

Managing the Risks related to COVID-19



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In this age of instant information, “going viral” on the internet means creating and sharing content that takes on an exponential life of its own after it is sent out into the online world. Facing humanity now is not internet content but rather a real and threatening novel virus that has not been previously seen and has not yet been adequately characterized.

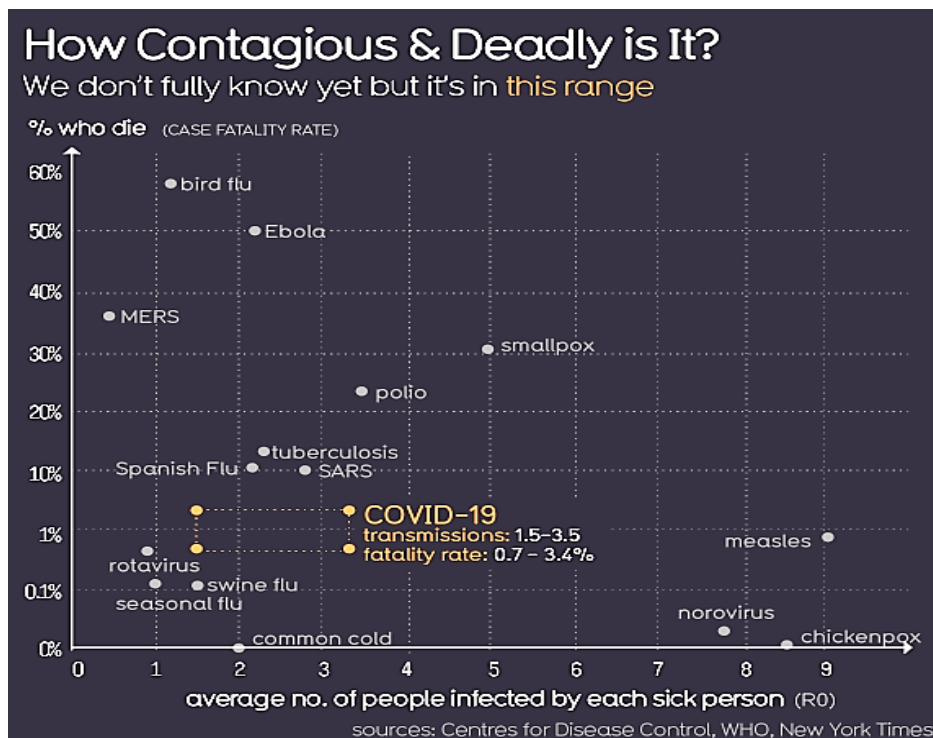
What we see rapidly unfolding is use of the Precautionary Principle that is a strategy for approaching issues of potential harm when extensive scientific knowledge on the matter is lacking. Take precautions always but proceed with greater care when there is great uncertainty.

Depending on how one might construct the timeline, in less than a month attitudes have shifted from “diagnosed cases are limited” to “nearly global shutdown”. How did this happen so quickly? To turn a phrase, the novel virus has gone viral. COVID-19 is a natural hazard representing a significant risk touching every part of the globe and the implications are significant.

We appreciate that numbers and statistics can be confusing and potentially misleading, but please bear with us for a moment as we explore a few numbers and facts while putting these in context. In the scientific community, an often used value for de minimis adverse risk is 1 in a million (or 0.0001%). Let’s not debate this value, but rather remember it for purposes of a later simple calculation.

Following is a graph from the US Centers for Disease Control (CDC) that does a great job at bracketing what scientists know about how COVID-19 compares to other contagious diseases. The bottom axis gives an indication of “contagiousness” (i.e. Chickenpox is more contagious than the common cold) and the left-hand axis gives an indication of rates of death (i.e. Ebola results in more fatalities than seasonal flu). What we can conclude is that COVID-19 looks similar to tuberculosis in terms of “contagiousness” and similar to measles in terms of “% who die”. The orange rectangle bracketing COVID-19 shows a fatality rate of 0.7-3.4%, so let’s use 1% (or 1 in 100) to make the math simpler but not unrealistically simple.

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Stop for a moment and ponder the difference between de minimis risk (0.0001%) and COVID-19 risk (1%). COVID-19 risk is 1/0.0001 or 10,000 times greater than de minimis risk.

Now appreciate that this applies to not only your community of friends and loved ones but to the entire world's population. The current world population is about 7.8 billion people and the current US population is 330 million people.

If drastic preventative measure are not taken, then 1% of the human population is at risk of dying. 1% of the world's population is 78 million people, roughly equivalent to all the people in California, Texas, and Florida combined. This is no small public health issue. While the decision to act is obvious, the unintended and undesired consequences are staggering from impacts on every household to impacts on the global economy; all because a piece of invisible genetic material that can be unwittingly inhaled needs a host to survive.

Strategies for stopping this mind boggling devastation from occurring involve taking fundamental precautions such as good personal hygiene and occupational hygiene principles, namely "reduce" or "eliminate" potential exposure. This means:

- Wash hands
- Avoid crowded places, social distancing
- Keep surfaces clean
- Cough and sneeze into a clothed elbow
- Self-quarantine for 2 weeks if concerned about exposure
- Seek medical attention should symptoms develop such as a temperature

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Decision-making when managing risk is a combination of technical analysis and a transparent examination of options. Building trust with reliable, relevant, and reproducible information is critical to get through this crisis with the least number of lives lost.

Let us all work at reducing panic, fear and hoarding. Following basic and time tested practical preventative precautions is the smartest way to avoid infection and disease development.

At RHP Risk Management, we help our clients characterize the uncertainties associated with environmental and occupational hazards and risks to contextualize meaning that can be understood by their decision-making audiences be they the public, employees, consumers, regulators, or shareholders.

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