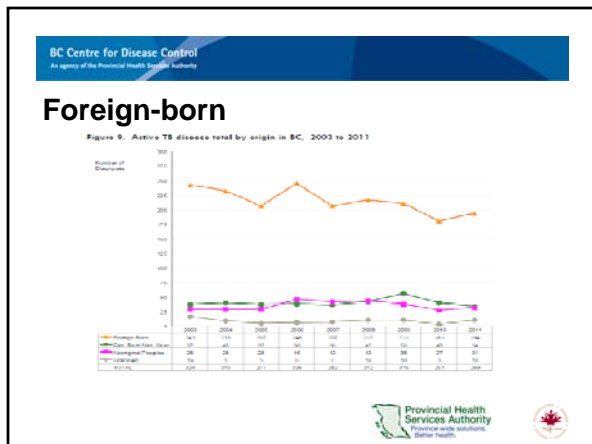
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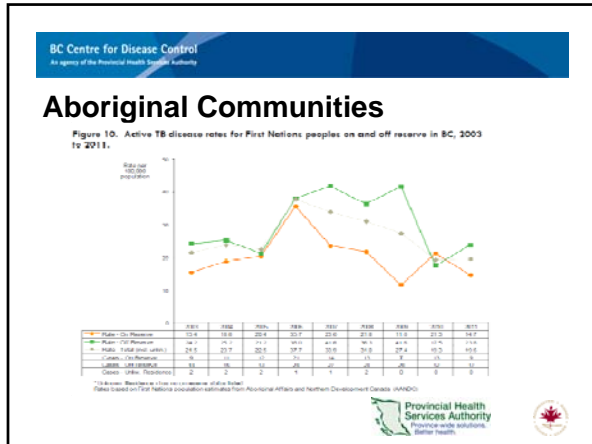
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### HIV infected and homeless individuals

- There have been over 100 cases of HIV-TB in the past decade
- Translates into an incidence > 130/100,000
- Mortality is 20% in the HIV-TB population
- In the past decade, we have experienced two outbreaks in homeless population in BC

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Proactive wide solutions. Better health.

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### Drug Resistant TB

MDR-TB Global Data:

- estimated 400,000 cases and 150,000 deaths
- only 7% of cases are diagnosed and notified
- 50% of cases are in China and India
- Highest incidence in the former Soviet Union
- In 2014, BC had 8 MDRTB cases

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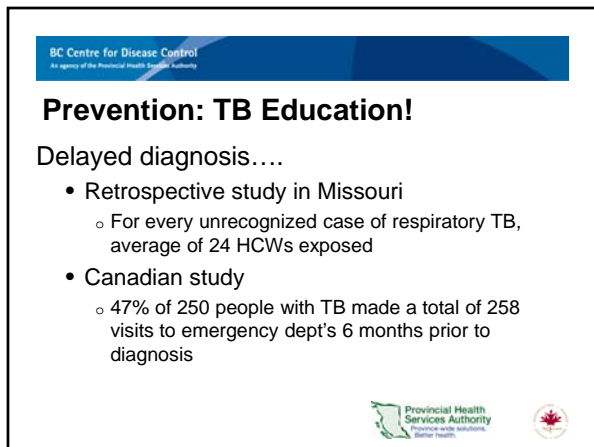
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## TB Education



NC Tip:  
Suspicious TB?  
Surgical Mask on  
patient & isolate

Front-line employees should know:

- TB medical risk factors and epidemiology
- Signs and symptoms active TB disease
- Transmission


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## At-Risk Population

**Medical:**

- TB hx
- Recent TB infection
- HIV
- Immune compromised
- Silicosis
- Fibronodular disease
- Renal pts on dialysis
- IVDU

**Social:**

- Congregate living such as shelters, corrections (staff and residents)
- Urban poor
- "Geographical" risk: immigrants, travelers from TB endemic countries or residents Aboriginal communities with high TB rates;
- HCW's working with at-risk groups


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## Recommendations



NC tip:  
Masks?  
HCW = N95  
Pt = surg

Prompt TB investigation when:

- Cough, 2-3 weeks duration with or without weight loss and fever in an at-risk population


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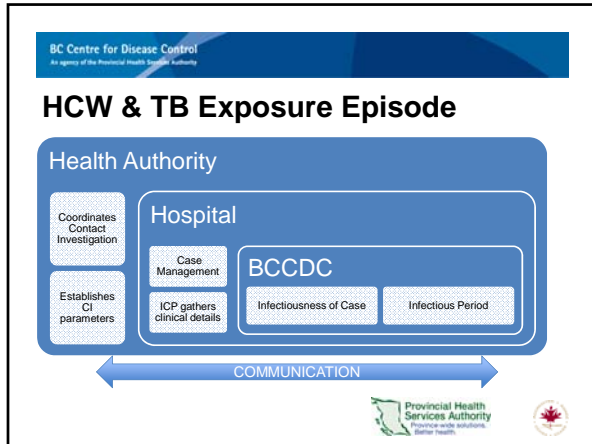
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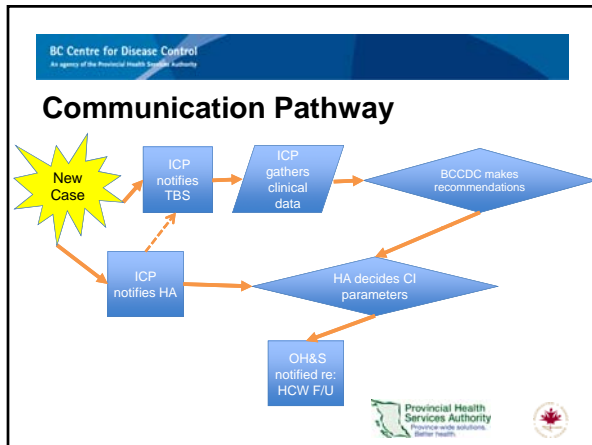
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- BC Centre for Disease Control  
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- ### Resources for ICP and TB
- BCCDC TB Manual
    - Current (2010) manual
    - New release: Appendix B – expanded info from current TB manual
  - National Recommendations
    - Canadian TB Standards, 7<sup>th</sup> ed. Ch. 15
  - Regional/agency policy
- Provincial Health Services Authority  
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### Managing TB cases: Key messages

1. Rapid diagnosis, isolation and promptly starting effective therapy

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### Who requires isolation?

- TB risk factors and signs and symptoms active respiratory disease
- Suspicious CXR (regardless of symptoms)
- AFB smear-positive sputum
- Suspected laryngeal involvement

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### Who requires isolation?

- Non-respiratory TB with
  - open abscess/lesion
  - Immune-suppression
  - Abnormal CXR
- Children < 10
  - AIIR if cavitary CXR, laryngeal involvement, AFB positive

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### Managing TB cases: Key messages

1. Rapid diagnosis, isolation and promptly starting effective therapy
2. Implementing Airborne Precautions
  - HCW N95
  - Pt – surgical mask until placed in airborne infection isolation room (AIIR)


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### Managing TB cases: Key messages

1. Rapid diagnosis, isolation and promptly starting effective therapy
2. Airborne Precautions
  1. HCW N95
  2. Pt – surgical mask till placed in airborne infection isolation room (AIIR)
3. Discharging AFB smear-positive case – consult local HA MHO and/or BCCDC


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### Discharging infectious case?

Ensure the following is in place:

- Tolerating effective treatment (sensitivities known)
- Clinical improvement
- Adherence, self-administration
- Home isolation and stable residence
  - NO children <5 or immune-compromised individuals in the home


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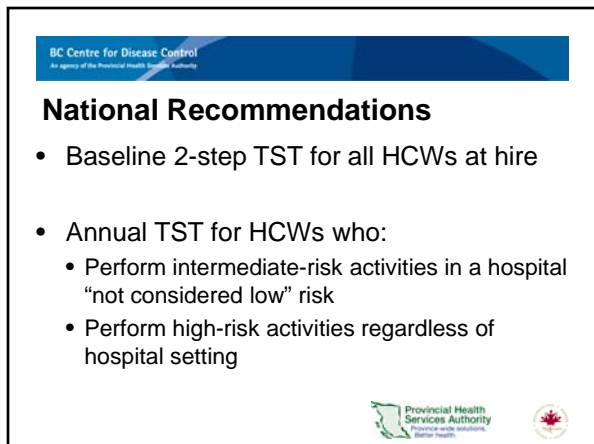
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**Definition: “not considered low” risk**

- ≥ 3 cases/year in hospital < 200 beds
- ≥ 6 cases/year in hospital ≥ 200 beds

Source: CTS Table 2: Risk classification for health care settings, Ch. 15, p. 366

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**Provincial Recommendations**

- New hire HCWs, health-care volunteers and students
- TB screening within 2 weeks of start or at the discretion of the employer/agency
  - Includes:
    - TST
    - Symptom and risk factor assessment
    - Further testing if TST positive or symptomatic

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**Provincial Recommendations**

- Routine HCW/volunteer/student screening is not a provincial standard
- Varies across Health Authorities or institutionally

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### New Projects?

- Ministry project
  - what TB screening exists across the province?
  - Inform provincial recommendations on best practice
- TB Essentials
  - Online, self-directed course on TB basics from pathophysiology to testing to treatment

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### Summary

If in doubt, call the TB Services Nurse Consultant line at:

604-707-5678  
Mon-Fri: 8:30am-4:30pm (excluding stat holidays)

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