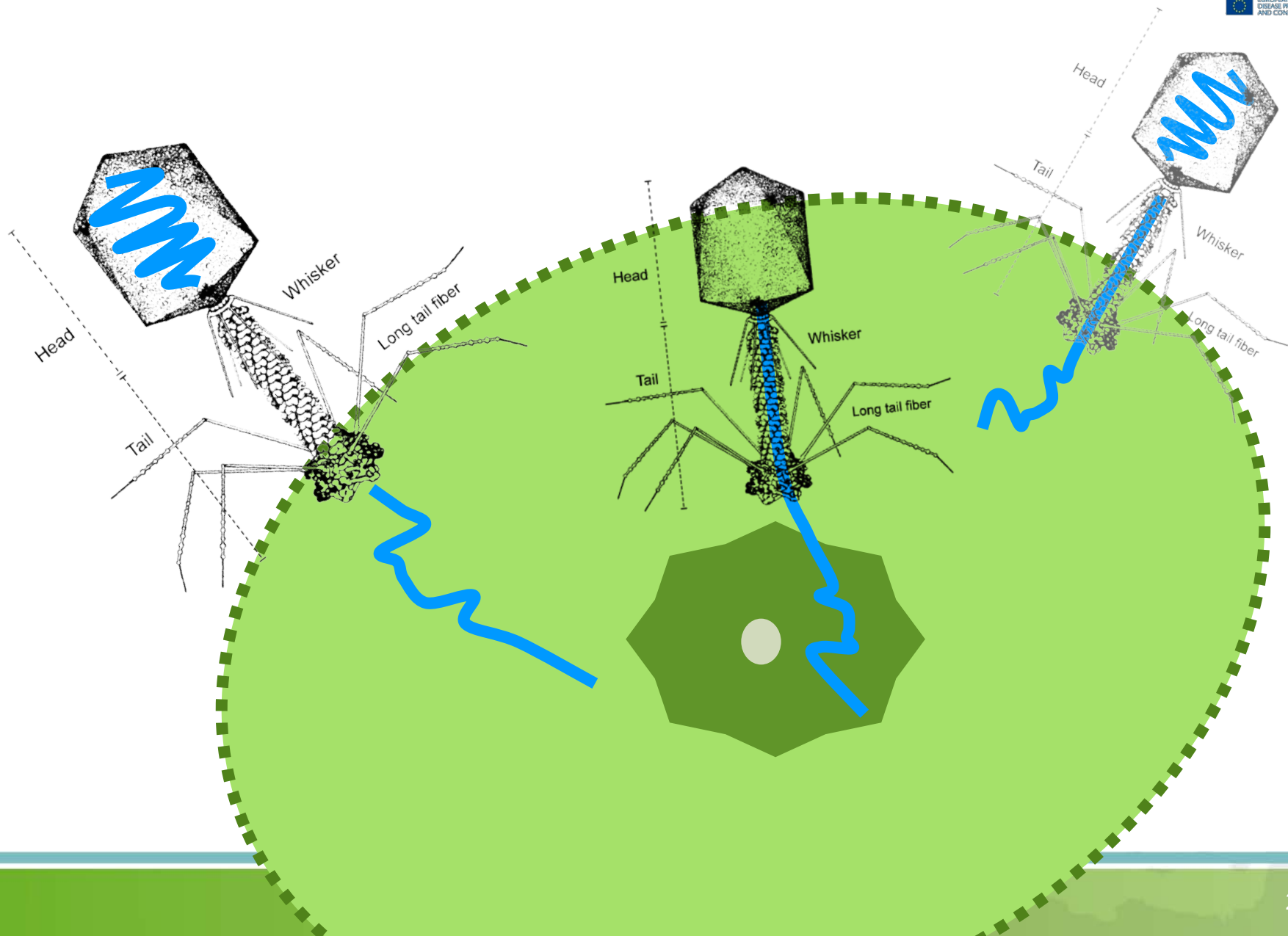




Looking at future disease threats and taking action –Linking science and action

Marc Sprenger, Director
European Centre for Disease Prevention and Control
Atlanta, 1 November 2009

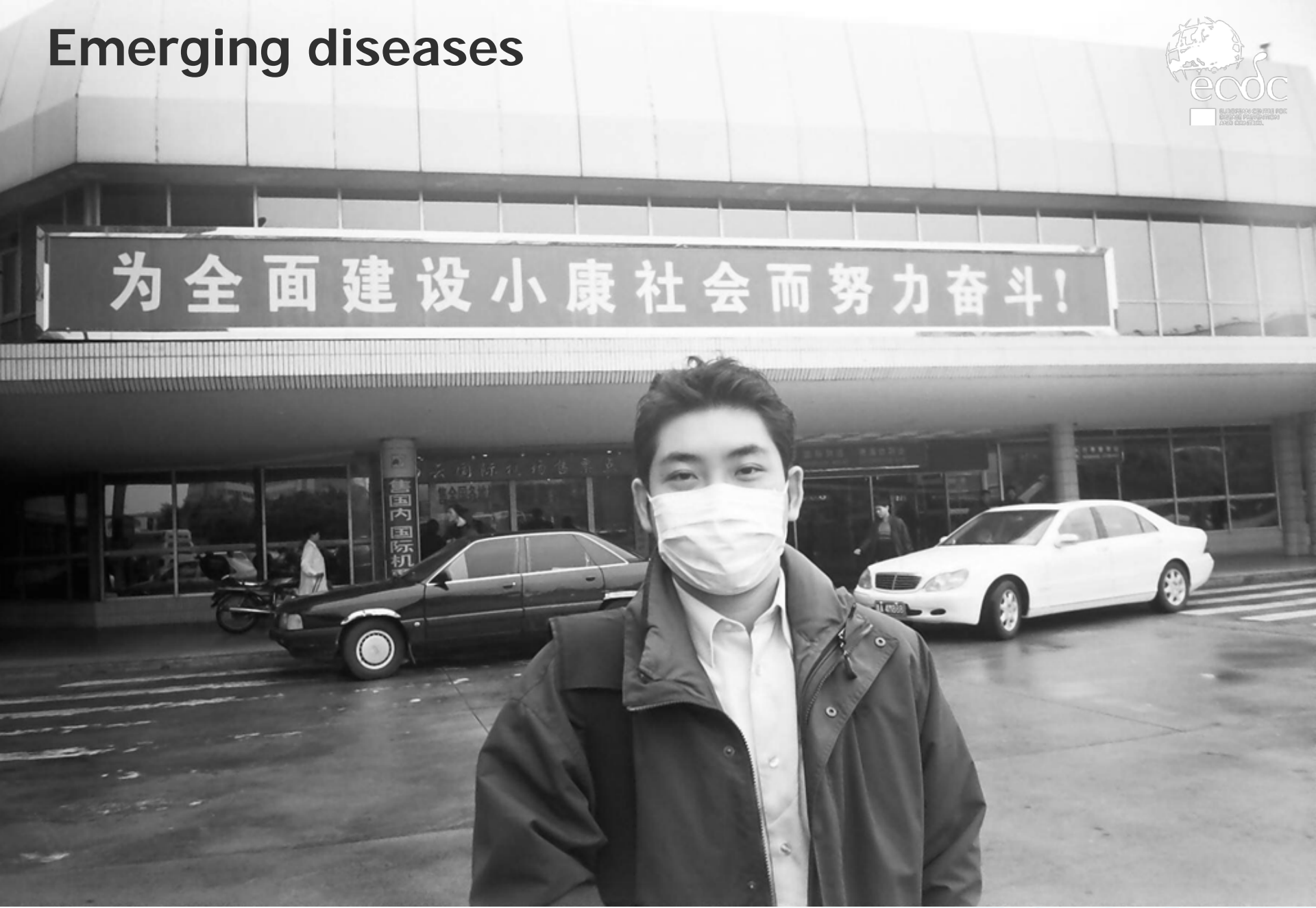
Future disease threats



Geographic origins of events with emerging infectious diseases, 1940 to 2004



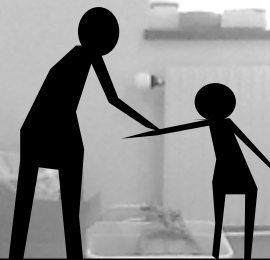
Emerging diseases



Disease drivers!



Environmental
change and
globalisation



Social and
economic
drivers of
disease



Public health

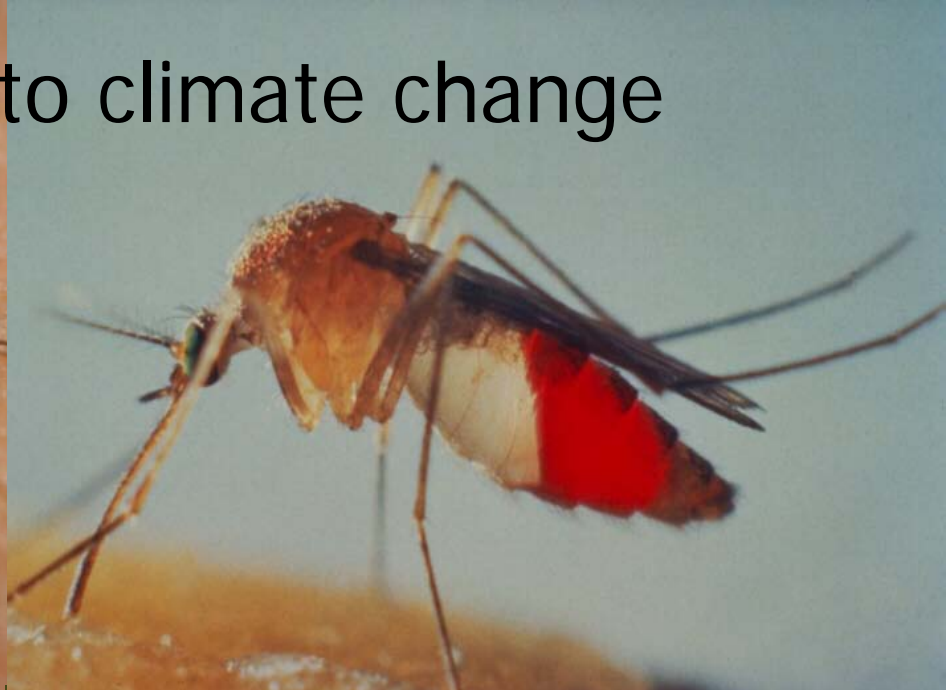
Disease drivers



Environ-
mental
change and
globalisation



Vectors sensitive to climate change



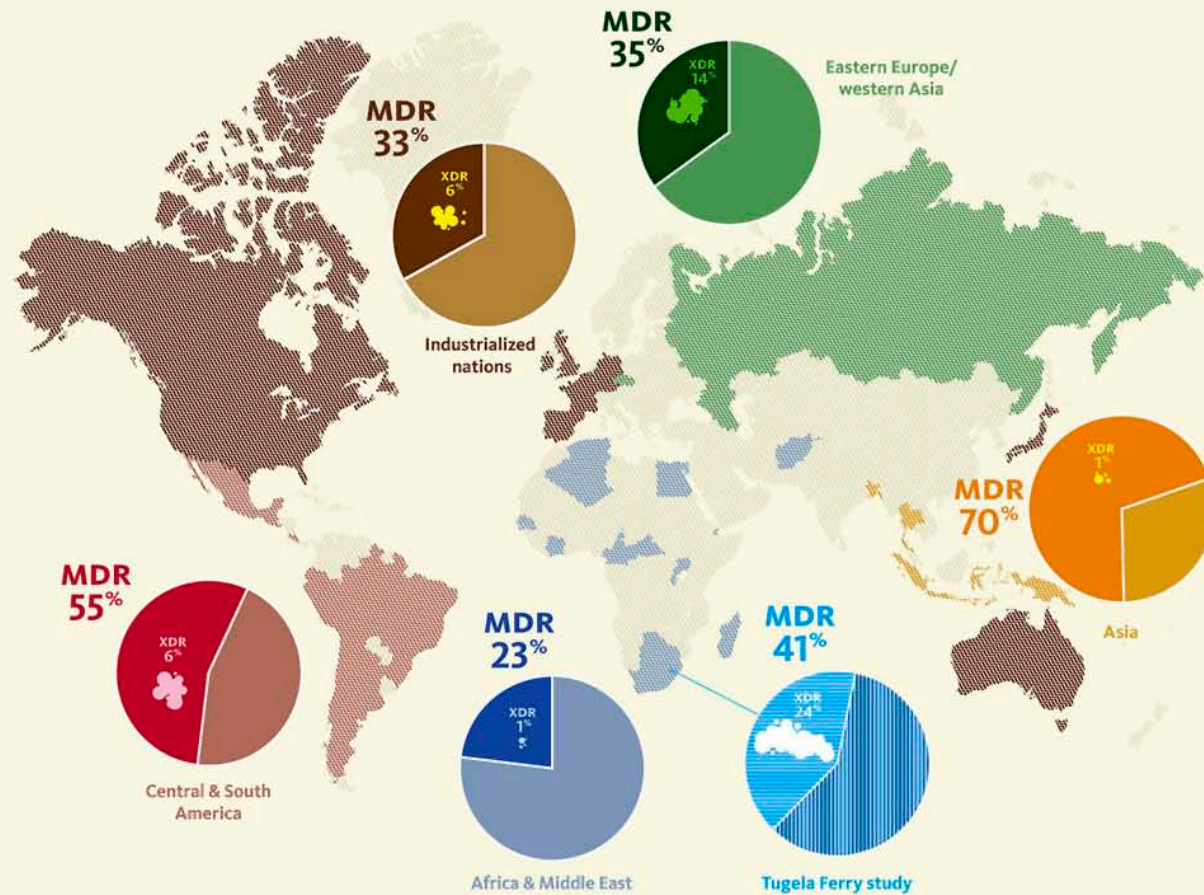
Disease drivers



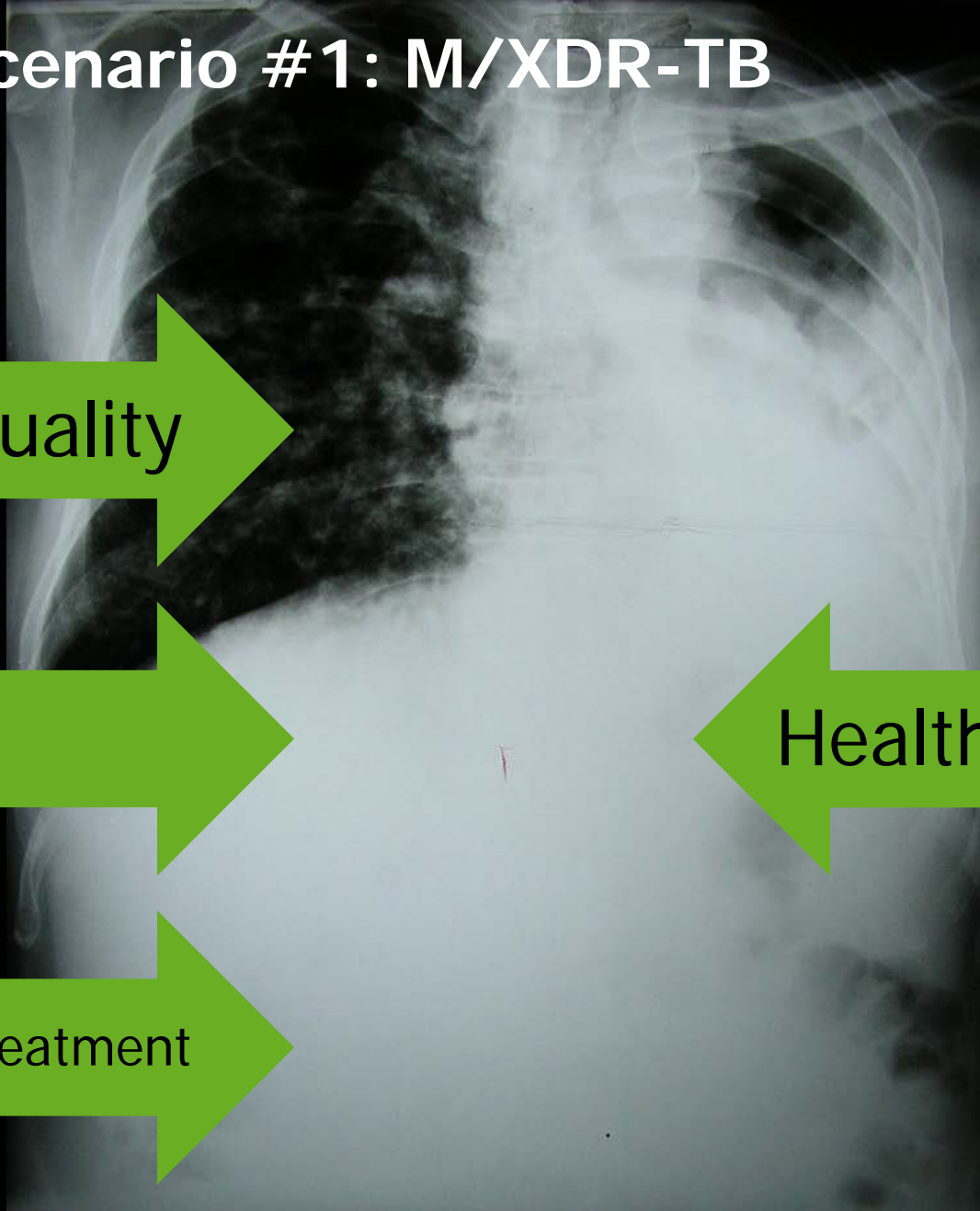
Social and
economic
drivers of
disease



Sample scenario #1: M/XDR-TB



Sample scenario #1: M/XDR-TB



Social inequality

Migration

Adherence to treatment

Healthcare

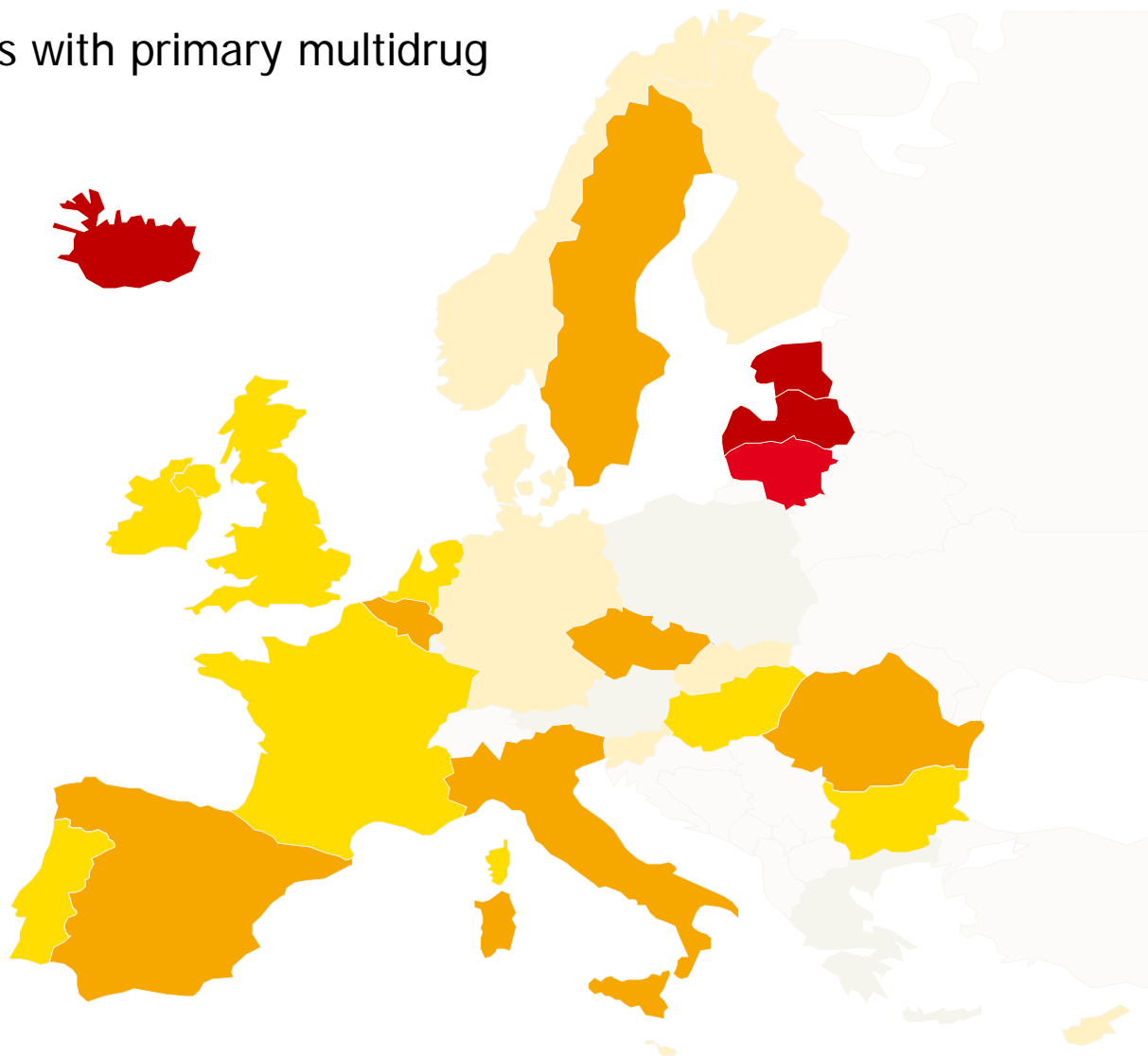
Disease drivers

Public health

LABORATORIES

Multidrug-Resistant (MDR) TB remains a problem in the EU/EEA

Proportion of notified TB cases with primary multidrug resistance, EU/EEA, 2008



* Multidrug-resistant tuberculosis (MDR TB) is defined as TB that is resistant at least to isoniazid (INH) and rifampicin (RMP), the two most powerful first-line anti-TB drugs.

For the future: Eight threats to fret about:

- extensive antimicrobial resistance;
- vector-borne infections;
- sexually transmitted diseases;
- pandemic influenza;
- foodborne disease outbreaks;
- vaccination fatigue and vaccine resistance;
- dramatic rise in nursing home infections; and
- multidrug and extensively drug-resistant TB (M/XDR-TB)

Anticipation

Action

