



University of Wales
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Component 1

Incidence of disease in communities

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INTRODUCTION

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Introduction of the case study (100 words)

This report deals with the definition, measures, control, monitoring, and policy available to the UK Government to maintain public health. According to the (WHO,2012, NHS,2021, CDC,2022), Mumps is an acute viral illness caused by a paramyxovirus that typically presents as swelling of the parotid (parotitis) or other salivary glands. Mumps normally affects younger adults who did not receive the MMR vaccine. The MMR VACCINE was introduced in the UK in 1988. Confirmed cases of measles, mumps, and rubella in England and Wales: 2017 to 2020. The value in the brackets is for England only. Mumps is an infectious disease that can be transmitted by sneezing, dropping in saliva, and touching infected items such as door handles and surfaces, Mumps is an airborne virus that can be transmitted through the air like covi_19 virus.

• Year	Measles	Mumps	Rubella
2017	283 (265)	1,840 (1,796)	
2018	989(968)	1,088(1,061)	

2019	808(797)	5,718(5,055)
2020	79(79)	3,738(3,215)
2021	2(2)	18(17)

Statistics show in the case study that the number of cases of Mumps in England and Wales varies yearly, for example in 2017 the number of mumps cases in England and Wales was 1,840(1,796), and in 2019 MUMPS cases rise to its highest figure of 5,718(5,055) and 2021 saw the lowest number of in England and Wales with figures as low as 18(17). (GOV. UK,2022).

- Strategies used in the UK **to measure** the incidence of the disease in your case study and critically evaluate it (250 words)

Collecting and analysing data on Mortality and morbidity are the two strategies used to measure the incidence of the disease.

According to (NCI Dictionary) Mortality refers to the state of being mortal. In medicine, mortality is used for the death rate, or the number of deaths among a certain group of people, age, gender, and ethnicity, and could be reported for people who have certain health or disease conditions. The death rate is very rare with Mumps because there is no death recorded as a result of Mumps infections globally.

Source: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/mortality>

The phrase "morbidity rate" refers to the frequency of a disease or illness in a population and can be used to assess a population's health and healthcare requirements. Acute to chronic, protracted illnesses are all possible.

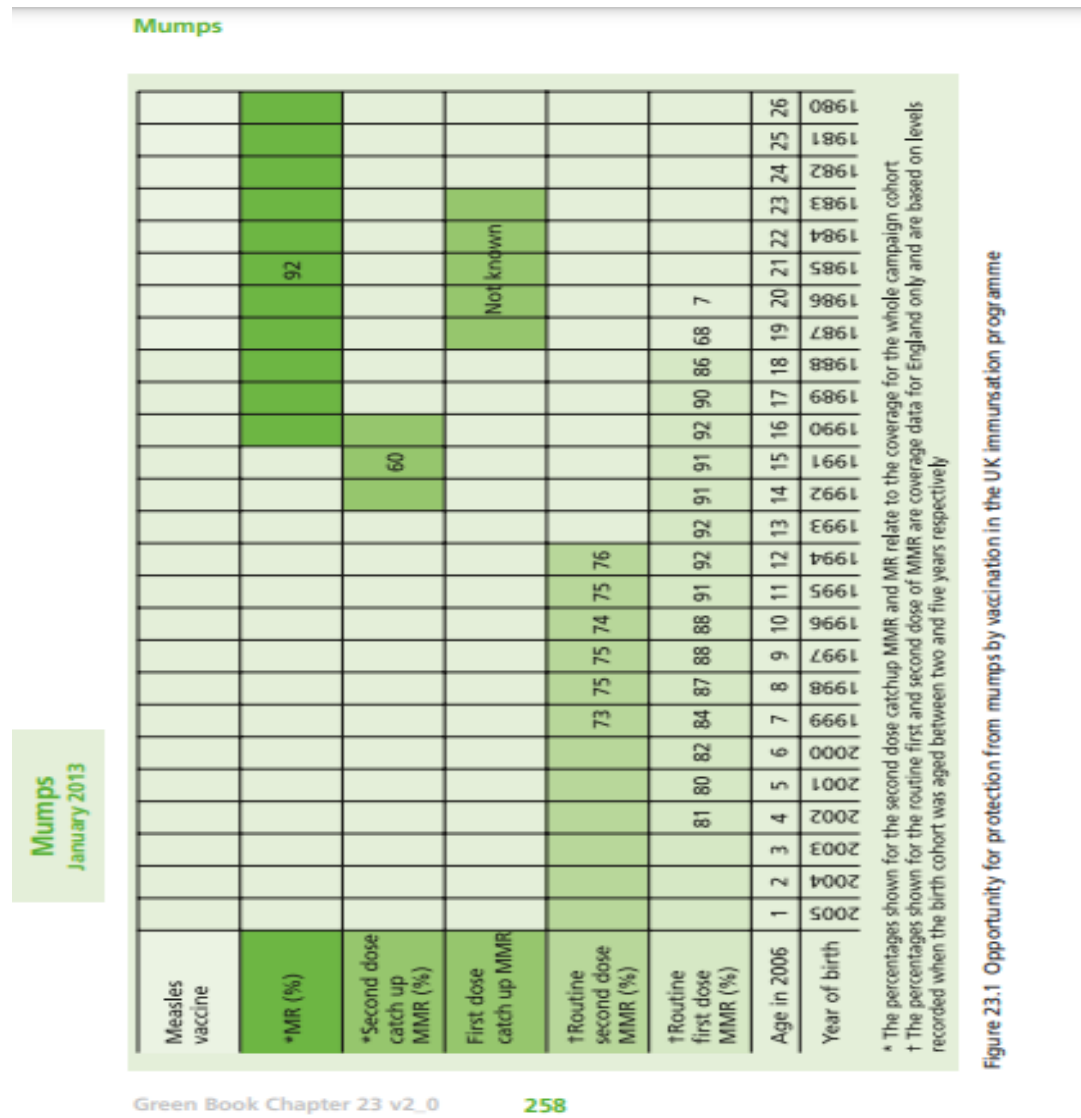
(Kenton, Cheng,2022)

It is important to collect mortality and morbidity data because that is the only way the authority or government will get the actual figure of those who have contracted the disease and the number of deaths caused by the disease. For example, during covid_19, the UK government was able to contain the covid_19 virus base on the statistics received from the findings from morbidity and mortality rates.

Strategies used in the UK **to monitor** the incidence of the disease in your case study and critically evaluate

Surveillance is one method for tracking the severity/level of the disease. What is surveillance? Is data analysis, such as trends, data comparisons over time and space, examination of the affected age groups, and gender-related factors, promoting the spread of the disease?

We can keep an eye on changes to the virus, the disease's effect on the healthcare system, and the progression of infections through surveillance. It is very important to take records of mortality rates and morbidity rates of an infectious disease through surveillance to enable the government to get the actual details of the disease. For example, during covid_19 the then health adviser to the UK government could not have been able to give credible advice to the government on the actual numbers of people who have contracted the disease and those who have died as a result of covid_19 if not for the help or aid of surveillance.



(Green Book,2013)

Data on the impact of immunizations/vaccines...

(Thacker, Berkelman) Surveillance is important because it equips decision-makers with timely, usable evidence, surveillance is crucial in enabling them to lead and manage more successfully. The positive impact of Surveillance is that it led to prompt and accurate results. Mumps surveillance is important for monitoring the impact of the MMR vaccination program.

- Strategies used in the UK **to control** the incidence of the disease in your case study and critically evaluate it (300 words)

The disease can be controlled in different ways. These include

Immunization

Lifestyle behavioral changes

Lockdown

Isolation

Keeping social distance

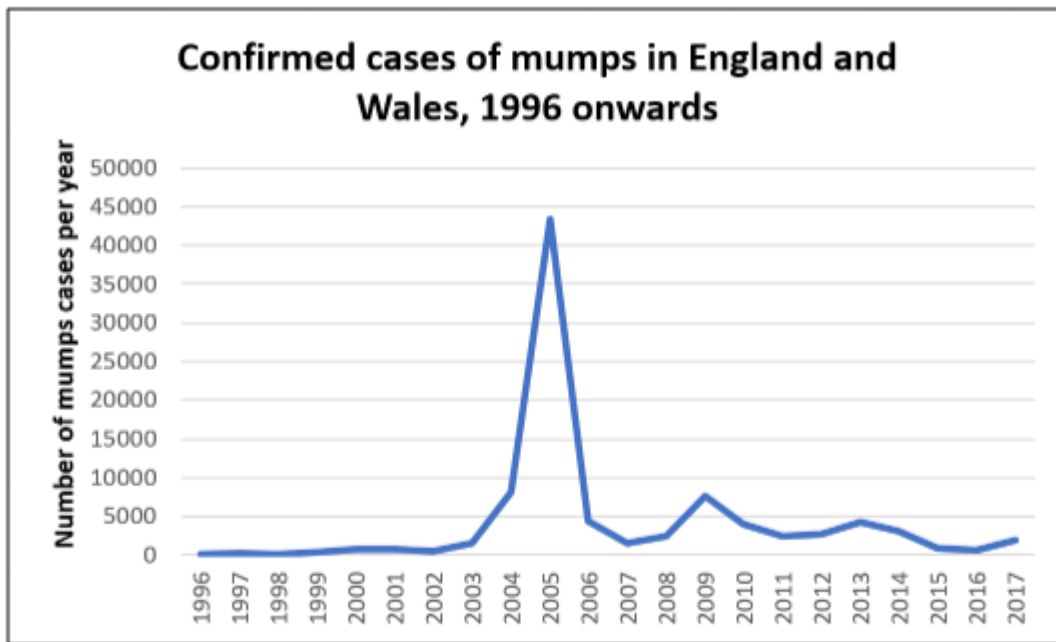
Medication: antibiotics, antivirals, and antifungals.

Modifying the environment: vector control

Quarantine

Health campaigns

Immunization is one of the most important approaches/measures to control the disease children or infants should receive their first dose of MMR vaccine from 6 through 11 months and the second dose after 28 days. Before the MMR vaccine was introduced in 1988 Mumps was responsible for over 1200 hospital beds in Wales and England and it was among school children and over 85% of adults have evidence of previous mumps infections (Capner *et al*,1988; Galbraith *et al*,1984).



Source: [Public Health England](#) and the [Health Protection Agency archive](#)

(Oxford

vaccine group,2022)

Health campaigns represent another important strategy to control the disease....

PROTECT YOURSELF AGAINST MUMPS

**MMR VACCINATION IS THE BEST WAY TO PREVENT MUMPS!**
THERE IS NO TREATMENT FOR MUMPS IF YOU GET IT

KEEP FROM SPREADING MUMPS


Don't share things that have saliva on them


Cover your coughs and sneezes


Stay home when you are sick


Wash your hands often with soap and water


Clean and disinfect surfaces

SIGNS AND SYMPTOMS OF MUMPS


Mumps is best known for the puffy cheeks and swollen jaw that it causes.


Fever


Headache


Loss of appetite


Muscle aches


Tiredness

VACCINATION ALSO HELPS PREVENT MUMPS COMPLICATIONS


Complications can include swelling of the:

- testicles
- ovaries
- breasts
- pancreas
- brain
- spinal cord tissue

IF YOU HAVE SYMPTOMS, STAY HOME AND AWAY FROM OTHERS. CONTACT YOUR DOCTOR OR HEALTH SERVICES AT YOUR INSTITUTION.



Conclusion

In conclusion, mumps rates are high among adolescents and young adults. There were large numbers of confirmed cases of mumps between 2004 to 2009 most in adolescents and young adults who are either at colleges or universities. confirmed cases of mumps were in London and the Northern region of the UK in 2010. Statistics show that in 2005 a total of 56,390 mumps were reported in England and Wales. Mumps can cause swollen men's testicles mumps can cause infertility; it is very rare for mumps to cause death. In October, 1988 mumps vaccine was introduced to the UK vaccination as part of new MMR vaccine. Children aged 12- 15 months are to be vaccinated with the first dose and second dose to be given at age 3- 5 years and it is on record in 1995 over 95% of children have taken the first dose of the MMR vaccine in UK. To prevent the spread of mumps constant washing of hands is advisable, any person with symptoms should not go to school nor work, should self-isolate and public health campaign be needed to educate the local communities.

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