Philippe Glaziou
KL, November 2012

TB targets, present and future

Outline

- Current targets and principles for setting post-2015 targets
- Indicators of impact
- Disease burden projections
- Proposed global targets
- Adaptation and local targeting

Current targets

TARGETS AND INDICATORS

- Revert incidence (MDG 6c)
  - Indicator 6.9: incidence, prevalence, mortality
  - Indicator 6.10: proportion detected and cured under DOTS
- Halve prevalence and mortality (STP) of 1990 by 2015
- Eliminate TB by 2050 (<1/million)

LIMITATIONS

- Unambitious
- Proportion detected not measured in any HBC
- Baseline undocumented (no data in most countries)
- Unrealistic 1000-fold decline in incidence

Post 2015 targets - principles

- Targets should be
  - Ambitious
  - Inspirational
  - Realistic
  - Capable of catalyzing efforts in the short term
- Progress should be measurable
  - Well defined indicator
  - Measured and monitored at country level

Indicators

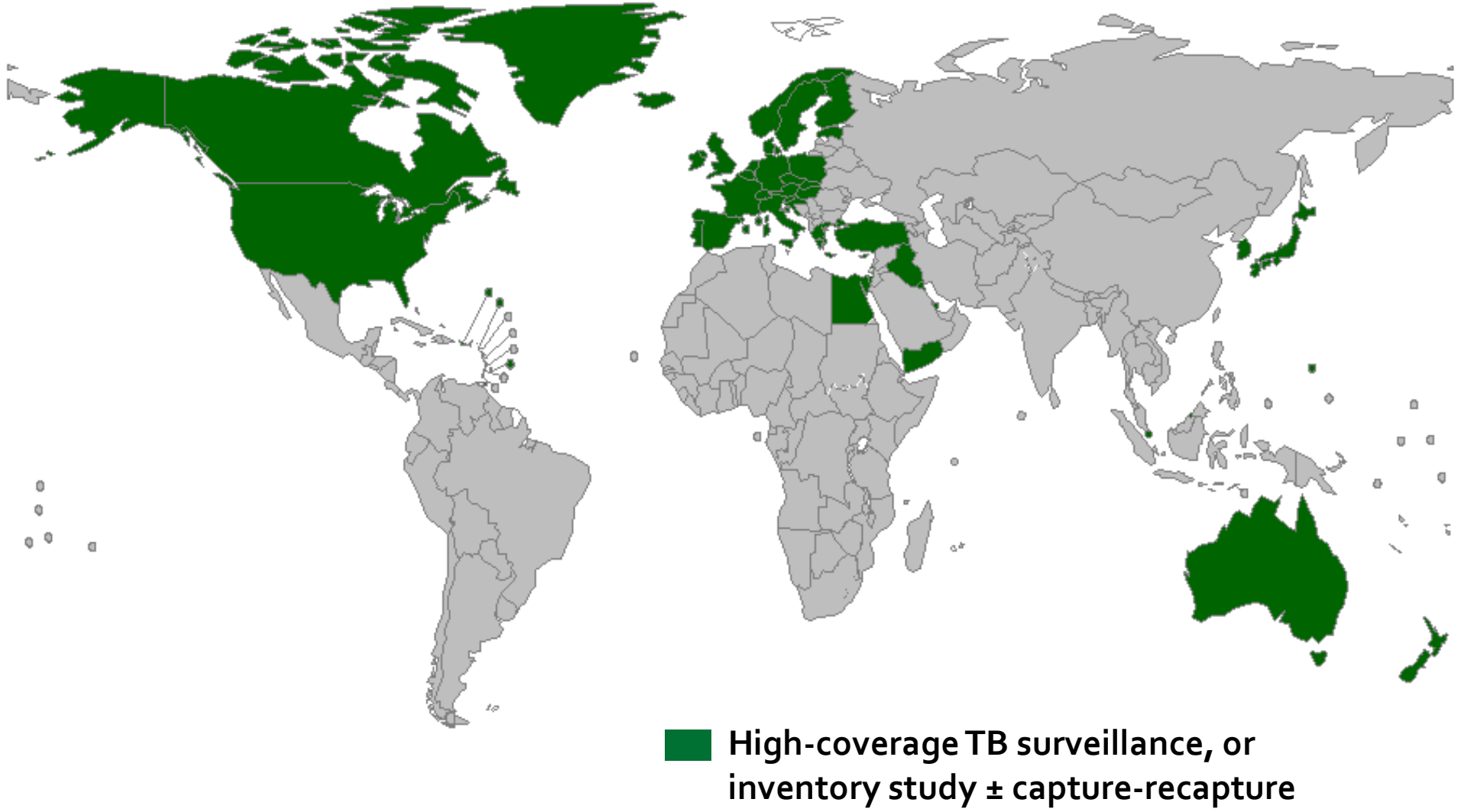
If you change the way you look at things,
the things you look at change

Max Plank

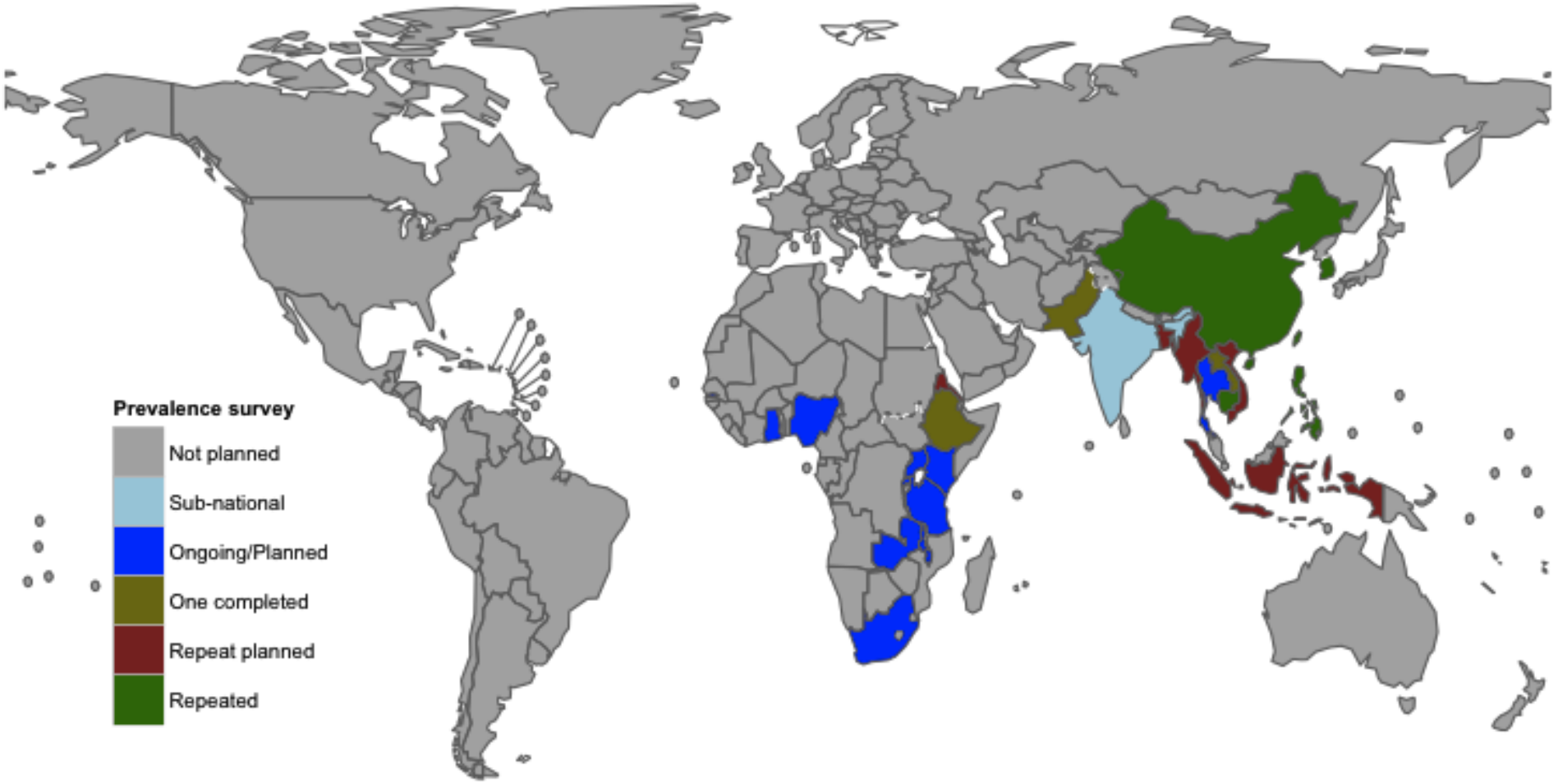
Incidence

- National incidence surveys impractical
- **Best documented through state-of-the art TB surveillance.** Estimates are uncertain due to
  - **Under-reporting**
  - **Under-diagnosis**
- Estimation from tuberculin surveys not satisfactory

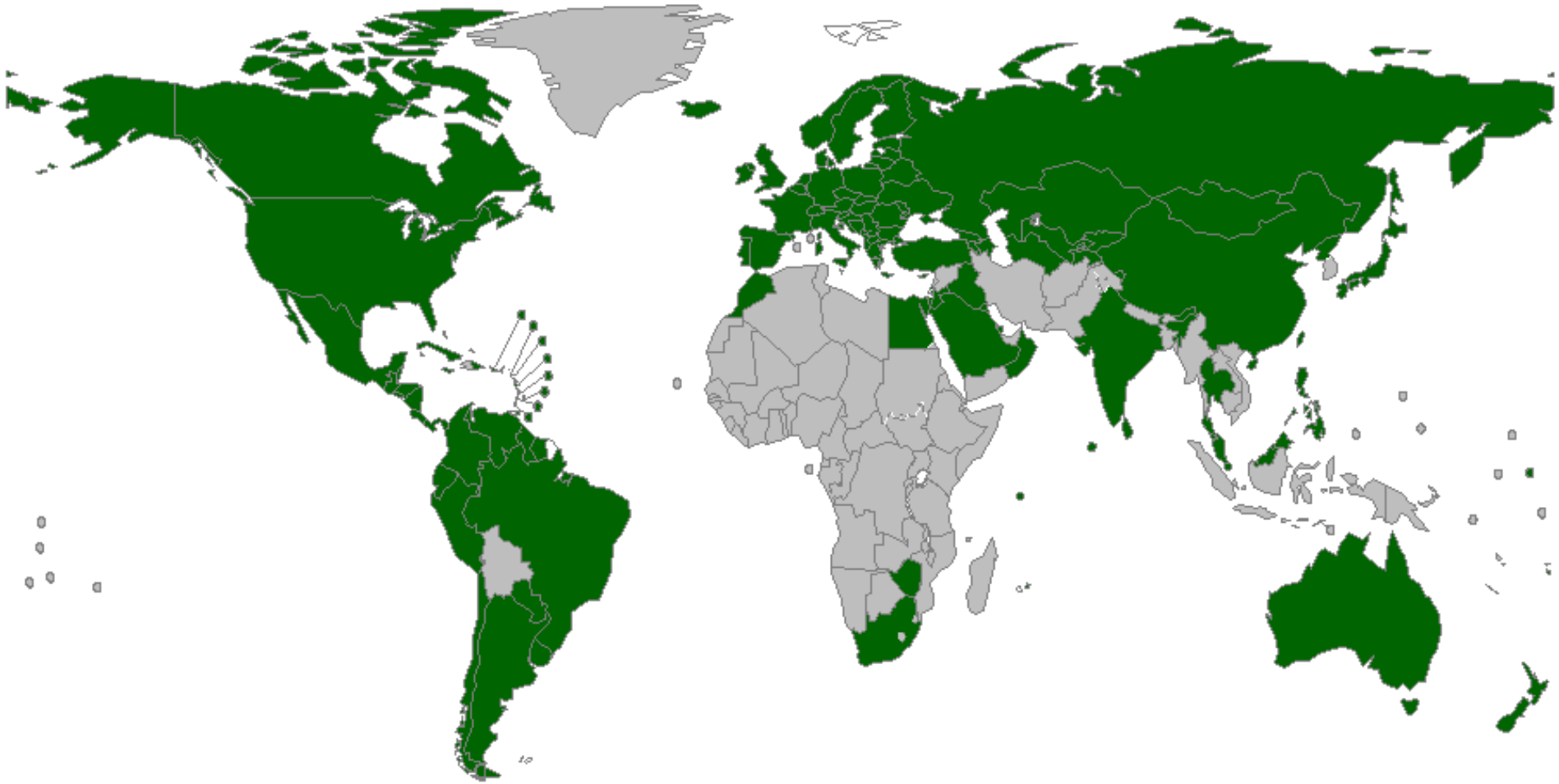
Incidence *not* directly measured in most HBCs



Prevalence surveys 1990 – 2015 (completed and planned)



Data on TB deaths (HIV-) from vital registration and surveys

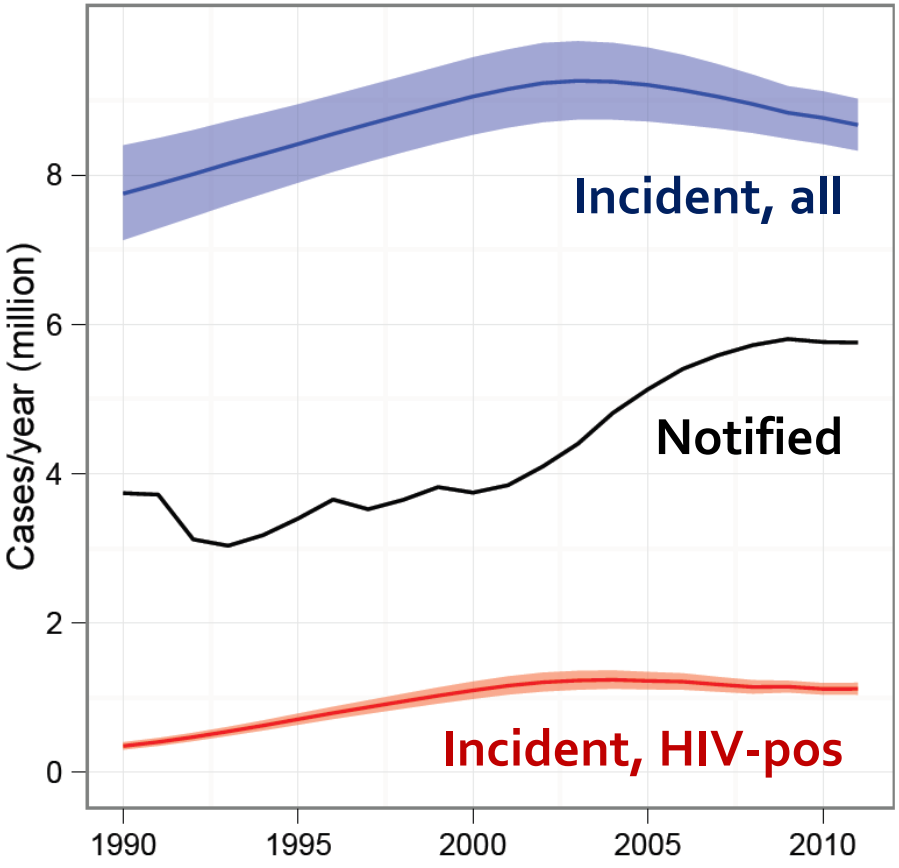


Projections

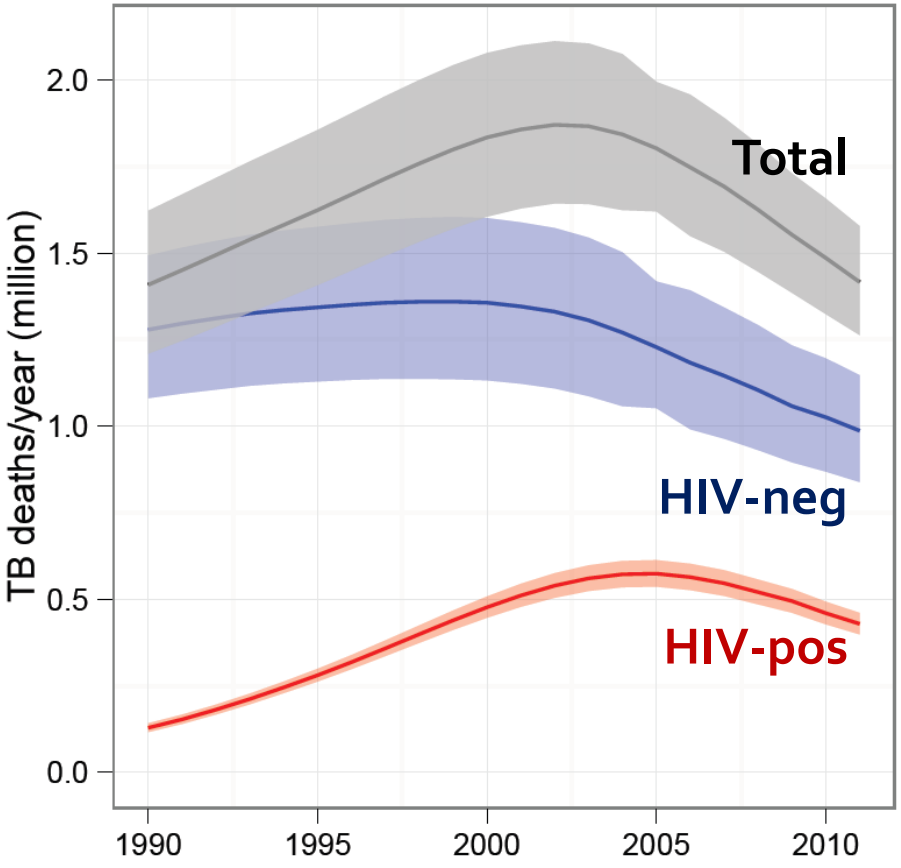
Once you know what it is you want to be true,
instinct is a very useful device
for enabling you to know that it is

Douglas Adams

Global burden since 1990

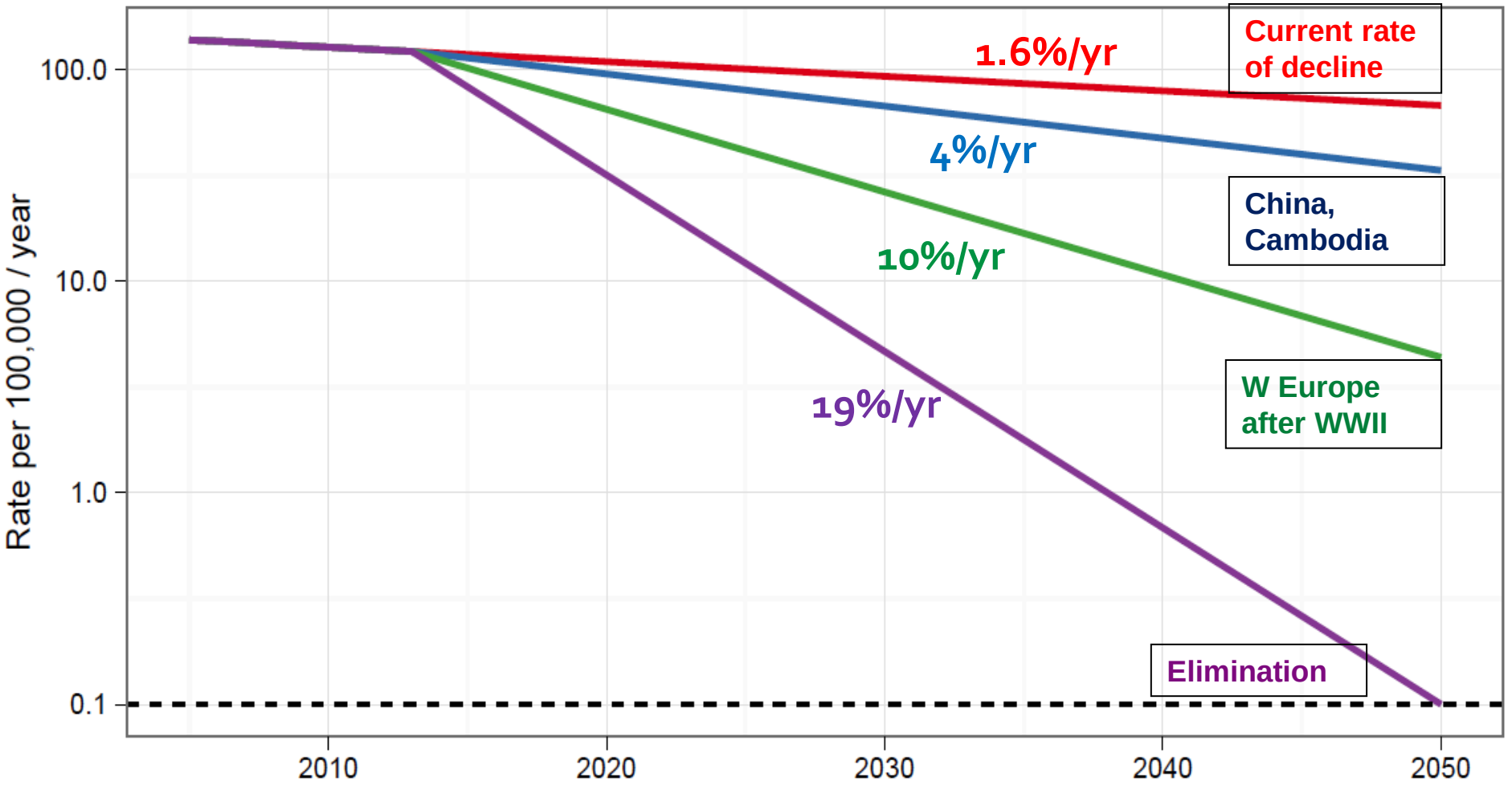


Number of new cases (million)

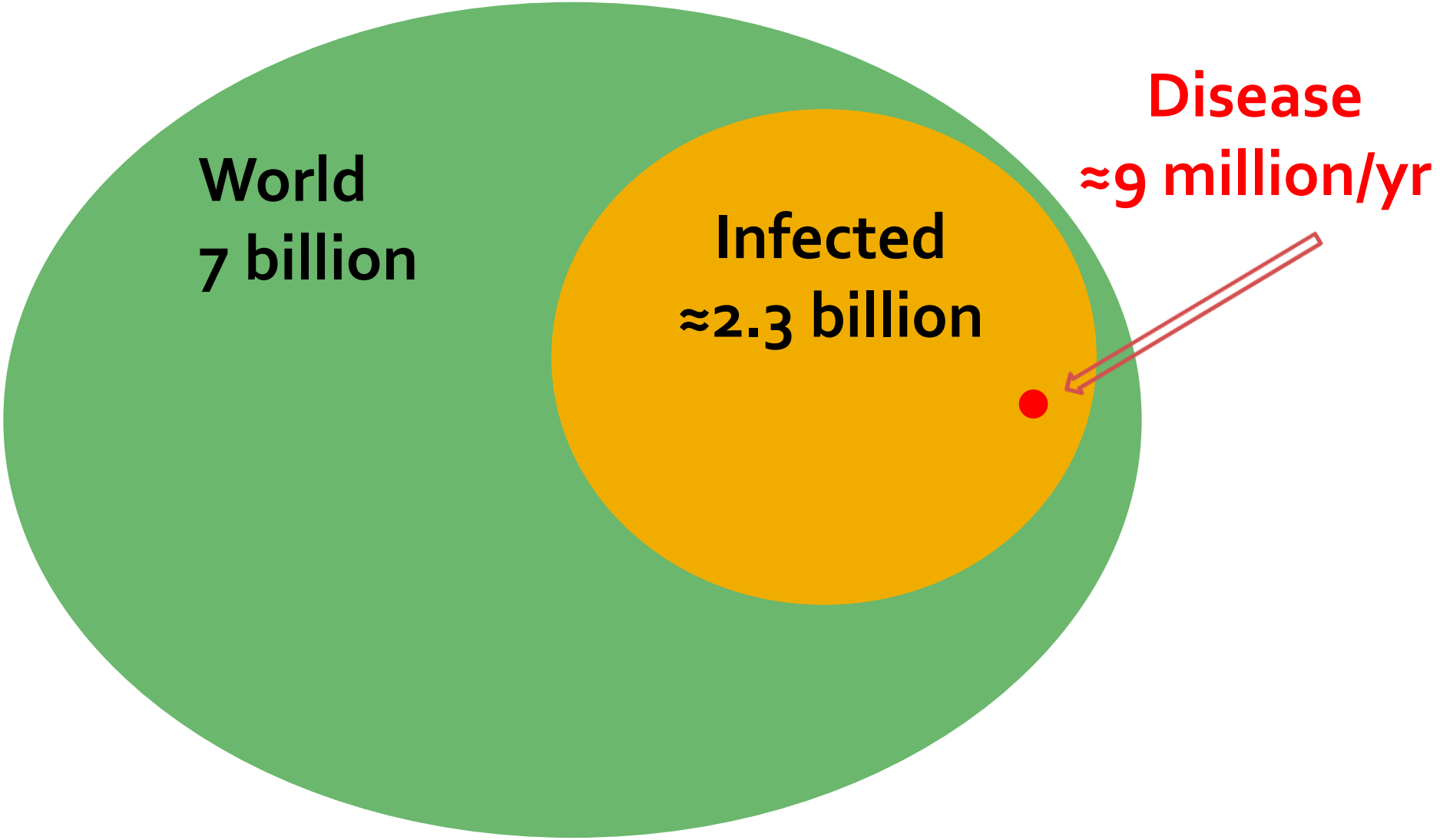


Number of TB deaths (million)

Can we reach TB elimination by 2050? (< 1 case / million)



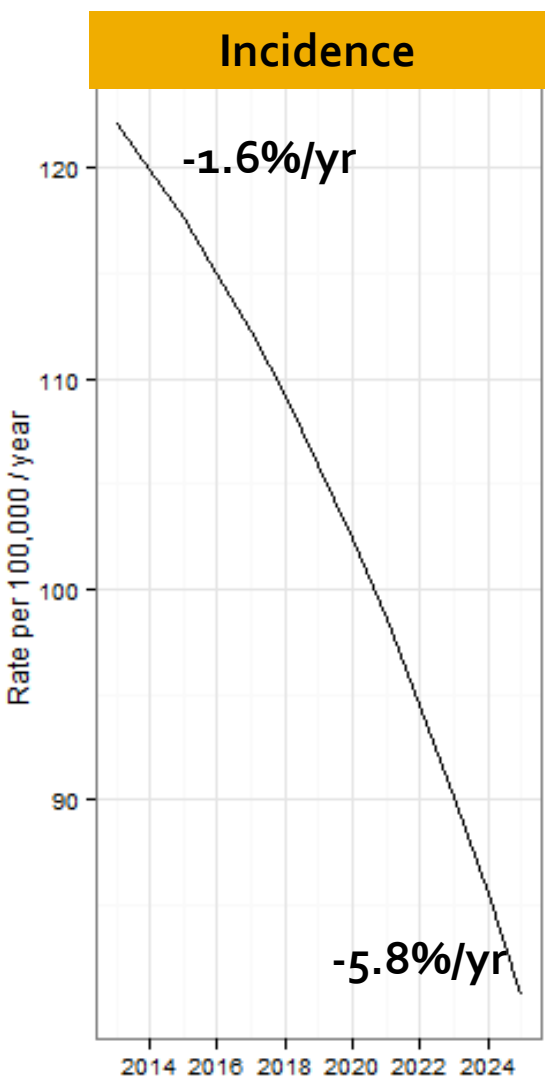
Can we prevent TB?

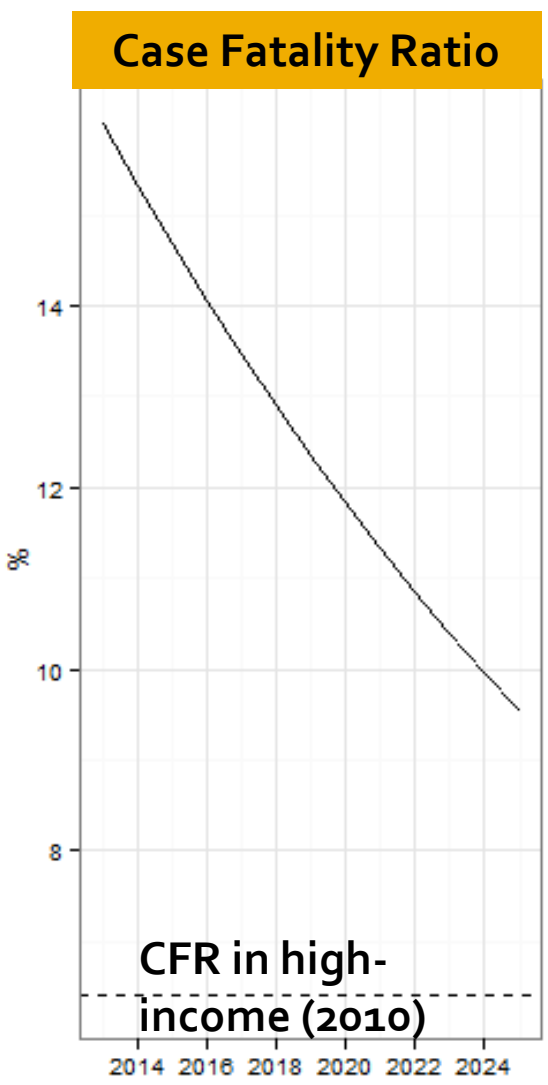


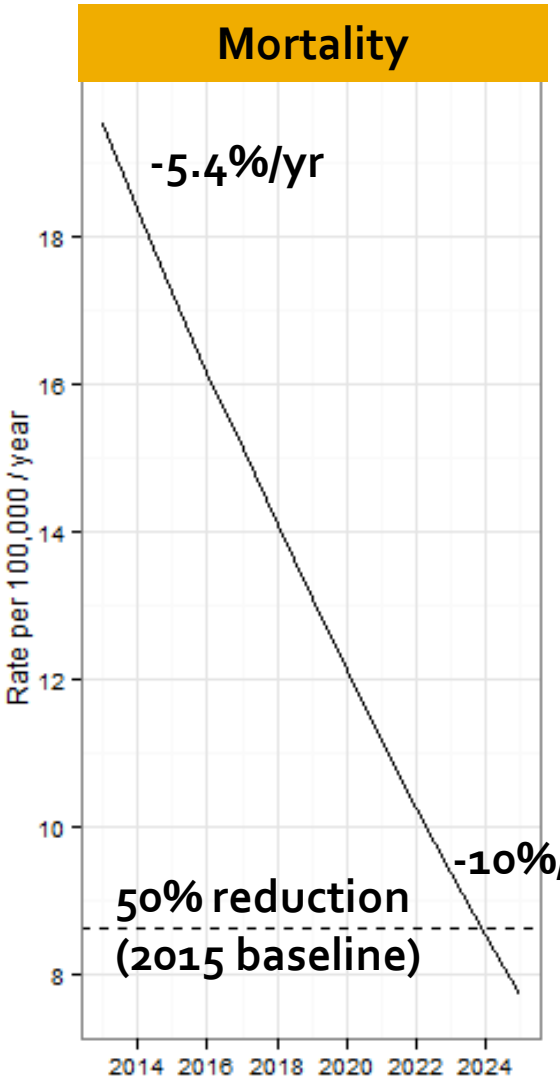
Reducing case fatality

- 16% globally is a very high rate compared with 2.5% in New Zealand
- **To drive the CFR downwards**, we need to
  - Detect TB earlier
  - Ensure high cure rates in detected but currently not routinely reported cases
  - Improve treatment outcomes in HIV-associated TB and MDR-TB

50% reduction in mortality 2015–2025







Can we halve mortality in 10 years?

- HIV declining, ART coverage expanding, IPT
- New rapid diagnostics
- Health insurance
- PPM expansion
- New drugs in phase 3 will contribute to improving global MDR-TB outcomes
- *New vaccines advancing towards phase 3*

Proposed post-2015 TB targets

- 50% reduction in TB mortality (2015-2025)
- ***Overarching target on TB morbidity to be determined***
- ***TB elimination by 2050***

- *Targets specific to each strategy component, including treatment success rate, etc…*, with country-level adaptation

Country-level adaptation

Reality is frequently inaccurate

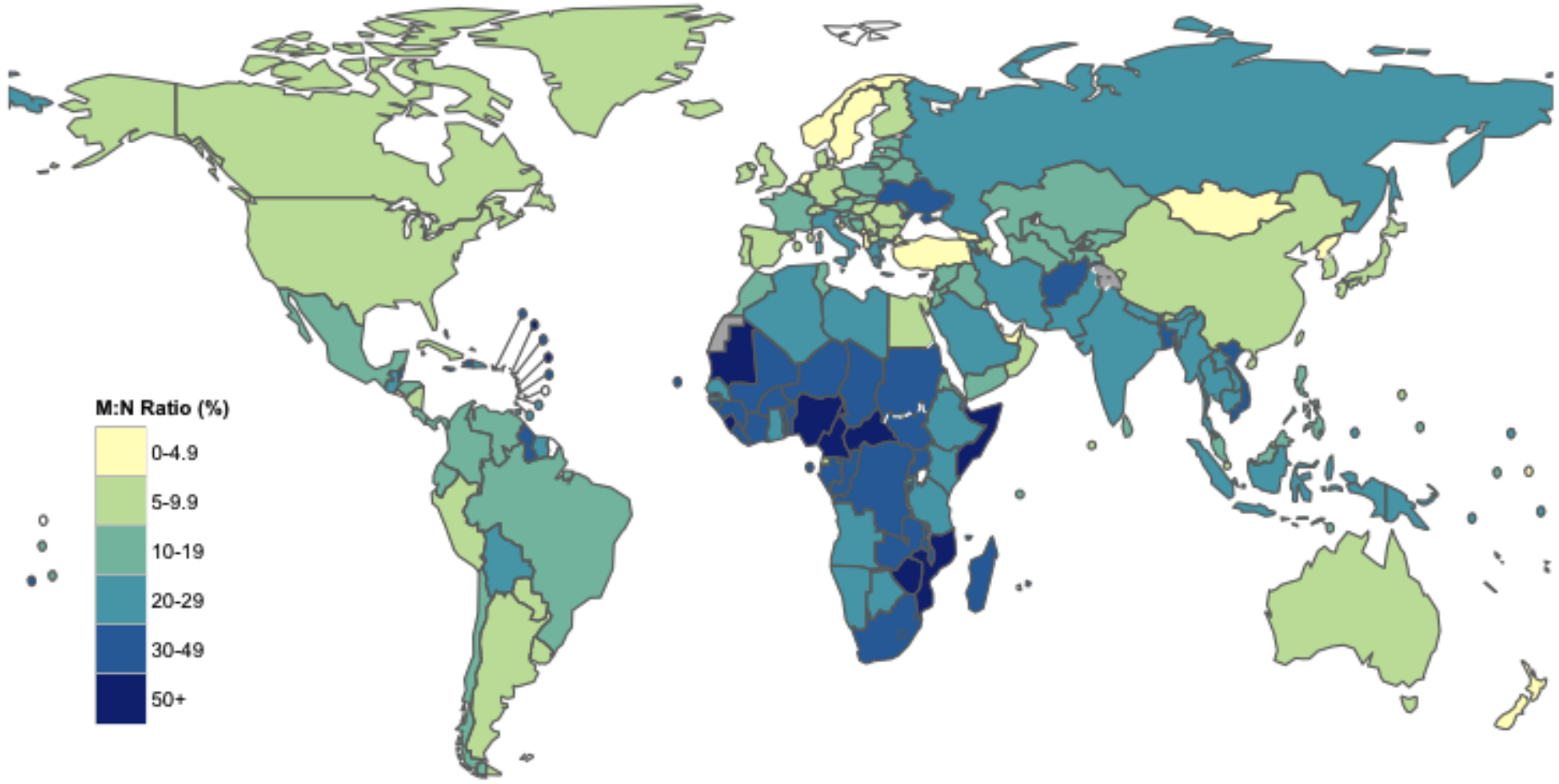
Douglas Adams

A new indicator, the MN ratio*

- **Driven downwards** by:
  - Early diagnosis
  - Reduced under-reporting
  - Better quality of care (including TBHIV and MDR)
- **Measureable at subpopulation level** (e.g. in children, in women)
- Not affected by uncertainty about incidence
- Can be used for **national target setting**

***MN = Mortality:Notification**

Inequities in Mortality:Notifications



In summary,

- Proposed new targets
  - 50% reduction in mortality over 2015-2025
  - *Morbidity target*
- Very ambitious but feasible
- Adapt new strategy with country specific indicators (e.g. MN ratio) and component-specific targets, including success rate

- Dramatic changes needed to eliminate TB as soon as 2050 (e.g. post-exposure vaccination)

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