

EVENTS & PANDEMICS

DURING HUMAN EVOLUTION THAT IMPACTED HUMAN RESILIENCE

A CRASH COURSE

The current multi-system crisis triggered by the Covid-19 pandemic was an inevitable consequence of the lack of adaptation of our thrifty hunter-gatherer genotype to our modern world. Find out how we were set on a crash course.

EVENTS

50,000 – 12,000 YEARS AGO

NOMADIC HUNTER-GATHERERS



RESILIENCE

Humans adapted to cycles of fasting and feeding, most of time spent outdoors, physically active for more than 10 hours per day

12,000 YEARS AGO

AGRICULTURE REVOLUTION



Social systems develop as humans transition from nomadic to pastoral and agriculturally-based civilisations

5,500 YEARS AGO

START OF BRONZE AGE



Human efficiency increases with the transition from stone to metal tools and implements

165 – 180 | 5M DEAD | **ANTONINE PLAGUE**

541 – 542 | 30-50M DEAD | **PLAGUE OF JUSTINIAN**

735 – 737 | 1M DEAD | **JAPANESE SMALLPOX**

1347 – 1351 | 200M DEAD | **BUBONIC PLAGUE**

1520 | 56M DEAD | **SMALLPOX**

1600s | 3M DEAD | **17TH CENTURY PLAGUES**

1700s | 600K DEAD | **18TH CENTURY PLAGUES**



Poor sanitation, diets, overcrowding and pestilence reduced resilience leading to high mortalities

AROUND 1800

INDUSTRIAL REVOLUTION



Transition towards urbanisation, development of increasing inequalities in social classes

1817 – 1823 | 1M DEAD | **CHOLERA 6**

1855 | 12M DEAD | **THE THIRD PLAGUE**

LATE 1800s | 100-150K DEAD | **YELLOW FEVER**

1889 – 1890 | 1M DEAD | **RUSSIAN FLU**

1918 – 1919 | 40-50M DEAD | **SPANISH FLU**

1950s

MODERN PHARMACEUTICAL ERA BEGINS



Antibiotics and new-to-nature patented medicines become key therapeutic agents for treatment of infectious and chronic diseases. Societies transition towards healthcare systems ever more reliant on treating symptoms of disease with patented medicines

1957 – 1958 | 1M DEAD | **ASIAN FLU**

1960s

ELECTRONIC AGE BEGINS



Transition from analogue to digital record keeping, storage and analysis; increasing reliance on computers; manual work becomes less important; humans become less physically active

1968 – 1970 | 1M DEAD | **HONG KONG FLU**

1970s

GREEN REVOLUTION AND INCREASING GLOBALISATION OF FOOD SUPPLY



High-yielding varieties of staple crops developed and food supply becomes increasingly globalised

1980s

DIETARY SIMPLIFICATION AND FOOD PROCESSING ERA BEGINS



Humans become more reliant on reduced diversity of foods, many of which are highly processed and ingredients less commonly seasonal or local

1981 – PRESENT | 25-35M DEAD | **AIDS**

2000s

GLOBAL WAR ON TERRORISM FOLLOWING 1999 BOMBINGS & 9/11



2002 – 2003 | 170K DEAD | **SARS**

DIGITAL AGE BEGINS

2008 FINANCIAL CRISIS

2009-2010 | 200K DEAD | **SWINE FLU**

2010s

Poor quality and progressively more simplified and processed diets, low levels of physical activity, social and familial disintegration, chronic stress, disordered circadian cycles, combined with chemical and EMF pollution contribute to low resilience

GLOBAL POPULATION HITS 7 BILLION (2011)



2012 – PRESENT | 850K DEAD | **MERS**

2014 – 2016 | 11K DEAD | **EBOLA**

UNPRECEDENTED CHEMICAL POLLUTION*

*2015: 1 MILLION CAS REGISTRATIONS



Pandemic triggers social, political, health and economic crisis. The emergence of a single, relatively low virulence, only moderately contagious zoonotic virus generates a global crisis magnified by poor human resilience, itself reflecting the lack of human adaptation to contemporary social systems, diets, lifestyles and environments.

2019 – ONGOING | ~500K DEAD

COVID-19 CRISIS

