

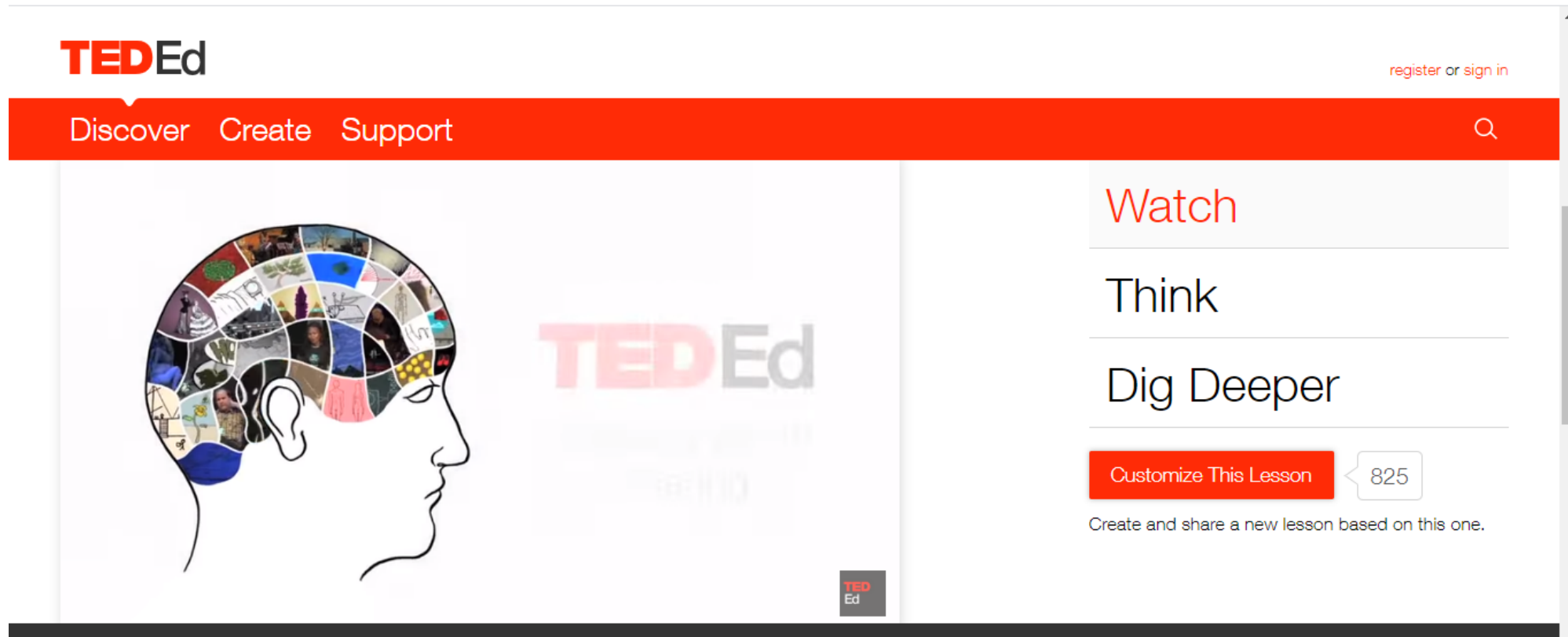
Pandemics and epidemics – How many are you already aware of?

Epidemic is a term that is often broadly used to describe any problem that has grown out of control. **An epidemic is defined as "an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population."**

An epidemic is an event in which a disease is actively spreading. In contrast, **the term pandemic relates to geographic spread and is used to describe a disease that affects a whole country or the entire world.**

TED TALKS

- <https://ed.ted.com/lessons/how-pandemics-spread>



The screenshot displays the TED Ed website interface. At the top left is the TED Ed logo. To its right, in the top right corner, are links for "register or sign in". Below the logo is a red navigation bar containing the words "Discover", "Create", and "Support", followed by a search icon. The main content area is split into two columns. The left column features a large illustration of a human head in profile, with the interior of the head filled with a mosaic of various small images representing different topics. To the right of this illustration is a large, faint "TED Ed" logo. The right column contains a vertical list of interactive options: "Watch", "Think", and "Dig Deeper". Below these options is a red button labeled "Customize This Lesson" and a speech bubble icon containing the number "825". At the bottom of this column, there is a line of text: "Create and share a new lesson based on this one."

Epidemics and Pandemics - Articles

- <https://www.visualcapitalist.com/history-of-pandemics-deadliest/>
- <https://www.livescience.com/worst-epidemics-and-pandemics-in-history.html>
- <https://www.history.com/news/pandemics-end-plague-cholera-black-death-smallpox>
- <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>
- <http://theconversation.com/10-misconceptions-about-the-1918-flu-the-greatest-pandemic-in-history-133994>



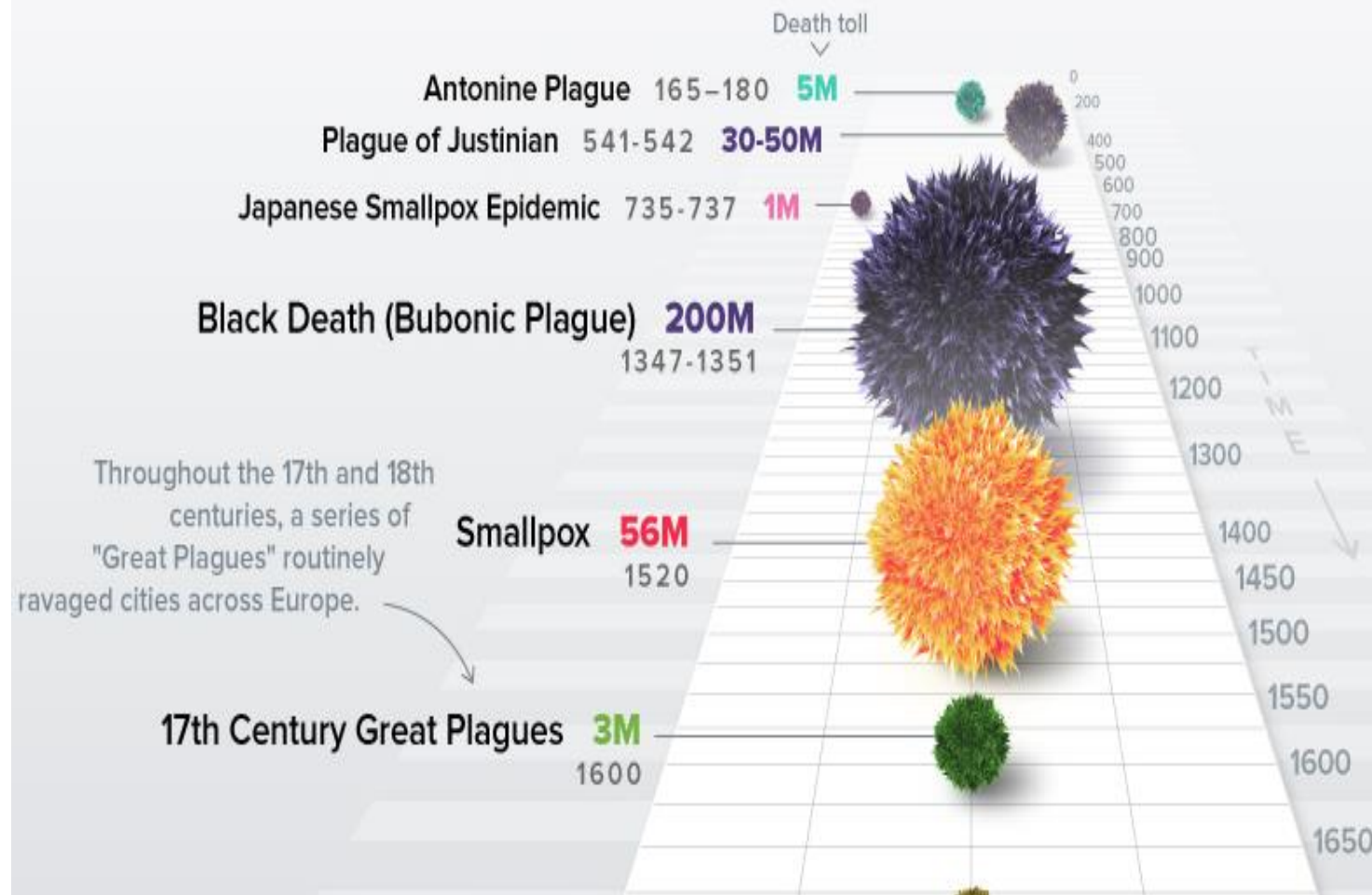
Some interesting historical ones.

HISTORY OF PANDEMICS

PAN-DEM-IC (of a disease) prevalent over a whole country or the world.

THROUGHOUT HISTORY, as humans spread across the world, infectious diseases have been a constant companion. Even in this modern era, outbreaks are nearly constant.

Here are some of history's most deadly pandemics, from the Antonine Plague to COVID-19.



18th Century Great Plagues **600K**
1700

Cholera 6 outbreak **1M**
1817-1923

The Third Plague **12M**
1855

Yellow Fever **100-150K**
LATE 1800s

HIV/AIDS **25-35M**
1981-PRESENT

MERS **850**
2012-PRESENT

Ebola **11.3K**
2014-2016

SARS **770**
2002-2003

Swine Flu **200K**
2009-2010

COVID-19 **11.4K***
2019-MAR 20 2020 [ON-GOING]

Asian Flu **1.1M**
1957-1958

Hong Kong Flu **1M**
1968-1970

Spanish Flu **40-50M**
1918-1919

Russian Flu **1M**
1889-1890

1700

1725

1750

1775

1800

1825

1850

1875

1900

1925

1950

1975

2000

2025

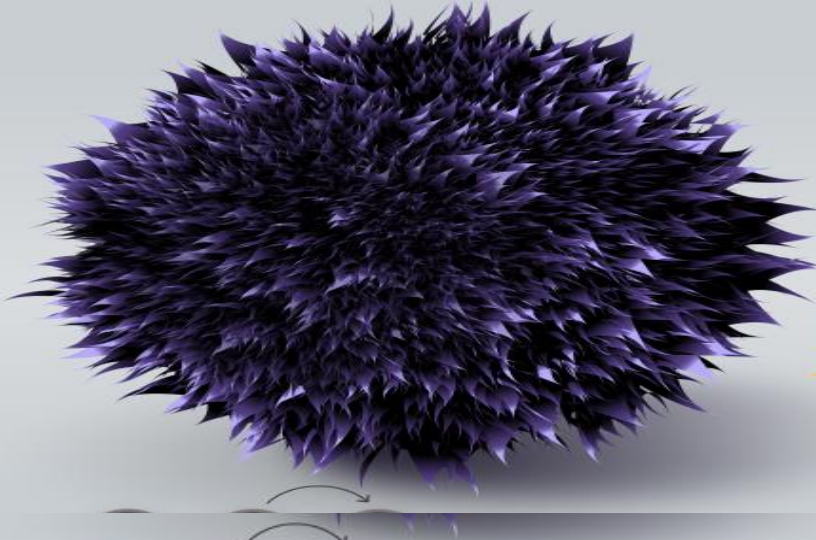
DEATH TOLL

[HIGHEST TO LOWEST]

the disease is new to medicine, and data is still coming in.

What reasons/ contributing factors might explain these statistics?

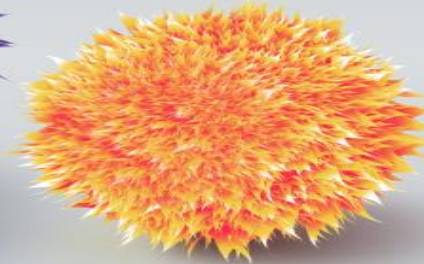
200M
Black Death (Bubonic Plague)
1347-1351



The plague originated in rats and spread to humans via infected fleas.

↑ The outbreak wiped out 30-50% of Europe's population. It took more than 200 years for the continent's population to recover.

56M
Smallpox
1520



↑ **Smallpox** killed an estimated 90% of Native Americans. In Europe during the 1800s, an estimated 400,000 people were being killed by smallpox annually. The first ever vaccine was created to ward off smallpox.

40-50M
Spanish Flu
1918-1919



30-50M
Plague of Justinian
541-542



↑ The death toll of this plague is still under debate as new evidence is uncovered, but many think it may have helped hasten the fall of the Roman Empire.



25-35M
HIV/AIDS
1981-PRESENT



12M
The Third Plague
1855



5M
Antonine Plague
165-180



3M
17th Century Great Plagues
1600



1.1M
Asian Flu
1957-1958



1M
Russian Flu
1889-1890



1M
Hong Kong Flu
1968-1970



1M
Cholera 6 outbreak
1817-1923

A series of **Cholera** outbreaks spread around the world in the 1800s killing millions of people. There is no solid consensus on death tolls. ↓

Thoughts and Discussion



- From your reading and research:
- What do these epidemic / pandemics have in common?
- Whose responsibility is it to deal with these pandemics?
- What are some misconceptions people have about pandemics?
- Why is it important that we read from reliable sources of information?
- How do we know if a piece of research is reliable?

Memory Box – Task

Extension – Create a fact file on the individuals / organisations that have helped combat these pandemics.

Chose on of the epidemics from History.

Write a diary entry about: the causes and symptoms of the disease/ virus.

What is being done to deal with it?

What has the impact been? (Challenge – keep it accurate to the historical context).

OR

Create a public information leaflet / poster / broadcast on what everyone's roles and responsibilities are in dealing with your chosen out break.

A handkerchief in time



saves nine



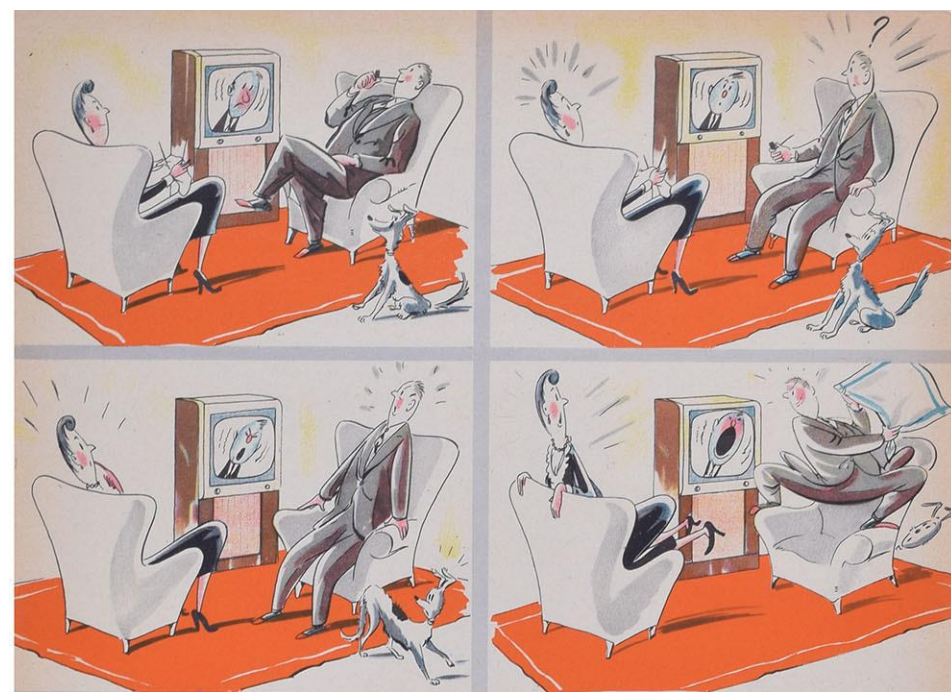
and helps to keep the nation fighting fit

COUGHS and SNEEZES SPREAD DISEASES

ISSUED BY THE MINISTRY OF HEALTH



Printed by the Stationery Office for H.M.S.O. 1945



trap the germs in your handkerchief

PRINTED FOR H.M. STATIONERY OFFICE BY T. & A. CO. LTD., 11-12/48

EPIDEMIC INFLUENZA (SPANISH)

This Disease is Highly Communicable.
It May Develop into a Severe Pneumonia.

There is no medicine which will prevent it.

Keep away from public meetings, theatres and other places where crowds are assembled.

Keep the mouth and nose covered while coughing or sneezing.

When a member of the household becomes ill, place him in a room by himself.

The room should be warm, but well ventilated.

The attendant should put on a mask before entering the room of those ill of the disease.

TO MAKE A MASK

Take a piece of ordinary cloth 6 x 16 inches, fold it to make it 3 x 8 inches. Next fold this to make it 3 x 4 inches. The ends should 10 inches long at each corner. Apply over mouth and nose as shown in the picture.



ISSUED BY THE PROVINCIAL BOARD OF HEALTH

INFLUENZA

FREQUENTLY COMPLICATED WITH

PNEUMONIA

IS PREVALENT AT THIS TIME THROUGHOUT AMERICA.

THIS THEATRE IS CO-OPERATING WITH THE DEPARTMENT OF HEALTH.

YOU MUST DO THE SAME

IF YOU HAVE A COLD AND ARE COUGHING AND
SNEEZING. DO NOT ENTER THIS THEATRE

GO HOME AND GO TO BED UNTIL YOU ARE WELL

Coughing, Sneezing or Spitting Will Not Be Permitted In The Theatre. In case you must cough or sneeze, do so in your own handkerchief, and if the Coughing or Sneezing Persists Leave The Theatre At Once.

This Theatre has agreed to co-operate with the Department Of Health in disseminating the truth about Influenza, and thus serve a great educational purpose.

**HELP US TO KEEP CHICAGO THE
HEALTHIEST CITY IN THE WORLD**

JOHN DILL ROBERTSON

COMMISSIONER OF HEALTH

think measles

It's not just a kids'
problem

Teenagers, young adults and anyone who has missed their MMR vaccination can get measles.

Symptoms such as:

- high fever
- rash – sometimes starting around the ears
- sore red eyes
- cough
- aching and feeling unwell

Remember, if it could be measles – they need to be in an area where they cannot pass the infection to vulnerable patients such as the immunocompromised and pregnant women.

For more information go to
www.nhs.uk/vaccinations

DIPHTHERIA COSTS LIVES



IMMUNISATION
COSTS NOTHING

Ask at your local council offices, school or welfare centre

ISSUED BY THE MINISTRY OF HEALTH