

# Contact tracing and Post-exposure prophylaxis

## WHO guidance

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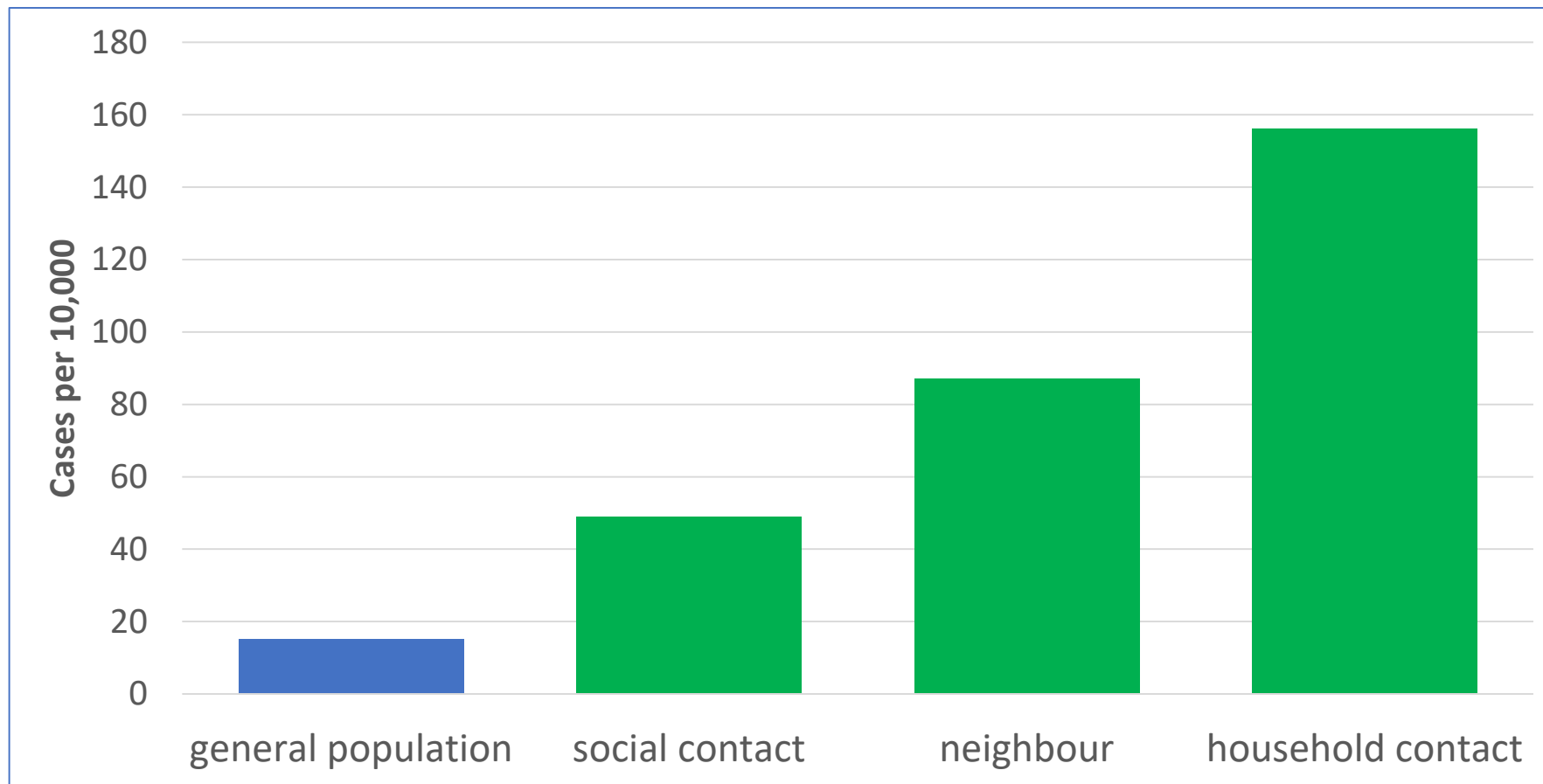
# Overview of presentation

Part 1: WHO Guidelines (*‘what to do’*)

Part 2: WHO guidance document (*‘how to do’*)

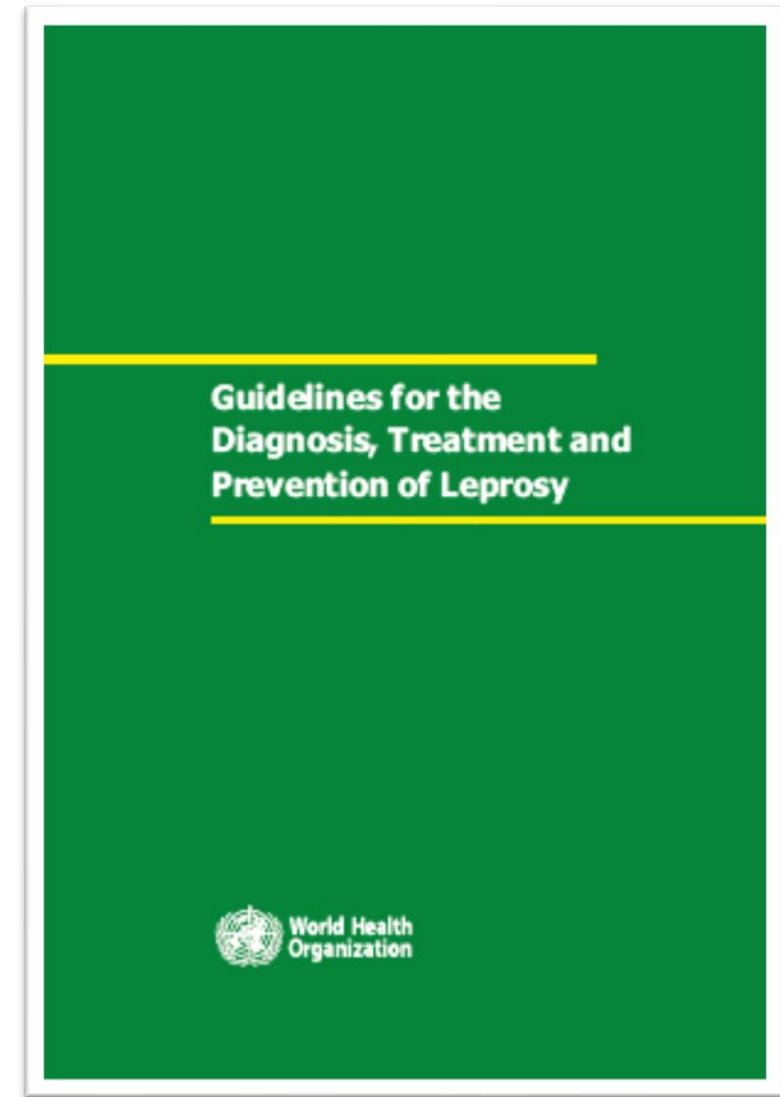
# Risks for contacts to develop leprosy

(Moet et al. J Infect Dis 2006)



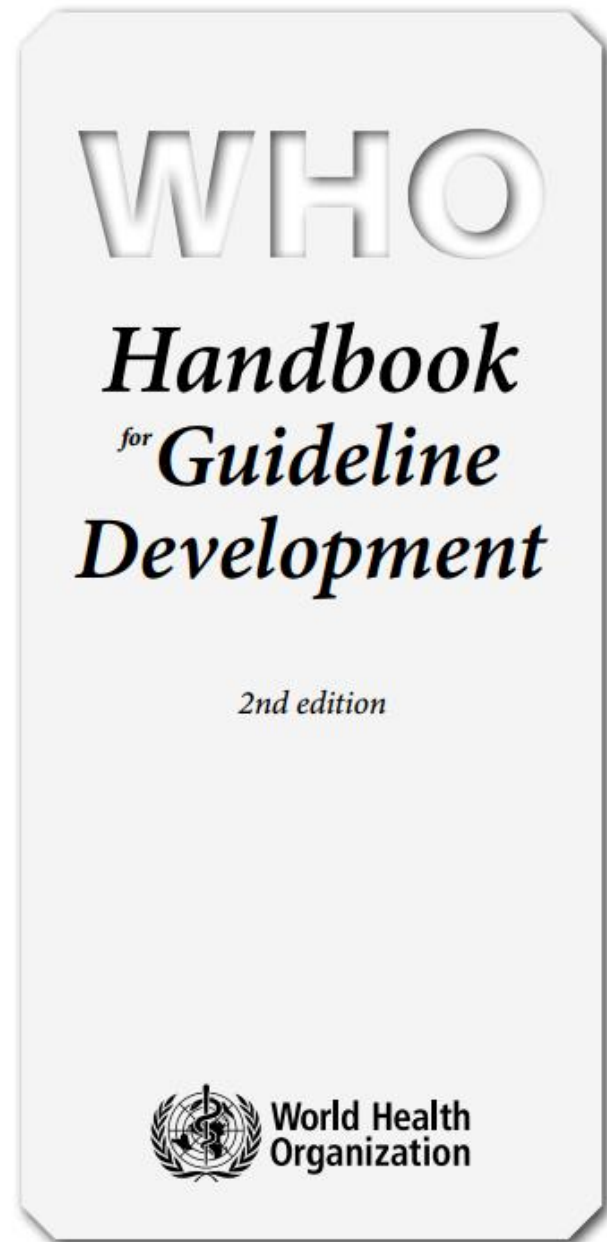
# Part I

## WHO Guidelines



# WHO guideline development

- Following GRADE mechanism
- Grading of Recommendations Assessment, Development and Evaluation
- Strictly described process: explicit, transparent
- Evidence-based
- Public health oriented



# Chemoprophylaxis

*“Is there an effective and safe chemo-prophylaxis for prevention of leprosy?”*

- Population:
  - Contacts of PB and MB (adults, children)
  - Population of endemic areas
- Intervention: SDR, post-exposure
- Comparison: no intervention
- Outcomes: disease, adverse events

# Chemoprophylaxis with SDR: efficacy

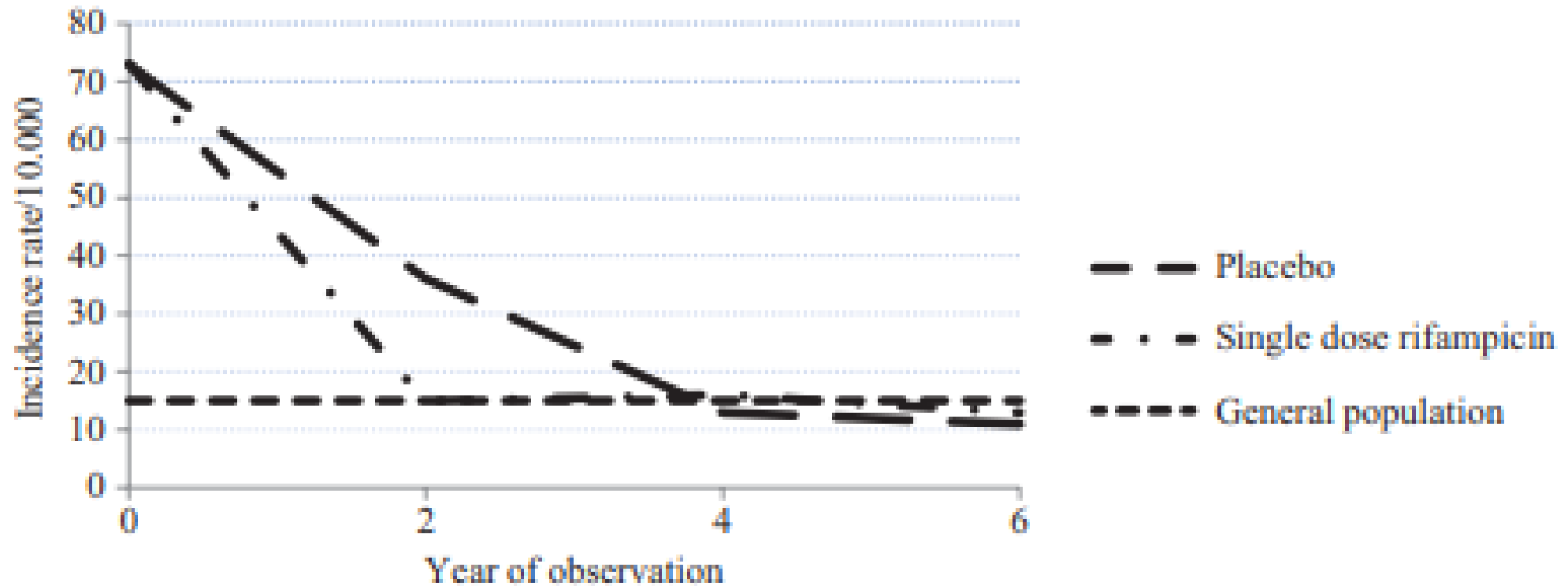
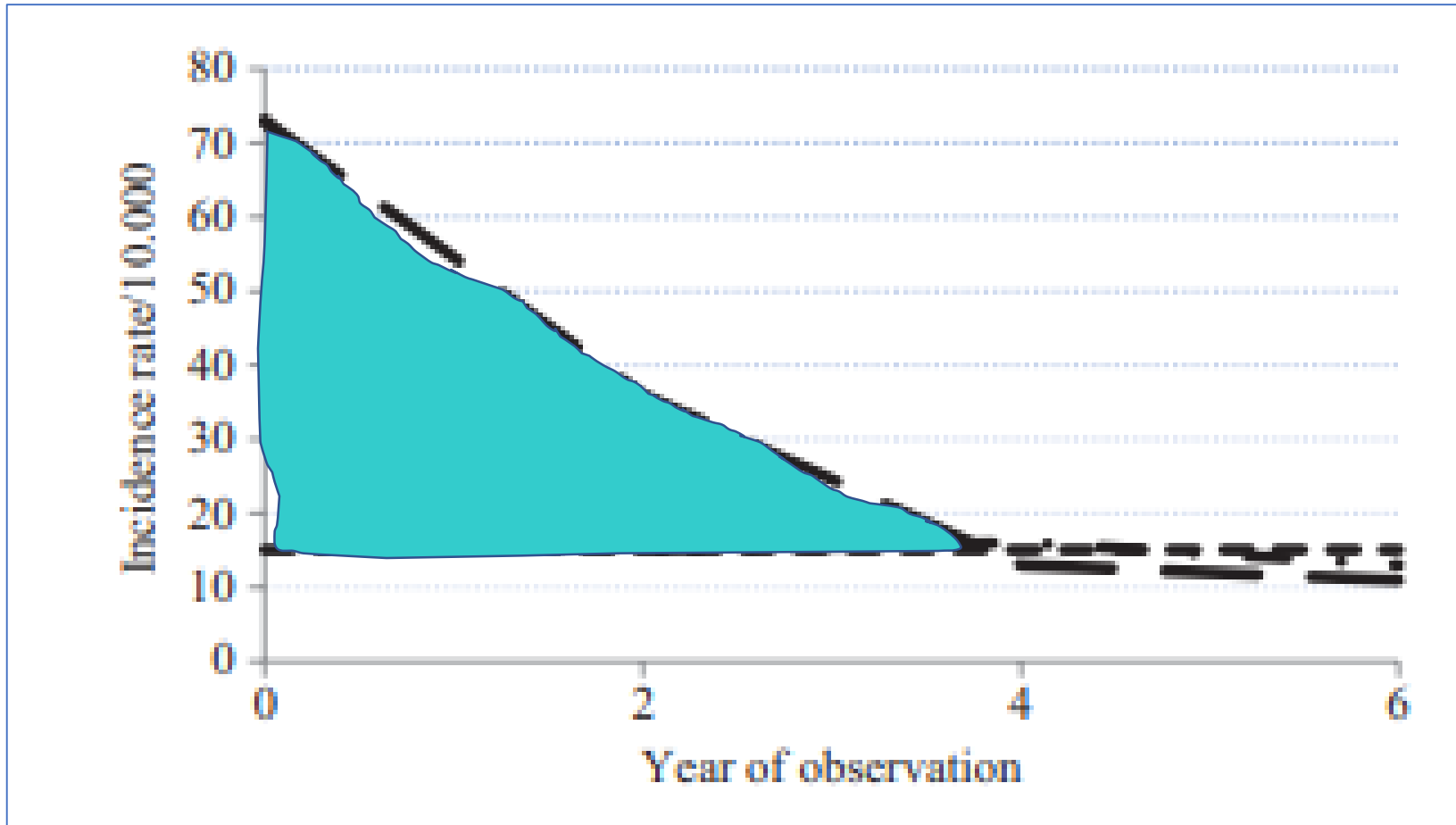


Figure 1. Results of the COLEP trial at 2, 4 and 6 years follow-up.

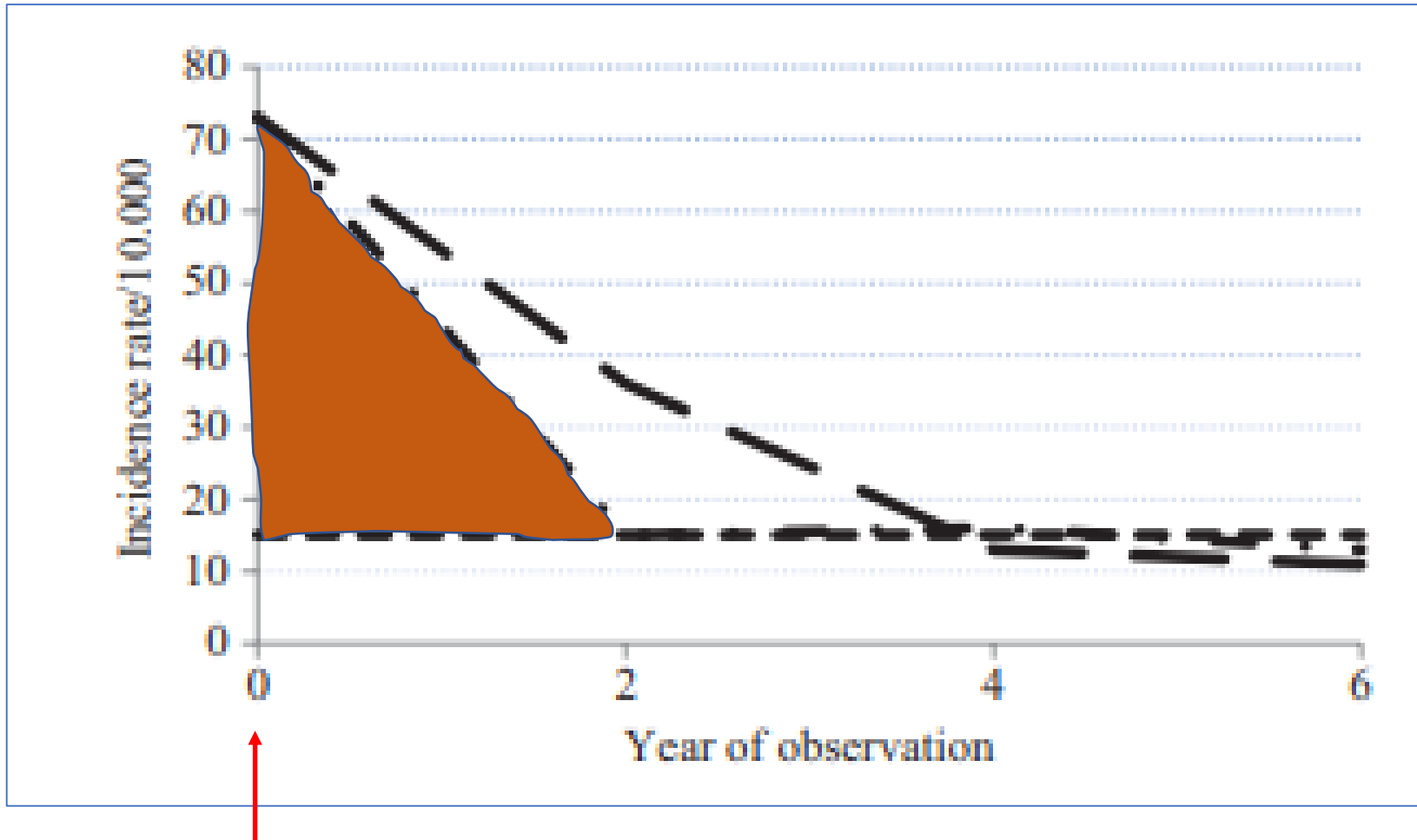
# Chemoprophylaxis with SDR: efficacy



- Scenario 1: Leprosy among contacts who did **not** receive SDR
- Periodic follow up of contacts and treatment with MDT of cases among them
- Leprosy incidence reduces to level of general community transmission in four years



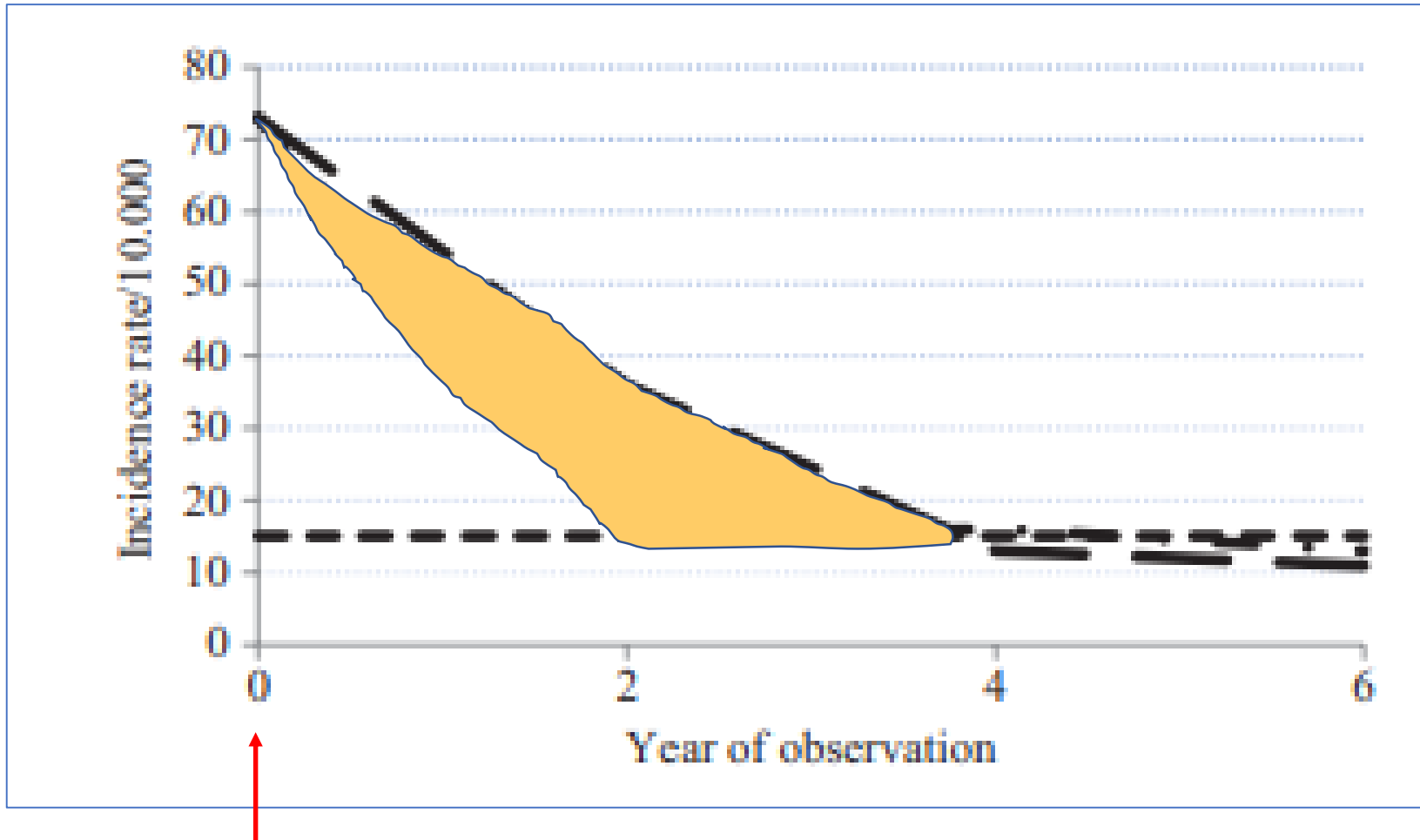
# Chemoprophylaxis with SDR: efficacy



All contacts receive SDR

- Scenario 2: Leprosy among contacts who received SDR
- Periodic follow up of contacts and treatment with MDT of cases among them
- SDR for all eligible contacts
- Leprosy goes down **faster** to reach level of community transmission within two years and **less** cases emerged

# Chemoprophylaxis with SDR: efficacy



- Leprosy cases among contacts averted with SDR
- No deferral of disease
- Efficacy: ↓57% risk after two years
- NNT to prevent one case: ~333

All contacts receive SDR or placebo

# WHO recommendation on chemoprophylaxis

Area of recommendation	Recommendation	Strength	Quality of evidence
<b>PREVENTION</b>			
Chemoprophylaxis for contacts of leprosy cases	<p><b>Single-dose rifampicin</b> may be used as leprosy preventive treatment for contacts of leprosy patients (adults and children aged 2 years and above), after excluding leprosy and tuberculosis disease, and in the absence of other contra-indications.</p> <p>This intervention shall be implemented only by programmes that can ensure:</p> <ul style="list-style-type: none"> <li>(a) Adequate management of contacts; and</li> <li>(b) Consent of the index case to disclose his/her disease</li> </ul>	Conditional	Moderate

# Chemoprophylaxis: SDR

**Table 5.** Rifampicin dose for single-dose rifampicin (SDR)

Age/weight	Rifampicin single dose
15 years and above	600 mg
10–14 years	450 mg
Children 6–9 years (weight $\geq$ 20 kg)	300 mg
Children $<$ 20 kg ( $\geq$ 2 years)	10–15 mg/kg

- Feasibility study: The Leprosy Post-Exposure Prophylaxis (LPEP) programme: update and interim analysis (interim report): *Lepr Rev* (2018) 89, 102–116
- Approaches:
  - For contacts: need agreement of index case
  - Blanket approach: in areas of high endemicity, overcrowding
- SDR improves contact screening, rejuvenates programme

## Part II

# WHO technical guidance on contact tracing and chemoprophylaxis

*In press*

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- Screening of contacts
- Administration of PEP
- Supply chain management
- Recording and reporting
- Implementing contact tracing and PEP
- Monitoring and supervision
- Information, education, communication
- Annex 1: Model contact list
- Annex 2: Consent form for index case
- Annex 3: Consent form for contact



# Contact Tracing & Screening



## 1 Identification of Index Case/s

Identification of index case(s), including address\*, with mobile/telephone number at the time of diagnosis or from the treatment register for cases detected earlier.



## 2 Counselling the Case

Counsel the case about the disease, its curability, spread, need for contact screening and possible prevention.



## 4 Line-Listing of Contacts

Line-listing of contacts.\*



## 3 Consent for Disclosure

Seek consent of the case for disclosure.

**!** If no consent, then no contact examination



## 5 Meet the Contacts

Home visit or by invitation to the health facility.



## 6 Counselling the Contact/s

Explain the importance of contact tracing and examination for finding additional leprosy cases at an early stage and possibility of providing Single Dose of Rifampicin (SDR) for the prevention of leprosy.



## 8 Examination of the Contact

Conduct physical examination of the contact, and repeat annually for five years.



## 7 Encouraging Self-Reporting

Encourage self-reporting of contacts who could not be checked during the screening, especially those who may have lesions suspect of leprosy.



\* Wherever feasible Geographical Positioning System (GPS) may be used.

# Post-Exposure Prophylaxis



## INDIVIDUAL CONTACTS



## 1 Counsel for Disease

After consent of the case for disclosure, follow the same steps as given in the box 'Contact Tracing & Screening'.

**!** If no consent, then no PEP with SDR



## 2 Counsel for Single Dose of Rifampicin (SDR)

Counsel the contacts or area population with regard to safety, side effects and usefulness of SDR



## BLANKET APPROACH



## 1 Advocacy with Authorities

Advocacy with health or civil authorities of the locality (consent of the index case may not be required)



## 3 Consent for SDR

Seek consent of the contact or community member (in case of blanket approach) for SDR

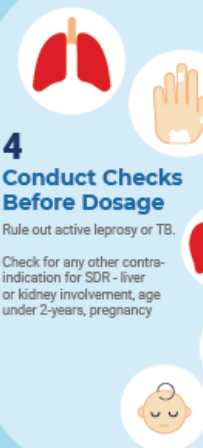
**!** If no consent, then no SDR



## 4 Conduct Checks Before Dosage

Rule out active leprosy or TB.

Check for any other contraindication for SDR - liver or kidney involvement, age under 2-years, pregnancy



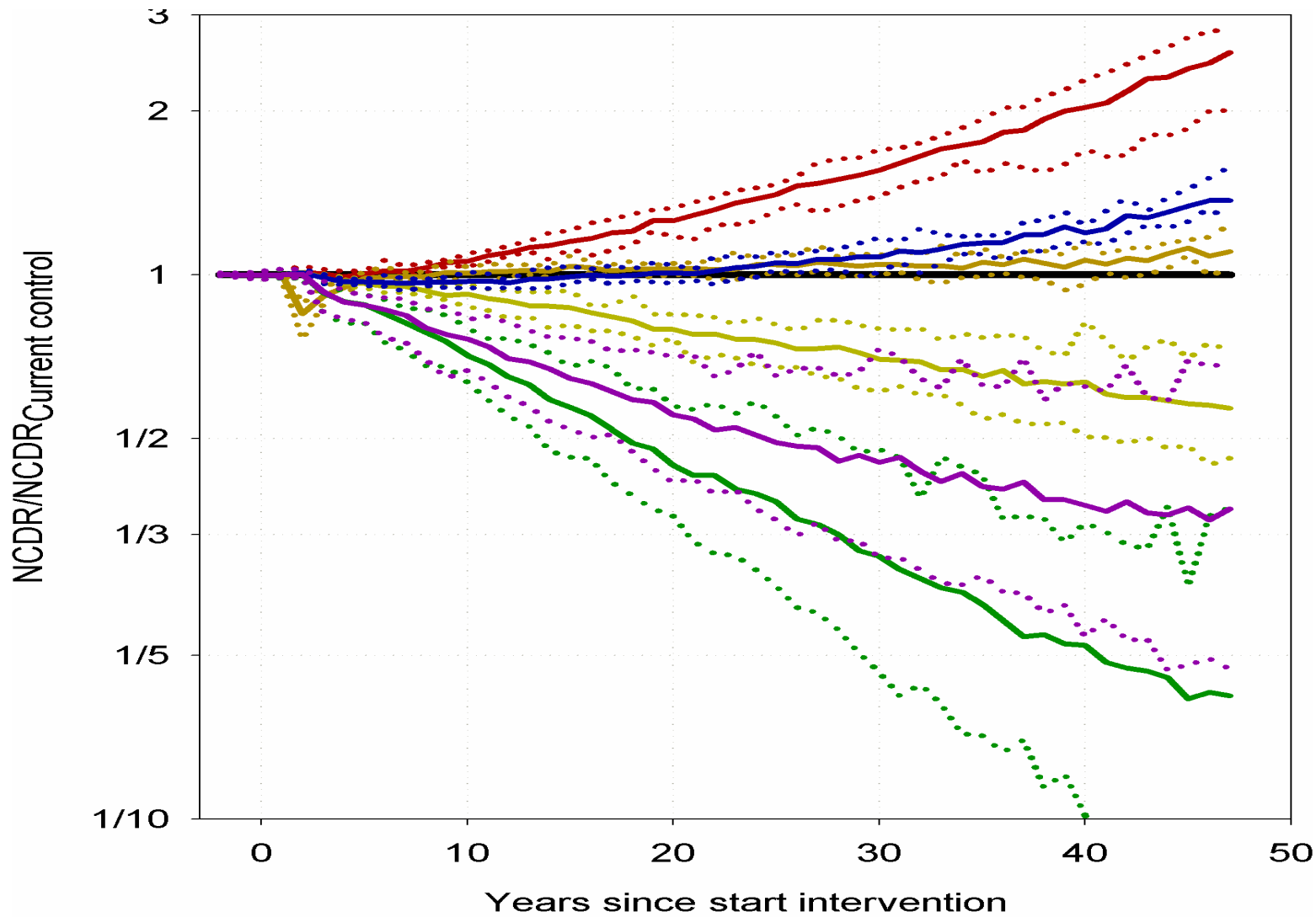
## 5 Keep Records

Record Name, Age, Address\*, Date and Place of SDR administration (if eligible). If not, note reason of exclusion.



\* Wherever feasible Geographical Positioning System (GPS) may be used.

# Different scenarios (modelling)



- Baseline control program
- No BCG
- No contact tracing
- Chemoprophylaxis
- Early diagnosis
- No BCG & chemoprophylaxis
- No BCG & early diagnosis





**Contact tracing and post-exposure prophylaxis**

**WHO guidance**

Erwin Cooreman, WHO GLP

**Country perspectives**

Tanzania: Deusdedit V. Kamara, National Leprosy Programme

Colombia: Yesenia Castro, National Leprosy Programme

Ghana: Benedict Quao, National Leprosy Programme

**Perspective of persons affected**

Tadesse Tesfaye, ENAPAL, Ethiopia

Paula S. Brandao, MORHAN, Brazil

**Perspective of partners**

Paul Saunderson, American Leprosy Missions

Blasdus Njako, German Leprosy and Tuberculosis Relief Association (Tanzania)