



Migration Health and Travel Medicine

17-11-2015

Basics on Migration and its Health/ Public Health challenges in the EU

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World map of early human migrations, with the North Pole at center (Wikipedia)





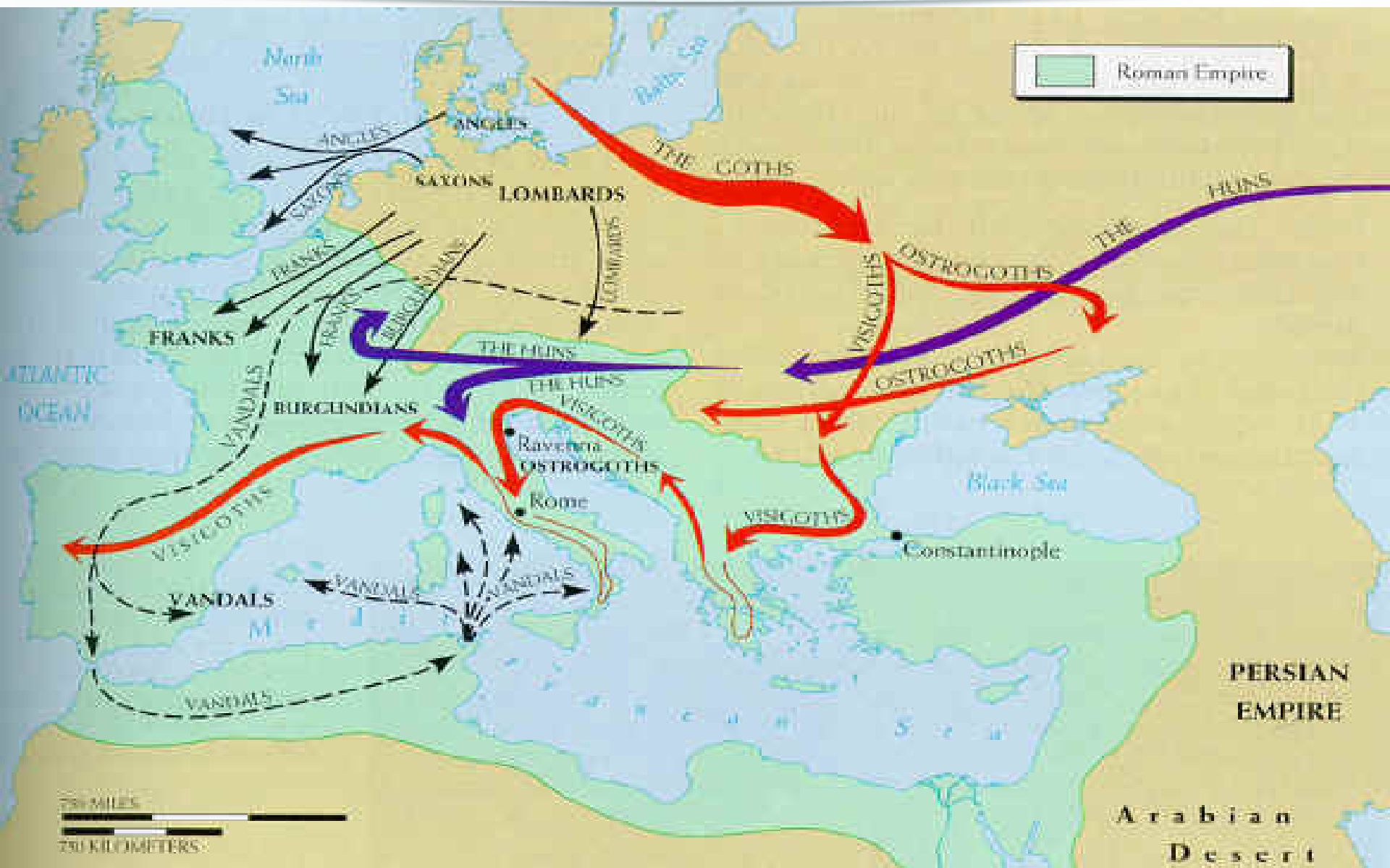
History of early human migration

Evolution of the genus *Homo* took place in Africa. First ***Homo erectus*** migrated out of Africa across Eurasia, beginning about one million years ago, no doubt using some of the same available land routes north of the Himalayas that were later to become the ***Silk Road***, and across the ***Strait of Gibraltar***. Bruce Bower has suggested that ***Homo erectus*** may have built rafts and sailed oceans, a theory that has raised some controversy.

The expansion of ***Homo erectus*** was followed by that of ***Homo sapiens***. The ***matrilinear most recent common ancestor*** shared by all living human beings, dubbed ***Mitochondrial Eve***, probably lived roughly 150-120 millennia ago, the time of ***Homo sapiens idaltu***, probably in the area of modern ***Ethiopia, Kenya or Tanzania***. Around ***100-80 millennia ago***, three main lines of ***Homo sapiens sapiens*** diverged, bearers of ***mitochondrial haplogroup L1*** (mtDNA) / A(Y-DNA) colonizing Southern Africa (the ancestors of the Khoisan (Capoid) peoples), bearers of haplogroup ***L2*** (mtDNA) / B (Y-DNA) settling Central and West Africa (the ancestors of Niger-Congo and Nilo-Saharan speaking peoples and of the Mbuti pygmies), while the bearers of haplogroup ***L3*** remained in East Africa. Some 70 millennia ago, a part of the L3 bearers migrated into the Near East, spreading east to southern ***Asia and Australasia some 60 millennia ago***, northwestwards into Europe and eastwards into Central Asia some 40 millennia ago, and further east to ***the Americas from ca. 30 millennia ago***.

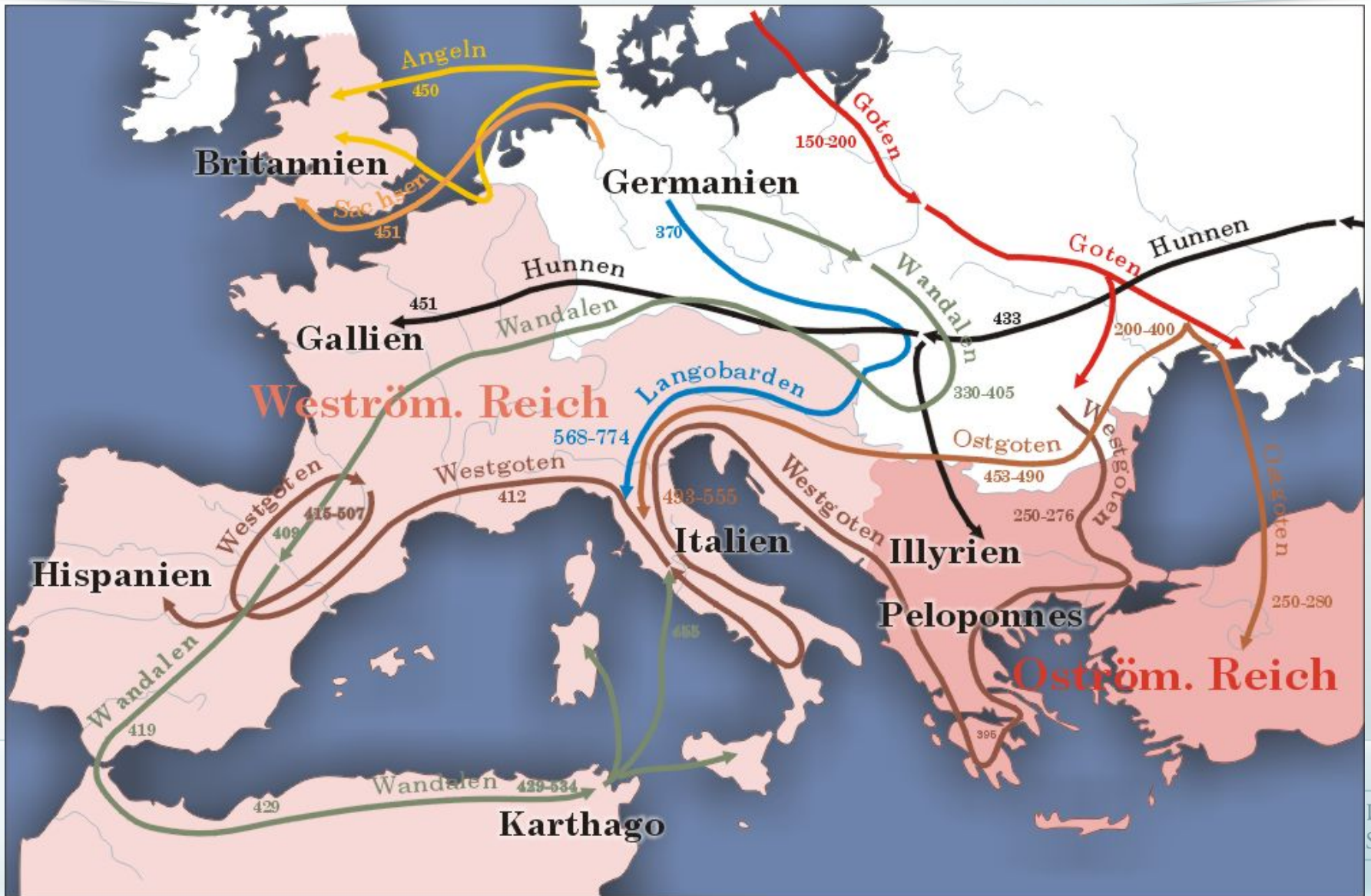


Migration: a phenomenon with long history in Europe





2nd to 5th century migrations





Definition of migration

Human migration denotes any movement by *humans* from one locality to another, sometimes over long distances or in large groups. Humans are known to have migrated extensively throughout history and prehistory.

The movement of populations in **modern** times has continued under the form of both voluntary migration within one's region, country, or beyond, and **involuntary migration** (which includes the **slave trade**, **trafficking in human beings** and **ethnic cleansing**). People who migrate are called **migrants**, or, more specifically, **emigrants**, **immigrants** or **settlers**, depending on historical setting, circumstances and perspective.

**Facts: estimated 220 M people crossed borders in 2013,
of which 90 million are migrant workers –
3% of the total population**



Source: Population Action International 1994



Magnitude

According to the estimation of UNDESA, the total number of migrants crossing officially the border of their country of origin (international migrants) from the **191 million in 2005** has increased to **214 million in 2010**.

In spite of the global economic crisis no any slowdown could be seen globally.

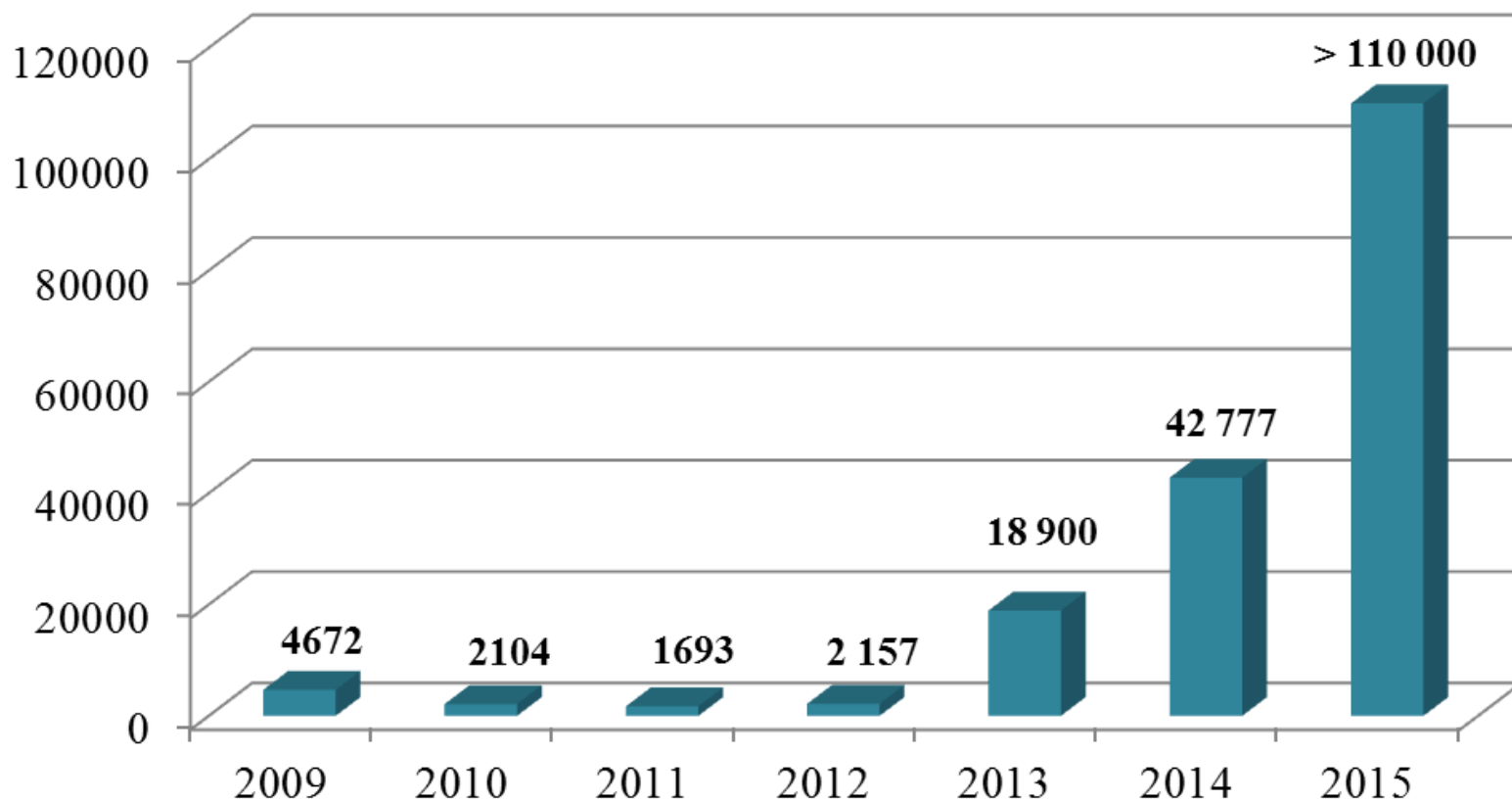
Nearly half of the people who are leaving their home country are migrating with the hope of finding a job abroad, known as 'migrant workforce'.

In addition to this nearly **3% of the total population of the Globe**, one can add those millions of people who are entering into another country illegally. The number of these '**irregular migrants**' is estimated as high as **15-20%** of the legal ones.



Total number of migrants crossed the Hungarian border between January – October 2015: more than **300 000**

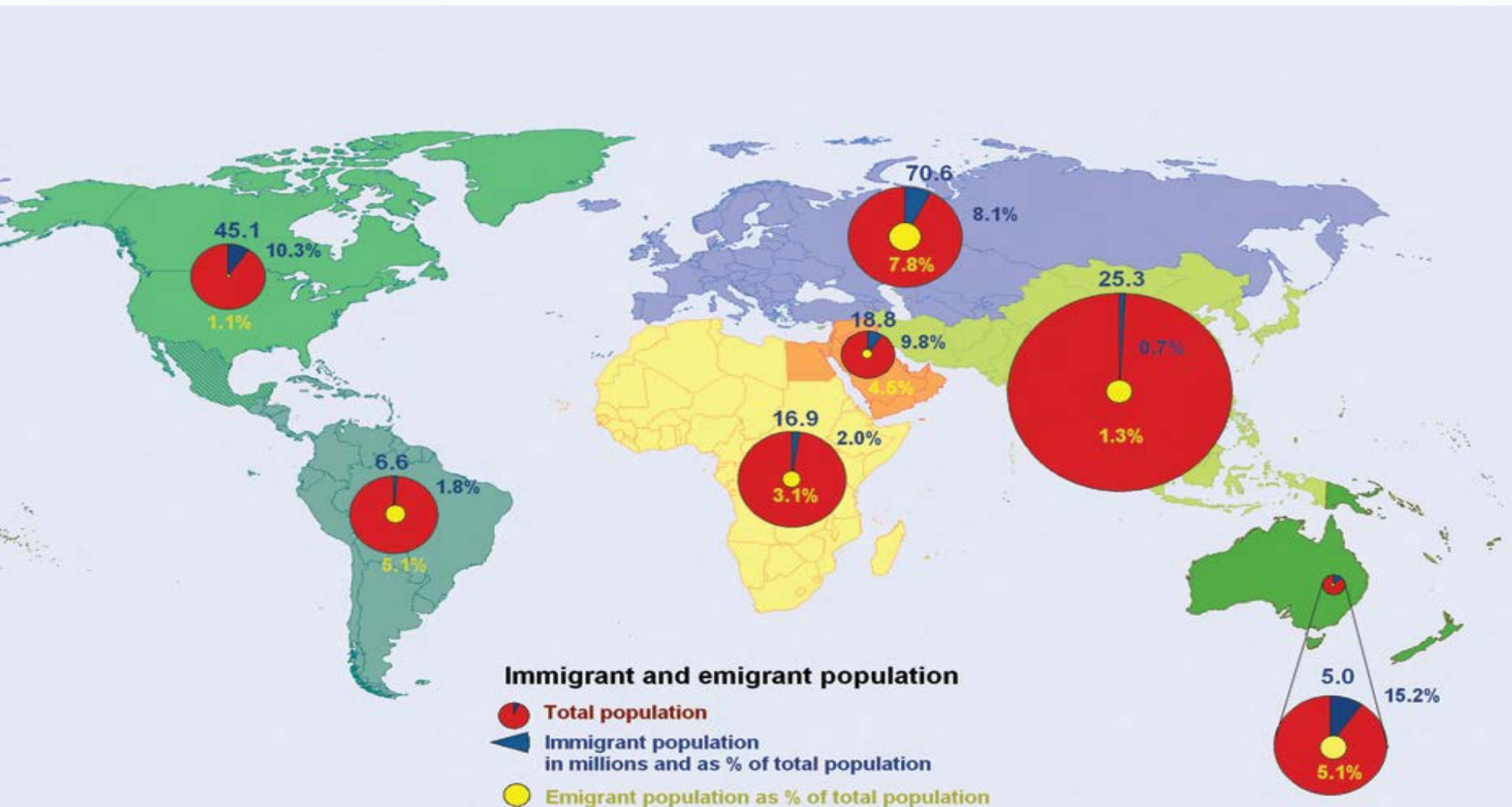
Number of registered asylum seekers in Hungary (2009 - 2015)





Total immigrant and emigrant population by region

University of Sussex, U.K., Global Migrant Origin Database, Dataset 4, updated March 2007





The vision about arrival of migrant workers...





...and the other end of the reality how they move ...



**...when seeking for 'rich
and safe heaven'**



***Pattern defines
conditions of the
journey and its impact
on health***





Egykor...



...és
most





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<http://totallycoolpix.com/2011/04/the-lampedusa-immigrants-crisis/>







350 férőhely a telepen... 8 hónap alatt több 10ezer menekült...



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<http://totallycoolpix.com/2011/04/the-lampedusa-immigrants-crisis/>





NEWS FROM LAMPEDUSA –

**Migrants thrown in the sea for “lightening” the boats.
“A youth under shock after seeing his brother die”,
says the psychologist...**

ROME, 13 MAY – He is 17 years old and arrived at Lampedusa on one of the many floating wrecks landing on the island. He is under shock, and the psychologist understands why only after having talked to him, he saw his brother die after being thrown in the sea for “lightening” a too heavy boat. This one of the tragic experiences that Ignazio Accomando, NIHMP psychologist, listened to in Lampedusa during the emergency. “The young man – says Accomando – was under shock because he assisted to the scene of his brother being thrown in the sea by other migrants, or by the ‘heads’, for lightening the boat”, and he declares that, according to the testimonies collected, “It is not the only case”

(Italian National Institute for Migration, Health and Poverty)



Island Lampedusa and the Arabic Spring

The facts:

Between January – May 2011 **31 000 refugees** have arrived to the island of capacity for 4000 ones.

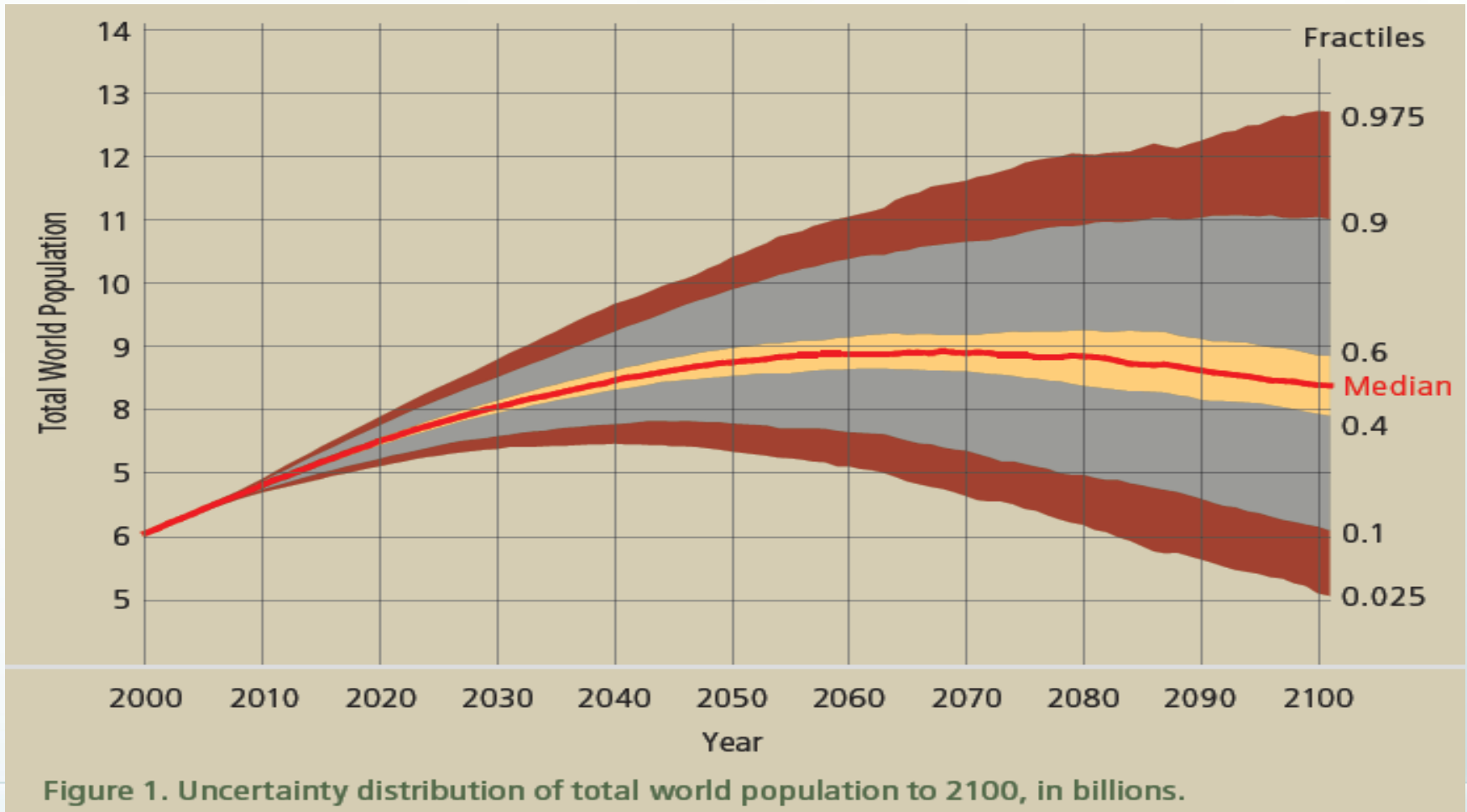
From Lybia to Tunis, Egypt, Algeria, Sudan) more than **800 000** refugees have arrived. The number of internally displaced families was as high as **40 000**.

Is the EU prepared to handle this type of migration born humanitarian crisis?

Do we have the specially trained HRC?



Demographic prediction





1

FACTS ON POPULATION MOBILITY



Facts for the EU...

Europe hosts **45–50 million international migrants, almost 8 percent of its population.** Since 2005, net yearly gain from international migration is **1.2 – 1.7 million people for the EU-25.** This accounted for almost **85% of Europe's total population growth.**

Over the next 15 to 20 years Europe will continue being a pole of attraction for many migrants, because of differences in employment opportunities and living standards, political stability as well as established inter-country networks based on family, culture and history.





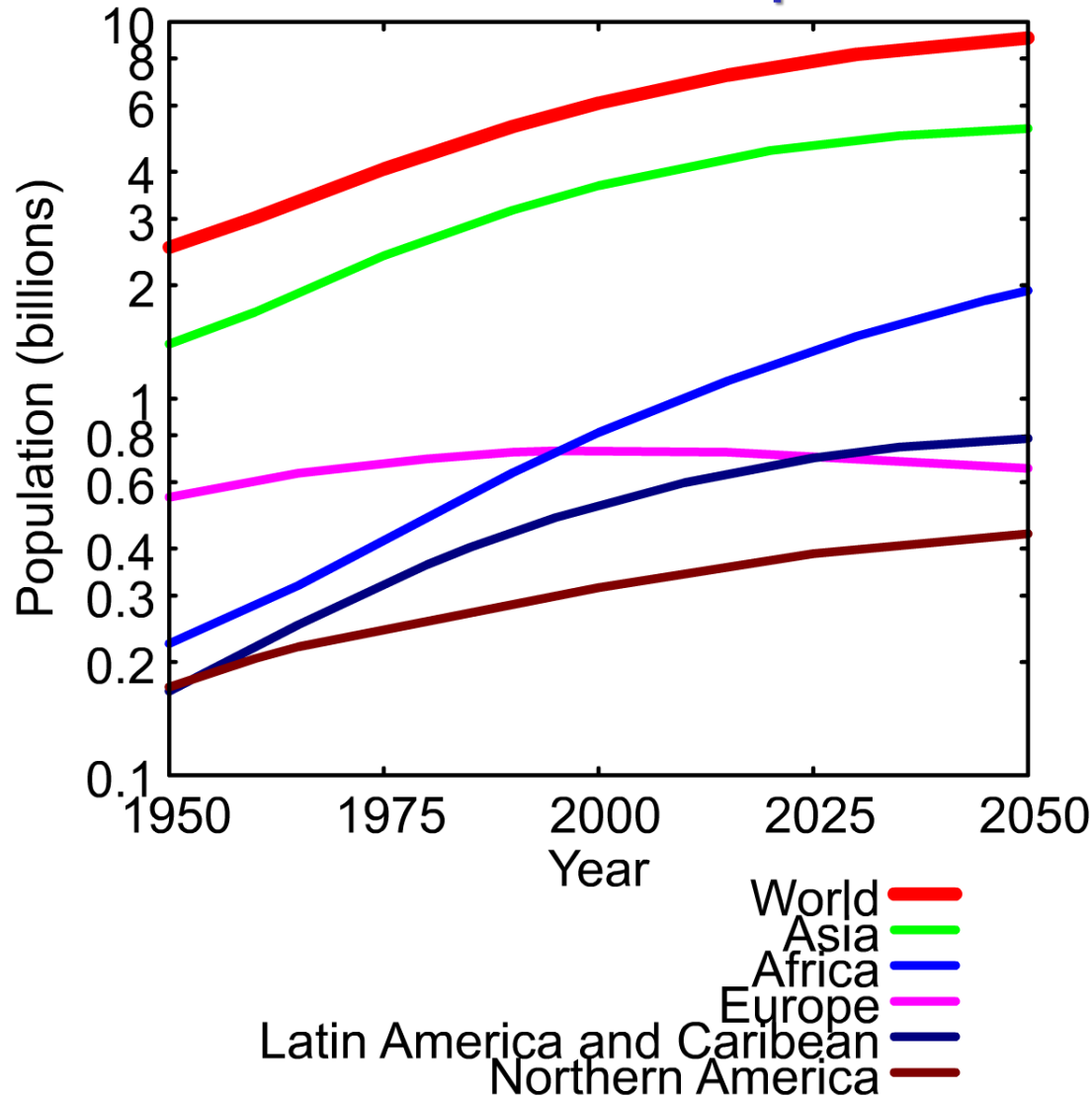
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FACTS ON NECESSITY FOR THE EU



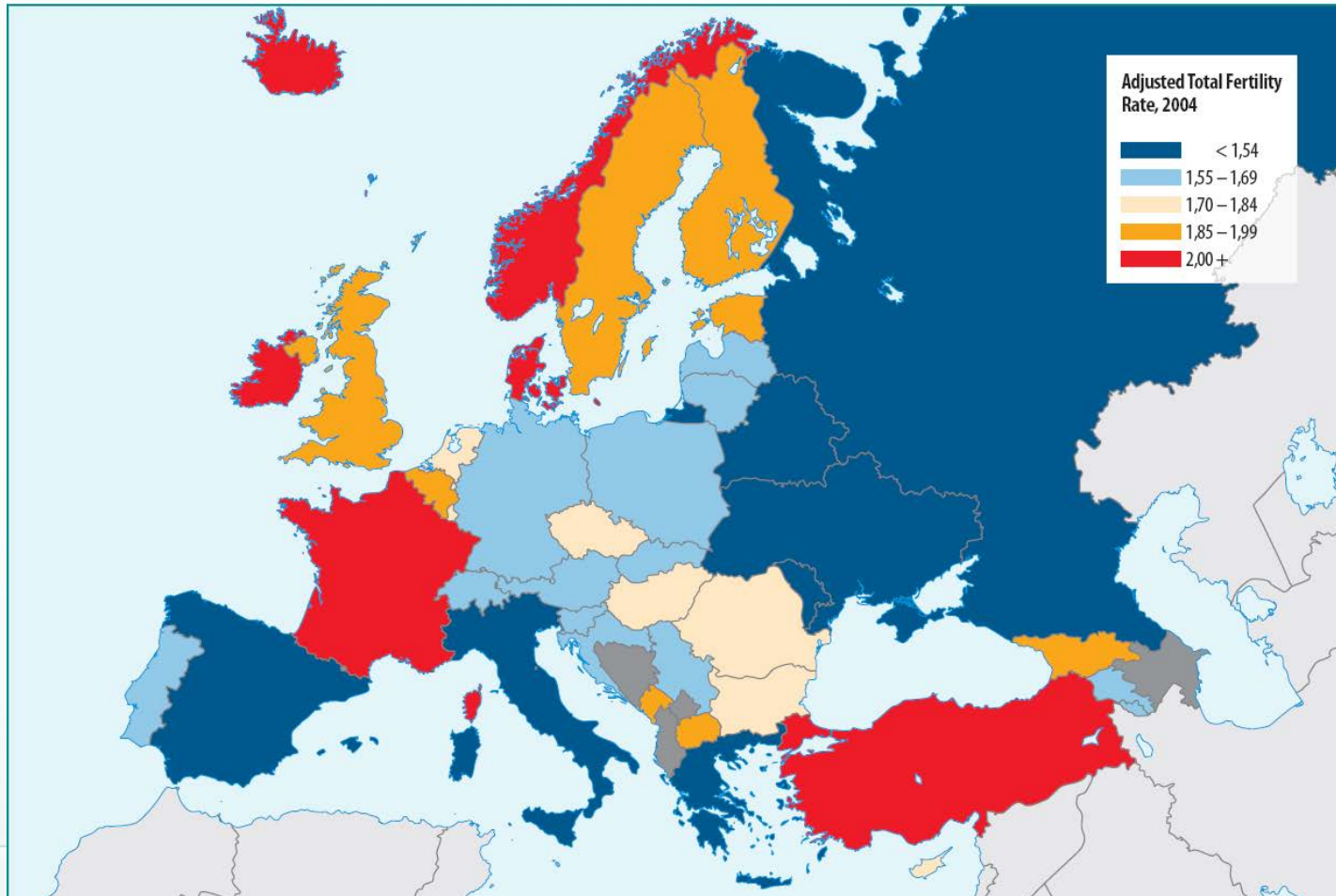
Demographic challenge

affects Europe more than any other region



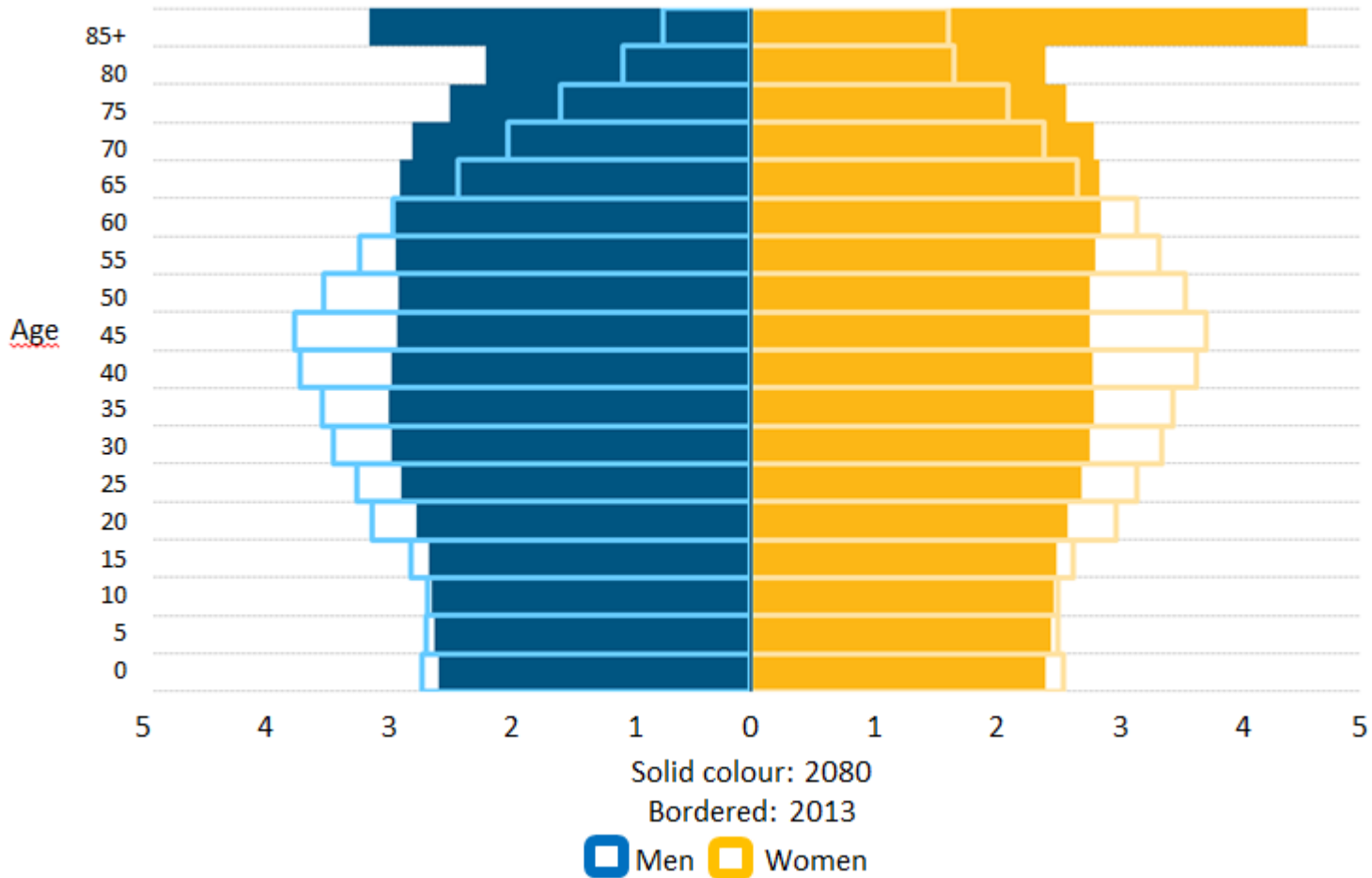
2006 - European Commission adopted a plan as the "baby-boom" generation begins to retire and families have less and less children.

Fertility by EU regions





Demographic forecast for the population of the 28 Member States of the EU, 2013–2080





EC Green paper (COM2004 811 final)

In fact, even if the Lisbon employment targets are met by 2010, overall employment levels will fall due to demographic change.

Between 2010 and 2030, at current immigration flows, the decline in the EU-25's working age population will entail a fall in the number of employed people of some 20 million.

Such developments will have a huge impact on overall economic growth, the functioning of the internal market and the competitiveness of EU enterprises.

Labour shortages of low skilled migrants, of semi skilled migrants or seasonal workers but also of skilled and highly skilled migrants. Some studies show that *low and semi skilled sectors or seasonal works would probably not survive in absence of migrants*



3

FACTS ON MIGRANTS' HEALTH



Migrating tribes and the Hittite bio-weapon

(Journal of Medical Hypothesis 2007)

Between 1320 – 1318 BC,
in the war of the New
Hittite empire and
Arzava, in advance to
the military invasion,
tribes owning Tularemia
infected animals
(mainly sheep) were
sent to the territory,
aiming to weakening
the defense forces (*Siro
Trevisanato*). Pharaoh
Ehnaton has named
Tularemia as Hittite
Pest.



**Bio-weapon of the
bronze ages**

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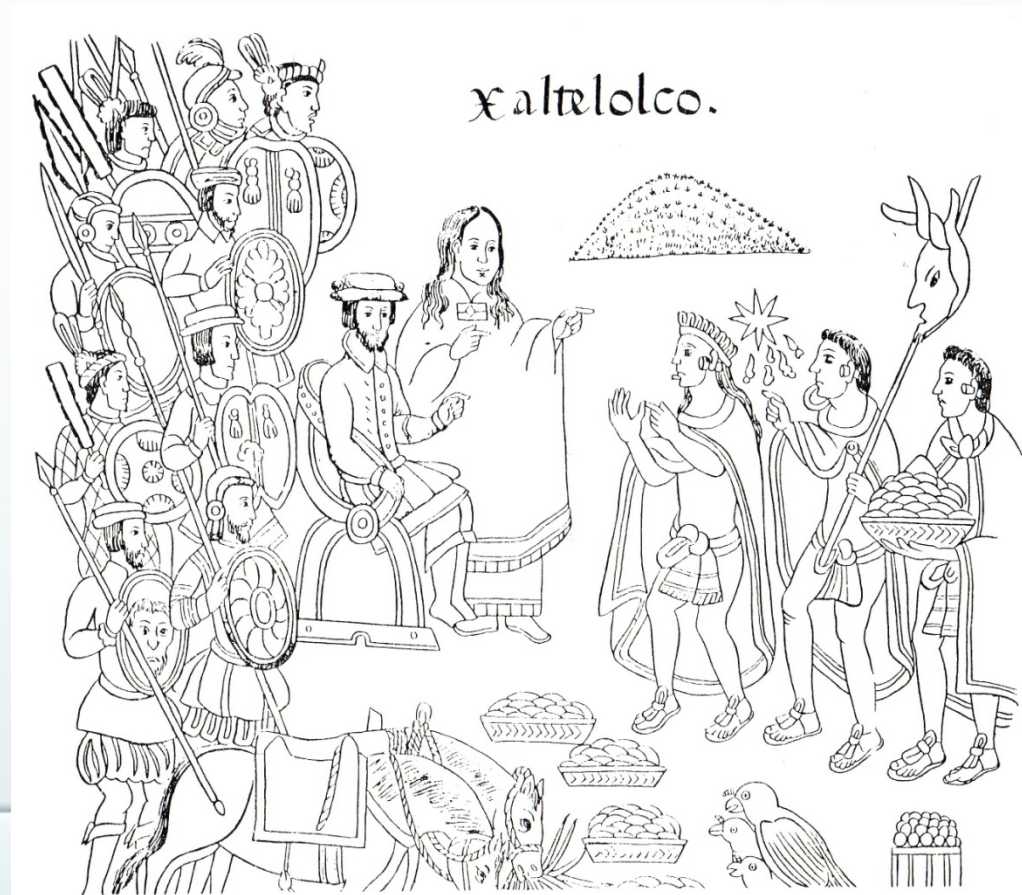




Fear with historical roots: Cortez 1519: invasion with 1000 'migrant workers' ...

Indian population in Central America:
1519: 25.3 million
1605: 1 million

Main factor in the background: small pocks and measles epidemics





WHAT is ...MOBILITY?

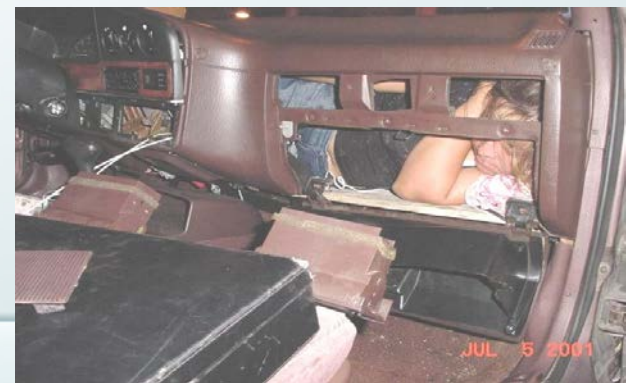
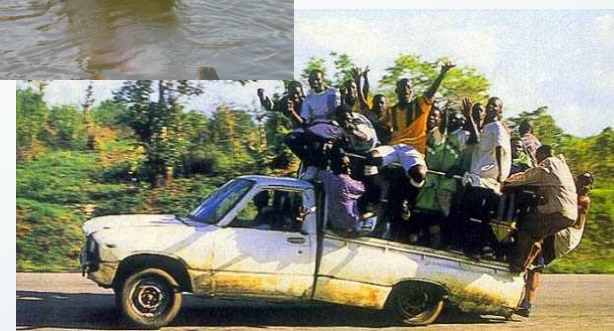
... of people:

Pattern defines conditions of the journey and its impact on health

Legal status often defines access to health & social services

☞ *Determinants on health:*

Pattern and legal status enhance vulnerability





WHAT is ...MOBILITY?

... of people

... of culture:

language, religion, behaviour

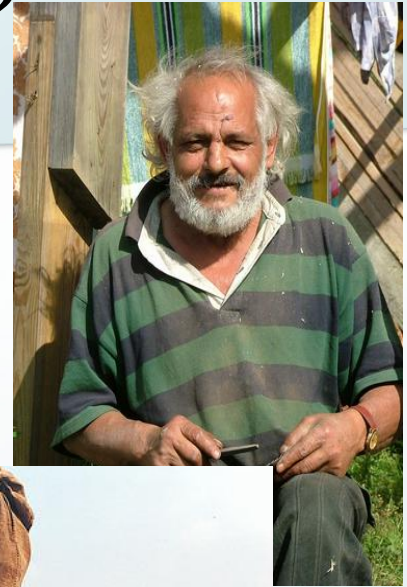
→ *impact on preventive health,*

→ *access to health,*

☞ *Determinants on health:*

discrimination, stigmatization, « being different »

....mental & social wellbeing





WHAT is ...MOBILITY?

... of people

... of culture

of epidemiological factors

Travel between zones of different disease prevalence (Tb, HIV, malaria, CVD)

Bring pre-existing conditions

Acquire health problems prevalent in host communities



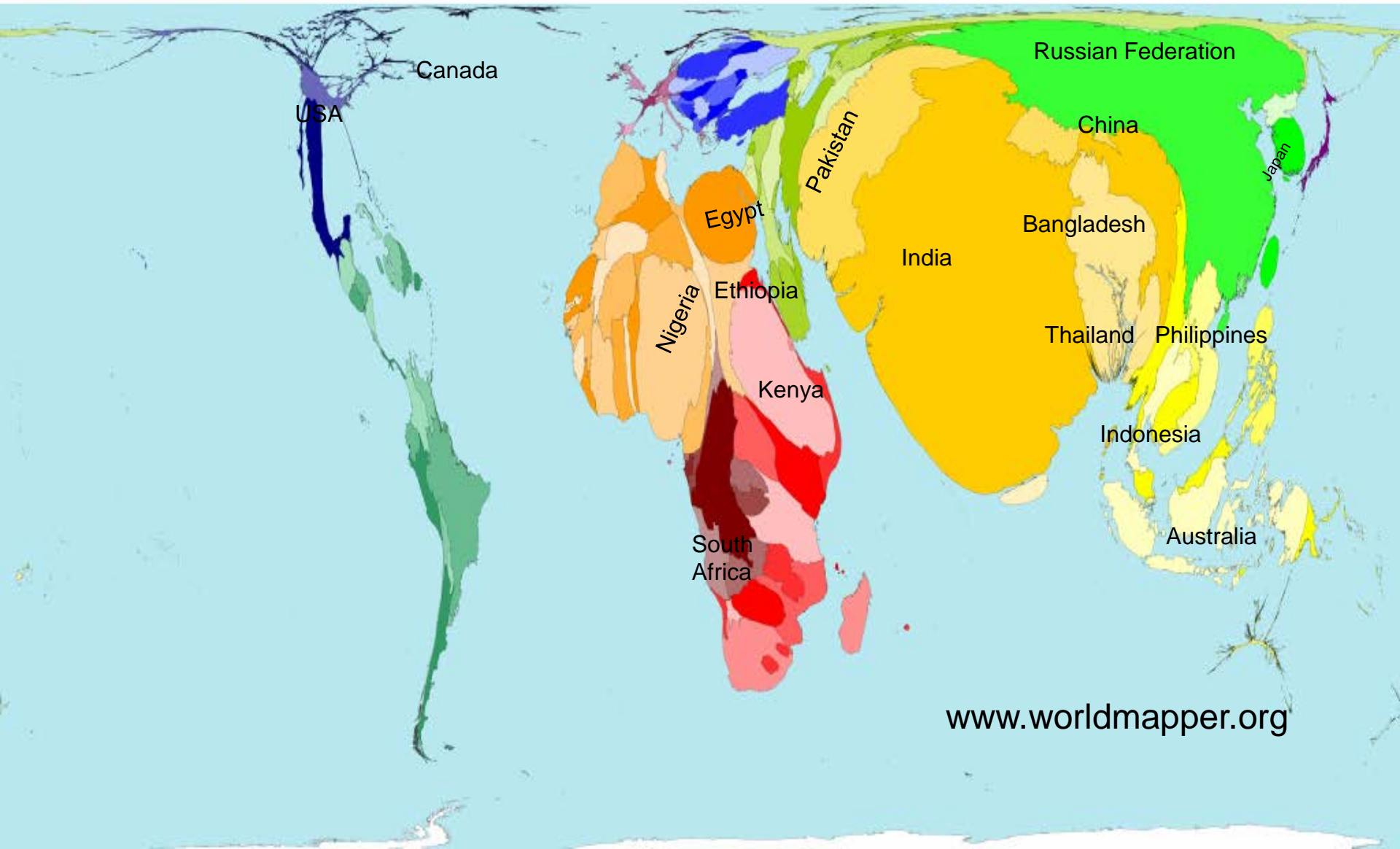


RUANDA...



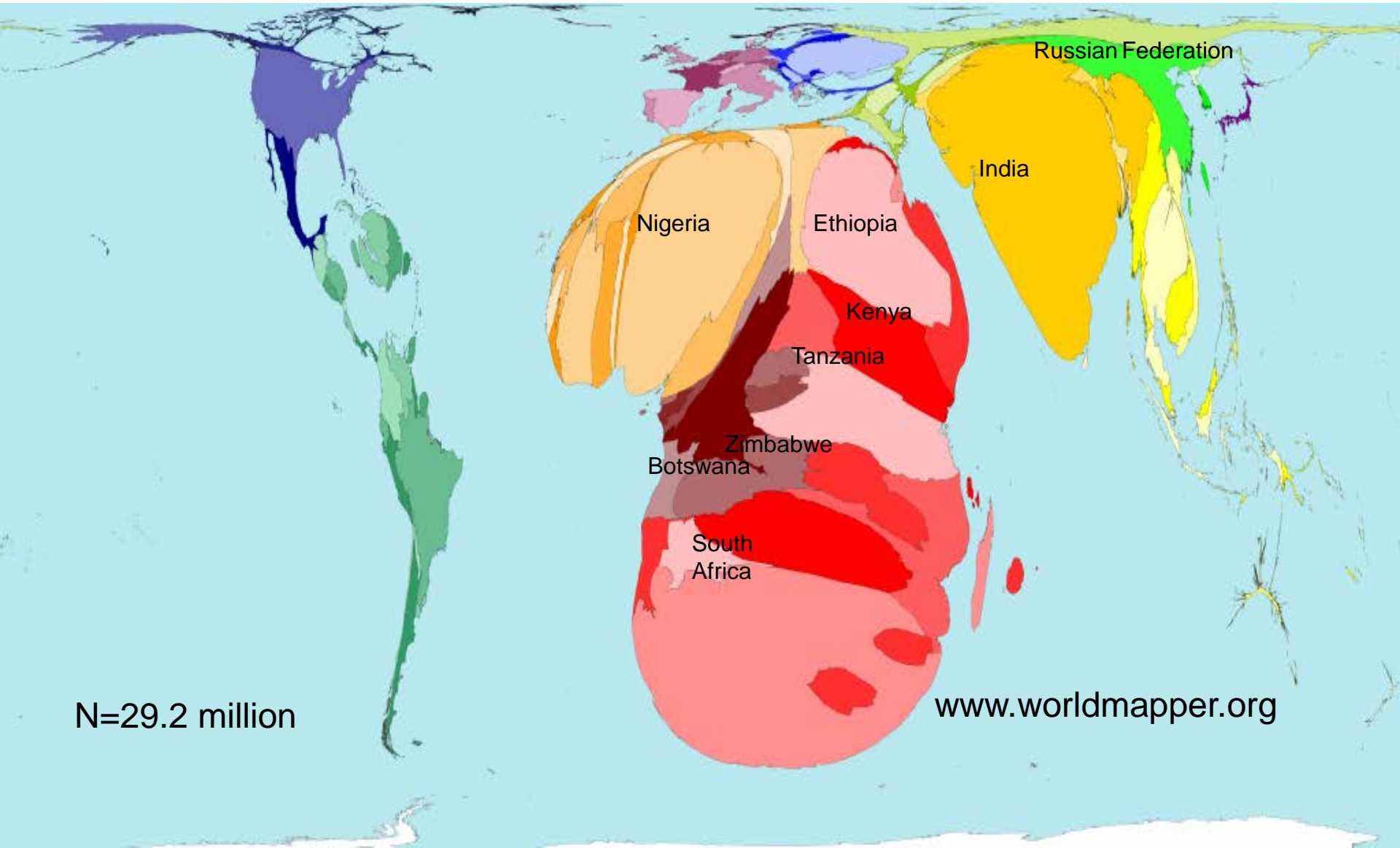


Human poverty index





Geographical distribution of HIV + population (age 15 – 49)

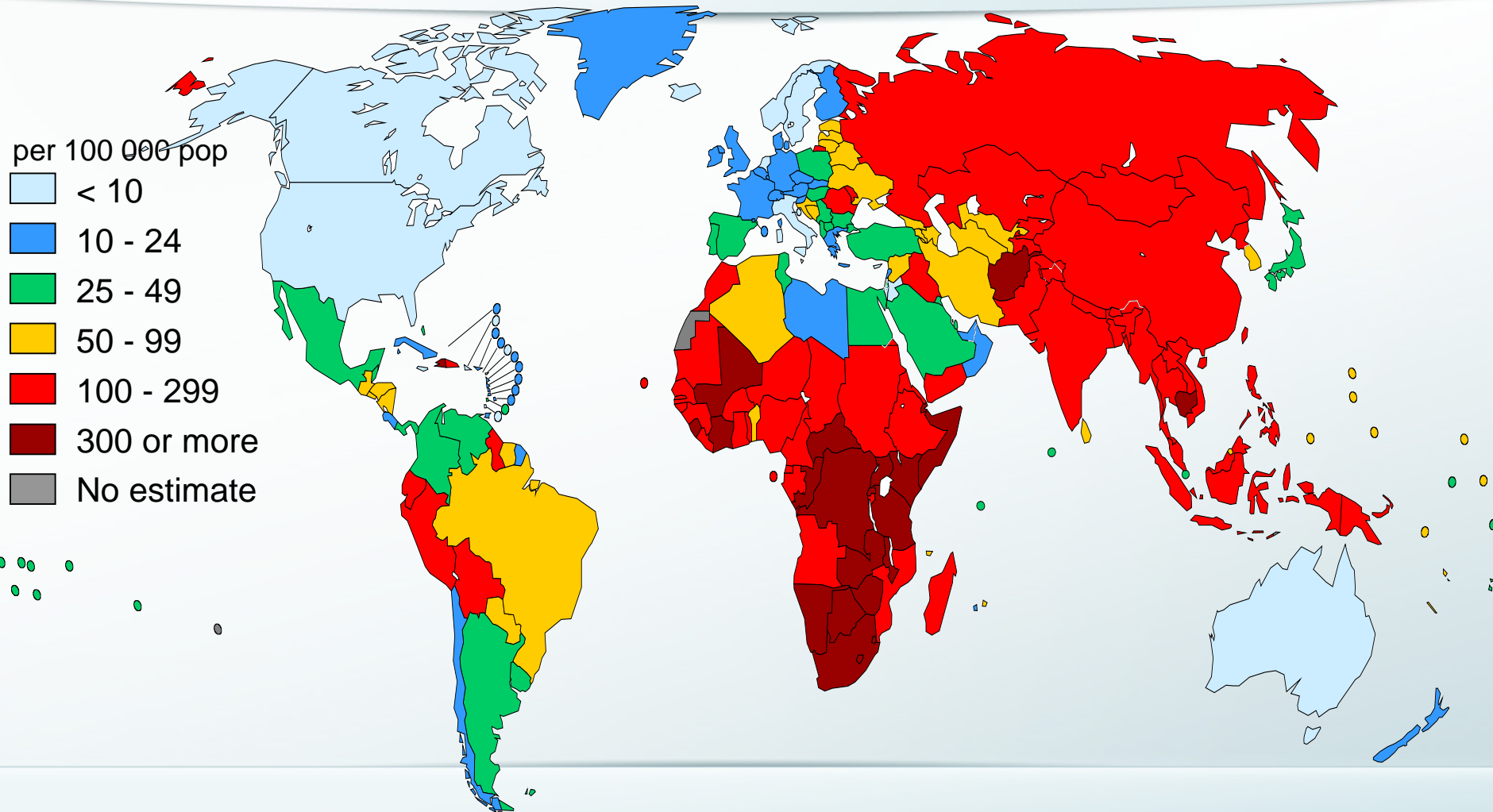


N=29.2 million

www.worldmapper.org



Estimated TB Incidence Rates



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. White lines on maps represent approximate border lines for which there may not yet be full agreement.



Tuberculosis in migrants to the UK in

(R. Gilbert/ Data from Enhanced TB Surveillance Programme)

6,837 cases of tuberculosis reported
and 70% of cases were born abroad

Rate in UK born 3.8 per 100,000 persons

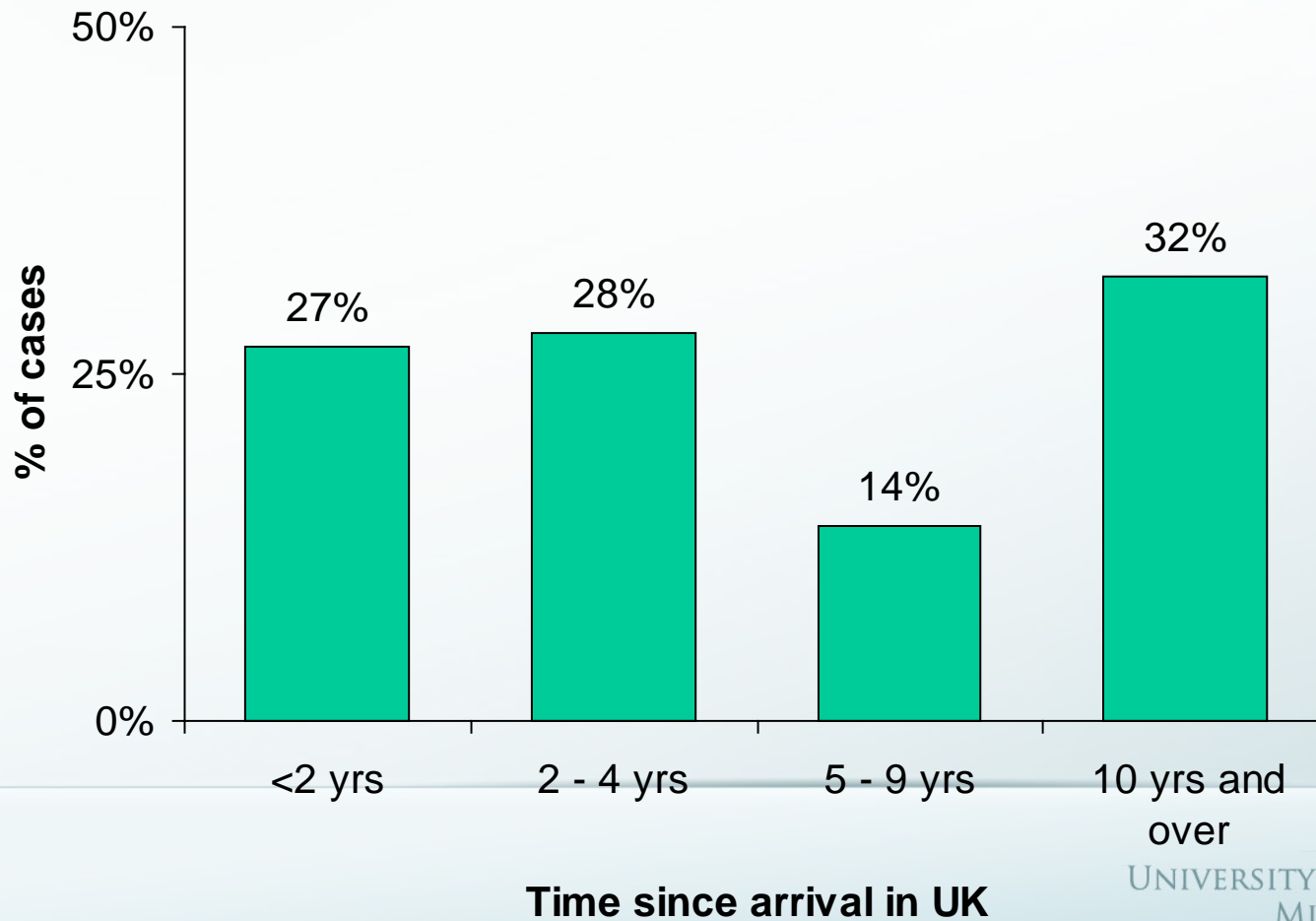
Rate in foreign born 90.1 per 100,000
persons

*Rate of disease was 23 times higher in
people born abroad*



Time between arrival in UK and diagnosis of TB

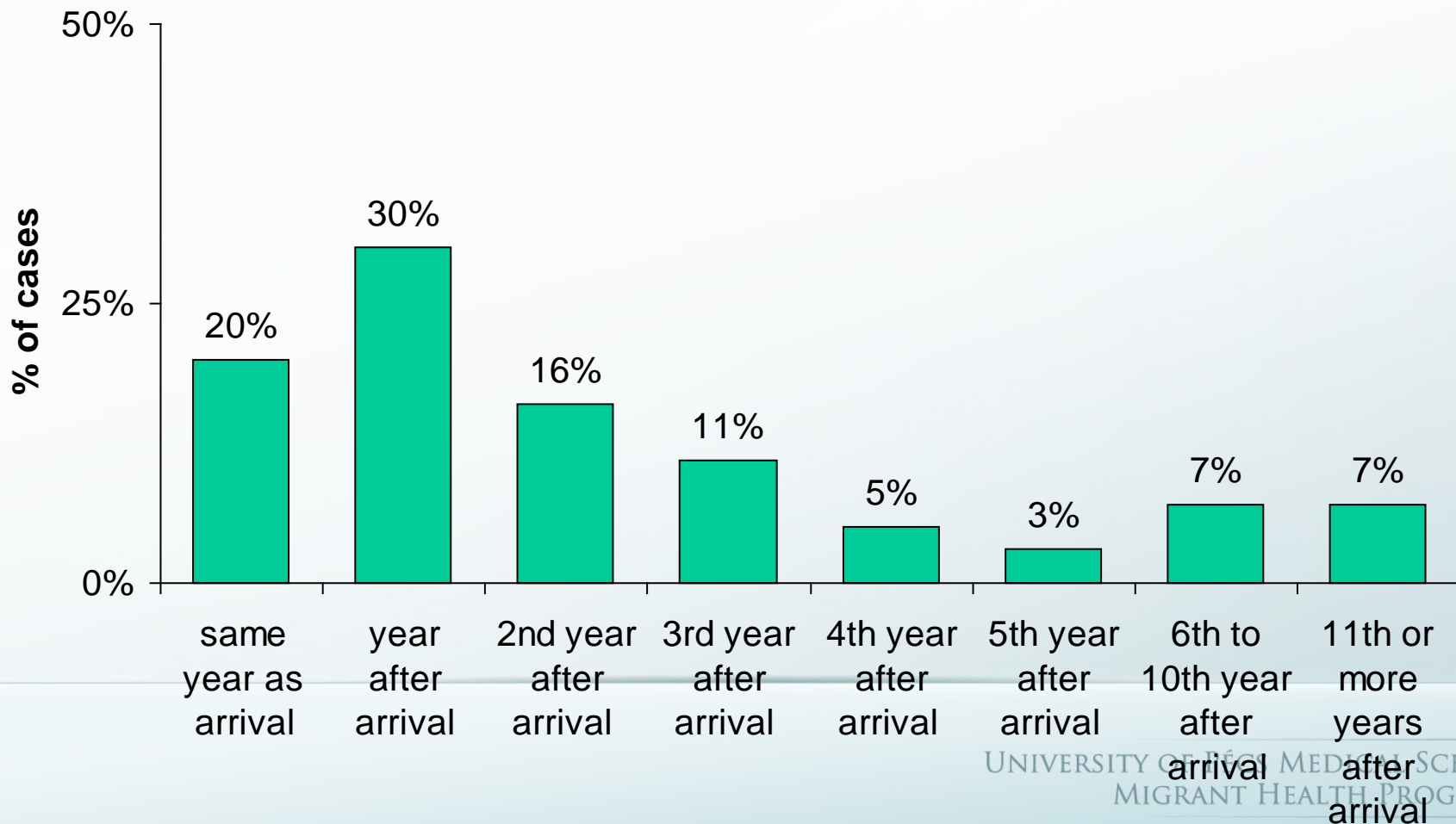
n=3729 cases with year of arrival information
(R. Gilbert, UK Health Protection Agency)





Time between arrival in the UK and HIV diagnosis

n=2055 cases with information on year of arrival
(R. Gilbert, UK Health Protection Agency)





UK Conclusions

(R. Gilbert, UK Health Protection Agency)

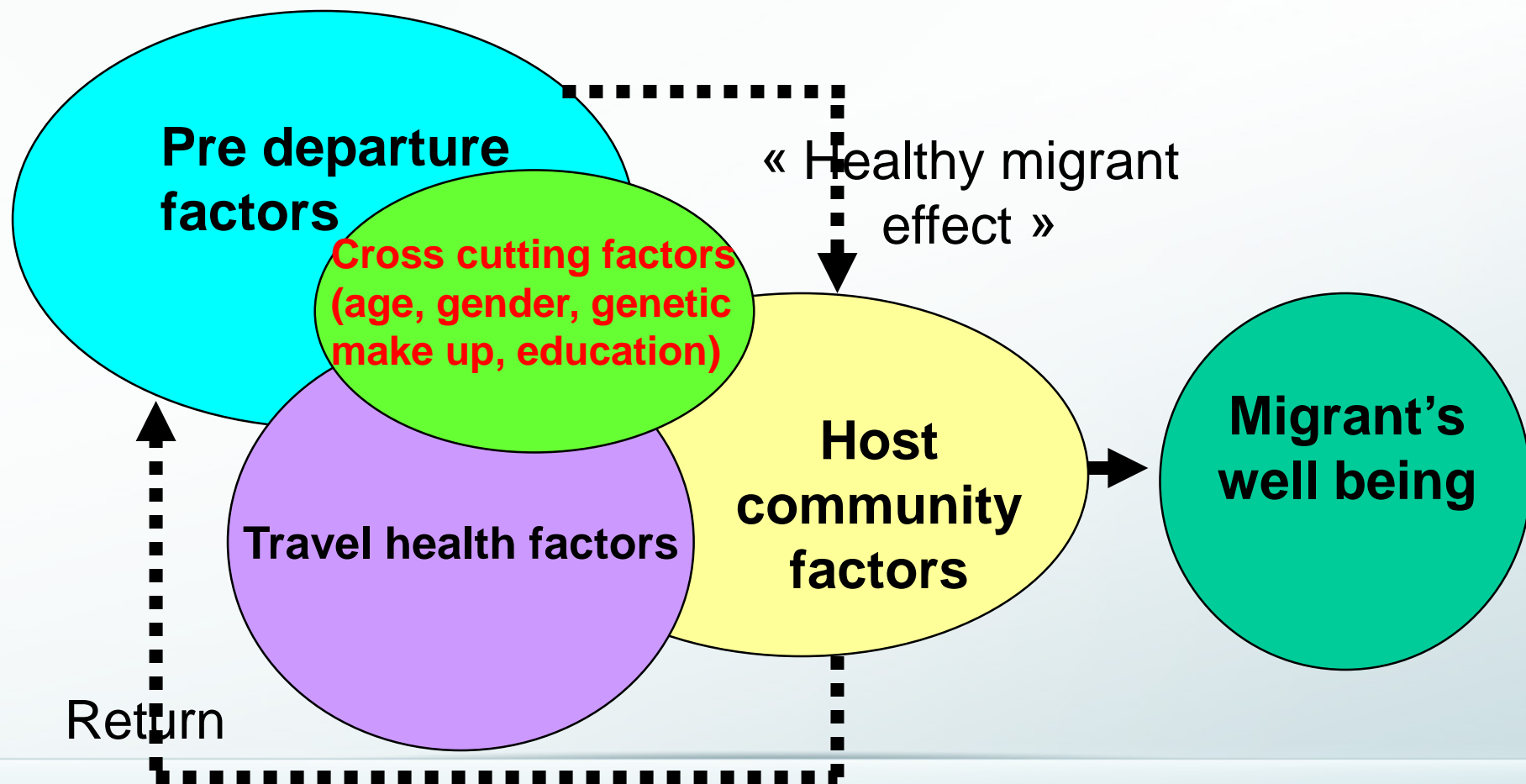
8% of the UK population are migrants

**70% of cases of TB occur in the foreign born
=> only 27% are diagnosed within 2 years of
arrival**

**72% of newly diagnosed cases of HIV occur in
the foreign born population
=> only 20% are diagnosed in year of arrival**



Various stages of the migration process & impact on migrant's well being





Migration Health: Impact of / in Host Community

Legal status, access to health & social services in general and those prepared to deal with transcultural aspects

Policies, health screening, discrimination, isolation, detention...

Exploitation, child labour, unsafe working conditions, sexual exploitation



WHY ...bridge migration and health?

- ➔ *Migrants have a right to health*
- ➔ *Benefits communities and society at large*
 - integration*
 - stabilization of societies: peace & security*
 - development*
 - health is wealth*



WHAT is Migrant Health?

Migration health addresses the physical, mental and social needs of migrants and the public health needs of hosting communities



The Amsterdam Declaration (2004) of Migrant Friendly Hospitals Network

...

Health policy should provide a framework to make *migrant-friendly quality development* relevant and feasible for each hospital (legal, financial, and organisational regulations)

A framework for *health oriented community development for migrants* and ethnic minorities has the potential to be most helpful in developing these groups' health literacy.

Policy and administration have an important role to play in *facilitating knowledge development* – for example in initiating and funding research, reviews, standards development and dissemination (networking, education, exchange of experience)

.....



'Migrant friendly':

Understanding the migrants' history

Push and pull factors,
conditions and environment of movement
Need/ benefit of host community

Coping with cross cultural, cross religious factors

Differences in health beliefs and health attitudes
Avoidance/ prevention of stigmatization and discrimination
Mental health aspects of integration

Being familiar with differences in morbidity profile and its impact on

Individual health
Public health
Prevention, treatment and continuous medical care, including ethnic specific therapy as well.



Highlights of ethnic specific therapy

Migrants are representing the morbidity profile of their country of origin that may differ significantly from that of the host country. This does not mean only the occurrence of rare or re-emerging infectious diseases; lifestyle related diseases are also common among immigrants.

Hypertension is a leading risk factor for cardiovascular diseases. Race or ethnicity data in most of the studies conducted in the EU were not registered. European trials are 5 times less likely to contain these types of data than in the US. In the same time several studies have confirmed that the therapeutic response to Ca² channel blockers and ACE inhibitors (standard components of the usual European therapeutic protocols) is influenced by the ethnicity of the patients.

Asians: In Japan calcium channel blocker therapy is often used as a first-line agent in uncomplicated hypertension. Two recent meta-analyses suggest that antihypertensive therapy with calcium channel blockers likely has an equivalent effect on cardiovascular outcomes compared with other classes of therapy.

Blacks: Blacks, who were treated with the ACE-inhibitor, had significantly higher blood pressure, a greater incidence of strokes, and a greater incidence of combined cardiovascular disease than blacks treated with diuretics, because of lower renin levels in black hypertensive patients, ACE-inhibitors are less effective as monotherapy for hypertension in blacks than in whites. Currently, ACE inhibitors are not recommended as first-line monotherapy for hypertension in blacks.



The European Core Health Indicators (ECHI) shortlist of 88 health indicators identified by policy area

Relevant policy areas*

		Health services and health care			Ageing and population			Health determinants		Diseases and Mental Health			HIAP
ECHI Chapters	ECHI Indicators	Sustainable health care systems	Health system performance, Quality of care, Efficiency of care, patient safety	(Planning of) health care resources and health care cost	Healthy ageing, Ageing population	Maternal & perin. health	Child health	Health inequalities (including accessibility of care)	Preventable health risks and lifestyle health behavior (including young adults)	Non-Communicable diseases (NCD), Chronic Diseases	(Preventable) Burden of Disease (BoD) and health threats, communicable diseases	Mental health	Health in All Policies (HIAP) including occupational and environmental health
		Demography and socio-economic situation	1. Population by sex/age	x		x	x						
2. Birth rate, crude	x					x							
3. Mother's age distribution			x			x	x	x					
4. Total fertility rate	x					x							
5. Population projections	x			x	x								
6. Population by education								x					x
7. Population by occupation								x					x
8. Total unemployment								x					x



University of Pécs: CHANCE - new training program for facilitating the integration of migrants through human capacity building

The teaching modules

Public health and applied epidemiology, infectology

Social, behavioral, multicultural, multireligious aspects in the health and social care of migrants

Applied occupational health

Economic aspects of the successful integration of migrants

Mental health and psychosomatic aspects of migrants health assistance; migrants communities and health promotion; human rights

'Migrant friendly' health and social services, related system managerial aspects and tasks



THE CHANCE CONSORTIUM



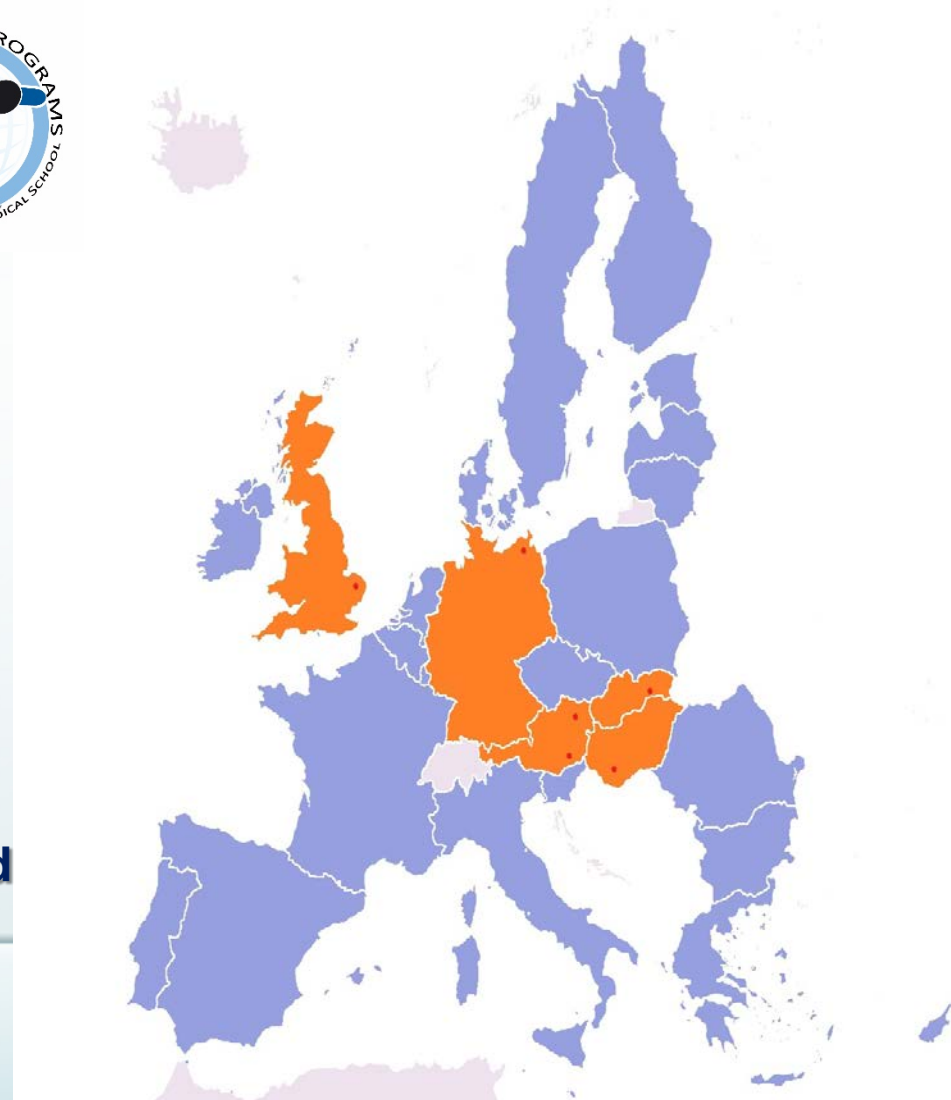
Project coordinator:
University of Pécs

Partners:

- **University of East Anglia**
- **Donau Universität, Krems**
- **Pavol Jozef Šafárik University in Košice**
- **Ernst-Moritz-Arndt-Universität Greifswald**
- **Medizinische Universität Graz**

Associated partner:

EURIPA (European Rural and Isolated Practitioners Association)





PTE Általános Orvostudományi Kar

DR. MISETA ATTILA
dékán

DR. ERTL TIBOR
általános, szak- és továbbképzési dékánhelyettes

DR. BIRÓ ZSOLT
klinikai és diákjóléti dékánhelyettes

DR. CSERNUS VALÉR
mb. oktatási dékánhelyettes

DR. DECSI TAMÁS
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UNIVERSITY OF PÉCS MEDICAL SCHOOL MIGRANT HEALTH PROGRAMS



Introducing University of Pécs Migrant Health Programs

The University of Pécs is the largest higher educational institution in Hungary with around 35,000 students at ten faculties (including more than 1000 foreign students at the Medical School alone). The Medical School is not only a site of students of various fields of health sciences but also an outstanding centre for regional health care provision, training and research. The mission is to bring the gap between scientific research and everyday practice by training of highly-qualified professionals. That is reflected by the more than 50 accredited Ph.D. programs of the Medical School alone.

As a new initiative, University of Pécs Medical School is taking migration health as a new challenging field of health sciences with growing importance in both: training and research. Migration is a recurring issue nowadays due to the growing number of immigrants in the EU. The estimated number of migrants is already more than 50 million in the EU 27 and the immigration flow is about 1 million yearly. The problem is multidisciplinary, overarches health care and



Irregular migrants in Hungary

2010 -2012: 2-3000/ year

2013: 19 000

2014: 24 000

2015: ???



Békéscsaba



Debrecen



Debrecen



Szeged



Bicske

