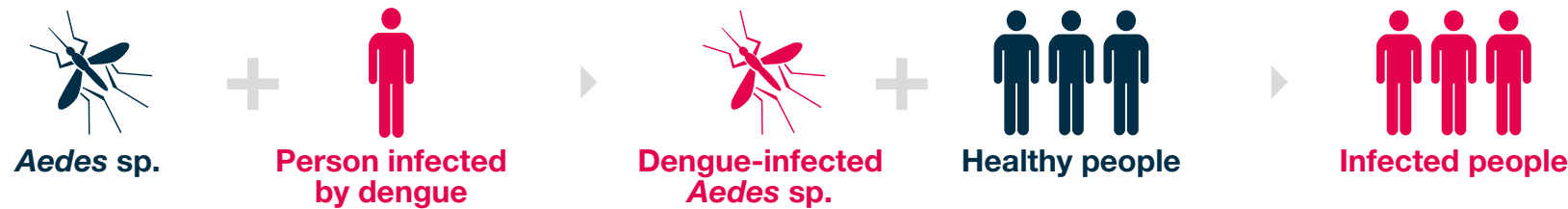




Dengue

Facts & Figures

Dengue: The Fastest Growing Endemic Disease



30-fold increase
in global incidence over last 50 years

A Global Threat

2 levels of disease infection:
// Dengue
// Severe dengue (DHF*¹ and DSS*²)

3.9 billion people at risk

390 million dengue infections a year

500,000 cases of severe dengue a year

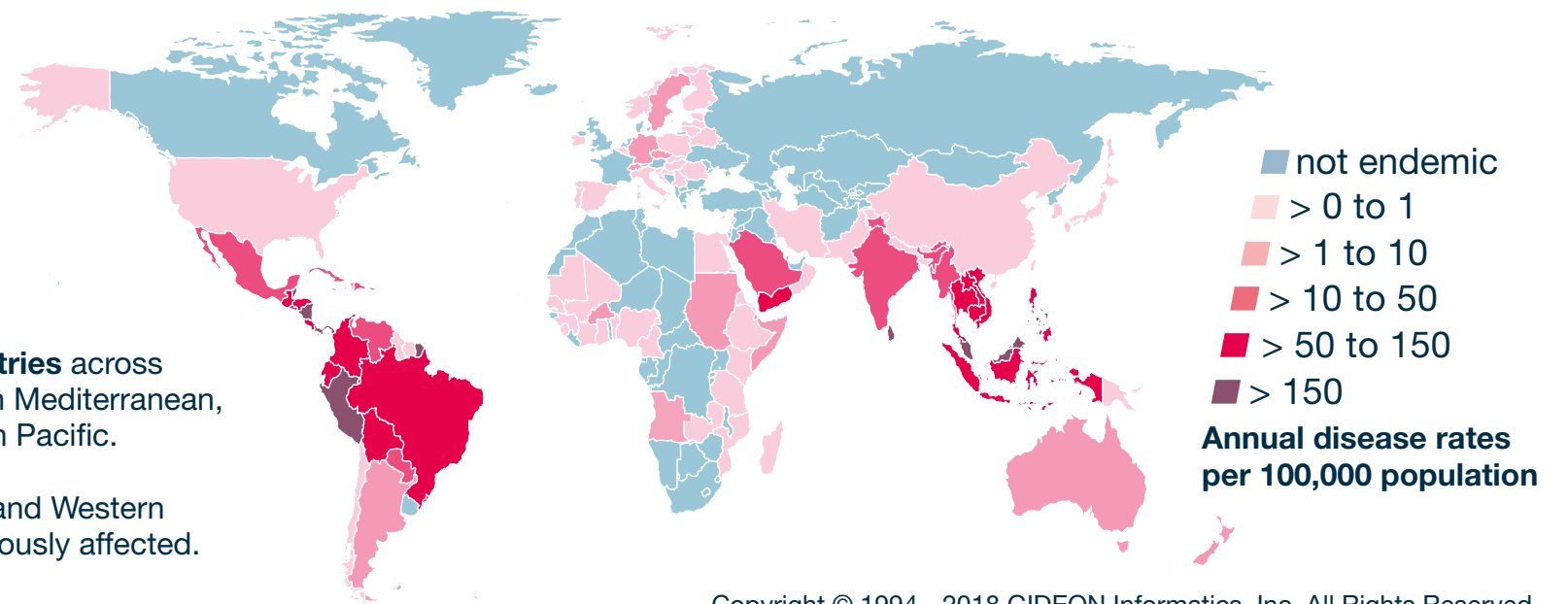
2.5% die from severe dengue

128 countries impacted by dengue

Dengue affects mainly thertropical and subtropical areas of the world and spreads mostly in urban and semi-urban areas.

Endemic in more than **100 countries** across Africa, the Americas, the Eastern Mediterranean, Southeast-Asia, and the Western Pacific.

The Americas, Southeast-Asia, and Western Pacific regions are the most seriously affected.



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Causes behind Dengue Expansion



Climate change



Poor sanitation



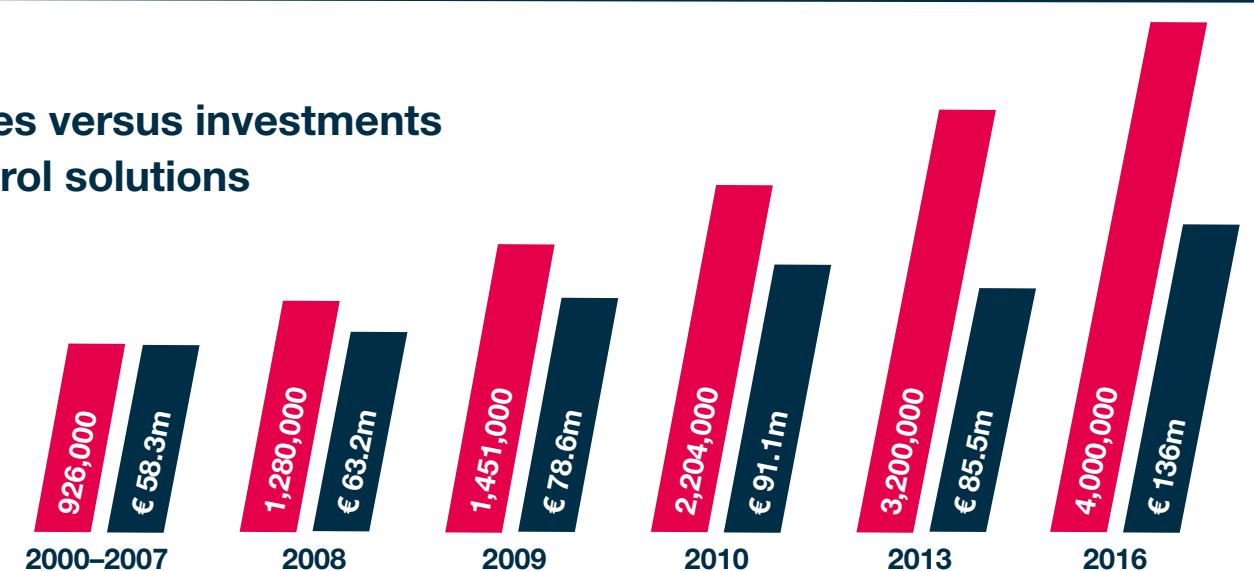
Unplanned rapid urbanization



Movement of goods and people

Increase of dengue cases versus investments into dengue vector control solutions

■ Number of cases reported
■ Investment made into dengue³ vector control solutions



Existing Solutions to Fight Dengue and Challenges

Vector Control



Space spraying



Larval source management

Medical Treatment



Preventative



Curative

Under-reporting and misdiagnosis of cases



Lack of specific anti-viral drugs to treat dengue infections



Insecticide resistance (declining efficiency of vector control solutions)

Effective vector control measures
are a key element in dengue prevention and control

Our Involvement in the Fight against Dengue

5-fold increase
in our investment into vector control over the last 10 years



Expertise:

// Over 60 years of expertise in vector control
// A global team of over 50 people

Solutions:

// 3 of 9 space sprays recommended by WHO come from Bayer
// Developing a new generation of vector control solutions including Fludora® Co-Max, the first combination product to combat resistance with an estimated market entry in 2019

Education:

// Use of digital tools such as Bayer Mosquito Learning Lab and Mosquito Quest to increase public awareness of the role they play in managing dengue

Partnership:

// Collaborating with international organizations, foundations, academia and government agencies

Advocacy:

// Awareness campaigns, influencing public policy and resource allocation, media campaigns and tools, public speaking, committee work and publishing research, etc.