

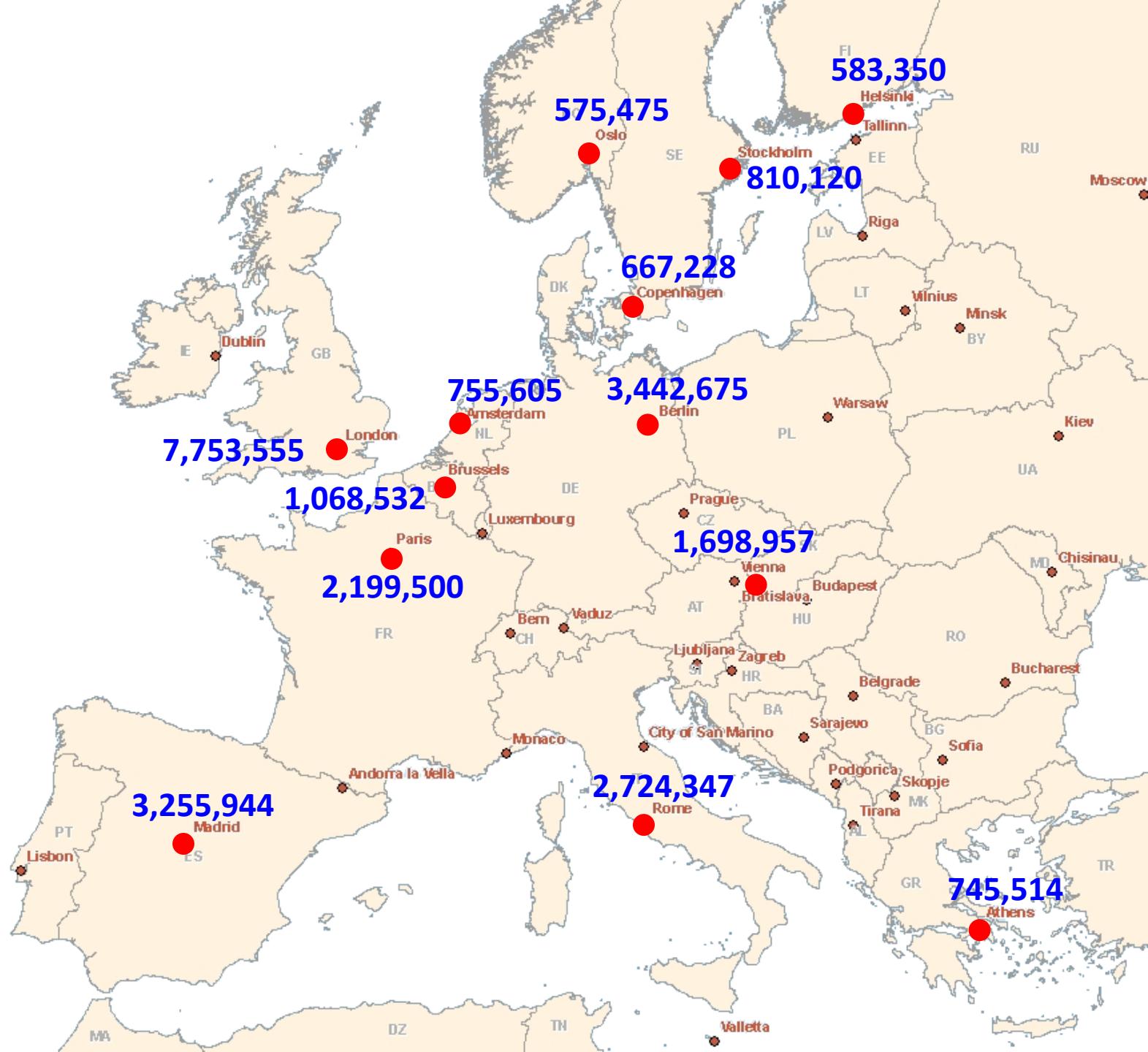
B R E A K F A S T S E S S I O N

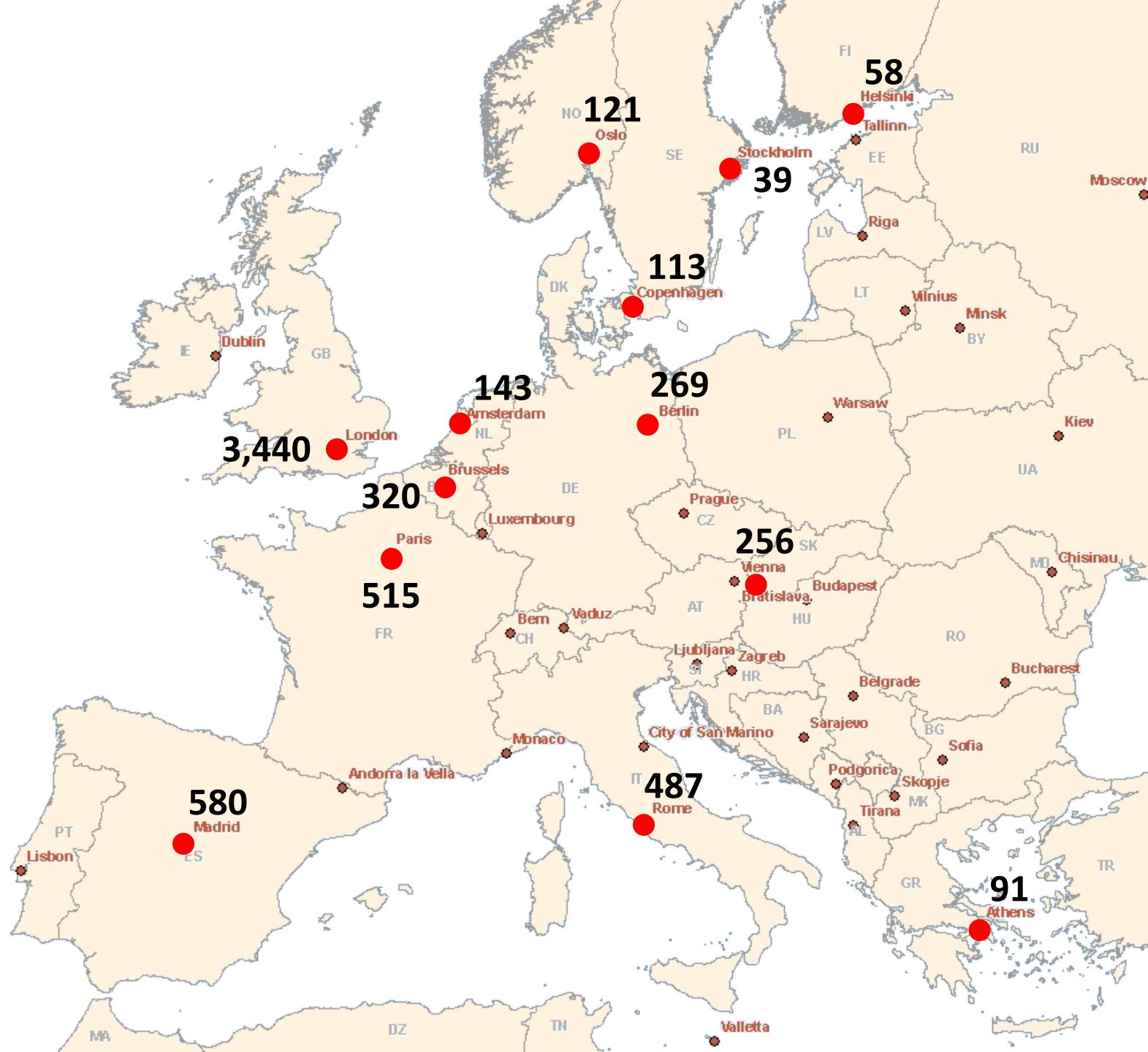


- Plan
 - A bit about TB
 - What I do
 - What I should do

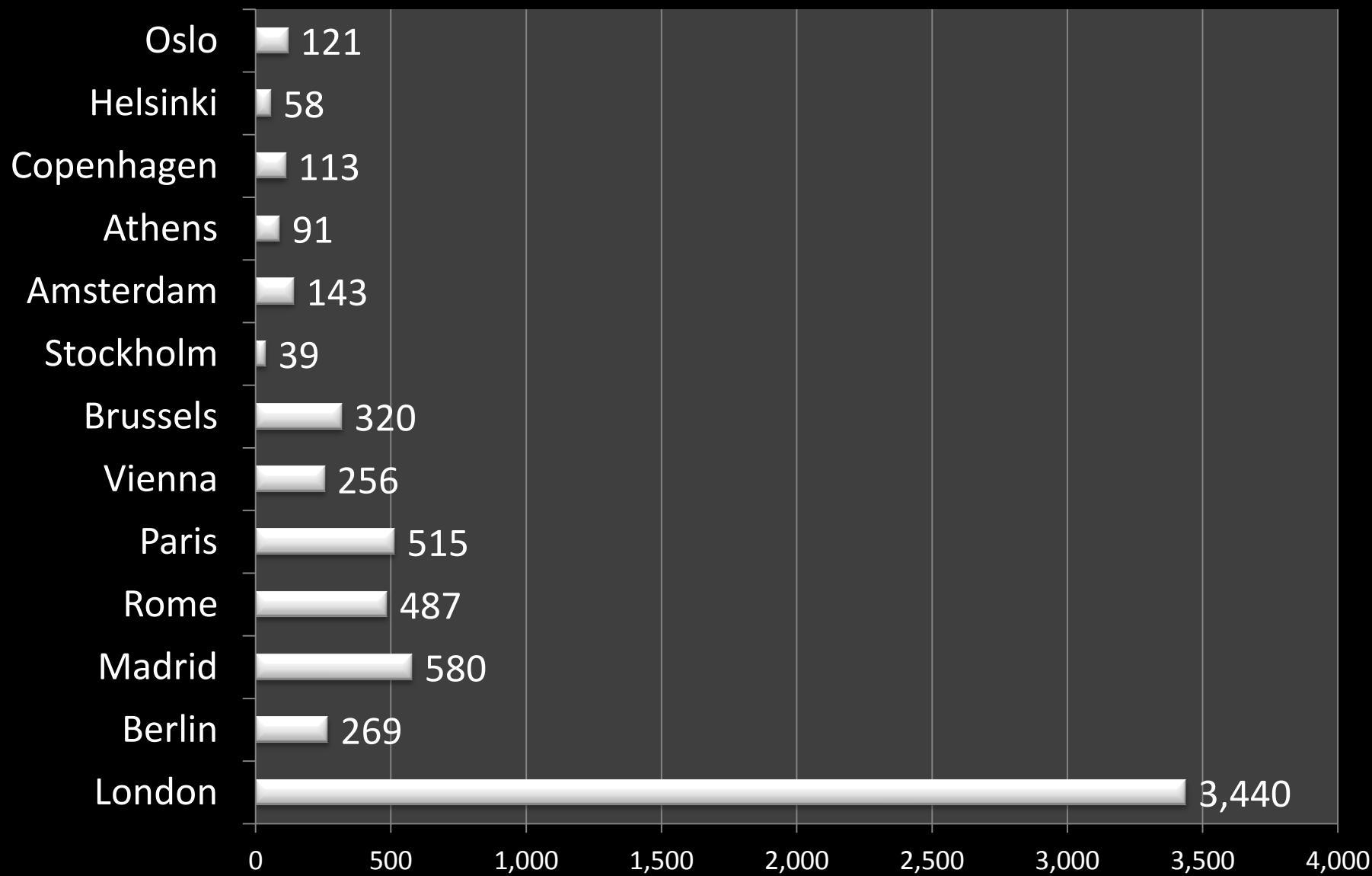




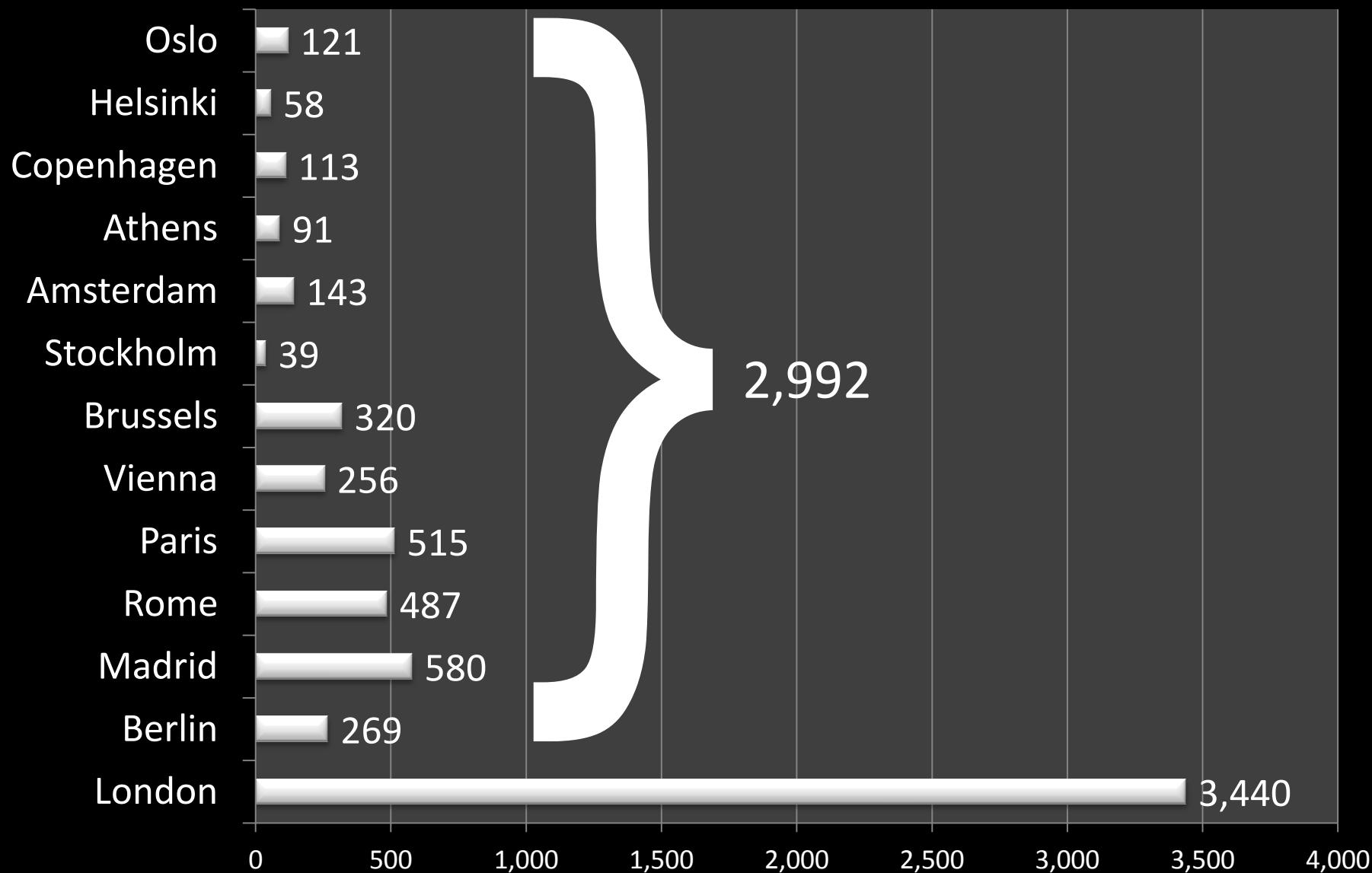




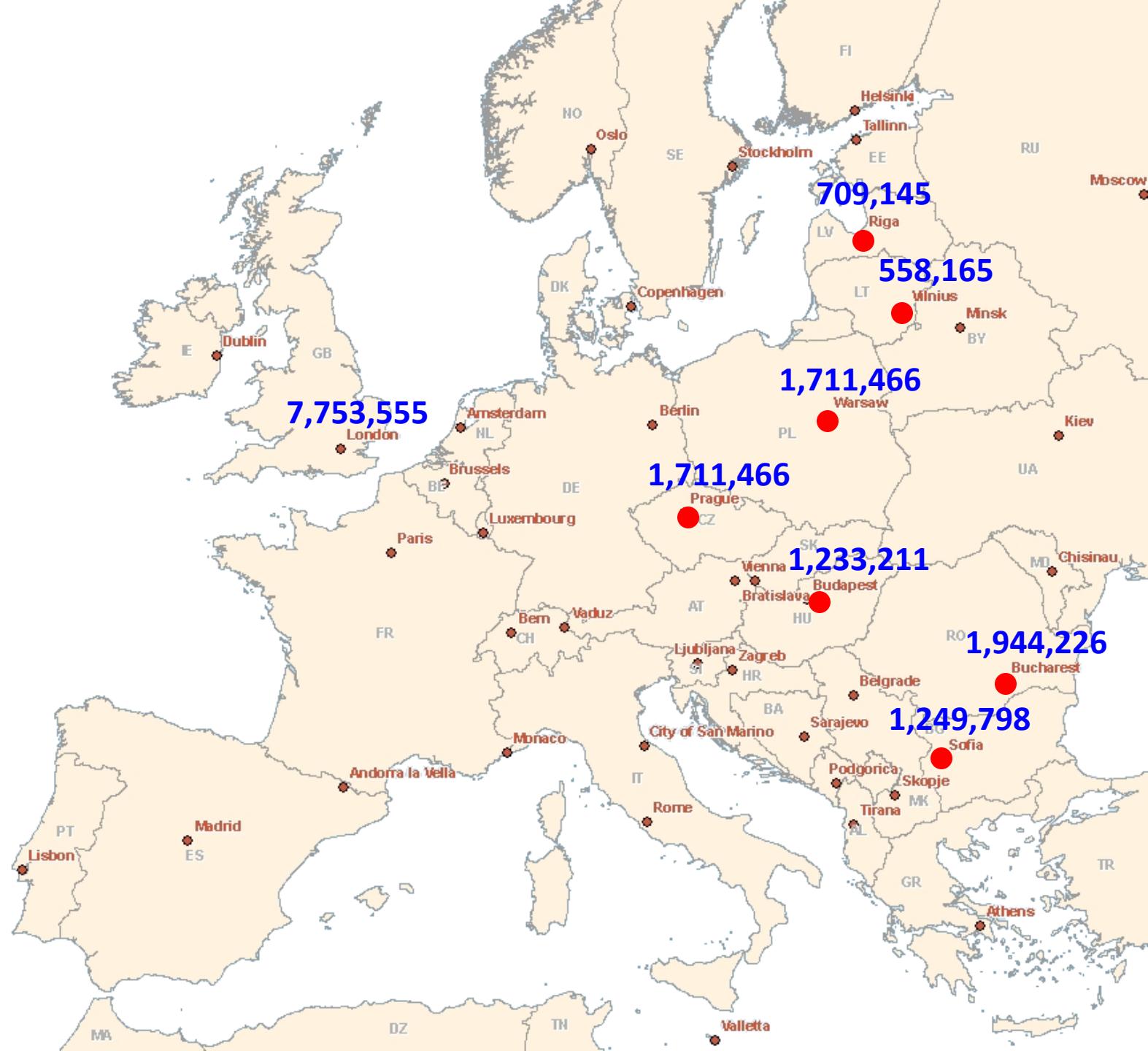
Western European Capital Cities (2009 pop. > 0.5M)

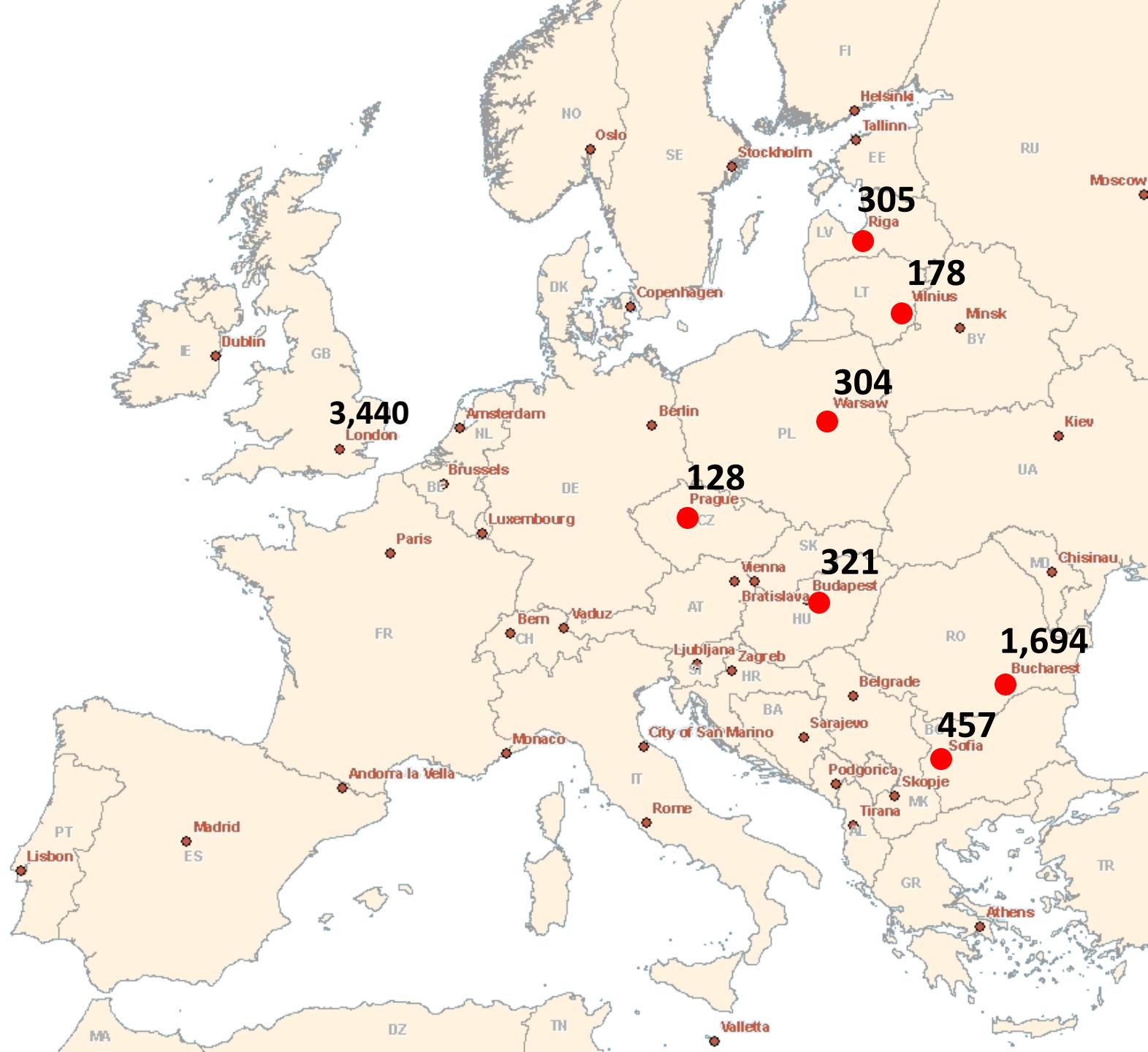


Western European Capital Cities (2009 pop. > 0.5M)

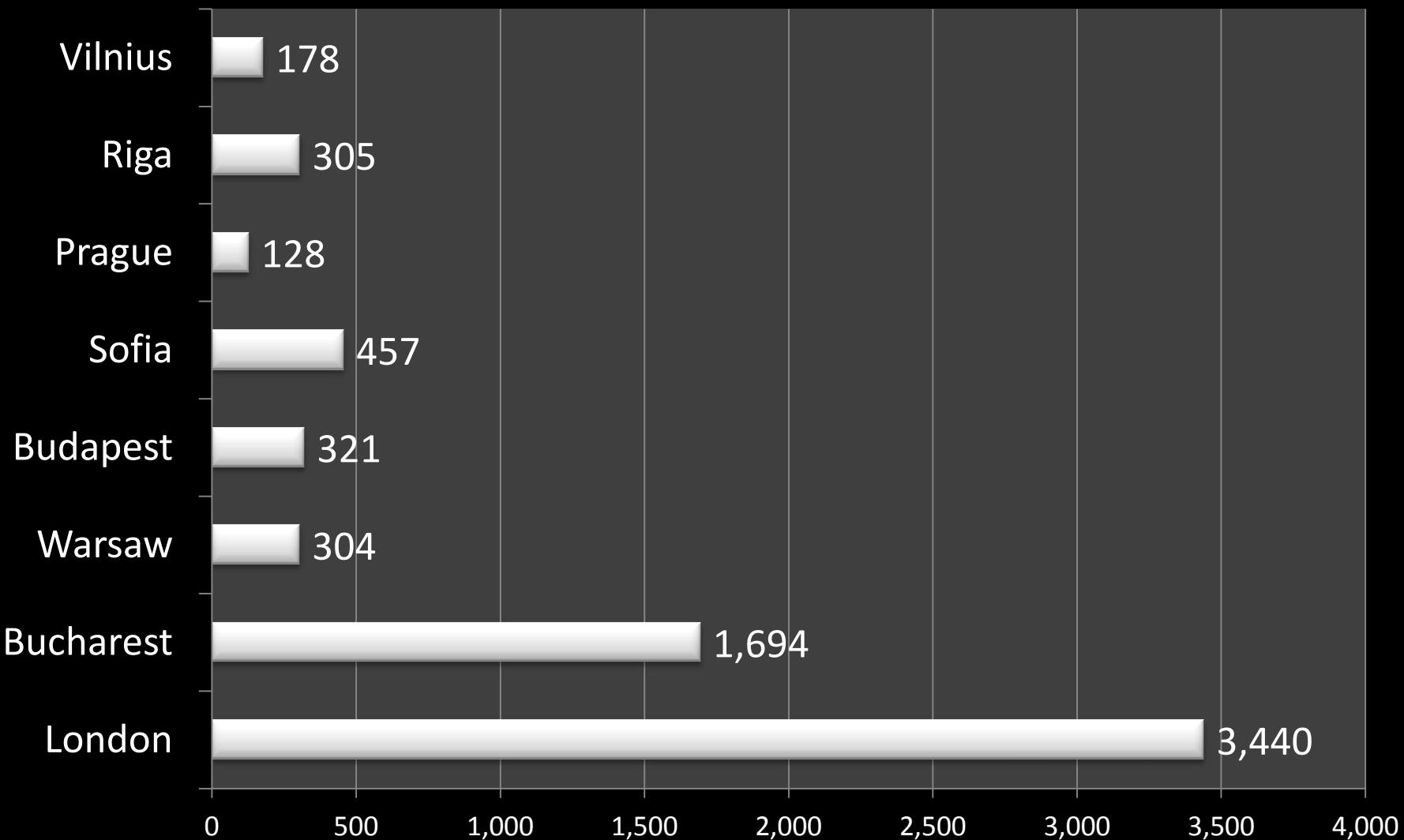




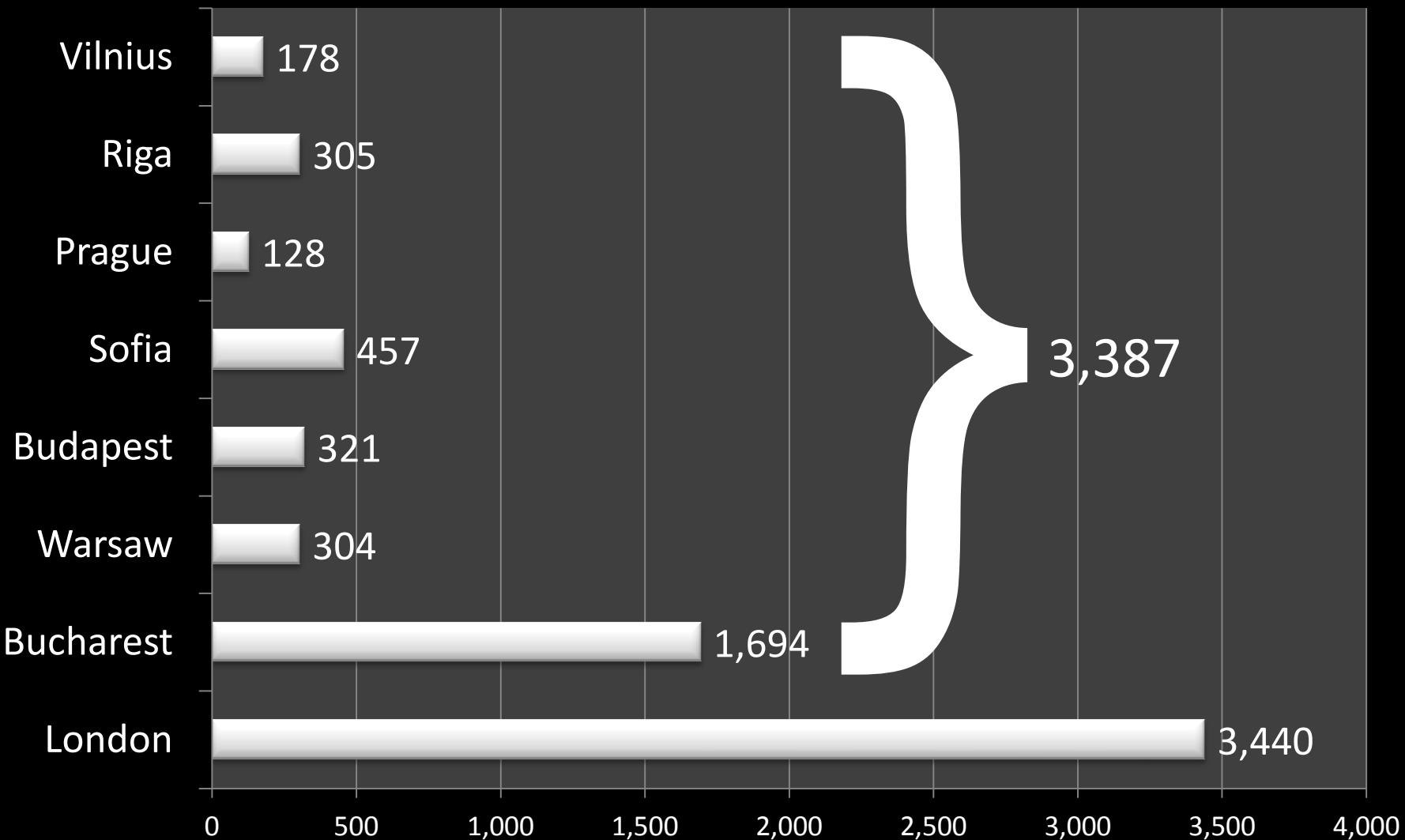




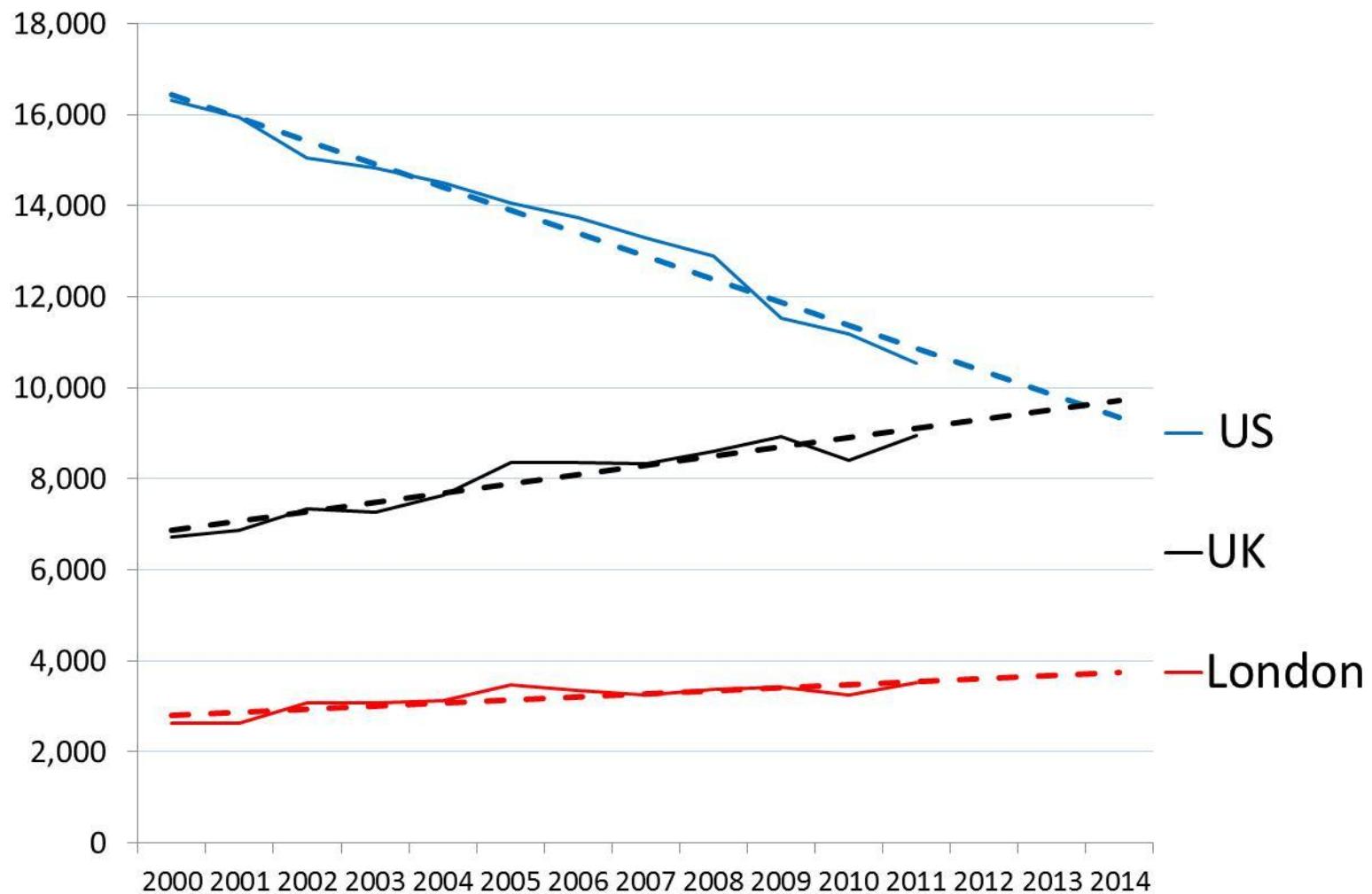
Eastern European Capital Cities (2009 pop. > 0.5M)



Eastern European Capital Cities (2009 pop. > 0.5M)



TB: Comparison case numbers UK, US and London

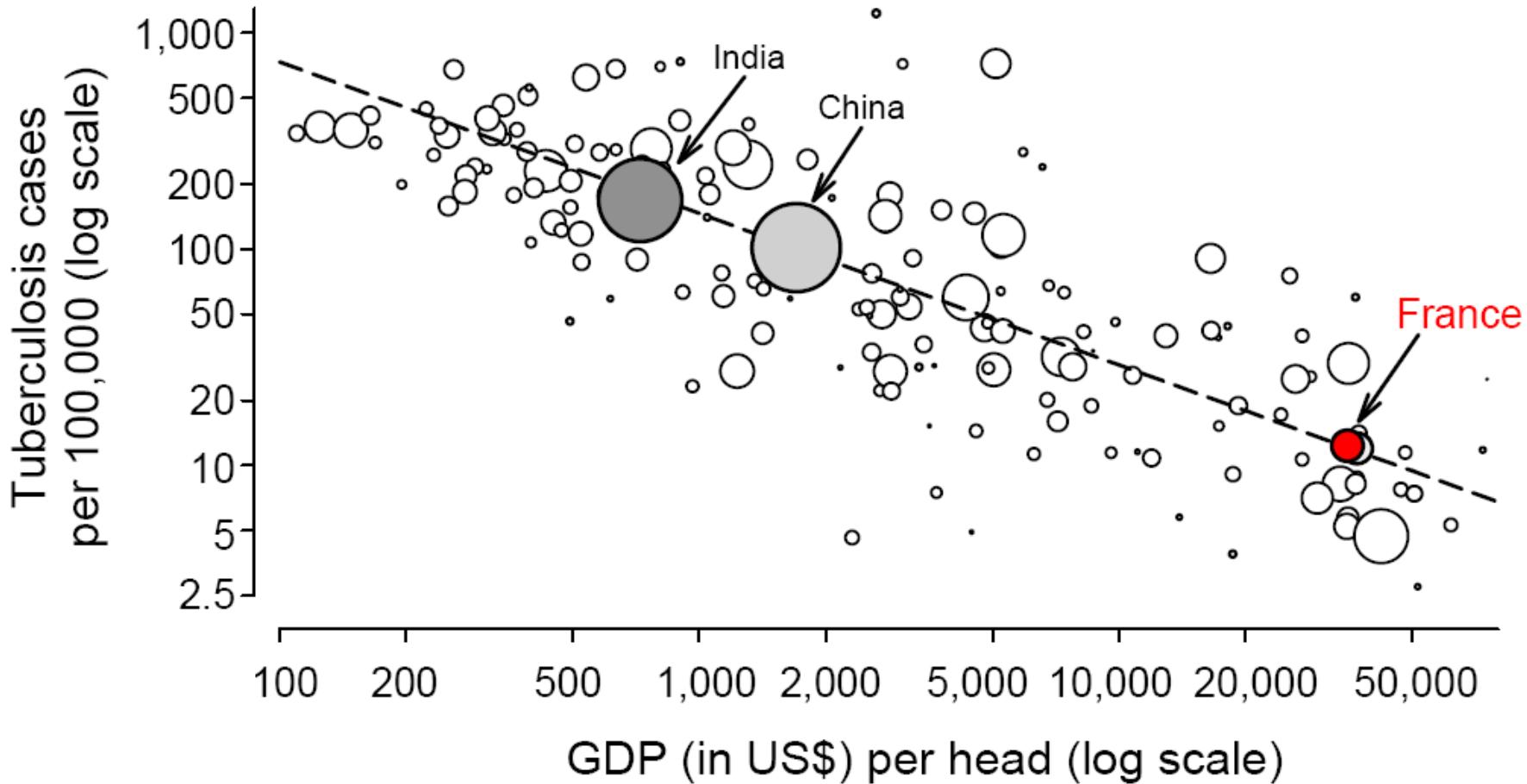


Source: Centers for Disease Control and Health Protection Agency 2013

Infection and Inequality

- Infectious diseases disproportionately affect vulnerable groups in every single EU Member State [1]
- TB especially correlates with income equality [2]
- Vulnerability to infectious diseases is further exacerbated by economic recession [3]

1. Semenza JC, Giesecke J (2008) Intervening on infections in inequality. *American Journal of Public Health* 98: 787–792.
2. Suk JMD, Buscher G, Semenza JC (2009) Wealth inequality and TB elimination in Europe. *Emerging infectious diseases* 15: 1812–1814.
3. Suhrcke M, Stuckler D, Suk JE, et al. The impact of economic crises on communicable disease transmission and control: a systematic review of the evidence. *PLoS One*. 2011;6(6):e20724. Epub 2011 Jun 10.



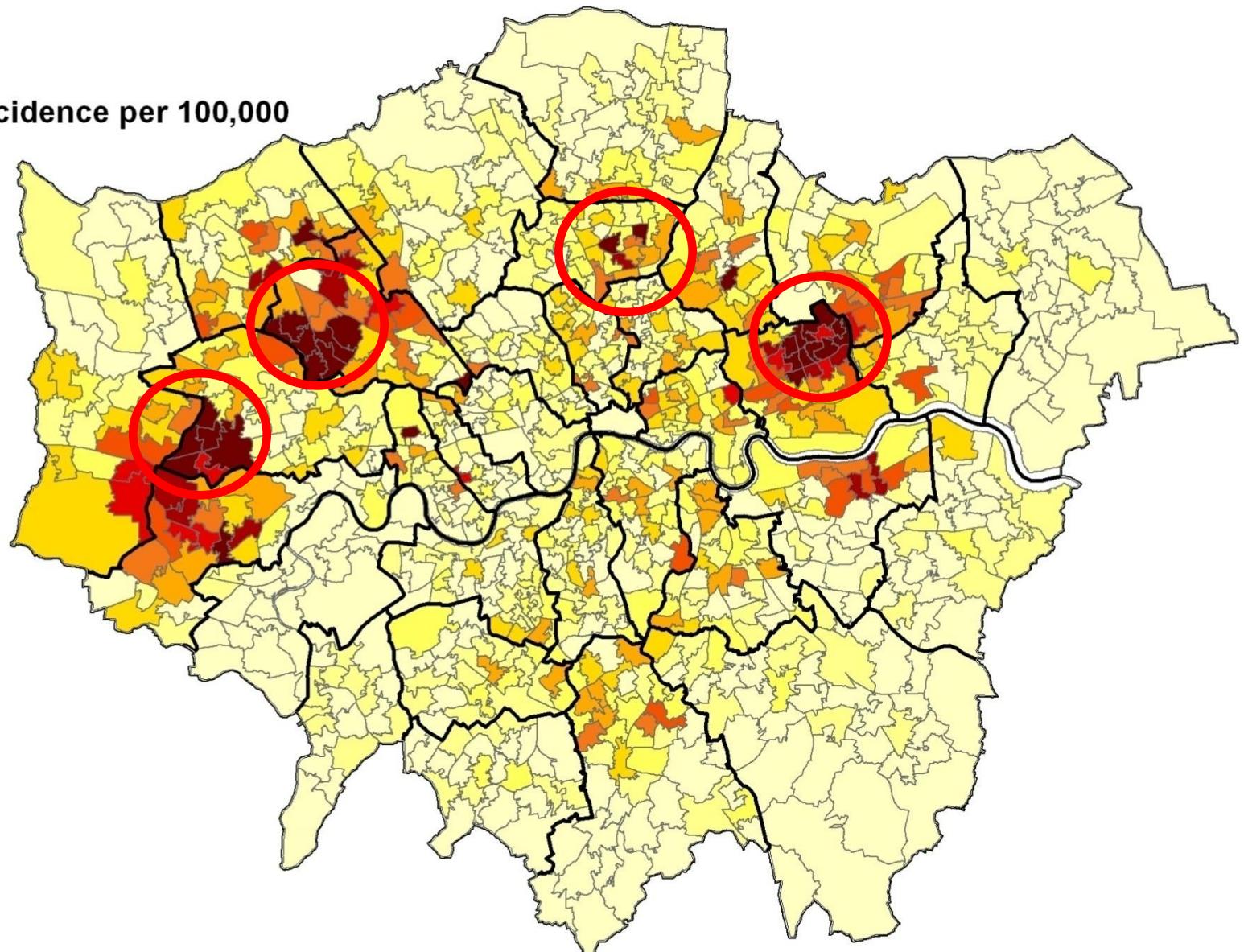
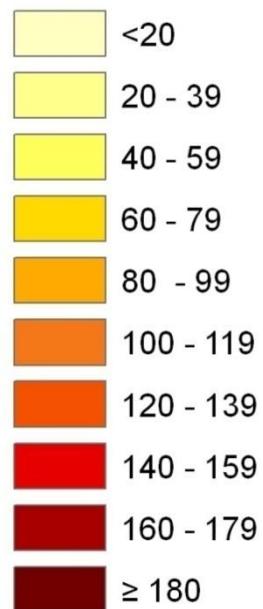
TB in London

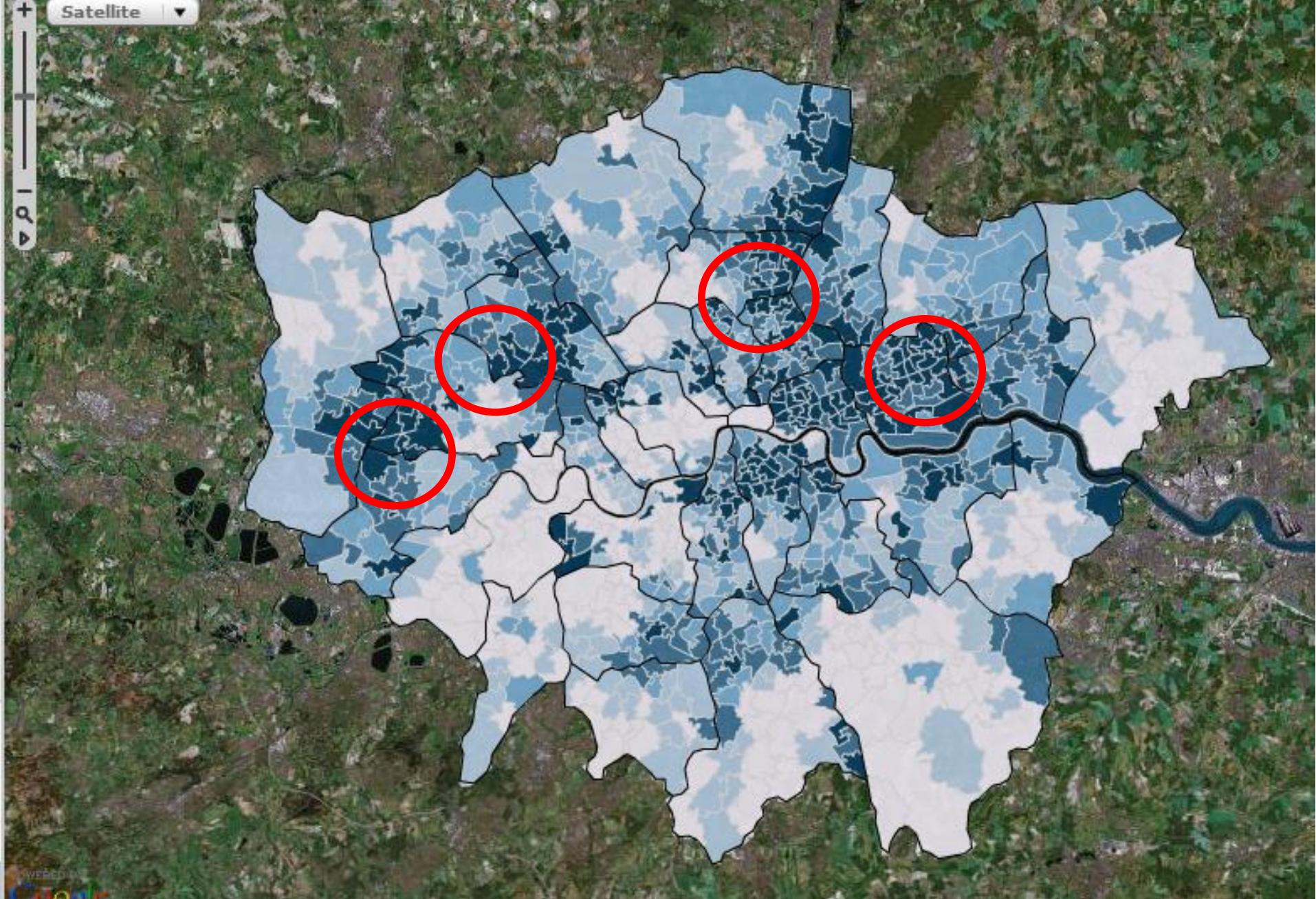
- Highest rates of TB in Western Europe [1]
- 10.2% of cases are now drug resistant [2]
- Significant increase in MDRTB [2]
 - Homelessness independently associated with MDRTB

[1] European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Tuberculosis surveillance and monitoring in Europe 2012. Stockholm: European Centre for Disease Prevention and Control, 2012.
<http://ecdc.europa.eu/en/publications/Publications/1203-Annual-TB-Report.pdf>

[2] Any first line Drug (INH, Rif, E,Z) Tuberculosis in London: Annual report (2011 data). Health Protection Agency London Regional Epidemiology Unit, September 2012.

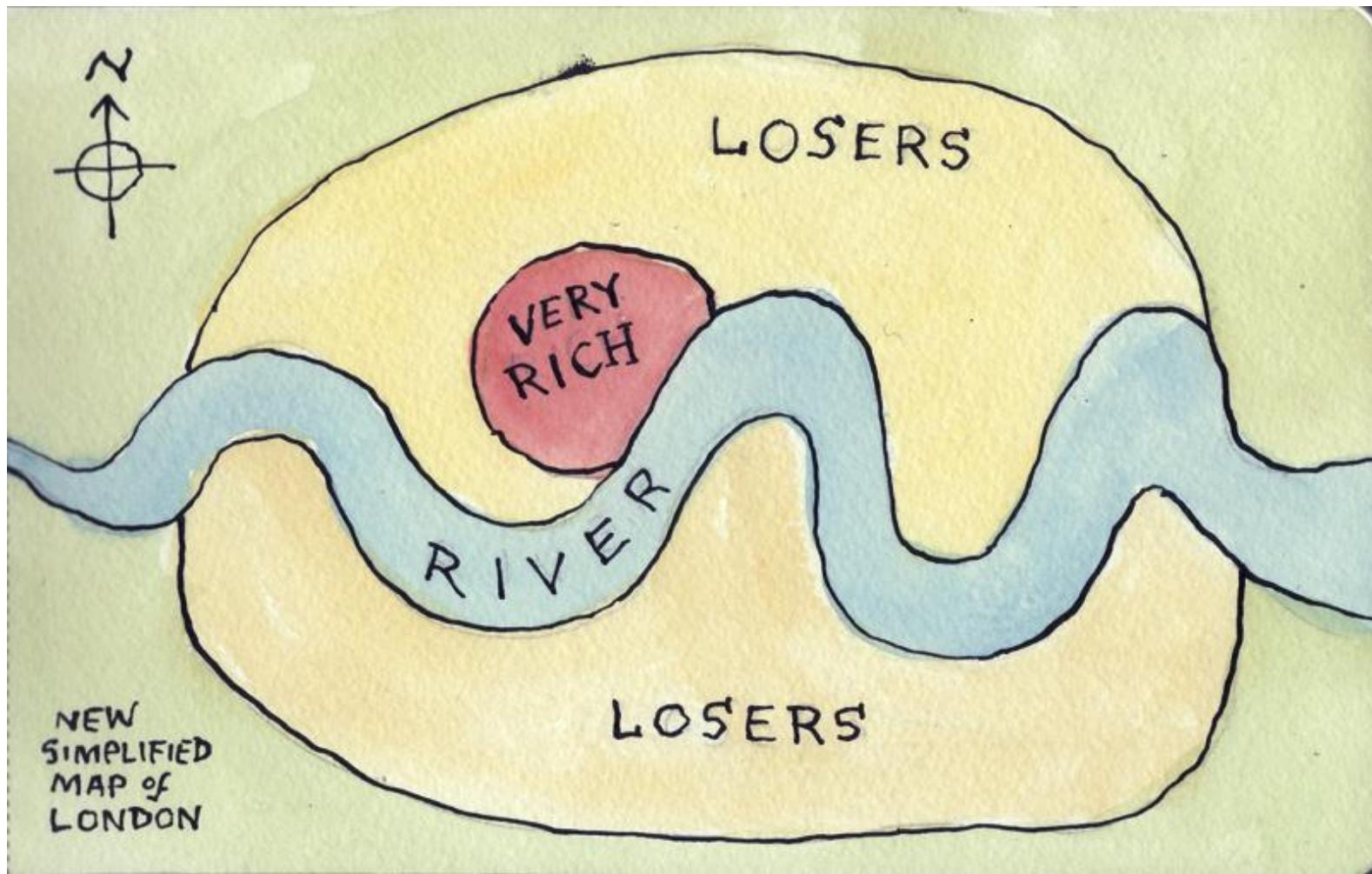
Rate of TB incidence per 100,000

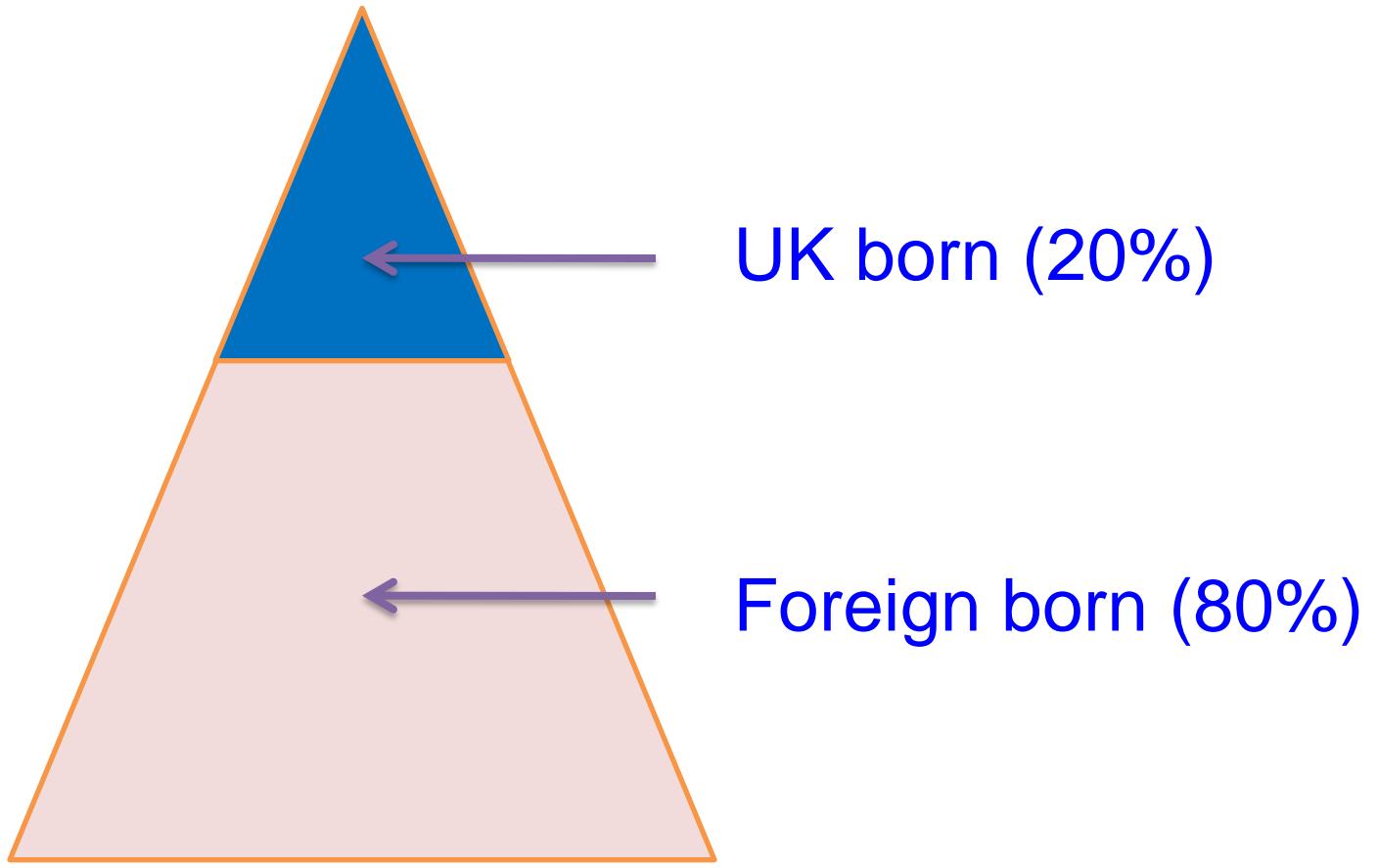




Percentage of Households below 60% of median income <http://data.london.gov.uk>

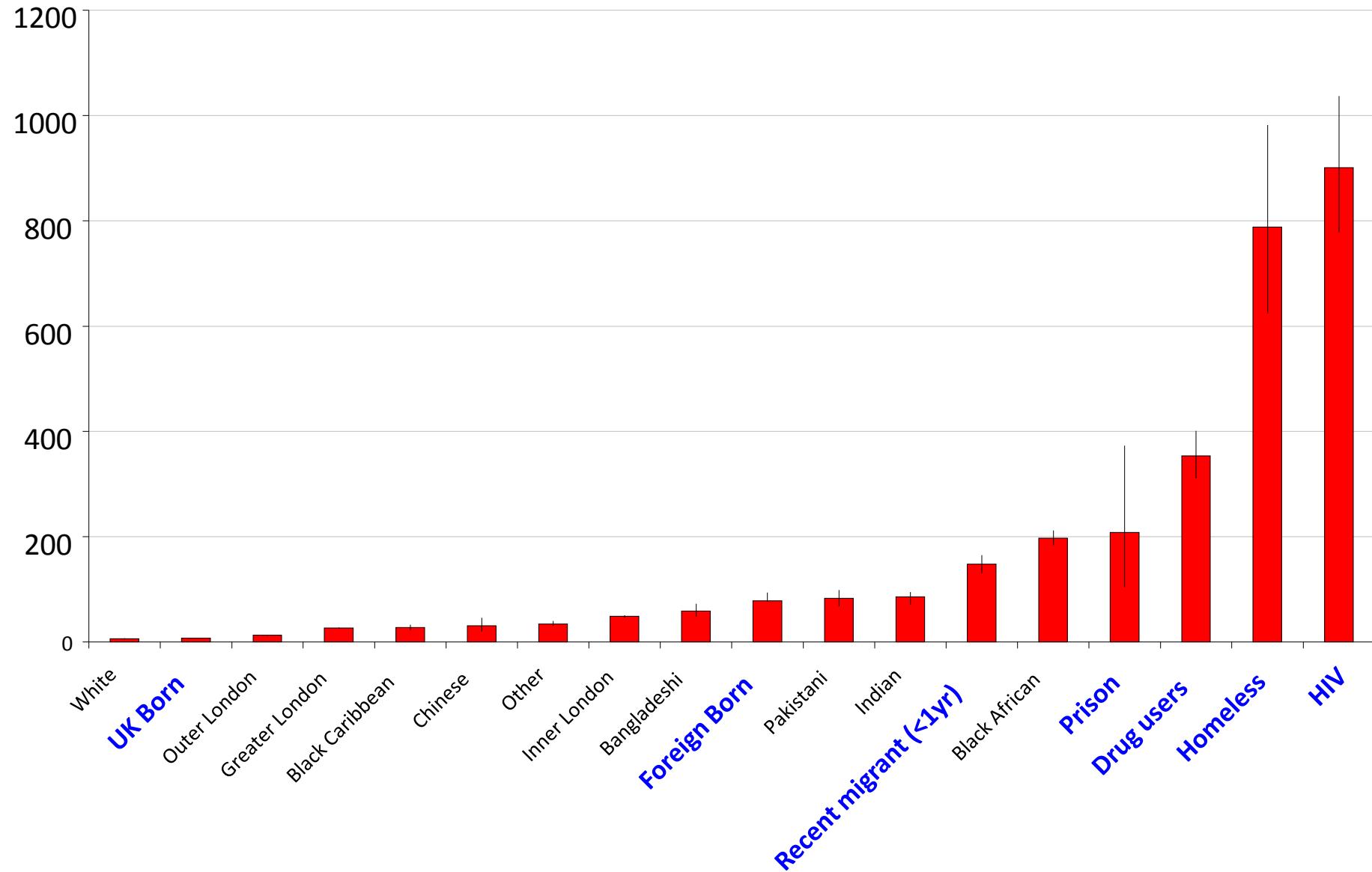
Inequality



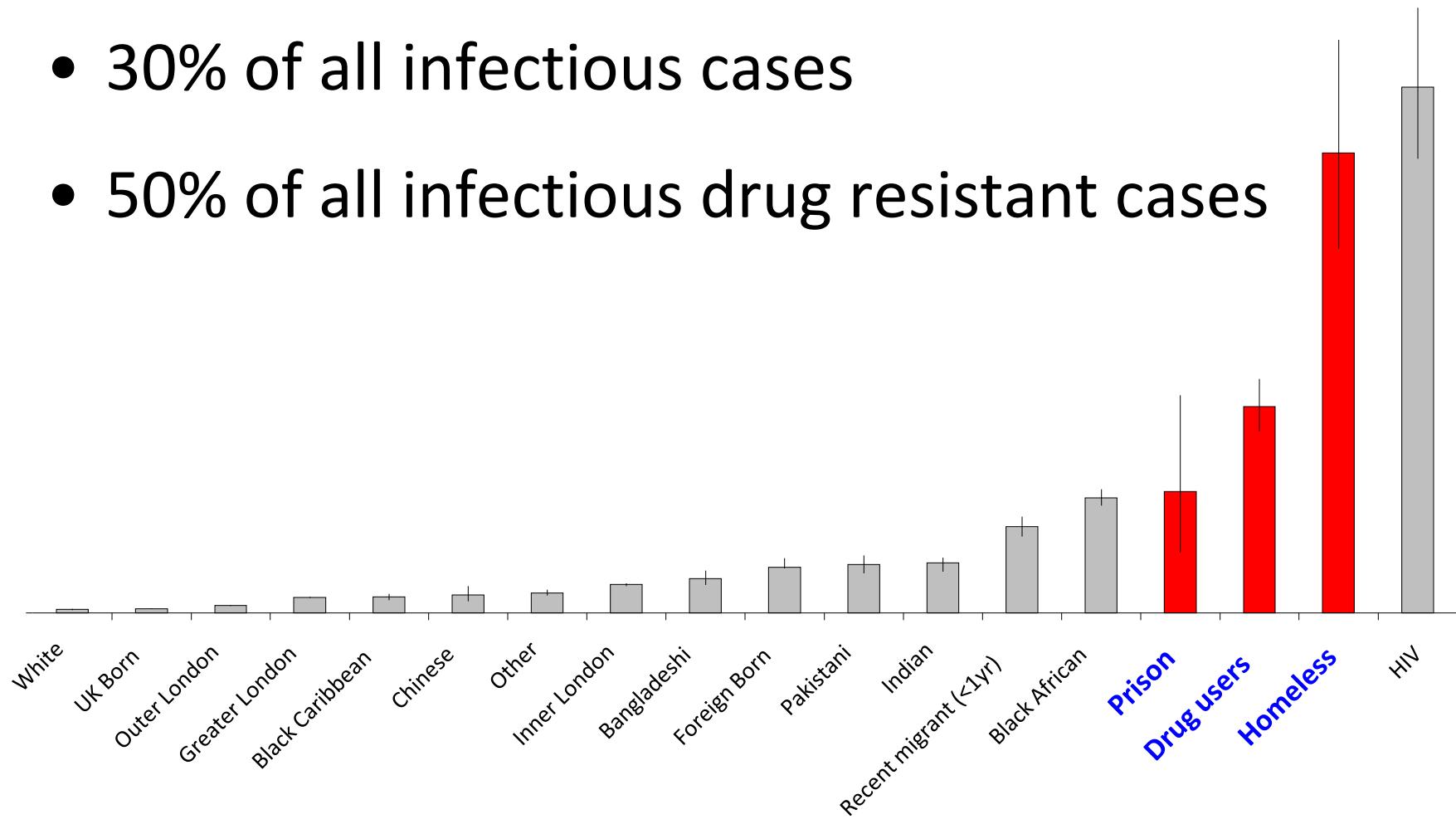


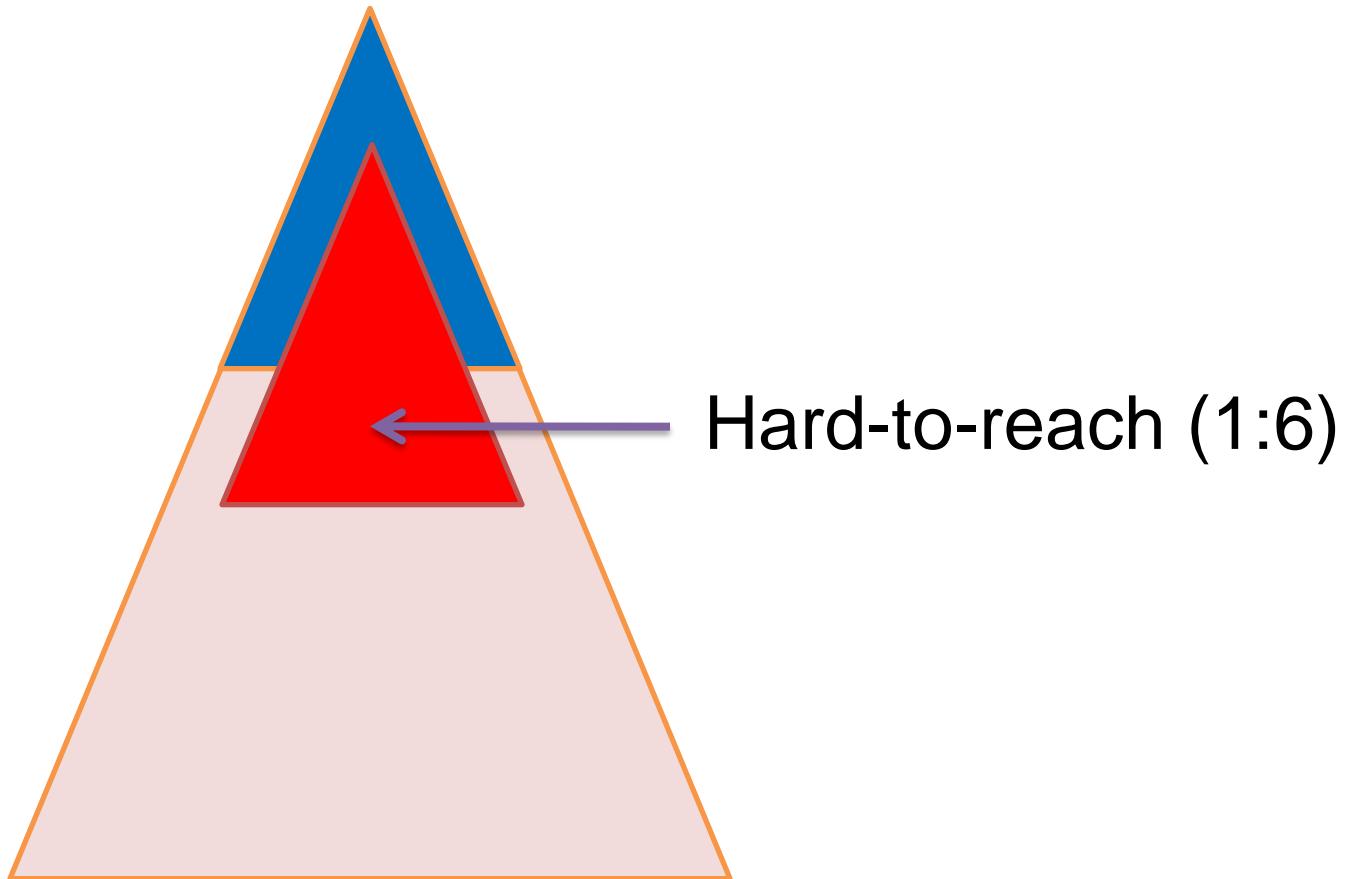
- Britain will be 'swamped' by TB
- Rise of drug-resistant tuberculosis in the UK 'is linked to immigration'
- Health Minister: Immigrants to blame for record rise in TB
- Time Bomb - Migrants to bring drug-resistant TB superbug to UK

London TB Profile study - TB Prevalence



- 17% of all cases
- 30% of all infectious cases
- 50% of all infectious drug resistant cases





Core business

- Active case finding
 - Circa 10K screens per year - 290 sessions
- Support the most complex cases
 - >1,500 referrals so far (34% DR - 68 MDR, 6 XDR)
- Locate & return to service
 - >250 active TB cases returned so far
- Training / awareness – Peer educators
 - 3rd Sector non-clinical professionals

Detection (1960's)



Detection (21st C) Dutch fleet



XX/07/2005

L



||||| 10mm/div

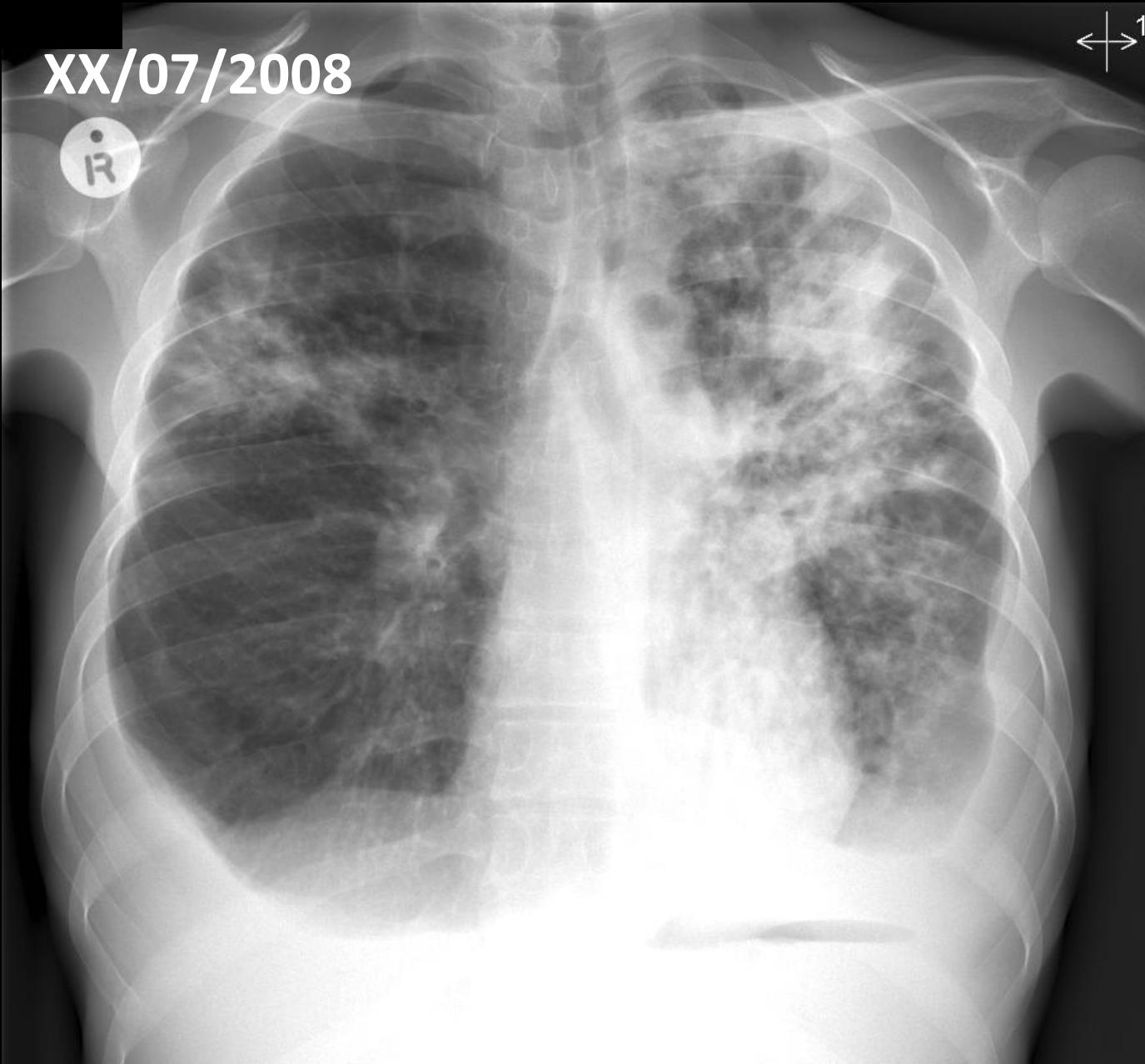
XX/12/2006

L



||||| 10mm/div

XX/07/2008





© AP



Chest PA
PA
CHEST
Im. #1
16x12/4

Zoom: 48%
PS
VOI

CXR

- 1 in 4 referred start TB treatment
- Two-thirds less likely to be infectious

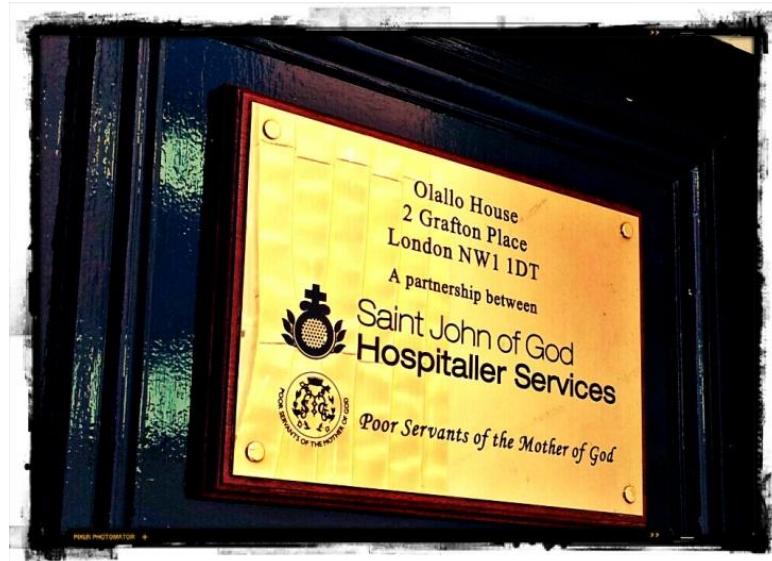
Story A, Aldridge RW, Abubakar I, Stagg HR, Lipman M, Watson JM, Hayward AC. Active case finding for pulmonary tuberculosis using mobile digital chest radiography: an observational study. Int J Tuberc Lung Dis. 2012 Nov;16(11):1461-7



**TAKE YOUR
PILLS
AND
SHUT YOUR
FACE**

**WHATEVER
IT TAKES**

Housing - TB hostel





Impact

- Early detection prevents future cases
- Overall 84% of active cases detected or referred are treatment engaged or completed

Highly cost effective

BMJ

BMJ 2011;343:d5376 doi: 10.1136/bmj.d5376

Page 1 of 11

RESEARCH

Dedicated outreach service for hard to reach patients with tuberculosis in London: observational study and economic evaluation

11 August 2010 Last updated at 10:12 ET

 Share    

Fears over TB treatment funding cuts in London

"Vulnerable" people may be put at risk because funding for London's mobile tuberculosis detection unit is to end, it is claimed.

The van, called Find and Treat, contains an X-ray machine which can detect signs of tuberculosis.

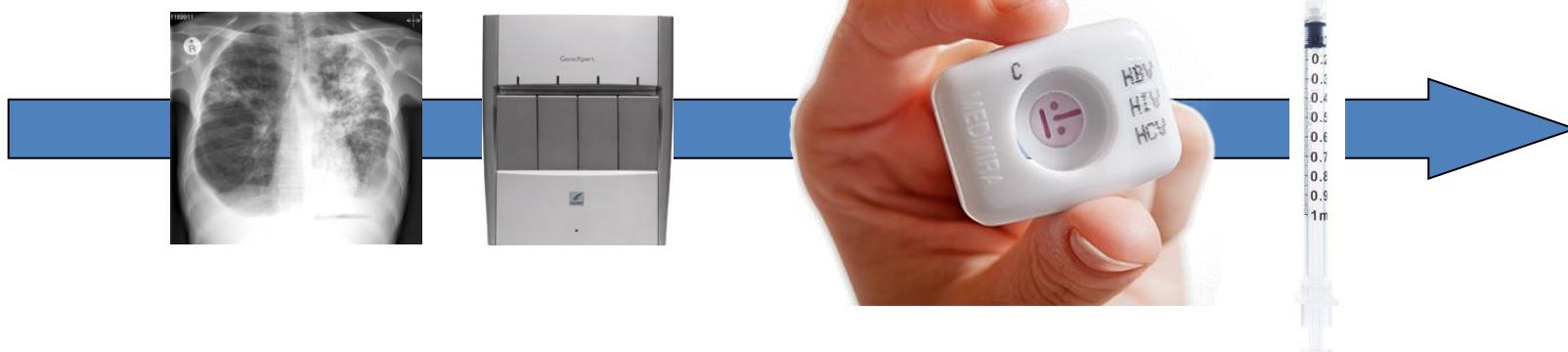


Next steps

TB

HCV
HBV
HIV

Flu
PPV
HBV







Mobile Health Units



Infectious diseases

- **TB** 1) Active pulmonary TB [CXR and PCR] 2) TB infection [abnormal CXR >35] *
- **Blood Borne Viruses [Hepatitis B & C, HIV]** [Saliva swabs] Venous blood for saliva positives *

Vaccine preventable diseases

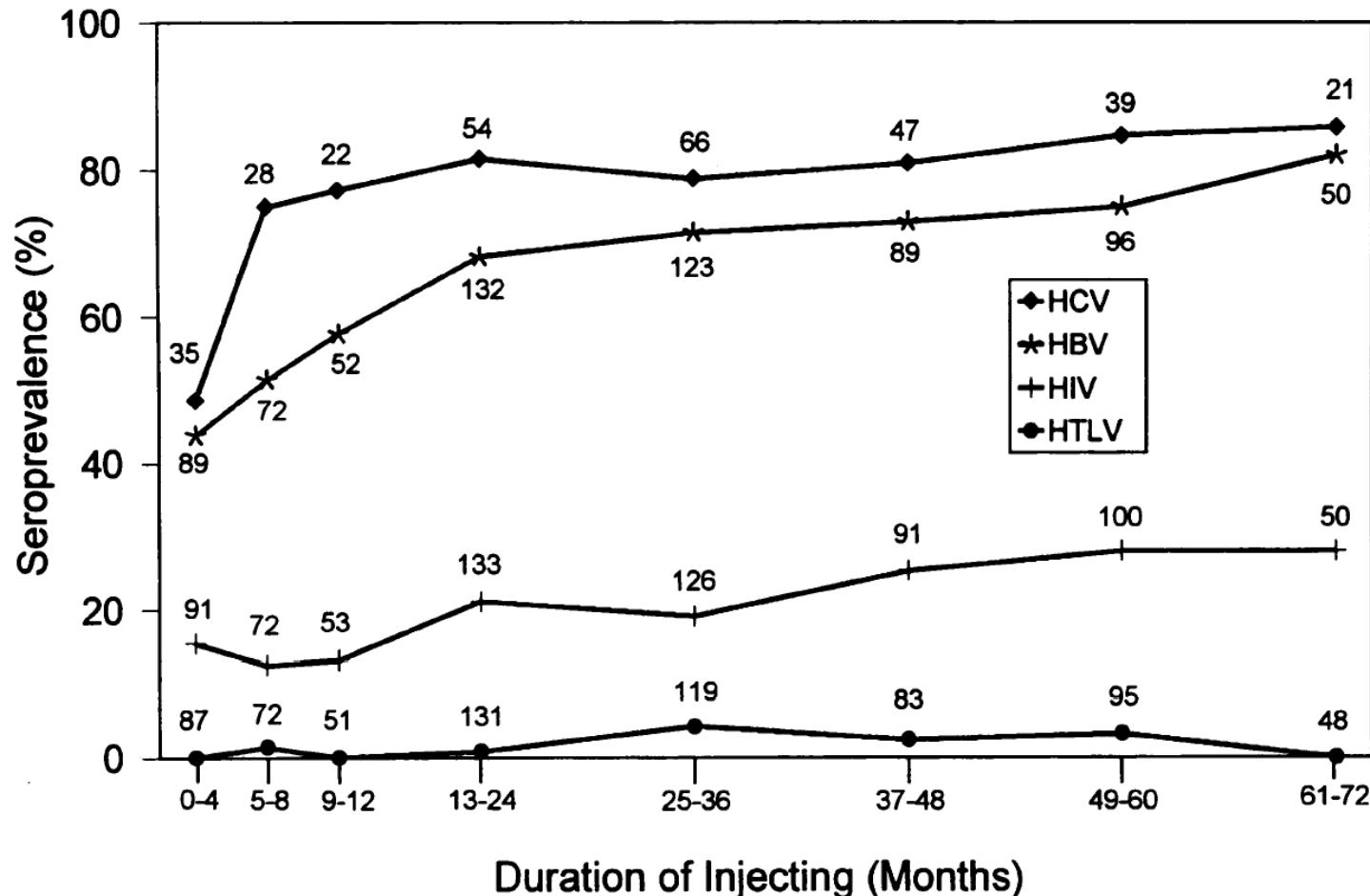
- **Hepatitis B** – 1) if neg. on saliva 2) no/incomplete history 3) >5 years
- **Influenza** – all seasonally
- **PPV** - pneumococcal pneumoniae and invasive disease [all not vaccinated]

Health MOT

- Rapid Health Survey [standardised]
- Health MOT from local primary care specialists [agreed and determined locally]
- Peer led health promotion

* Those requiring full venous bloods will also have IGRA

Force of infection

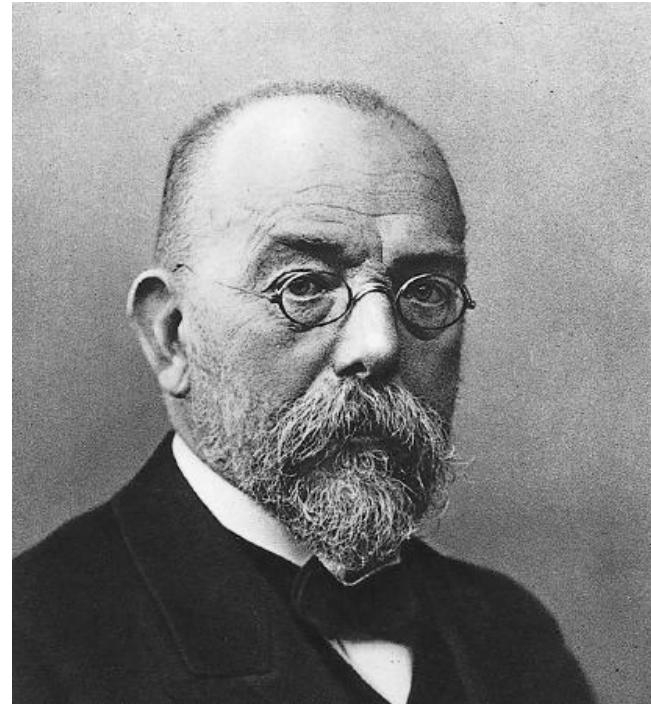


Garfein RS, Vlahov D, Galai N, Doherty MC, Nelson KE. Viral infections in short-term injection drug users: the prevalence of the hepatitis C, hepatitis B, human immunodeficiency, and human T-lymphotropic viruses. Am J Public Health. 1996 May;86(5):655-61



Why are we here...

Phthisie des pauvres - Guerre au bacille



The state's responsibility to improve the lot of the masses

The physician's responsibility to kill the bacilli

Pidoux

“What a calamity such a result would be!...poor consumptives sequestered like lepers; the tenderness of their families at war with fear and selfishness....”

Hermann Pidoux, in “Discussion sur la tuberculose” (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l’Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

Pidoux

A medicine of the species above and beyond the medicine of the individual

Tuberculosis requires more advanced and more social solutions

Hermann Pidoux, in “Discussion sur la tuberculose” (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l'Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

Pidoux

1: Diatheses

Constitutional predisposition

Hermann Pidoux, in “Discussion sur la tuberculose” (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l'Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

Pidoux

2: External Poverty (misère)

- ignorance
- overwork
- malnutrition
- unsanitary housing

Hermann Pidoux, in “Discussion sur la tuberculose” (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l'Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

Pidoux

3: Internal Poverty (misère)

- various chronic diseases
- laziness
- habits of luxury
- flabbiness - excesses at table
- the torments of ambition

Hermann Pidoux, in “Discussion sur la tuberculose” (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l'Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

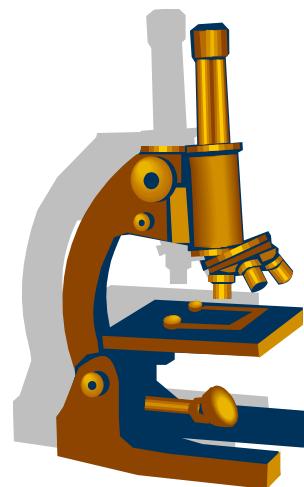
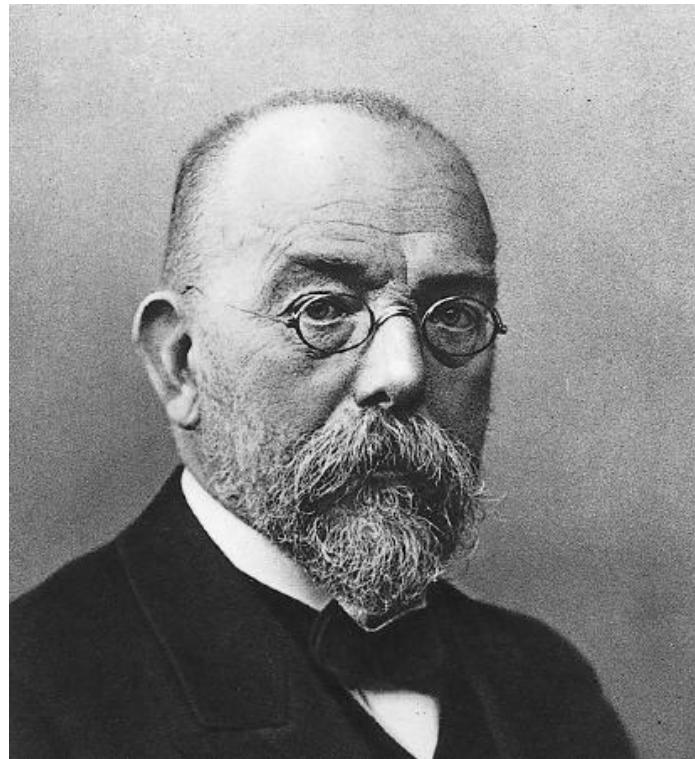
Pidoux

Central to Pidoux's proposed solution was an unprecedented government-sponsored

...network of local associations to investigate and remedy the social causes of tuberculosis at the local level

Hermann Pidoux, in "Discussion sur la tuberculose" (at Academy of Medicine, December 3 and 10, 1867), *Bulletin de l'Académie impériale de médecine* 32 (1866–67): 1254–1255, 1261.

Robert Koch - March 24th 1882



An Address
on the
MODERN TREATMENT OF PULMONARY PHthisis

By C. Theodore Williams M.D. F.R.C.P. London

CONSULTING PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON

“Koch’s brilliant discovery, while it has largely assisted diagnosis it cannot be said to have contributed much to the progress of treatment.

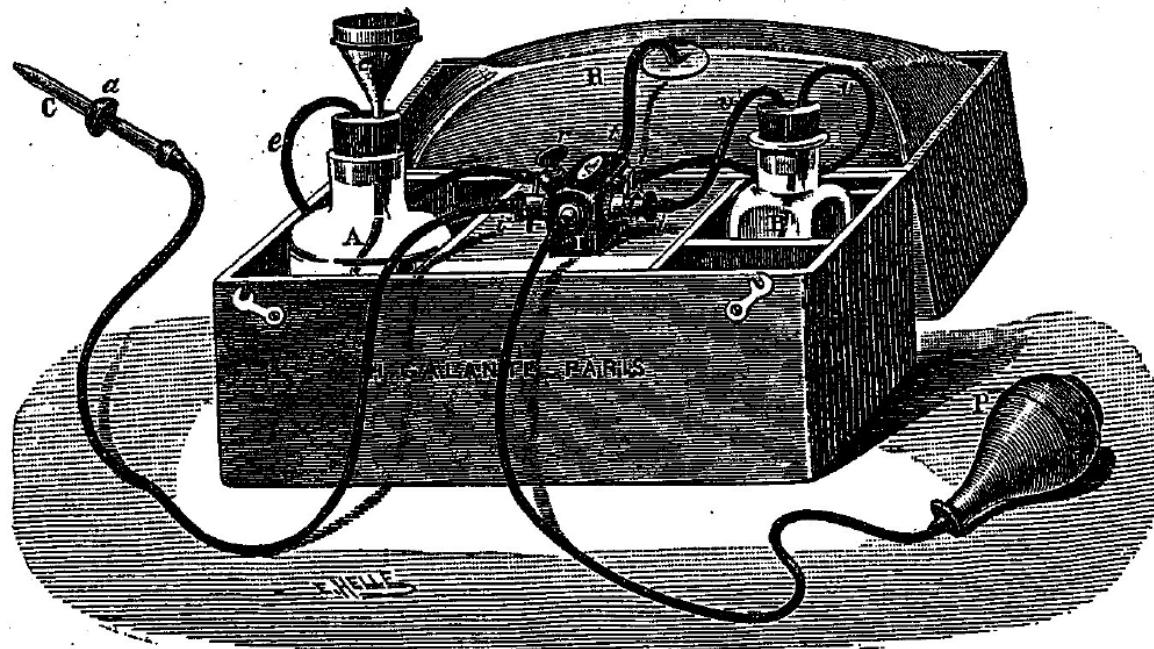
It was the signal for an enthusiastic outburst of antiseptic or bacillicide measures.

All efforts short of destroying the patient were directed to slaughter the Tubercl bacillus.”

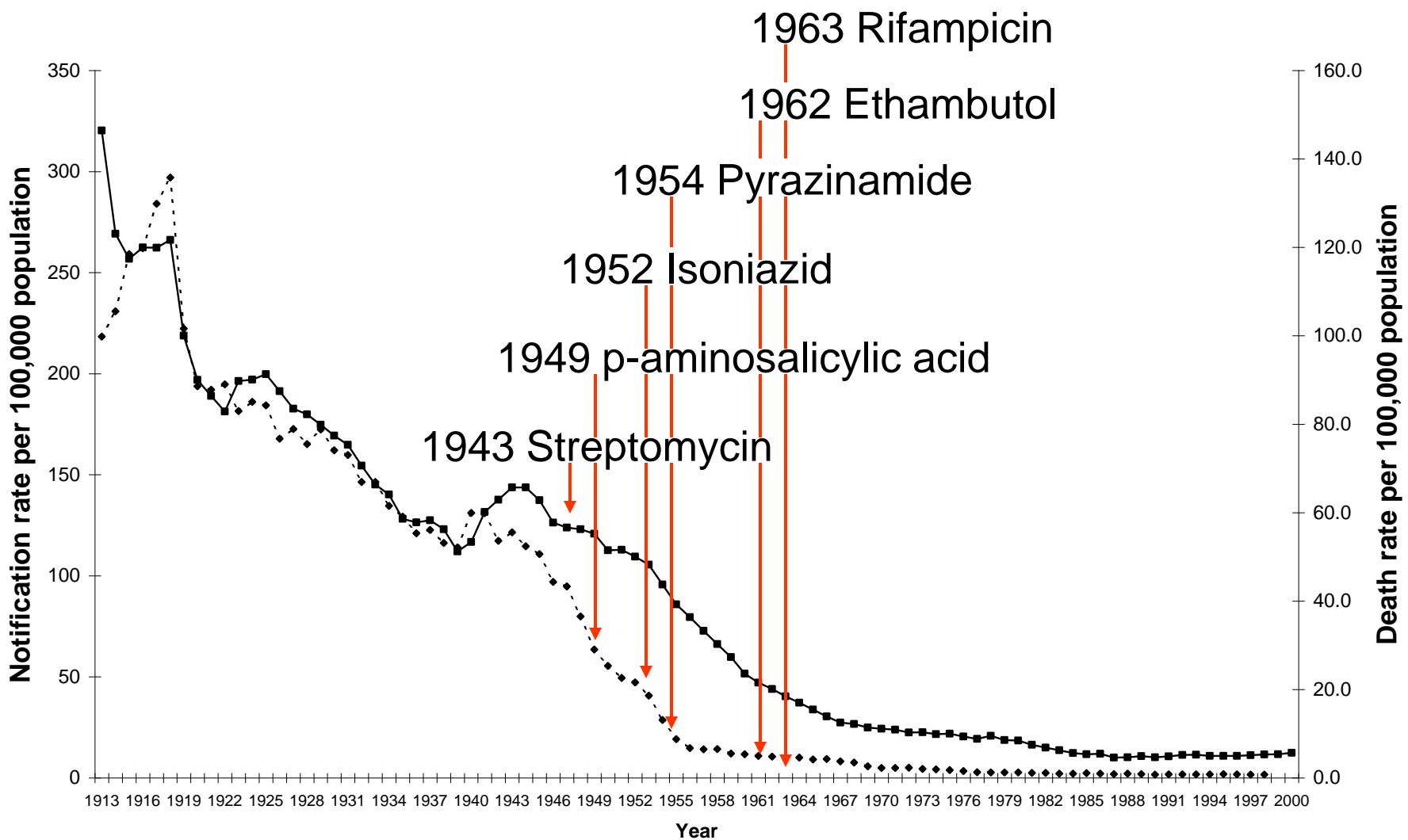
A Lecture on the
NEW METHOD OF TREATMENT OF CONSUMPTION AND OTHER
DISEASES OF THE RESPIRATORY ORGANS BY GASEOUS RECTAL INJECTIONS

By I. Burney Yeo M.D. F.R.C.P.

PROFESSOR OF CLINICAL THERAPEUTICS IN KING'S COLLEGE, AND PHYSICIAN TO KING'S COLLEGES HOSPITAL



The Lancet. April 16, 1887 pp 761-65



A new approach to controlling a social disease

- Political commitment
- Emphasis on prevention & control measures
- Financial support
- Health education of the general public

Tuberculosis as a Disease of the Masses and How to Combat it. Knopf, 1901.

“Without Koch’s discovery, the socio-economic character of tuberculosis would have been clearer, and a demand for redistribution of the wealth of the community would have been a much more important issue”

Waaler 1982

Thanks to you and...the outreach team, and our partners, punters and pundits

