

Health and Climate in Asia

Dr. Wenjia Cai | Director of Lancet Countdown Asia @LancetCountdown



Key messages

Global warming and extreme weather events are threatening human health in Asia.

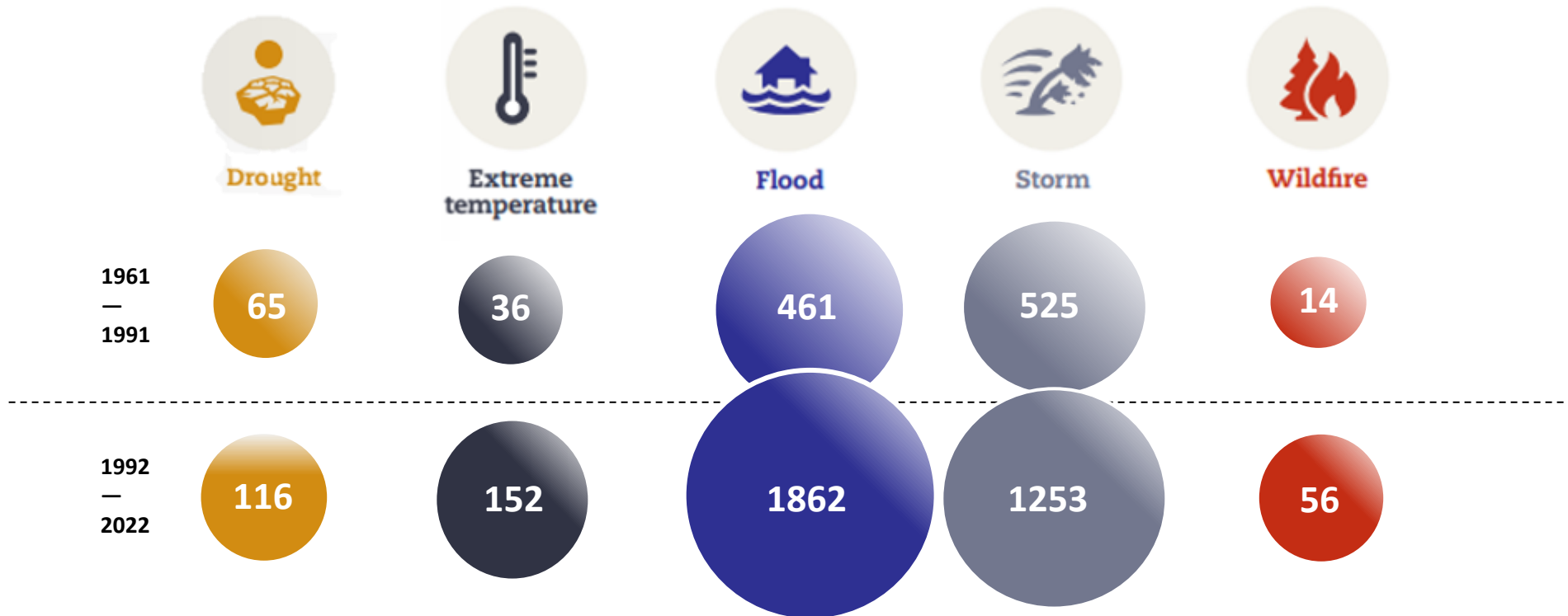
With highly diverse and complex climate conditions and socio-economic backgrounds, Asian countries face different health threats of climate change.

Targeted and coordinated response measures are needed.



Global warming and extreme weather events are threatening human health in Asia.

Total disaster events by type: 1961-1991 VS. 1992-2022



(Data source: EM-DAT)



2021 Turkey Wildfire



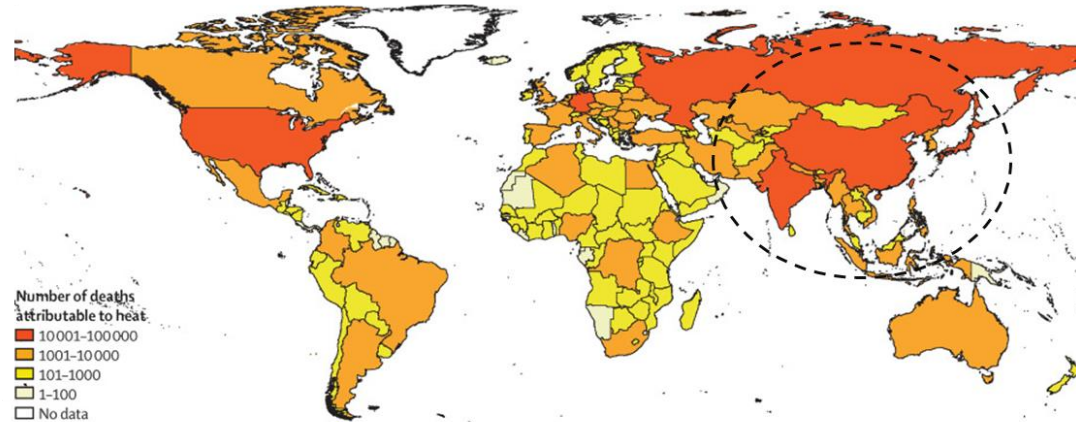
2021 Henan floods in China



2022 heatwaves in Japan

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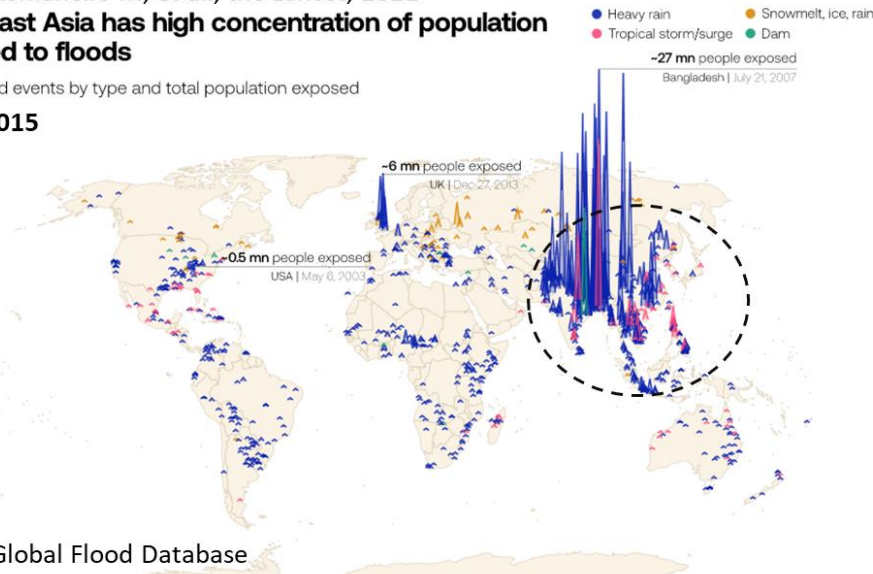
Heat-related deaths of people older than 65 years in 2019



Source: Romanello M, et al., the Lancet, 2021

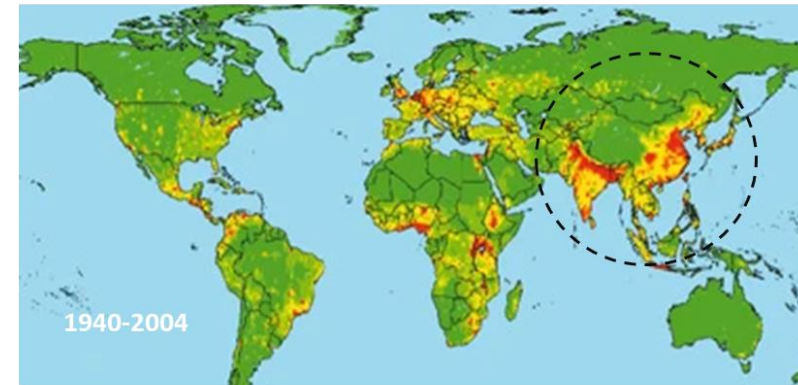
Southeast Asia has high concentration of population exposed to floods

Global flood events by type and total population exposed
2000-2015

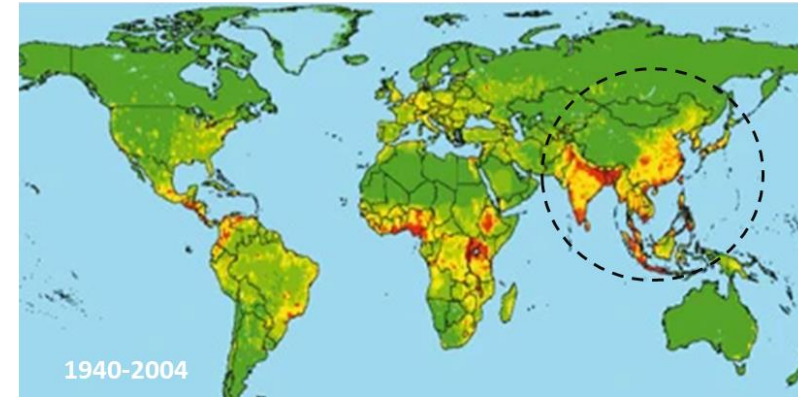


Source: Global Flood Database

Relative risk of Emerging infectious diseases from zoonotic pathogens from wildlife

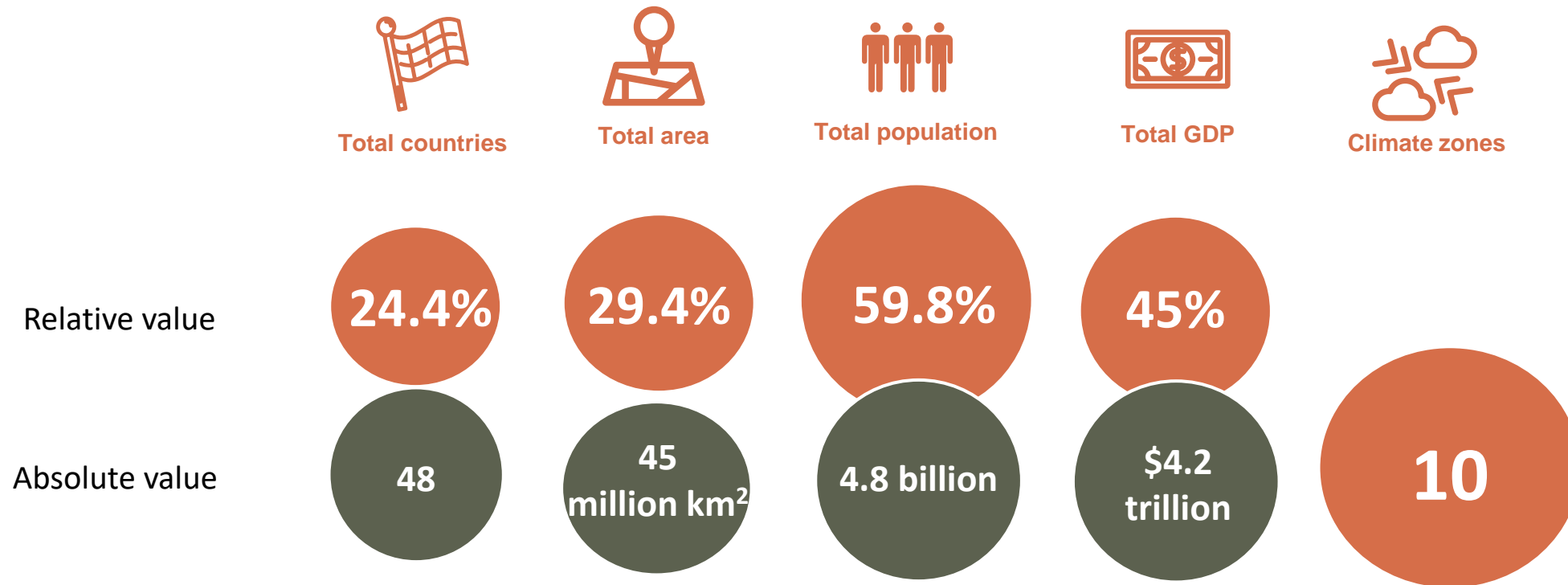


Relative risk of Emerging infectious diseases from vector-borne pathogens



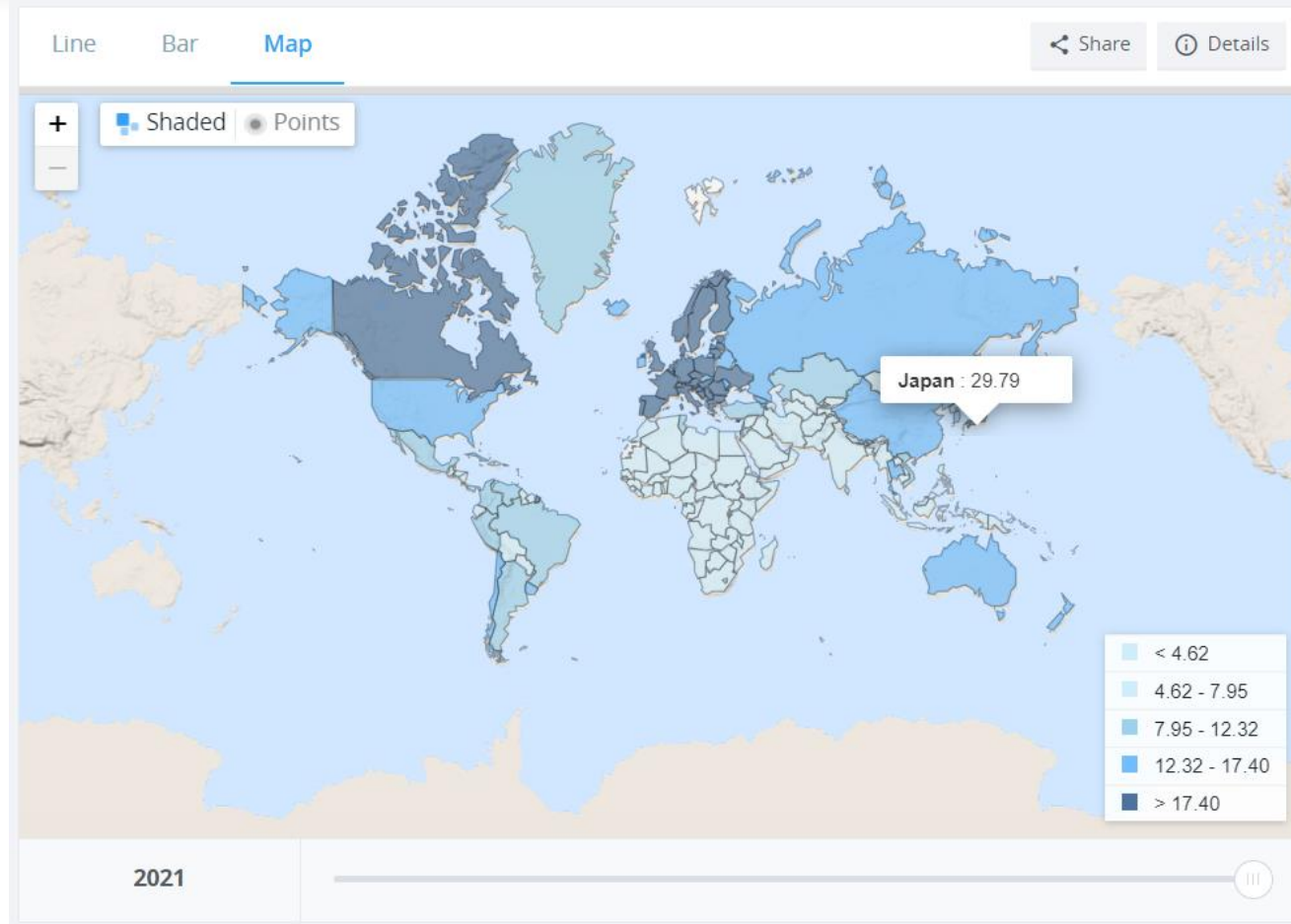
Source: Jones L, et al. nature, 2008

Some basic facts about Asia: diverse and complex climate and socio-economic conditions



Asia is the largest continent in the world with the largest population. The climate and socio-economic conditions among Asian countries vary a lot.

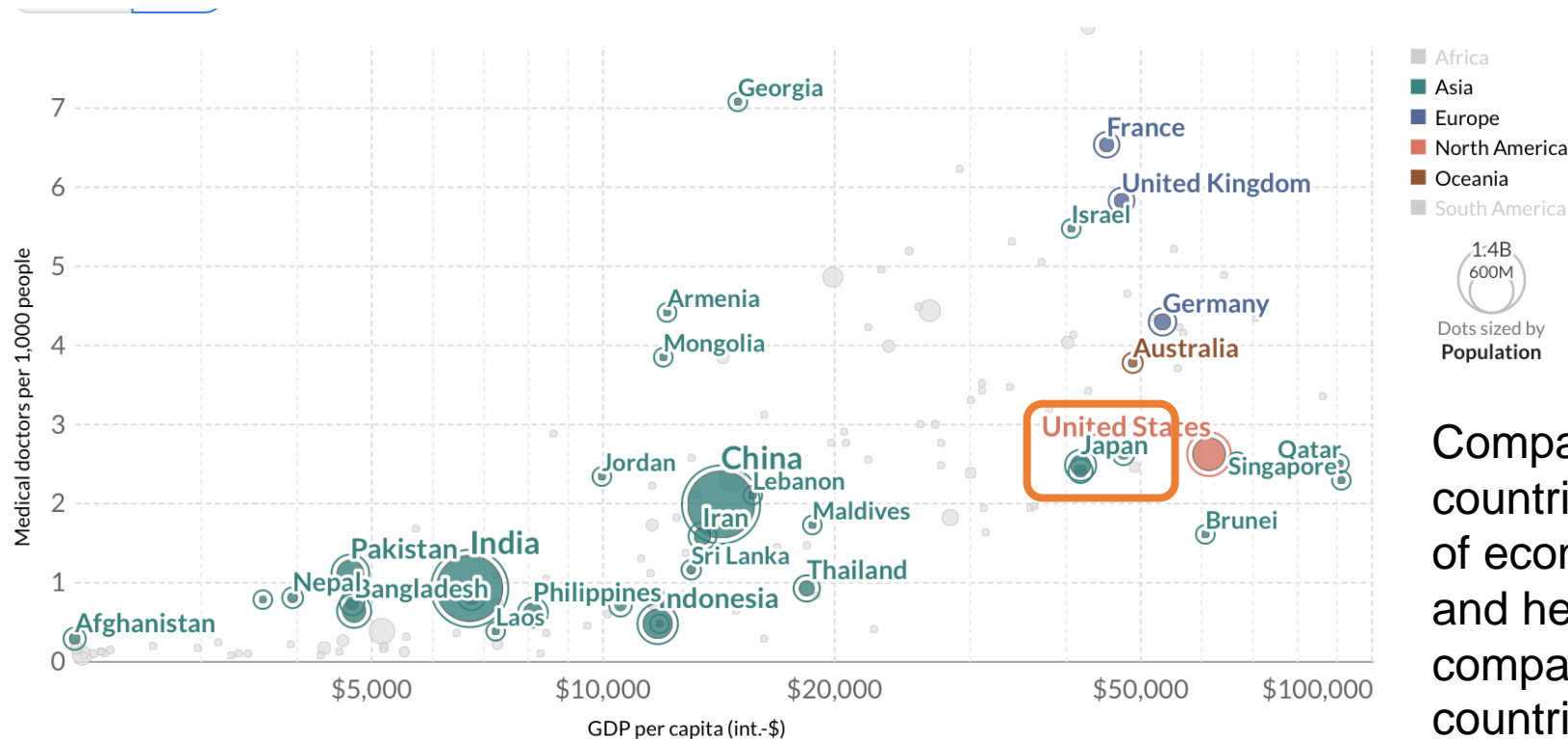
Some basic facts about Asia: diverse and complex climate and socio-economic conditions



Japan is one of the countries in the world that have the highest share of older people. Elderly people are more vulnerable to climate change.

Share of older people (65+) in total population in Asia

Some basic facts about Asia: diverse and complex climate and socio-economic conditions



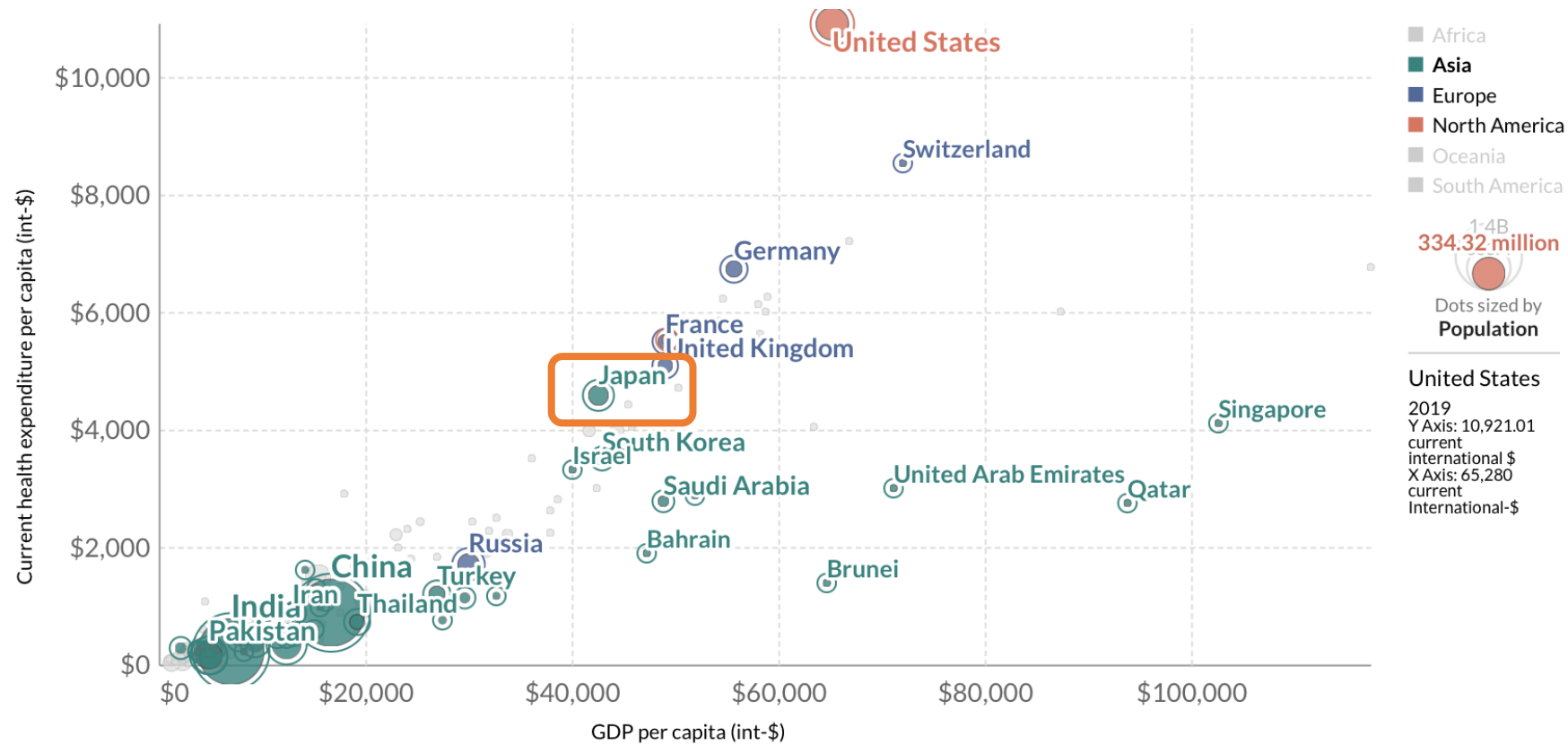
Comparatively, most Asian countries have lower levels of economic development and healthcare resources compared to western countries.

Source: Data compiled from multiple sources by World Bank

OurWorldInData.org/economic-growth • CC BY

Medical doctors per 1,000 people v.s. GDP per capita, 2019

Some basic facts about Asia: diverse and complex climate and socio-economic conditions



Comparatively, most Asian countries have lower levels of economic development and healthcare resources compared to western countries.

Source: Data compiled from multiple sources by World Bank

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Current health expenditure per capita v.s. GDP per capita, 2019

Major health concerns of climate change in Asia:

Similarities and differences co-exist. Targeted response measures needed.

Source: AASSA, 2021

	Climate and flooding	Forest fires	Heat-related	Cold-related	Mental health	Forced migration	Climate change and environmental toxicology	Food & nutrition security and agriculture	Infection disease threats	Fertility	Allergy
China	√	√	√	√		√	√		√		
India	√	√	√			√		√			
Japan			√				√		√		
South Korea			√								
Indonesia											
Malaysia	√	√					√		√	√	
Nepal	√		√	√			√	√	√		
Pakistan	√							√	√		
Turkey	√		√			√					
Armenia	√		√			√		√	√		√
Azerbaijan								√			
Bangladesh			√	√	√				√		√
Russian Federation	√	√				√		√			

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Thank you

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