Antibiotic resistance may be bigger problem than previously thought

A project commissioned by the British government has released estimates of the near-future global toll of antibiotic resistance that are jaw-dropping in their seriousness and scale: 10 millions deaths per year, more than cancer, and at least \$100 *trillion* in sacrificed gross national product.

The <u>first paper</u>, released late last week, is based on work by two consulting teams, from RAND and KPMG, examining just the effect of resistance in six pathogens: three commonly resistant bacterial infections, *Klebsiella pneumoniae*, *E. coli* and MRSA; and three globally important diseases: HIV, TB and malaria. It doesn't examine the effect of resistance in other pathogens; and it doesn't attempt to estimate either healthcare costs or secondary social costs (more on that below). So it is a conservative effort, several different ways.

And yet, its baseline estimates of the size of the global problem are breathtaking.

Among them:

Antibiotic resistance currently accounts for an estimated 50,000 deaths in the US and Europe, which have surveillance to support those numbers. (The <u>CDC puts</u> the number for the US at 23,000.) But the project estimates that the actual *current* death toll is 700,000 worldwide.

If antibiotic resistance were allowed to grow unchecked — that is, if there were no successful efforts to curb it or no new drugs to combat it (the latter is very plausible) — the number of deaths per year would balloon to 10 million by 2050. For comparison, that is more than the 8.2 million per year who currently die of cancer and 1.5 million who die of diabetes, combined.

Those deaths would cost the world up to 3.5 percent of its total gross domestic product, or up to \$100 trillion per year.

Moreover, the toll of deaths — and the cost of them — would fall unevenly across the world, with the global south and Asia suffering to a greater extent and losing greater amounts of income. In one example, they estimate that 25 percent of all deaths in Nigeria could be caused by resistance if trends continue unchecked.

Read full, original article: The Coming Cost of Superbugs: 10 Million Deaths Per Year