

The sudden appearance of an epidemic typically inspires rapt attention, panic and action. Once the crisis subsides, public attention wanes although the threat of contagion continues, especially among the world's poor.

Compare our response to severe acute respiratory syndrome, or SARS, with the more familiar germs that plague us daily. Compare it to the dangers of smoking or getting in a car and heading out on the road. Every life is precious, but when you look at the numbers, SARS just isn't as formidable a threat as we've made it out to be. Its death rate is far lower than that for AIDS or malaria; coronaviruses, like the one believed to cause SARS, tend to be most active in the winter and early spring.

In addition to taking the steps necessary to keep SARS at bay—watching out for new cases and isolating people who are contagious to others—we would do well to channel our energies into something more lasting: a permanent, integrated and accountable global public health system for the surveillance and prevention of the microbes that are certain to emerge in the future. Right now, worldwide accounting of disease is incomplete at best, hampered in large measure by sketchy reporting from developing countries. These gaps slowed our containment of SARS and allowed rumor to spread more rapidly than reliable information. When the facts are few, it's easy for fear to fill the vacuum.

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# THE EPIDEMIC SCORECARD

By Howard Markel and Stephen Doyle

Estimates of disease incidence and mortality are from the World Health Organization

**2 MILLION DEATHS A YEAR**  
**8 MILLION NEW CASES A YEAR, AND CLIMBING**

**ONE THIRD OF THE WORLD'S POPULATION IS INFECTED WITH**

## Tuberculosis

**EACH YEAR 1 PERCENT of the WORLD BECOMES INFECTED with the TB GERM**

**INFECTION DROPLETS TRANSMITTED BY**  
\* BREATHING \* COUGHING \*  
\* SNEEZING \* EVEN SPEAKING \*

**TO BE EFFECTIVE, TB DRUGS MUST BE TAKEN FOR SIX TO EIGHT MONTHS**

**DRUG-RESISTANT STRAINS ARE INCURABLE (AND MULTIPLYING)**

**In the last hour, more than 200 people have died of tuberculosis**

**MORE THAN 100 DEATHS AN HOUR**

**BORNE BY MOSQUITOES**

Medicines exist to fight many strains of the malaria parasite, but public health workers are concerned about drug-resistant forms of the disease.

Prevention (mosquito control) is the most effective.

## MALARIA

**1 MILLION DEATHS A YEAR**  
**300-500 MILLION NEW CASES A YEAR**

**1 MILLION DEATHS A YEAR / 10-30 MILLION NEW CASES A YEAR**

## HEPATITIS B VIRUS

puts you at high risk for cirrhosis, liver cancer, liver failure and death

**TRANSMITTED VIA**  
• Mother to child at birth  
• Unsafe injections or transfusions  
• Sexual contact

**No effective treatment.**  
Vaccine can block chronic infection, but its high cost prevents its widespread distribution in poor nations.

## DIARRHEAL DISEASES

(cholera, shigella, dysentery, typhoid, E. coli and others)

**1.9 MILLION DEATHS A YEAR**  
mostly infants and young children  
**2.7 BILLION NEW CASES A YEAR**

**Within the last hour, 200 people have died of these diseases**

**Transmitted by contaminated food or water**  
**1.5 billion people do not have ready access to clean water**

## AIDS

**3.1 MILLION DEATHS A YEAR**  
**5.5 MILLION NEW CASES A YEAR**  
**42 MILLION PEOPLE ARE H.I.V. - POSITIVE**

**IN THE LAST HOUR, MORE THAN 300 PEOPLE HAVE DIED OF AIDS**

**And...**  
Cardiovascular disease (heart attack and stroke) deaths: 17 million a year  
Tobacco-related deaths: 3.5 million a year  
Motor vehicle fatalities: 1.26 million a year

## Measles

**NEARLY 900,000 DEATHS A YEAR**  
**30 MILLION NEW CASES A YEAR**

**ENTIRELY PREVENTABLE WITH A VACCINE THAT COSTS 26 CENTS AND HAS BEEN AVAILABLE SINCE 1963**

**24,000 DEATHS A YEAR**  
**20 MILLION NEW CASES A YEAR**

*mosquito-borne*

## Dengue Fever

## INFLUENZA

**250,000 DEATHS A YEAR**  
**3-5 million new cases a year**

**Entire world affected**

## YELLOW FEVER

**30,000 DEATHS A YEAR**  
**200,000 NEW CASES A YEAR**

## SARS

**353 DEATHS out of 5,462 cases in 180 days**