

# Facility Assessment

## Tuberculosis Contact Investigation



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TB Control  
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## Factors Determining Transmission

- Infectiousness of Case
- Duration of Exposure
- Environmental Conditions
- Susceptibility of Contact

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## Infectiousness of Case

- Smear Results (Carbolfuchin stain)
- Negative No AFB Seen
- +/- 1 - 2 AFB/300 Fields
- 1+ 1-9 AFB/100 Fields
- 2+ 1-9 AFB/10 Fields
- 3+ 1-9 AFB/Field
- 4+ >9 AFB/Field

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## Infectiousness of Case

- Smear Results (Fluorochrome stain)
- Negative No AFB Seen
- +/- 1-2 AFB/30 Fields
- 1+ 1-9 AFB/10 Fields
- 2+ 1-9 AFB/Field
- 3+ 10-90 AFB/Field
- 4+ >90 AFB/Field

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## Duration of Exposure

- Exposure Limits
- 8 hrs very small space
- 24 hrs small-medium space
- 50 hrs medium-large space
- 100 hrs large space

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## Environmental Conditions

- Size of Environment
- Amount of ventilation
- Number of air exchanges

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### Susceptibility of Contact

- Current Immune Status
- Immunosuppressive Medication
- Some Illegal Drugs
- HIV Status
- Malnutrition
- Extreme fatigue / Lack of sleep

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### Facility Assessment: Ventilation

- Standard air handler
- Re-circulating air
- 5% - 10% fresh air mix
- Many output vents
- Few return vents
- Direct duct or plenum

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### Facility Assessment Office

- Individual offices vs cubicles
- Location of return vents
- Location of doors and windows

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### Facility Assessment Office



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### Facility Assessment Warehouse

- Very large spaces
- Often open loading bay doors
- Look for area fans
- Most important area is break room

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## Facility Assessment Warehouse



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## Facility Assessment Warehouse



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## Facility Assessment Classroom

- “Classroom” vs Lecture Hall
- Often test for “political reasons”
- Never forget school bus

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Facility Assessment  
Classroom



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Facility Assessment  
Classroom



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Facility Assessment:  
School



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## Facility Assessment Nursing home

- Most have individual AC units in Rooms
- Usually have standard vents in hall ceiling
- “Zones” often ventilate single wing
- Check dining room, therapy rooms

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## Facility Assessment Church

- Check for “favorite” seats.
- Make note of any directional ventilation.
- Start investigation with contacts one row distant.

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## Facility Assessment Conclusion

- Remember four elements affecting communicability
- Remember TB is airborne
- Air currents within open spaces

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