

Figuring out what makes populations sick: unraveling disease mysteries

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UNDER CONSTRUCTION version sept 04

What I wish to convey

- (Via 19th century – pre germ-theory – examples) how epidemiologists think, work, and face challenges
- Public health benefits of acting even before disease processes are fully understood
- Epidemiological research in 21st century

PhD

A bright young *chachem* told his grandmother that he was going to be a Doctor of Philosophy.

She smiled proudly: 'Wonderful. But what kind of disease is philosophy?'

Leo Rosten: *The Joys of Yiddish* (1970), cited in a 2011 mini-dictionary of epidemiology



Disease

THE EXTRAORDINARY STORIES BEHIND
HISTORY'S DEADLIEST KILLERS

MARY DOBSON

Quercus

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A 17th-century physician wearing a traditional plague-preventive costume.

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Syphilis, painted in 1910 by the artist Richard Cooper.

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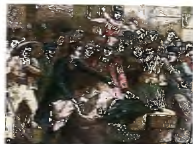
AIDS

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The body louse, carrier of typhus.



A depiction of the 1832 cholera epidemic in Paris.

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What invasion was this?

If a Foreign Army had landed on the coast of England, seized all the seaports, sent detachments over the surrounding districts, ravaged the population through summer, after harvest

destroyed more than
1,000 lives a day for several days in succession,

and,

in the year it held possession of the country,
slain 53,293 men, women, and children

– the task of registering the Dead would be inexpressibly painful; and the pain is not greatly diminished by the circumstance that in the calamity to be described
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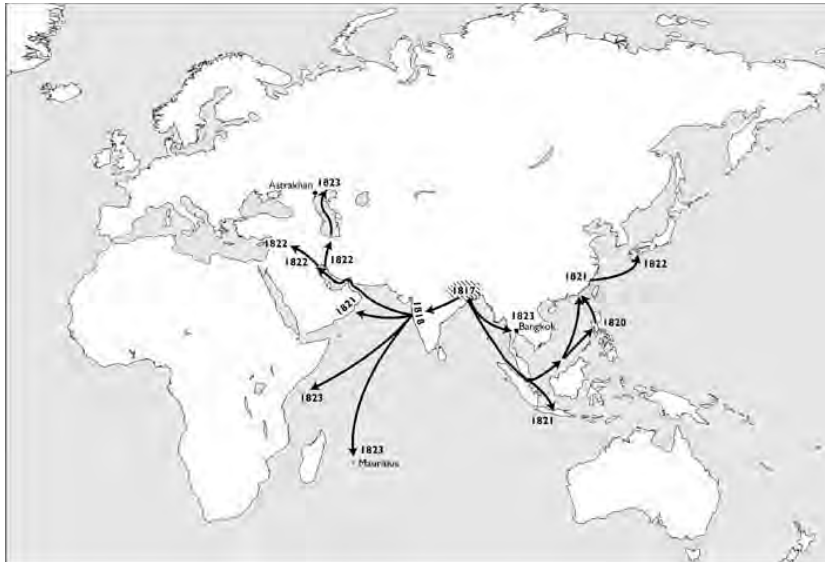
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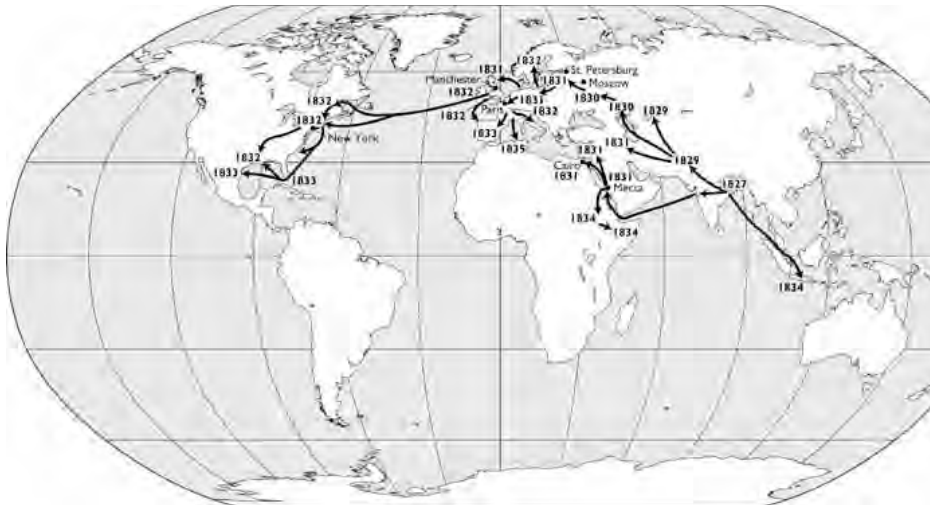
the minister of destruction was a

Pestilence

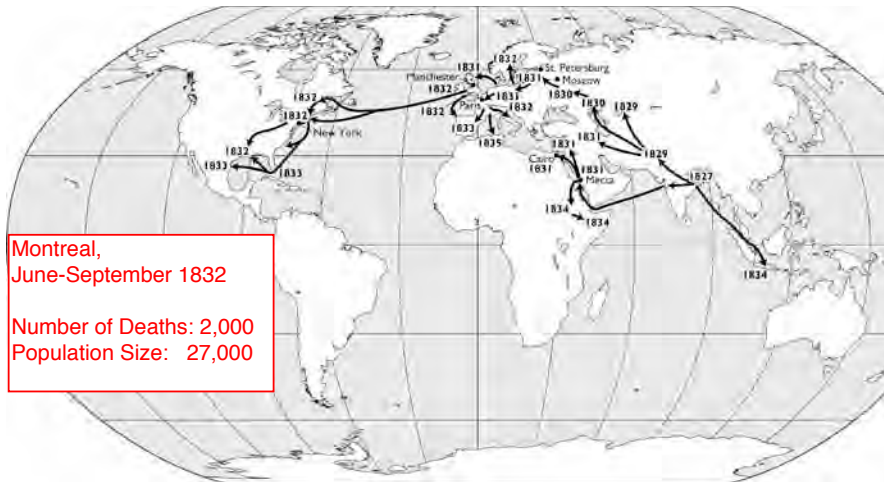
1st Pandemic, 1817-1824



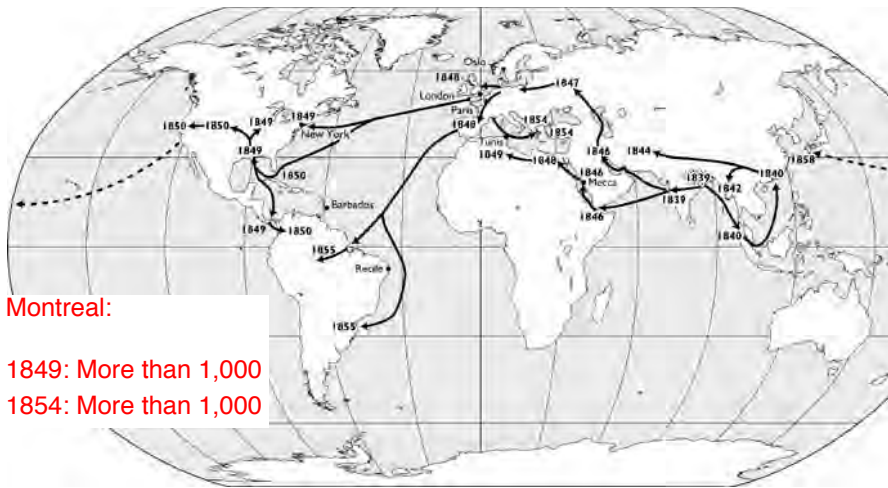
2nd, 1827-1835



2nd, 1827-1835



3rd, 1839-1856

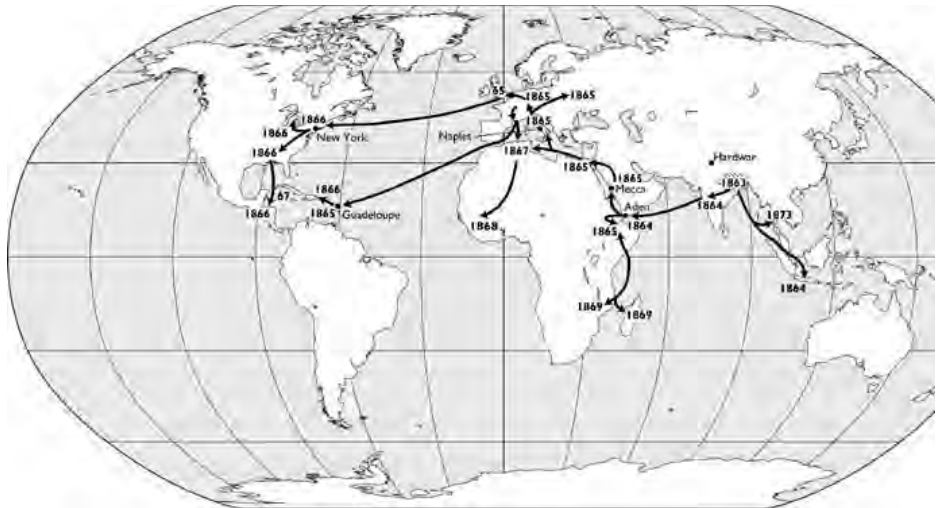


Montreal:

1849: More than 1,000

1854: More than 1,000

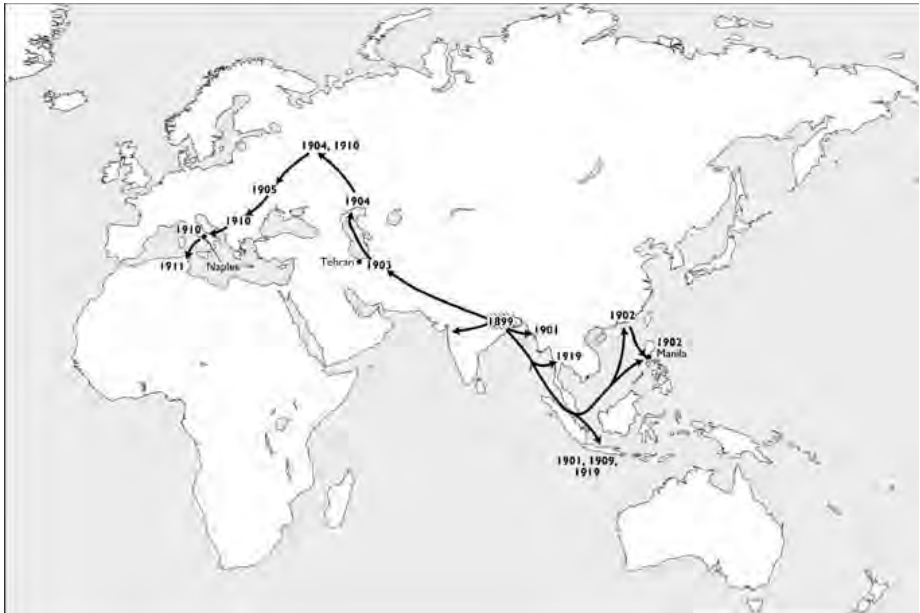
4th, 1863-1875



5th, 1881-1896



6th, 1899-1923



Areas reporting outbreaks, 2010-2011



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Data Source: World Health Organization
Map Production: Public Health Information
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