

A-Level Geography – Taster Session

What is Geography?

Geography is the study of **places** and the **relationships** between **people** and their **environments**. Geographers explore both the **physical properties** of Earth's surface and the **human societies** spread across it.

They also examine how **human culture** interacts with the **natural environment** and the way that **locations and places** can have an **impact on people**.



Dynamic – The rapid changes taking place in London and cities across the world as they are 'gentrified'



Physical Geography

Tectonic Processes and Hazards

Coastal Landscapes and Change

The Water Cycle

The Carbon Cycle

Human Geography

Globalisation

Regenerating Places

Superpowers

Health, Human Rights and Interventions

- The syllabus is large
- You will be expected to know your material inside out, the questions will often ask you to use that knowledge to apply it to something new
- Questions are almost all evaluative – in other words they require an informed judgement by you I.e. not just what something is but how much you agree or how strong something is.
- **E.g. you will learn about earthquakes case studies but a question could be “Earthquakes don’t kill people, buildings do” To what extent do you agree with this statement? /20**
- You need to be prepared to do a lot of reading and research both guided and independently and the more the better so that you can shape these opinions and sound like you know what you are talking about!

Exploring the biotechnological potential of isoprene-degrading bacteria – Miss Jones' dissertation

Exploring the Paleocene-Eocene Thermal Maximum paleoclimate using isotope analysis of foraminifera in sediments – Miss Jones' Masters dissertation

Place, Memories and Inter-generational relations: Exploring Charlton Athletic Football Club Fan Attachment to their Stadium, The Valley – Mr Slater's dissertation

WHERE CAN GEOGRAPHY TAKE YOU?

Report writing

CARDIFF UNIVERSITY
PRIFYSGOL CAERDYDD

What drives the vertical nitrate flux in the Western Irish Sea?

What is the relative effect of sea level rise on regional infrastructure?

How globalisation has impacted concepts of place.

IT Skills

A GIS analysis on the prevalence and local management of ash dieback.

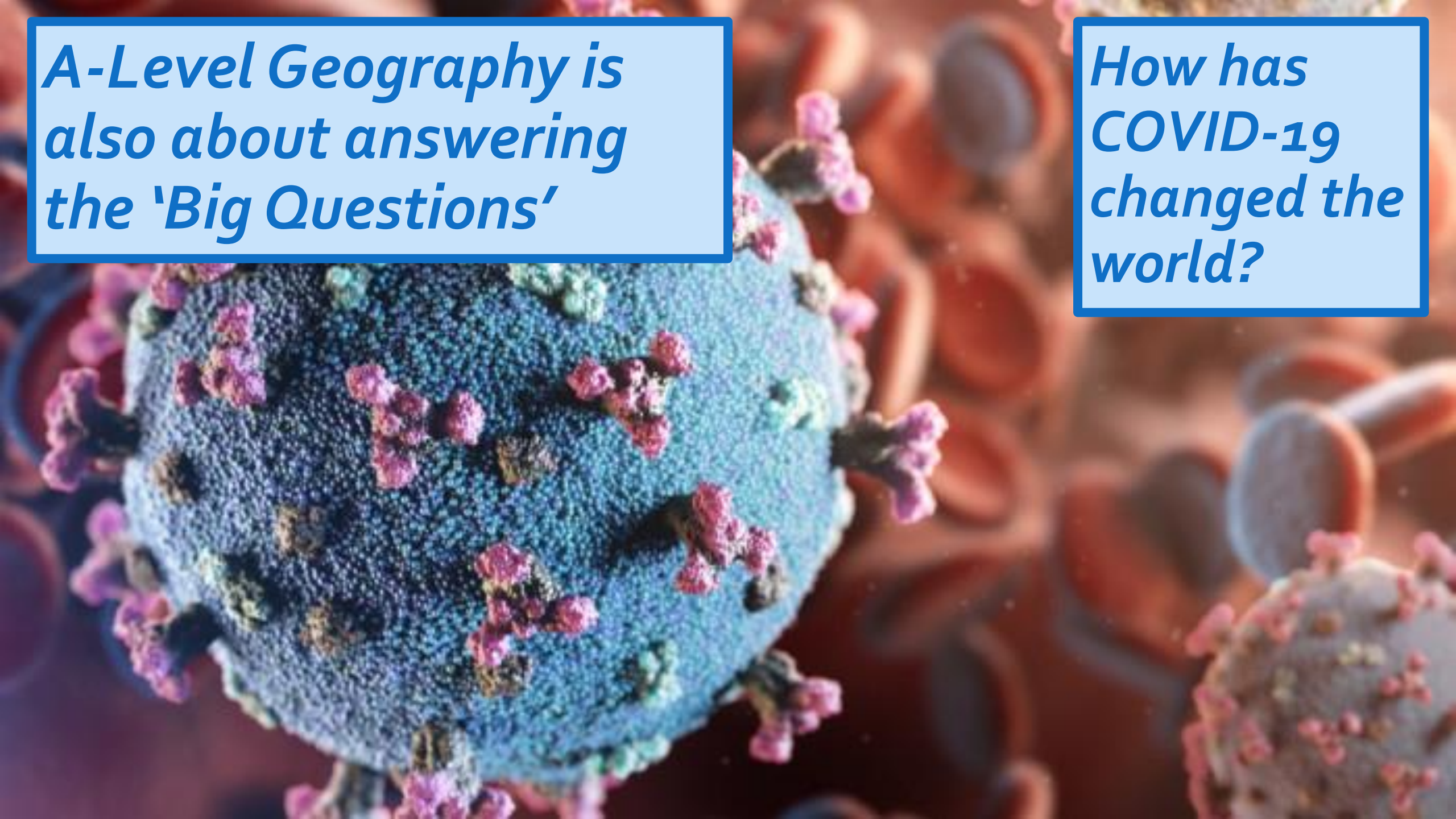
"Maps are less pictures than they are arguments." – Discuss.

A critical comparison of air pollution policy methods – written in the style of a government POSTnote

Transport Marketing



vision
and
media



A-Level Geography is also about answering the 'Big Questions'

How has COVID-19 changed the world?

DISEASE DILEMMAS

Key Ideas	Content
1.a. Diseases can be classified and their patterns mapped. The spread of diseases is complex and influenced by a number of factors.	<ul style="list-style-type: none">• How diseases can be classified, including infectious and non-infectious, communicable and noncommunicable, contagious and non-contagious, epidemic, endemic and pandemic.• Patterns of diseases, including global distributions of malaria, HIV, tuberculosis, diabetes and cardio-vascular disease.• Disease diffusion and spread to new areas (Hägerstrand model), including the phases of diffusion, physical and socio-economic barriers.

Round table: How many diseases can you name?



Without ARVs life looks bleak for HIV/Aids patients

Another moratorium expected in the Free State

AMSTERDAM — HIV/AIDS patients are being urged to get antiretroviral (ARV) drugs as early as possible to avoid serious complications. A study by the Free State Health Department, which is part of the Department of Health, shows that patients who do not start ARV treatment early enough face a significantly higher risk of death. The study, which was conducted in the Free State, found that patients who started ARV treatment within six months of diagnosis had a 50 per cent lower risk of death compared to those who started later. The study also found that patients who started ARV treatment within six months of diagnosis had a 50 per cent lower risk of death compared to those who started later.

reports are with Health Services for AIDS, according to the report. The Free State Health Department is a group of people, health care providers, local experts, people living with HIV and religious groups. The Free State Health Department is a group of people, health care providers, local experts, people living with HIV and religious groups. The Free State Health Department is a group of people, health care providers, local experts, people living with HIV and religious groups.



SICKENING SITUATION: Maria Kofie cleans up her daughter Katerine, who has HIV, the prevention of Mother to Child Transmission programme in the Free State.

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This is leading to human rights abuses. The Free State Health Department is a group of people, health care providers, local experts, people living with HIV and religious groups. The Free State Health Department is a group of people, health care providers, local experts, people living with HIV and religious groups.

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Zika virus alert over rising birth defects

The Zika virus, a mosquito-borne disease suspected of causing serious birth defects, is likely to spread to all countries in the Americas except Canada and Chile, says the WHO



EU heart deaths 'halved since 1980s'

By Helen Briggs
BBC News
26 June 2013 | Health

Death rates from coronary heart disease have more than halved in almost all EU countries since the early 1980s, according to research.

Most countries have seen steady reductions in deaths in both men and women of all ages, despite rises in obesity and diabetes, a UK study shows.

However, experts have warned against complacency, saying wide



DR P. MARAZZI/SCIENCE PHOTO LIBRARY
About one in five men and one in eight women die from coronary heart disease in the UK



Typical head size
Baby with microcephaly

WINE
PANIC SWEET

BRITAIN
Thousands ignore 'keep calm' pleas as helplines are flooded

Tears for soldier

Revealed: the secret No 10 plan to tackle bird flu food shortages

flu virus

Key word card sort

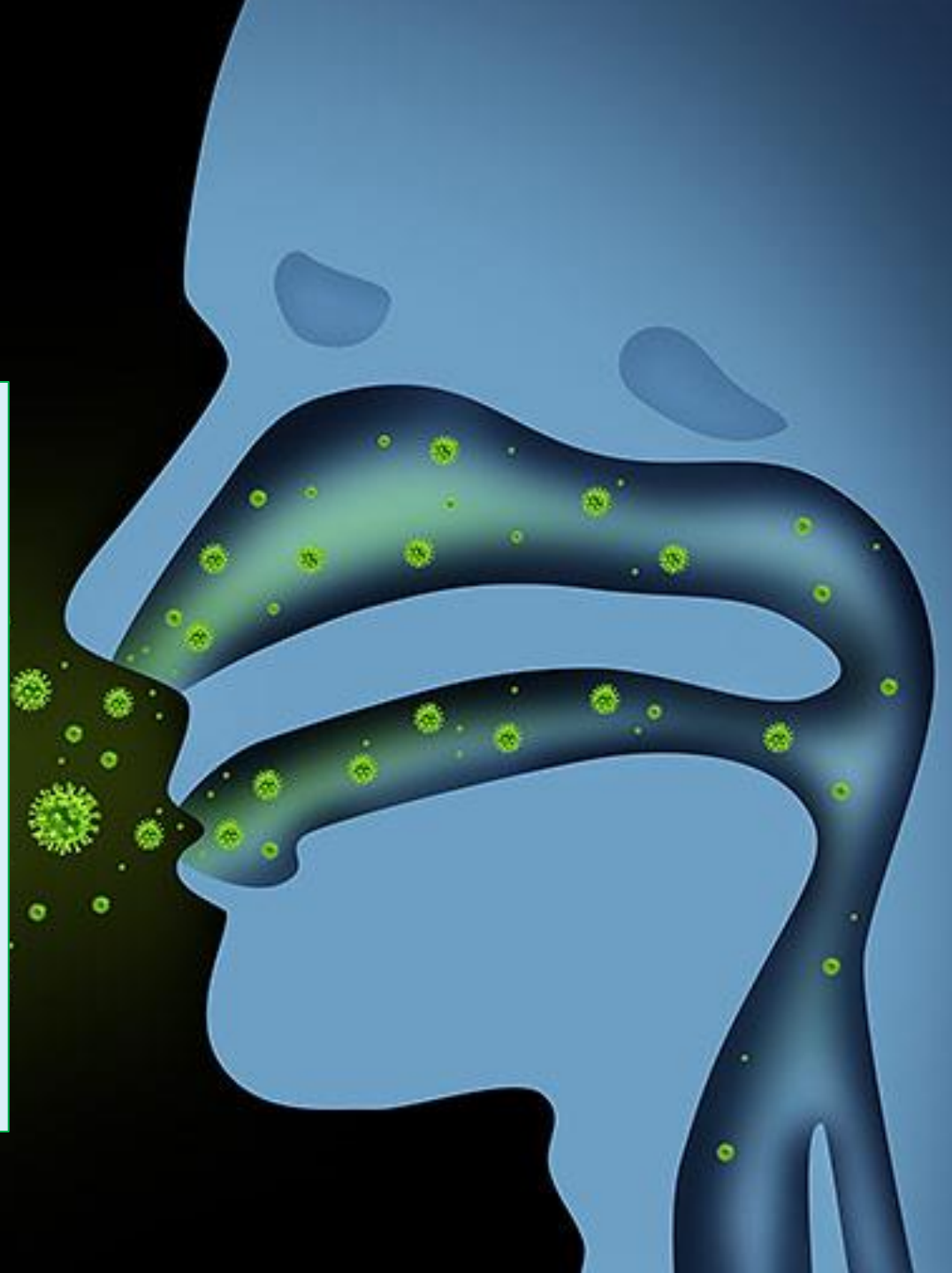


Disease classifications

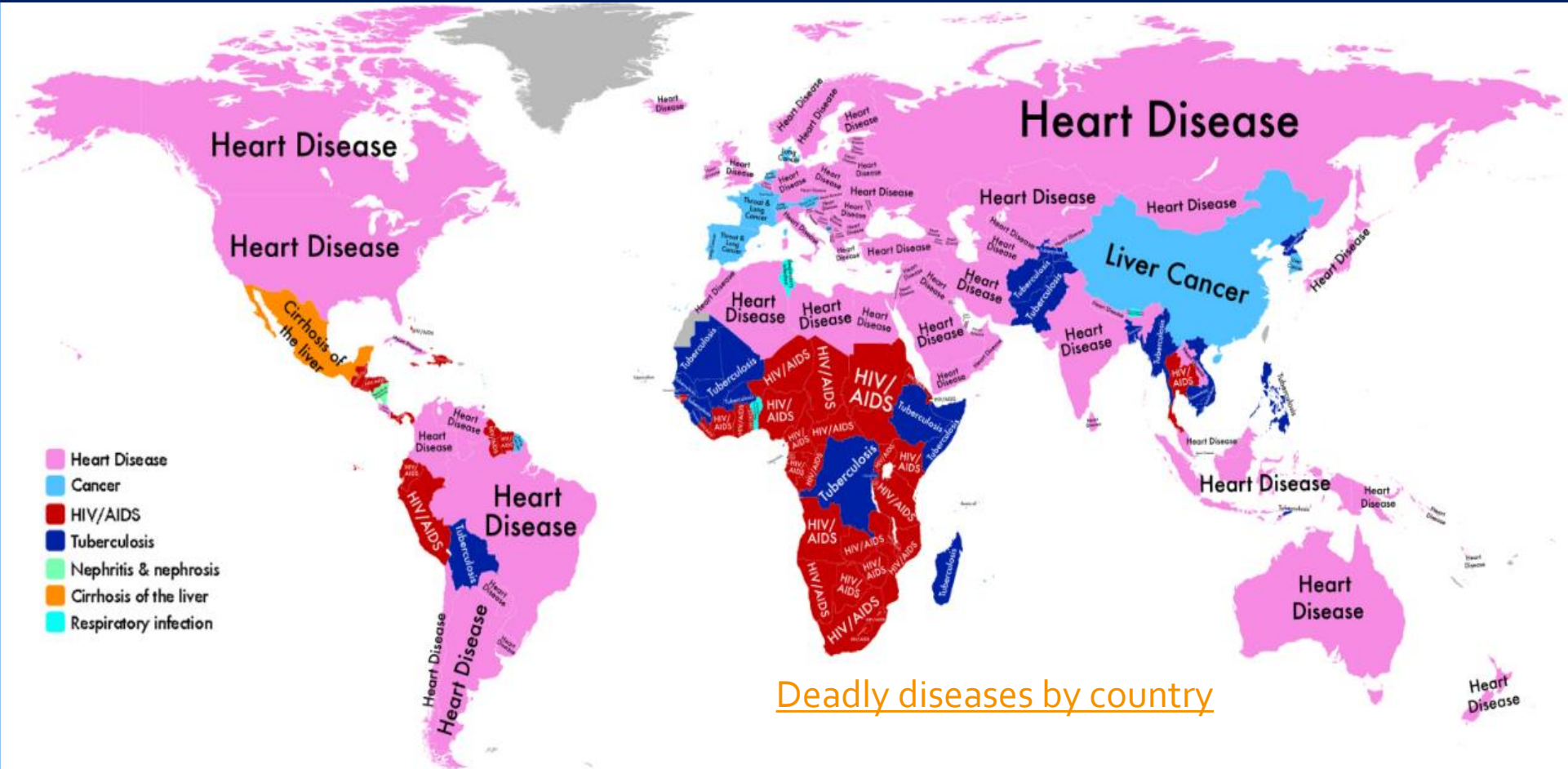
Infectious	Infectious diseases are caused by <u>pathogenic</u> microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another
Non-infectious	They arise from inside the body as a result of hereditary conditions or other causes, such as dietary deficiencies
Communicable CDs	An infectious disease transmissible or communicable [CD] (as from person to person) by direct contact with an affected individual or the individual's discharges or by indirect means (as by a vector)
<u>Noncommunicable NCDs</u>	<u>Noncommunicable</u> diseases [NCD], also known as <u>chronic</u> diseases, are not passed from person to person. They are of long duration and generally slow progression. The 4 main types of NCDs are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease & asthma) and diabetes
Contagious	A disease spread by contact (such as bodily fluids) or indirect contact (such as coughing) between people
Non-contagious	Usually requires a special mode of transmission between persons or hosts such as <u>vectors</u> (mosquitoes) or by non-casual transfer of bodily fluid (such as unprotected sex, blood transfusions or sharing needles)
Epidemic	An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area
Endemic	A disease that exists permanently in a geographical area or human group
Pandemic	An epidemic that has spread over several countries or continents, usually affecting a large number of people

Infectious vs communicable

- Communicable – any disease that can be **transferred between people** either directly (contagious so quarantine is required) or indirectly (non-contagious so no quarantine is required)
- Infectious diseases involve pathogens (an organism that causes disease)
- **Infectious diseases can be communicable and vice versa**
- **Genetic diseases are communicable but not infectious**



Which disease is most likely to kill you depending on where you live?



Q1. What is the **pattern** of disease spread?

Q2. What **factors** influence these patterns of disease?

Which disease is most likely to kill you depending on where you live?

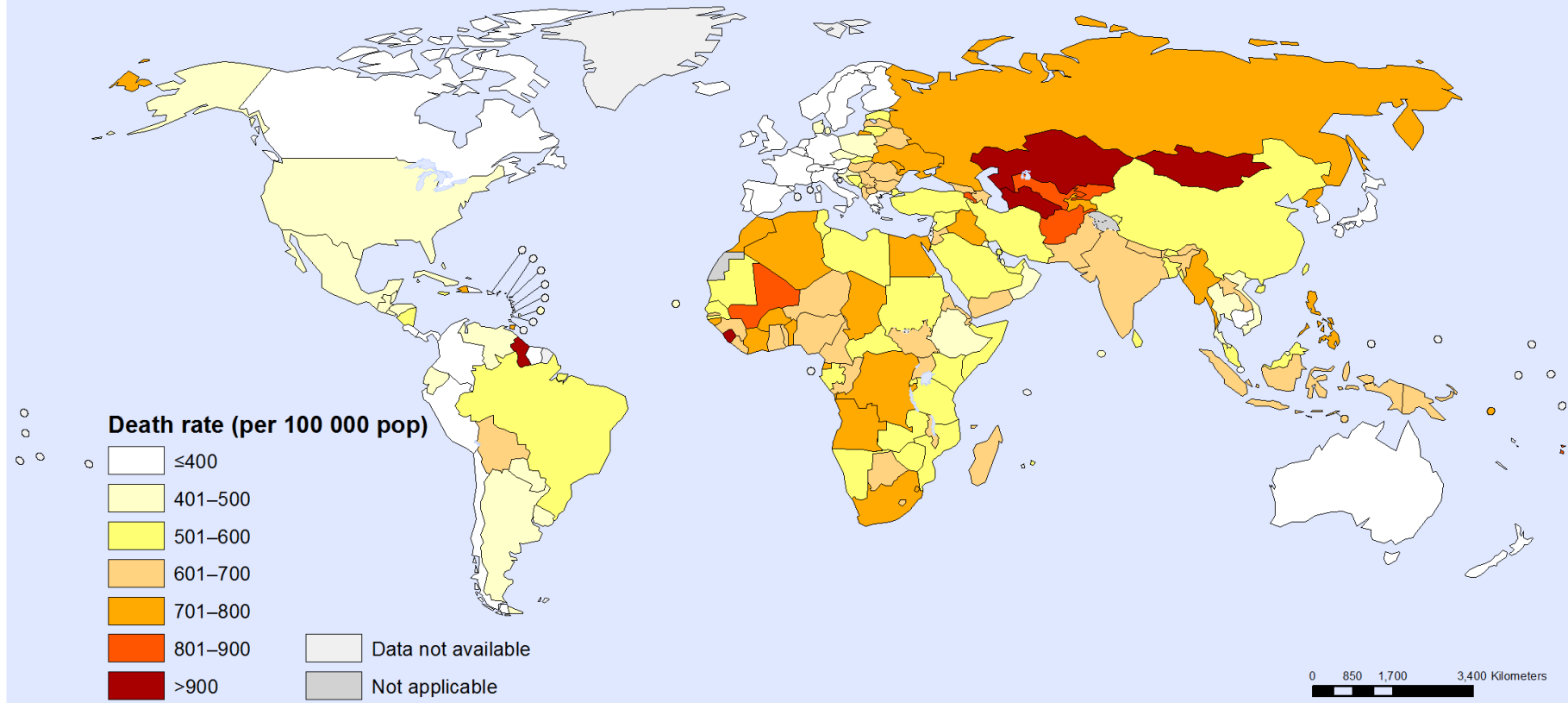


Q1. What is the **pattern** of disease spread?

Northern hemisphere the main pattern is heart disease which is non-communicable [NCD]. Africa is largely HIV/AIDS which is communicable [CD]

Q2. What **factors** influence these patterns of disease?
Physical – relief, climate or
Socio-economic – level of development (*how does this affect disease/health?*)

**Deaths due to noncommunicable diseases: age-standardized death rate (per 100 000 population)
Both sexes, 2012**

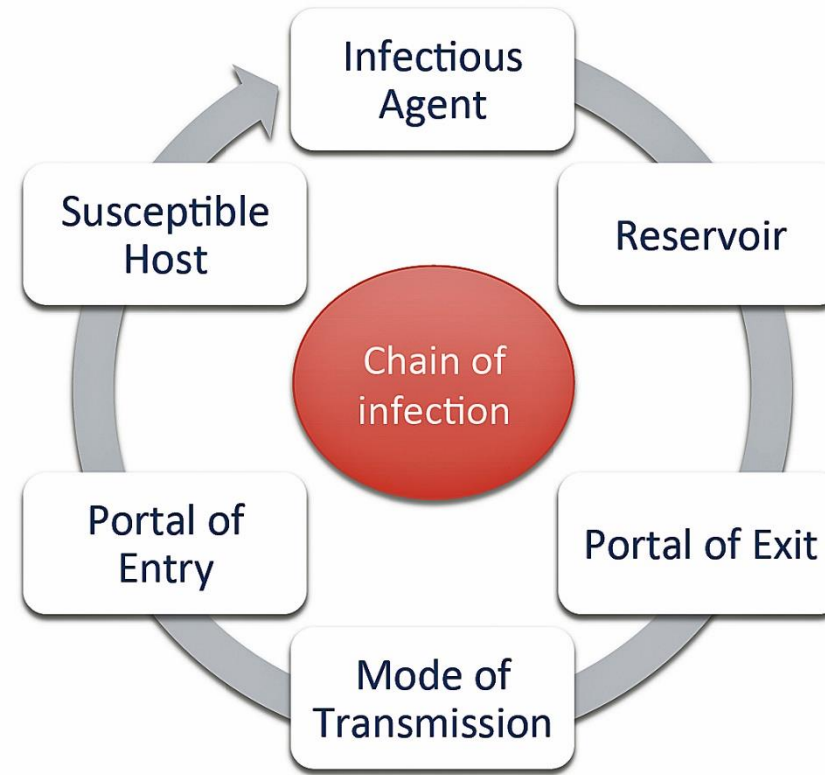


Describe what is happening

INFECTIOUS DISEASES: Modes of transmission

- All diseases classified as 'infectious' are just that, readily passed from person to person.
- The diagram shows that there are 6 basic organisms involved in the spread of infectious diseases.
- It also shows there are 6 main modes of transmission [ways they are passed on]

Chain of Transmission



Five major routes of transmission

What germs are on our hands ??

1. Contact:

Direct (person-person)

Indirect (through an object)

2. Droplet

3. Airborne

4. Common vehicle

5. Vector borne



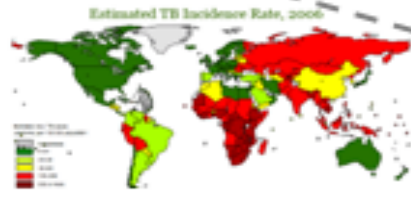
The same organism may be transmitted by more than one route



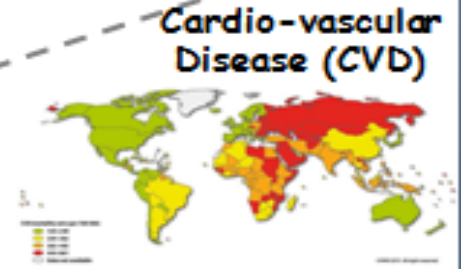
Malaria



HIV-AIDS

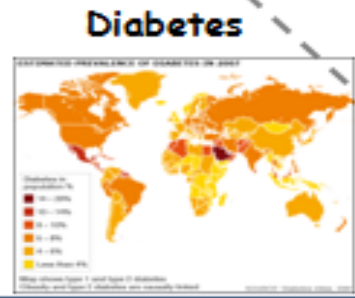


Tuberculosis (TB)



Cardio-vascular Disease (CVD)

Description of global distribution of diseases



Diabetes

Name _____

Plague Inc. Project

Can You Destroy Humanity?



Human history has been guided by the effects of disease. Two examples are the Black Plague (killed almost 1/3 of the entire human population) and the Spanish Flu (killed 5% of the human population).

Plague Inc. is a strategy-simulation game in which you are an infectious agent which infects an individual. Your goal is to infect and kill the whole human population by evolving and adapting to various environments. However, there is a time pressure to complete the game before humans develop a cure against you.

