

# **ADMINISTRATIVE CONTROLS - FOR TB INFECTION CONTROL IN LATVIA**

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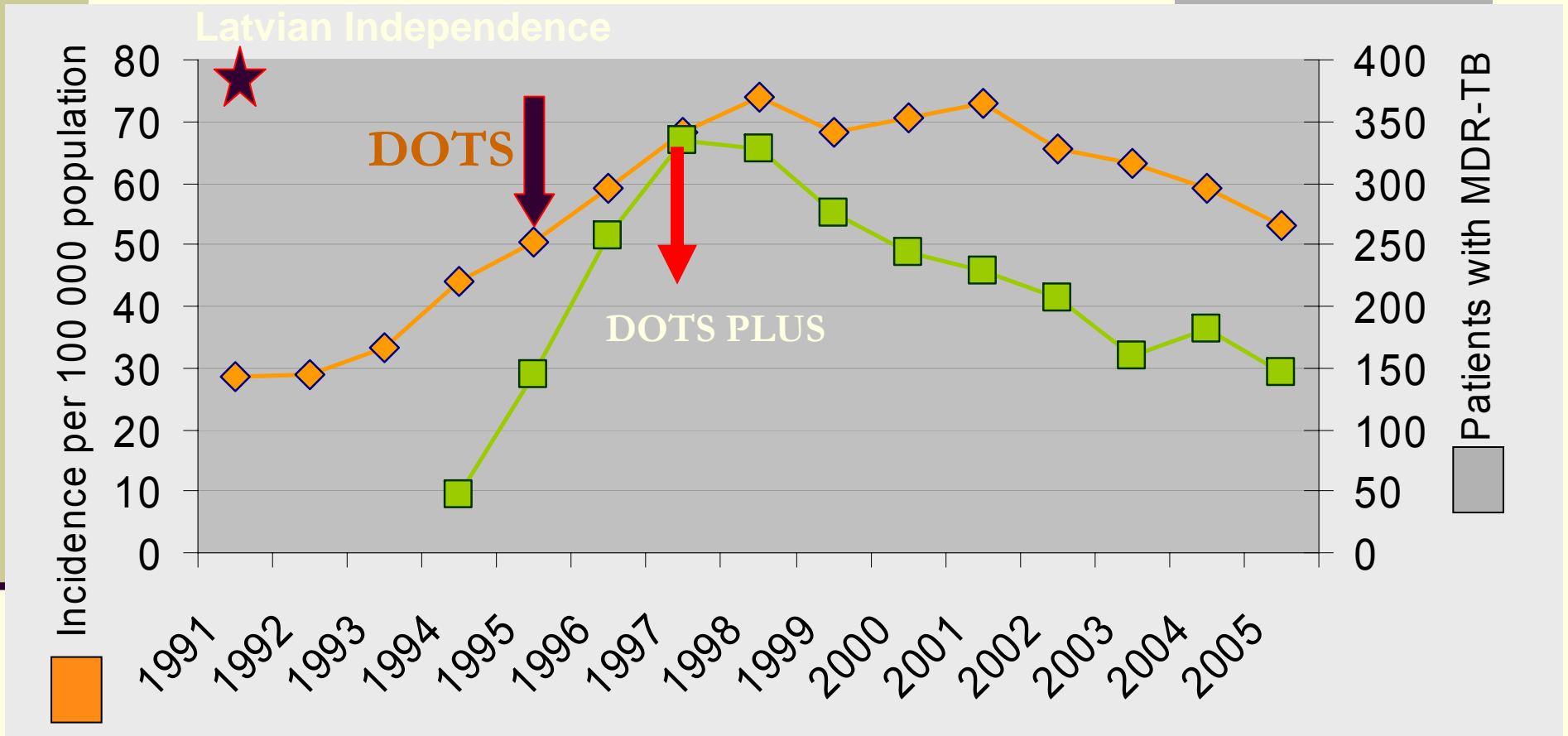
# PRESENTATION OUTLINE

- Introduction
- Administrative Infection Controls in TB and lung hospital
- Plan of Infection Controls
- Conclusions



**LATVIA Independent Baltic state since 1991**

# TB AND MDR CASE DETECTION RATE 1991-2005, LATVIA



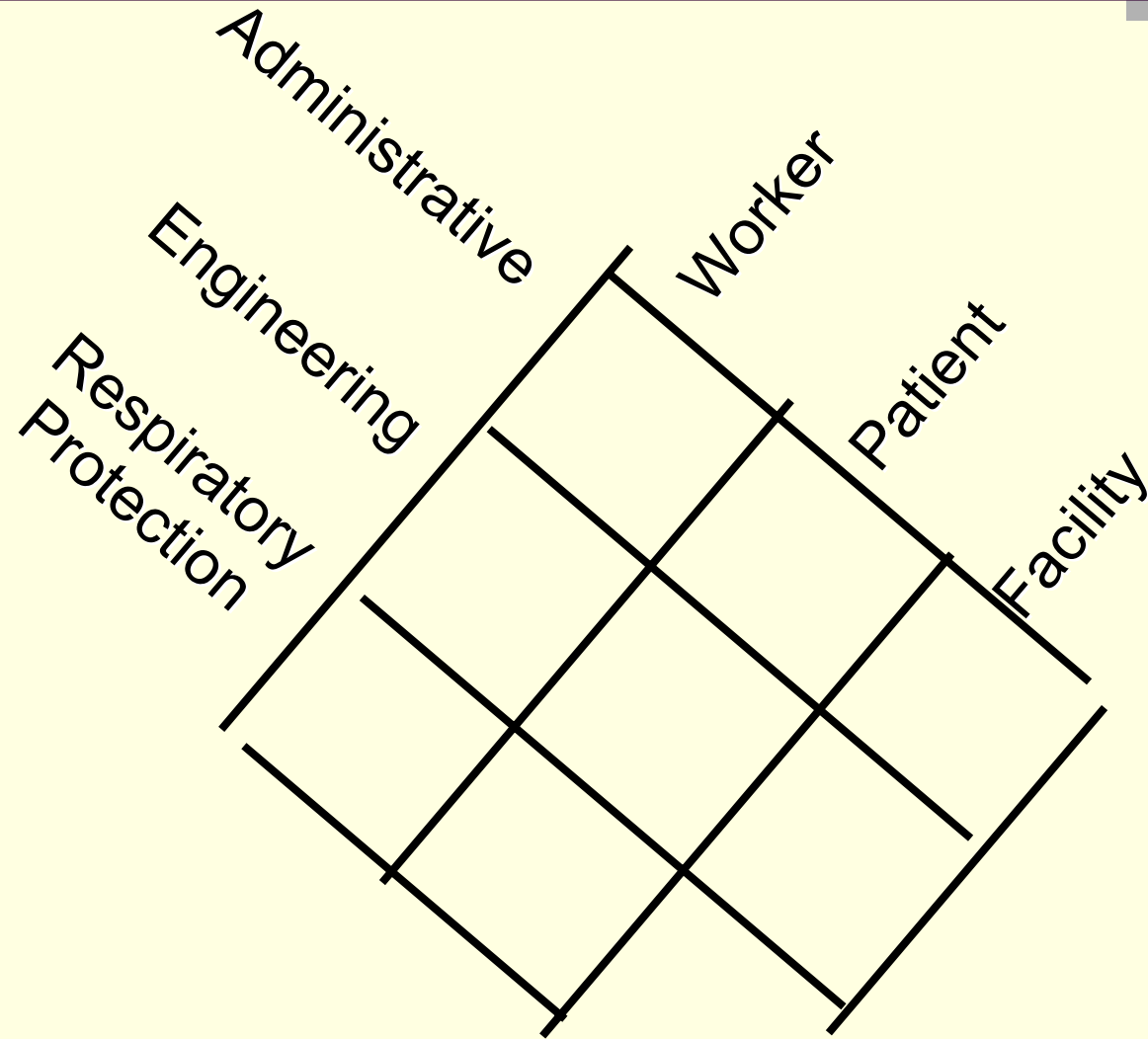
*Source: Latvian National TB Control Program,  
published Eurosurveillance, March 2006*

## **COLLABORATIVE PROJECT WITH CDC TO DEVELOP COMPREHENSIVE INFECTION CONTROL PLAN IN SATLD OF LATVIA:**

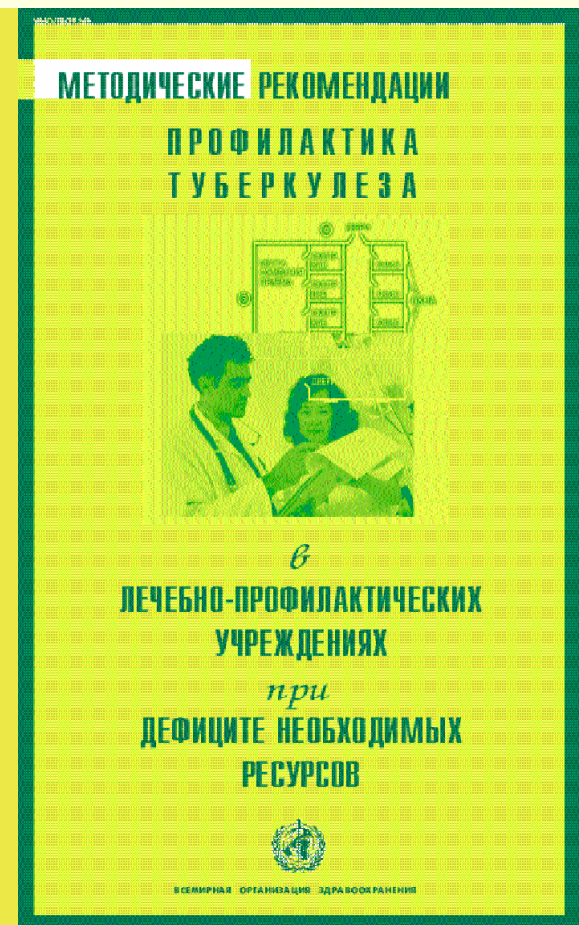
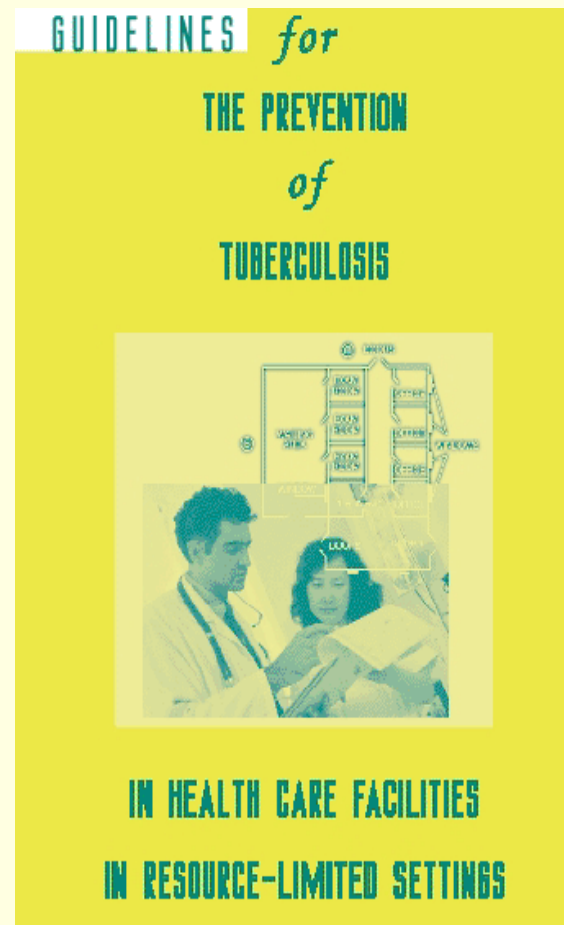
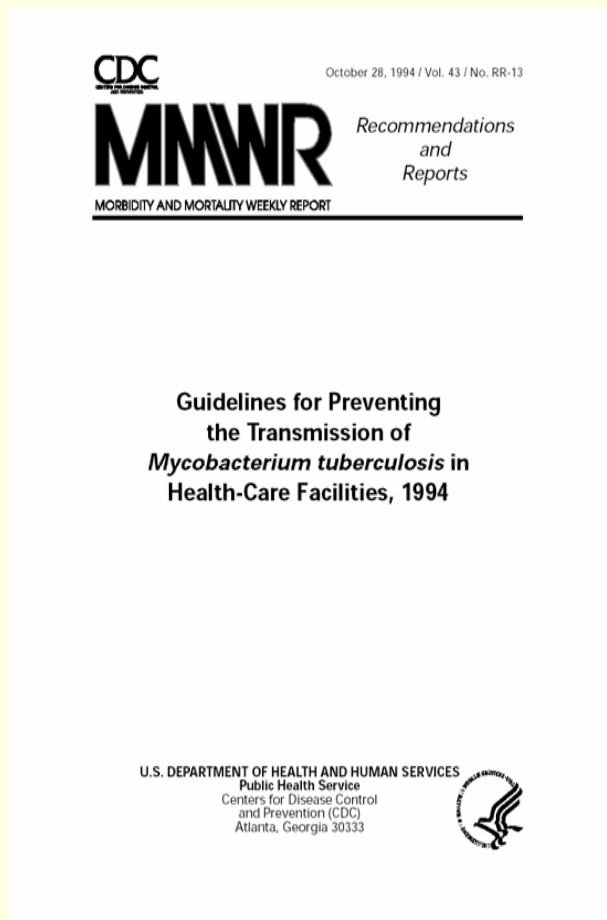
- 1999-2000 developed and implemented first TB infection control plan; revised and updated on regular basis;
- Established UV lamps HEPA filters; respirators for HCW;



# Hierarchy of Controls



Administrative controls are managerial measures to significantly reduce the risk of TB transmission by preventing the generation of droplet nuclei.



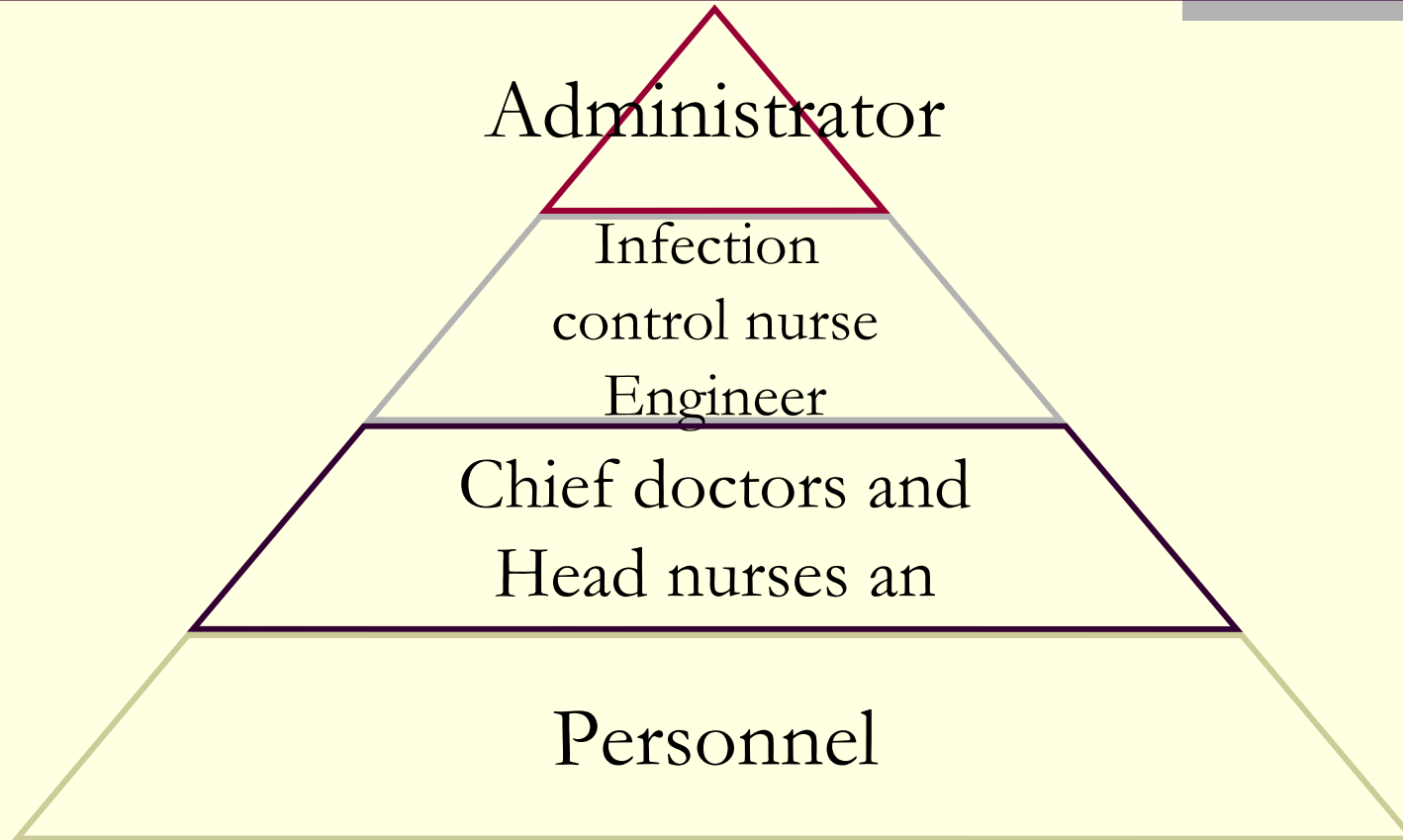
# ADMINISTRATIVE CONTROLS – SATLD

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- Includes
  - Assignment responsibilities
  - Risk assessment
  - Written infection control plan
    - Isolation procedures
    - Patient flow within facility
    - Reducing cough inducing procedures
  - Staff and client education
  - Screening program for HCW
- Implementation, supervision of IC

Administrative control measures SATLD

# 1.ASSIGNMENT OF RESPONSIBILITIES



Responsibility on implementing, monitoring, enforcing, evaluating, and revising infection control programs on a routine basis including linkage to TB diagnostics

## 2. WRITTEN INFECTION CONTROL PLAN

- Written protocols to ensure early identification, diagnostic evaluation, isolation and treatment
- Isolation and discontinuation of isolation protocols and procedures
- Flow of infectious patients, in hospital, transfer and discharge
- Special precautions for high risk procedures and locations
- Use and maintain environmental control measures
- Personal respiratory protection program
- HCW and clients education



Administrative control measures, SATLD

### 3. RISK ASSESSMENT WITHIN SATLD

#### **Very high risk – TB patients treatment**

3;4;5;TB departments;  
6; 7; .MDR-TB departments  
Bacteriology laboratory  
Bronchoscopy; X-ray; admission departments  
**administrative controls**  
**engineering controls**  
**personal respiratory protection**

#### **High risk – infectious TB patients not encountered**

1;2;8 ;9 non TB departments, intensive care, Consultation and other diagnostic procedures; Physical therapy  
**administrative controls**  
**engineering controls**

#### **Medium risk – no TB patients attended**

Clinical laboratory; pharmacy;  
Administration department  
Maintenance department

**•administrative controls**

# INFECTION PROGRAM HAS THREE GOALS WITH RESPECT TO PERSON WITH INFECTIOUS TB

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- Early detection
- Early isolation
- Early treatment

## 4. ISOLATION OF INFECTIOUS TB PATIENTS

Non infectious TB patients	Closed (isolation department) for Infectious TB patients engineering controls - UV amps personnel respiratory protection
MDR-TB department – only for confirmed cases	Until culture conversion to negative
High risk for MDR-TB department	until DST results or smear conversion to negative
TB department - new case	until smear conversion to negative
TB department - new case	until smear conversion to negative
Pleural TB department	until smear conversion to negative

Administrative control measures SATLD

## 5. ISOLATION PROCEDURES

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- Patient education, signed informed consent
- Isolation department:
  - AFB+ new TB case or strongly suspected for TB
  - Patient with TB again become smear positive
  - Determine infectiousness and drug resistance as soon as possible
- 1. Ideal: separate rooms
- 2. Isolation together, according patient infectiousness, and risk for MDR-TB
- Monitor infectiousness (frequency) Interrupt isolation
  - Received treatment 2-3 weeks
  - Three negative smears, collected in consecutive days
  - Clinical improvement

## 6. ADHERANCE TO ISOLATION PROCEDURES

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- **Books;**
  - Newspapers, magazines
  - Hygiene kits delivery;
  - radio, televizors;
  - phone;

Administrative control measures SATLD

## 7. PATIENTS FLOWS

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- From admission department to isolation room
- From isolation room to examination rooms
- Cough inducing procedures
  - bronchoscopy;
  - inhalations;

Administrative control measures SATLD

## 8. EARLY DIAGNOSIS AND APPROPRIATE TREATMENT AND ISOLATION

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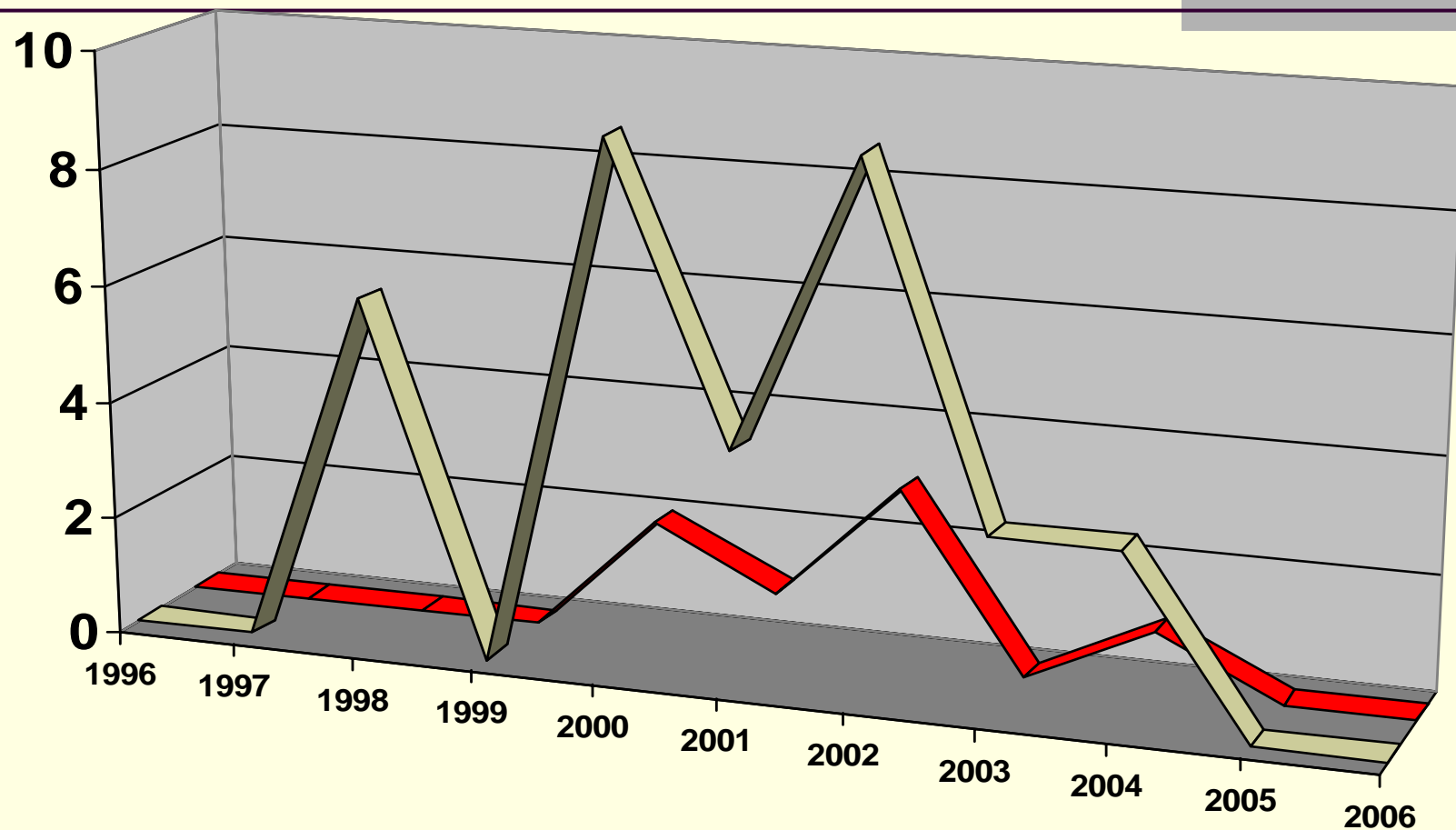
- **DST** provide for all culture (+) patients on L/J – absolute concentration method
- **BACTEC/MGIT**
  - Priority **I** - for high MDR-TB risk patient sputum smear (+)
  - Priority **II** – all sputum smear + cases for better infection control purposes
- **INNO LiPA test** – from direct specimen for sputum smear +; high risk for MDR-TB patients

## 9. POLICIES FOR HCW

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- Training and education for HCW to ensure good work practices
  - IC plan - organization, rationale, and what is expected of them
  - Personal respiratory protection program
- Counsel and screen HCW to identify TB disease each yearly
  - Medical questionnaire;
  - Chest x-ray yearly,
  - Sputum exam if cough > 3 weeks

# TB AND MDR-TB CASES AMONG HCW IN SATLD OF LATVIA



■ Total HCW TB cases ■ HCW MDR-TB cases

Administrative control measures, SATLD

## CONCLUSIONS

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- Administrative IC are the most important component of IC plan in setting with limited resources and high incidence of TB and MDR-TB
- Administrative IC Program can ensure
  - Early detection
  - Early isolation
  - Early treatment
- TB infection control can effectively prevent nosocomial transmission of TB and MDR-TB to HCW