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# The Role of Migration in Disease Transmission

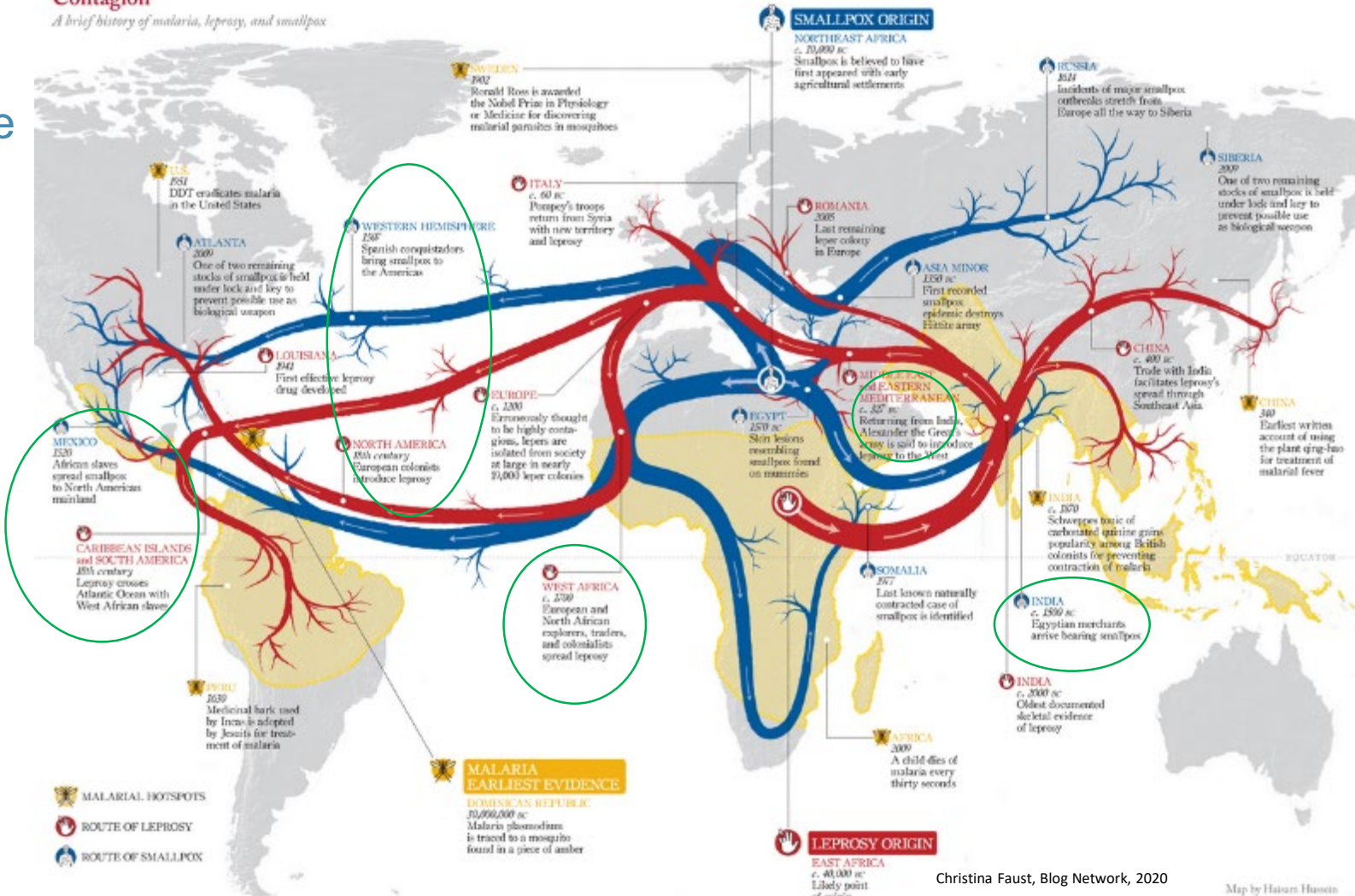
**“Global Health in the 21<sup>st</sup> Century”**

*Swiss TPH VIRTUAL Symposium 2021, 28-30 June*

Afona Chernet, MMedSci, PhD  
Dept. of Medicine, Clinical Research Unit  
Swiss Tropical and Public Health Institute

**Contagion**  
A brief history of malaria, leprosy, and smallpox

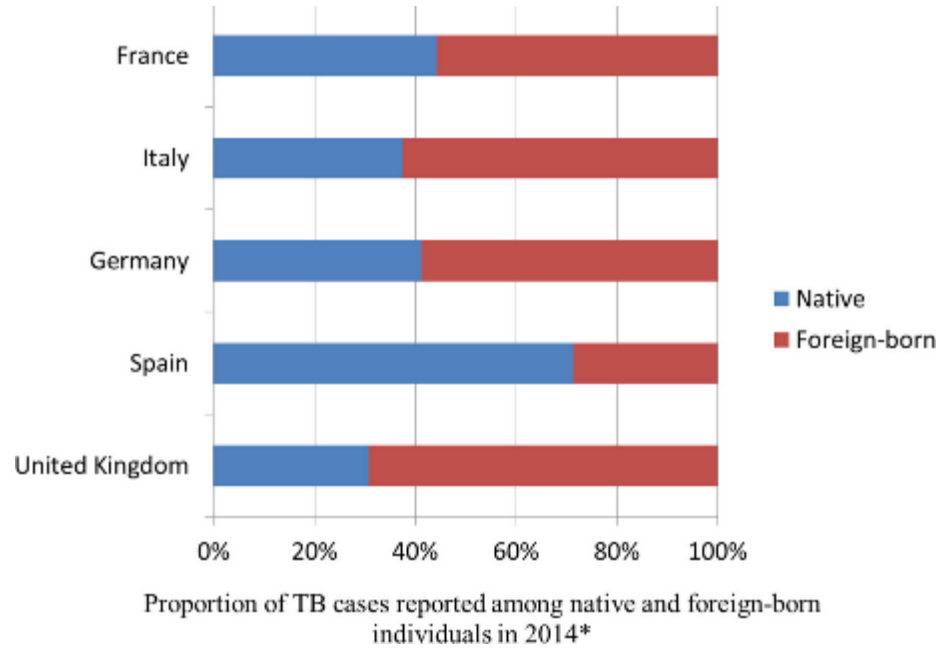
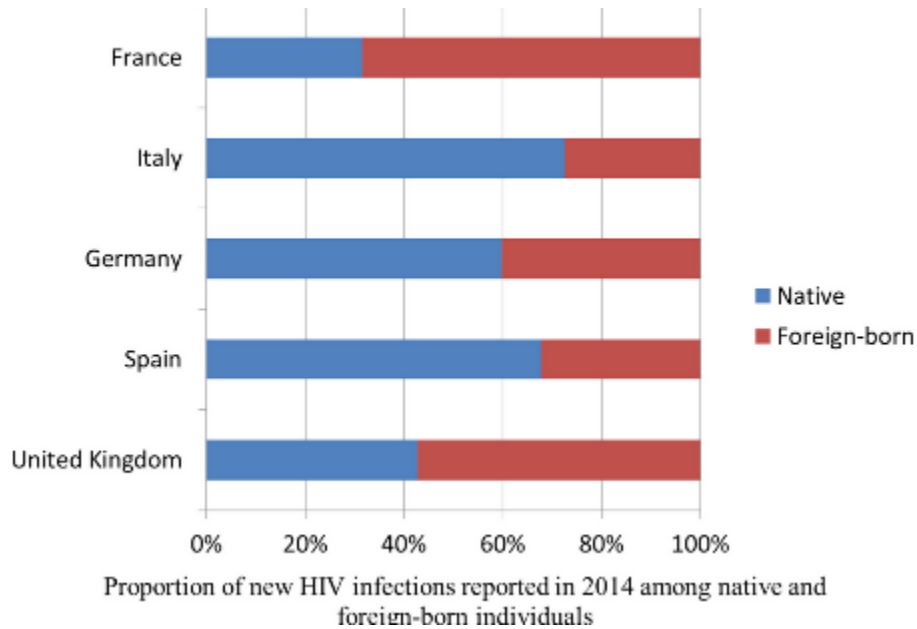
Humans: are we the most effective vector of disease?



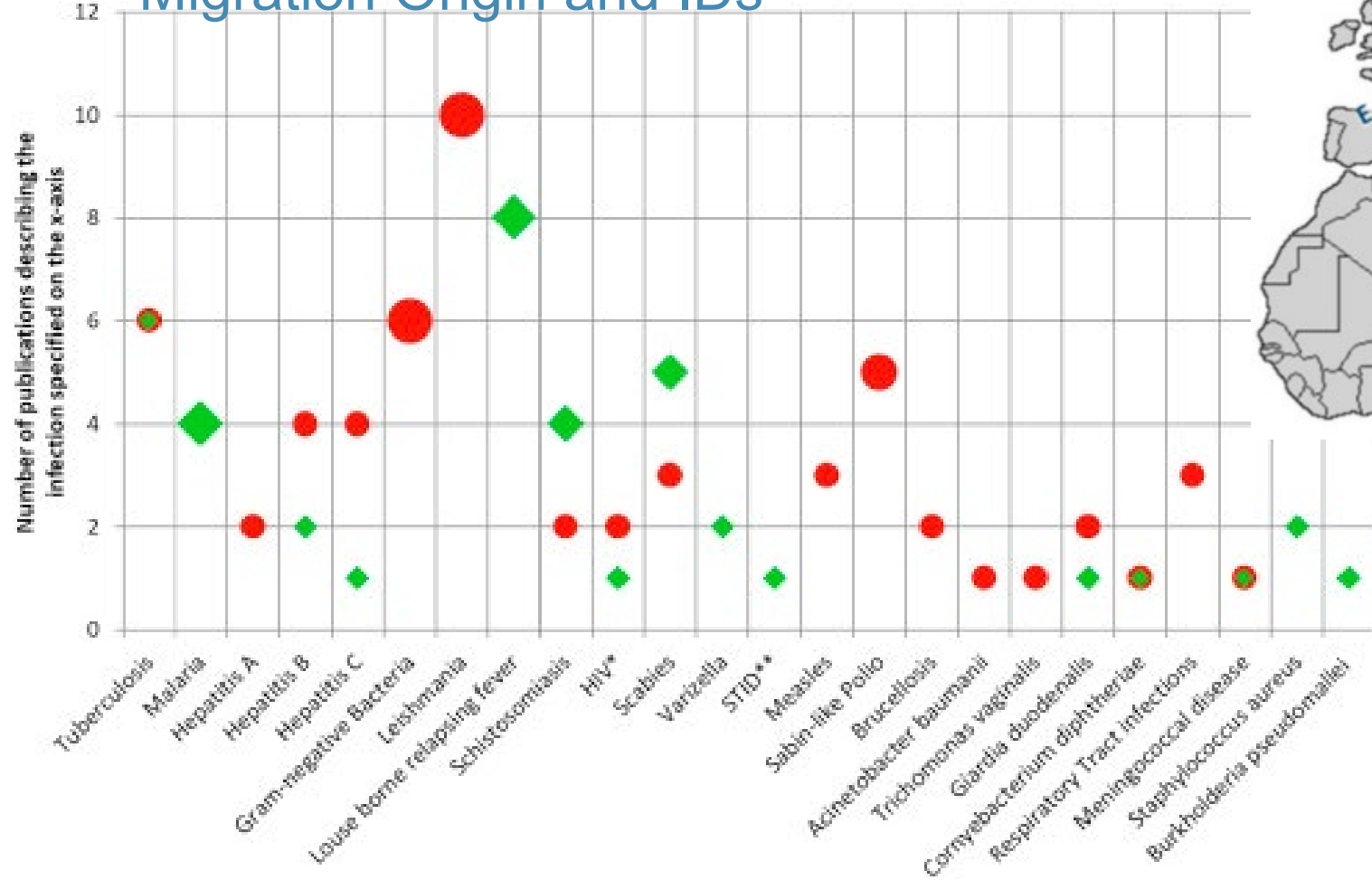
# Infectious Diseases and Migrants

- **On arrival**; injuries, hypothermia, burns, gastrointestinal, NCDs and their treatment, child health, SRH, mental health and violence, IDs, and others
- Communicable disease → ← **poverty**
- **No systematic association**, but with travelers
- **Low risk** of transmission to host population
- **No obligatory** screening program is recommended by WHO, → no evidence of cost-effectiveness, but at point of entry,
- **Triage** followed by proper diagnosis and treatment is recommended

# Native and foreign-born individuals with IDs



# Migration Origin and IDs



Isenring E. et al. *Travel Medicine and Infectious Disease* 2018

# Air Travel and emerging and re-emerging IDs

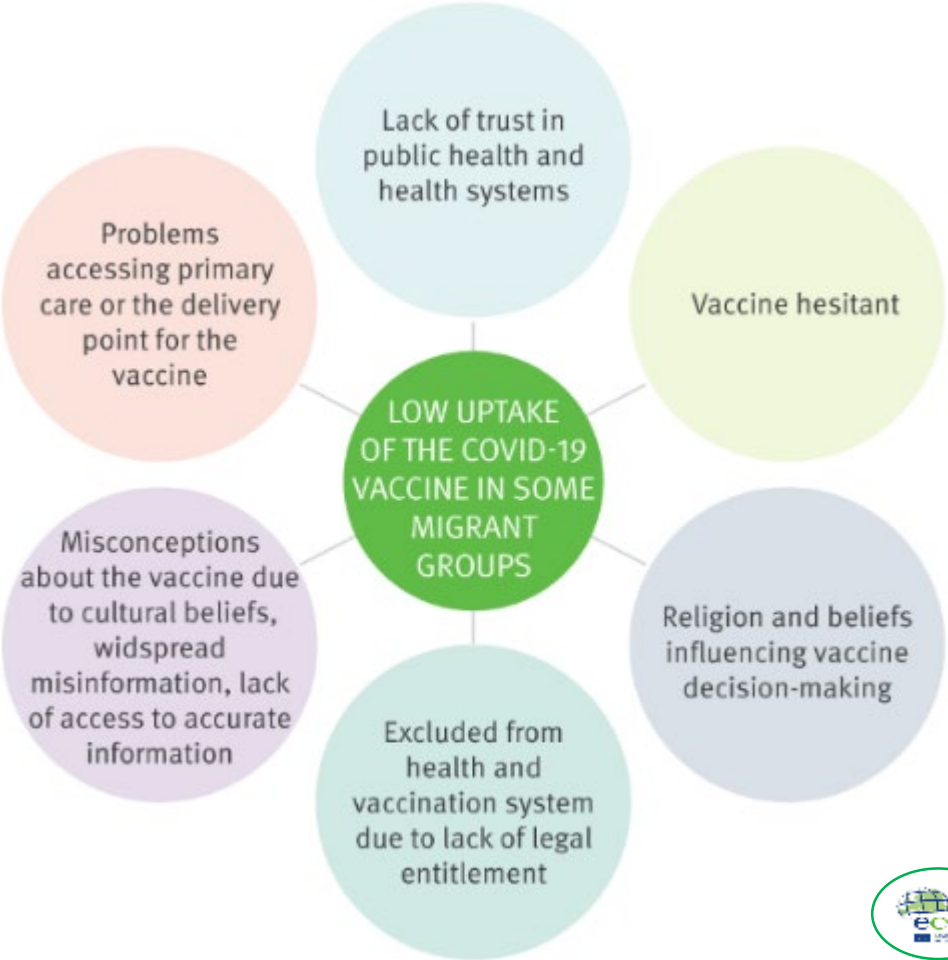
- Potential for outbreak or speeding up of epidemics
- Last two decades alone, several of them were reported

<b>SARS-CoV-2</b>	<b>Wuhan,China (2019)</b>	<b>Pandemic (2019)</b>
Influenza H1N1	Mexico (2009)	Pandemic
<i>Vibrio cholerae</i>	South Asia (2002,2008)	Haiti epidemic (2010)
NDM-1carbapenem-resistant Gram-negative	India (2009)	Several countries (2009)
<i>mcr-1</i> colistin-resistant Gram-negative	China (2014)	Several countries (2014)
Dengue virus	South east Asia (1950s)	Global emergence over past 5 decades
MERS-CoV	Saudi Arabia (2012)	Epidemics in several countries (2012)
Zika virus	Africa and Asia	Latin American and Caribbean (2015)
Chikungunya virus	Africa and Asia	Latin American and Caribbean (2013)
SARS-CoV	Southern China (2002)	Epidemic in several countries (2002)
Schistosomiasis	Africa	Epidemic in Corsica (2013)

# COVID-19 and Migrants

- Health and social risk factors, → Higher risk of exposure;
  - Occupational risk
  - Dwelling conditions → over crowded (camps, detention facilities & homeless shelters)
  - Lower levels of awareness → healthcare and public health messaging access.
- Only 6% (3/47) published information on testing or healthcare entitlements in common migrant languages, though 96% (45/47) had online advices.
- Effective communication → the notion “**health of one is the health of all**” is key for pandemic response

# Risk factors for lower uptake of the COVID-19 vaccine among migrants:







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Thank You!