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

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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

Environmental change and globalisation

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Vectors sensitive to climate change
Disease drivers

Social and economic drivers of disease
Sample scenario #1: M/ XDR-TB
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Social inequality

Migration

Healthcare

Adherence to treatment
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)