## **Countering the Coronavirus**

by Michael Curtis



Look how she washes her hands for a quarter of an hour. Will all the great Neptune's ocean wash this blood clean from her hand? Will her hand make the multitudinous seas incarnadine? Lady Macbeth was right, wash your hands. A little water, a rinse and shake, is not enough to clear us from infection from a virus: we all need at least twenty seconds, if not a quarter of an hour, to contain the coronavirus pandemic haunting the world today.

These are the times that try men's souls. We do not need the summer soldiers and the sunshine patriots. It is now clear that the world is engaged in a marathon war, not a skirmish, to overcome the coronavirus, Covid-19, that has spread and affected thousands of people, and led to economic and financial problems around the globe. Slowing the spread, preventing new cases of the virus, and treating the infected, requires drastic action by a combination of public governments, private institutions, and citizens, and international cooperation.

Precautions inevitably should mean staying home, limitation of human activities, and changes in life style, until a vaccine

can be found. The spread of the virus has occasioned different responses in personal behavior such as panic over continuing existence of food and other supplies, such as toilet paper, seemingly the flavor of the month, hand sanitizer and face masks, and political disputes over whether the necessary regulations will reduce civil liberties, and whether states will focus on national or global solutions.

We are facing changes in life and behavior, even if not encountering a Brave New World. Unlike Aldous Huxley's citizens who have been psychologically manipulated, individuals are free to disobey and to panic. Though French President Emmanuel Macron spoke strongly to avoid close contacts and has ordered people to stay at home for 15 days, thousands of Yellow Vests marched through the streets of Paris, on the eve of local elections on March 15, 2020. Similarly, in England, about 6,000 people took part in the ten mile marathon in Liverpool, 12,000 attended an event in Bath, and 70,000 were at the horse races in Cheltenham. Tom Cruise continues to do his cycle stunts in the production of Mission Impossible 7 being made in Surrey, England. Though Prime Minister Boris Johnson has called for refraining from contact with others and for no non- essential travel, pubs in London remain open, and his own father went there for a pint.

First, changes in human action in addition to hygiene. We have learned of the necessity for social behavior now termed "social distancing," maintaining a physical distance, at least six feet, from other people, and refraining from contact in normal meeting places. This involves avoiding public gatherings, travel especially by air, work places, schools and universities, restaurants and pubs. Life has changed. Pigeons not tourists occupy St Mark's Square in Venice. Broadway is dark. The Mona Lisa is on her own, alone, in the Louvre. Jews must not kiss the Western Wall in Jerusalem. People shop through home on-line deliveries, not by going to the store. Even terrorists have changed. ISIS has instructed its disciples and suicide bombers to stay away from Europe to avoid contact with the epidemic.

Can we learn from the past? In the mid 14<sup>th</sup> century the Black Death struck Europe, a devasting pandemic, coming from China, the first major outbreak of the plague in the continent, killing millions, perhaps half or more of the population and causing social, economic, and religious changes. Giovanni Boccaccio in the *Decameron* tells us of the life of citizens who had fled the plague in Florence, to seek isolation and safety in ten days in a villa in Fiesole.

Lessons for the present day can be learned from Boccaccio's tale. An interesting one is that Queen Elizabeth left Buckingham Palace for Windsor Castle. A major lesson is the benefit for the exiles by the mixture of social isolation in their villa, but also avoidance of depression by enjoyment of pleasant activities, keeping up spirits by playing games and enjoying music, and overcoming fear. Not least of the lessons is the fact that the tales of each of the ten days ends with a canzone, song. In present day imitation, the sounds of music emanate from citizens of cities of Italy, a country now virtually isolated from other countries, and which has suffered severely from the pandemic Covid-19 which is said to be thirty times more deadly than the flu or MERS or SARS.

The Black Death ended after a few years, but a new pandemic, Covid-19, also coming from China, has appeared, akin to a Black Swan event, one that comes as a surprise and has a major effect. Little is known of it, and almost certainly it is mutating as it spreads. It is difficult to contain, let alone cure, since at the moment no vaccine exists to contain it. The present virus has spread rapidly from China, and Europe is the new epicenter, but almost every country has become infected. No doubt the U.S., like all other countries, was woefully unprepared for the extent and the severity of the virus and lacked medical and other facilities to deal with it, but recriminations are not in order at this time. It will probably take at least a year before a vaccine can be found.

A number of actions are necessary to prevent the spread of this global pandemic which will not quickly disappear. Comprehensive testing, slow to start and even inaccurate, is urgent and must be increased. This must mean two things. One is cooperation of private companies and public health clinics and labs, both federal and individual states, and must take place irrespective of the insurance status of individuals. Tn the U.S., where as in other countries mistakes have been made, it is gratifying that private companies such as Roche, and other drug companies, have been officially approved to participate in this cooperation. A second factor is the use of technological developments and the internet to speed the process. One such important development is the one in South Korea of a smartphone process allowing citizens to report their own symptoms to medical authorities.

What else is to be done to restrict the spread of the virus? Everyone will agree on the need for personal hygiene, washing hands continually, wearing face masks if needed. More broadly, what is essential is rapid improvement in and funding for health systems and medical care that have not been prepared to deal with a pandemic, and public-private partnerships to develop treatment, production of masks, hospital beds, ventilators and pharmaceutical ingredients, and intensified research for a vaccine which may take some time, testing for all, and treatment of those who have been infected.

Other actions are beneficial: staying indoors as ordered in the San Francisco Bay Area, cancelling large public and private gatherings, teleworking for those working from home, staggered shift, wider insurance coverage, and quarantine for those exposed to infection.

More controversial, because of their economic, social and educational effects, is the closing of national borders or

restrictions on entry of foreigners, extent of closing of facilities and imposing of curfews on schools and universities, restaurants, bars, tourist attractions, cruises and air travel. Variations are present and changes are made in government policies. Denmark, Poland, Czech Republic, Slovakia, have closed borders. The EU will close its external borders for30 days. So will Canada except for U.S. citizens.

Spain and Italy, and Austria, imposed total or lesser limits or bans on gatherings for public activities, limit freedom of movement, and closed schools, and restaurants. The U.S., the UK, and Ireland have imposed travel bans, but the UK still allows large gatherings. However, Irish pubs will be closed for a time. France has ordered closing of restaurants and bars, and school and universities, banned sports events and large gatherings, and reduced public transport. Germany forbids gatherings in religious institutions. Several states in the U.S. and the federal government have imposed restrictions on schools, restaurants, bars, casinos, racetracks, stores in malls.

After some hesitation, President Trump had made the overcoming the virus a central, priority issue. On March 13, 2020 he declared a national emergency to deal with the virus. He promised up to \$50 billions in additional funding to help states, localities and territories, and could take additional authority to deal with the virus. Now with his extraordinary authority Trump has called on states and hospitals to set up emergency operations and stated money would be available for sick pay for infected workers. No doubt these issues and policies relevant to the pandemic will feature prominently in the 2020 U.S. presidential election.