

UNIVERSITY OF WALES
Trinity Saint David
London

Introduction to Public Health
LCHS4008
Lecture's Name: Dr Pascal Navelle

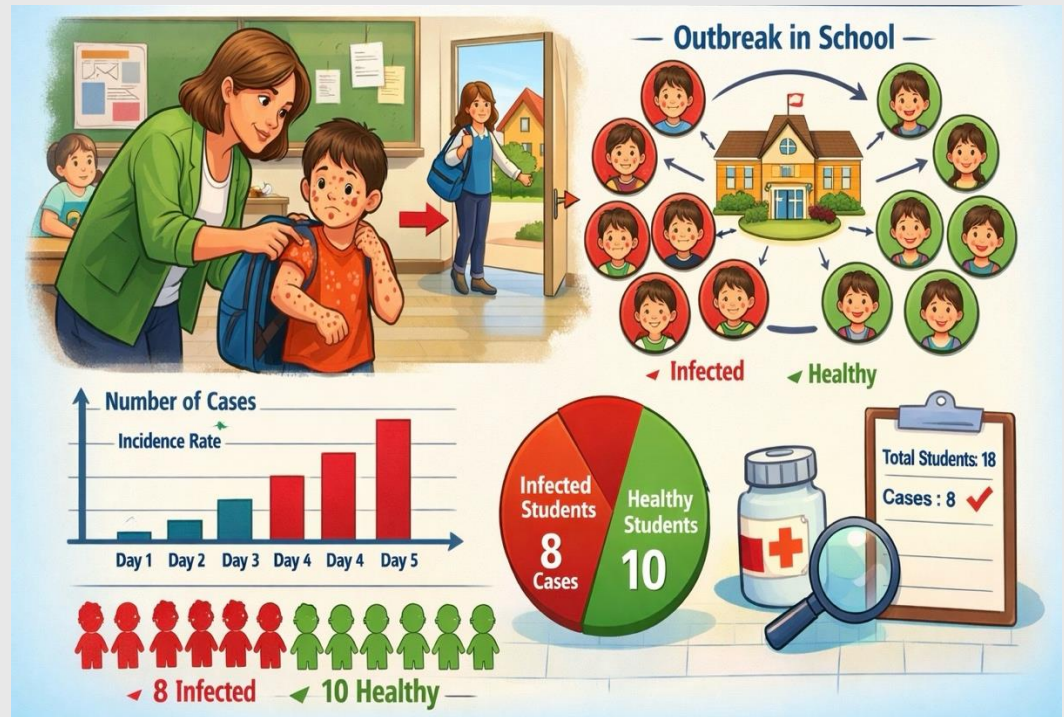
Assessment 1: Group Presentation 1

Student name:	Student ID:
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Measuring the Incidence of Chickenpox in a school Outbreak

Student Name: Dana Bardar

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Introduction:

- Chickenpox, also called Varicella, is a viral infection that spreads easily between people and is caused by the varicella-zoster virus.
- It is common in children under 10 years old and spreads easily in places like schools and nurseries.
- The main symptom is an itchy rash with small blisters, often accompanied by fever and tiredness.
- In the presentation, I will explain how Public health professionals measure the incidence of chickenpox using a school case study involving Roma, Maria and Mona.

Overview of Chickenpox (Varicella):

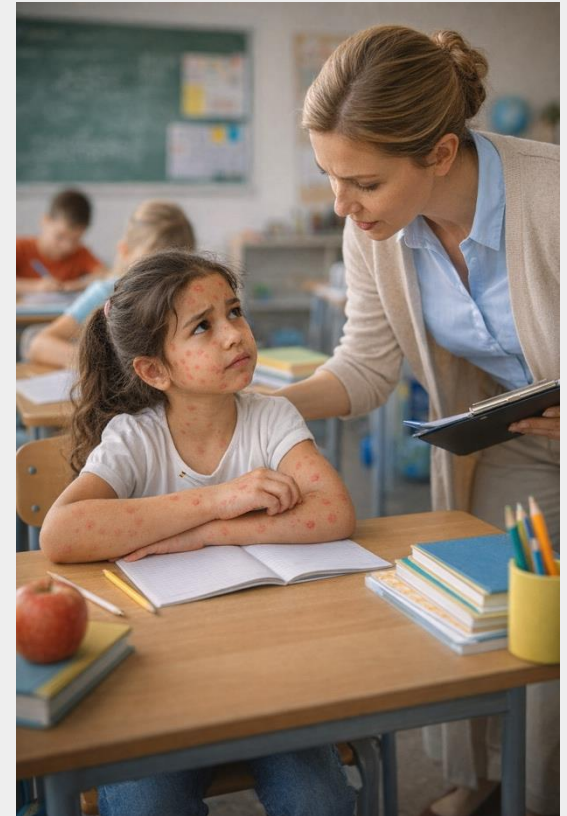
- Chickenpox is an infection disease caused by the varicella-zoster virus and it spreads easily between people.
- The illness mainly affects young children, although adults can also become infected.
- One of the most common symptoms is an itchy rash that develops into small fluid-filled blisters which later form scabs.

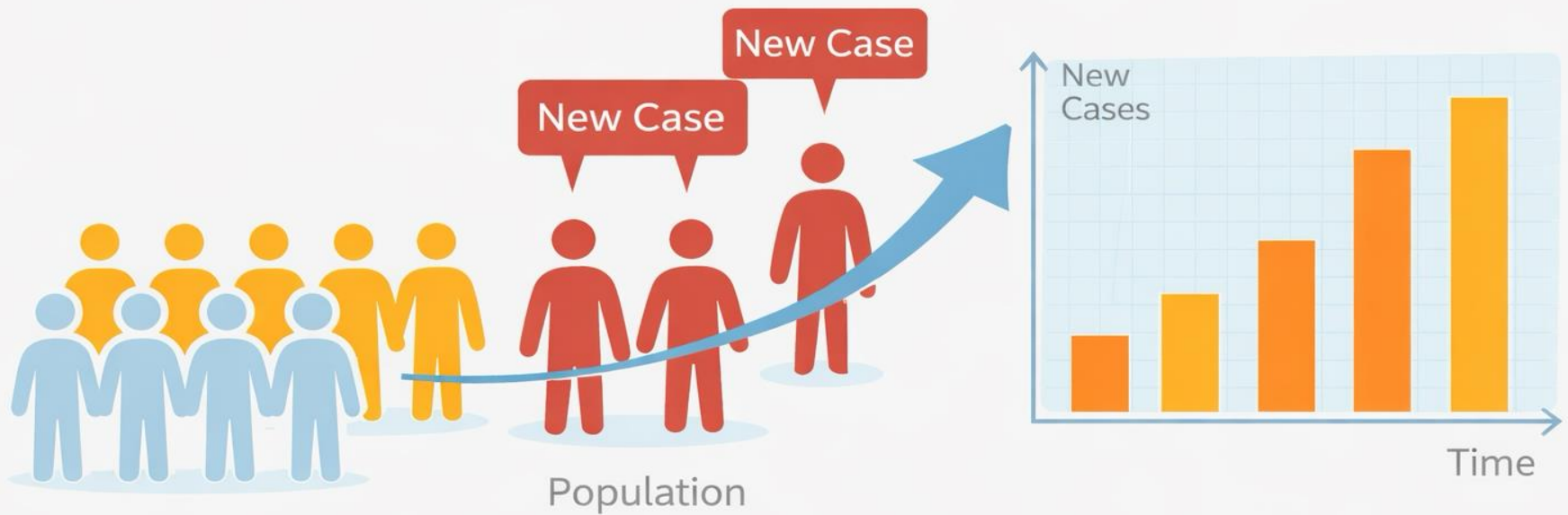
Common symptoms include:

- Itchy red rash
- Fever
- Tiredness
- Loss of appetite
- The infection spreads through coughing, sneezing or direct contact with the blisters.

Case Study: Suspected School Outbreak

- Roma is a seven-year-old girl in Year 1.
- During class, her teacher noticed itchy spots on her hand and suspected chickenpox.
- The teacher asked Roma's parents to take her home to prevent the infection from spreading.
- The following day, two other girls from the same class, Maria and Mona, were also absent with chickenpox.
- This situation may suggest the beginning of an outbreak in the school environment.





Measuring Disease Incidence:

- Incidence refers to the number of new cases of disease that occur in a particular population during a certain time period.
- Measuring incidence helps public health professionals understand how common a disease is and how fast it spreads.
- Collecting accurate data allows health authorities to detect outbreaks early and respond quickly.
- In the case study, several cases in the same class may indicate an increase in disease incidence in the school.



Public health professionals collect information from several sources:

Healthcare reporting:

- Doctors and general practitioners record cases of chickenpox and report them to public health authorities.

School monitoring:

- Teachers may notice symptoms and report when multiple children are absent with the same illness.

Laboratory information:

- In some cases, laboratory tests provide reliable data about new cases in the community.

Importance of Measuring Incidence:

Identify new cases of
infection in the
community.

Direct outbreaks at an
early stage.

Understand how quickly
the disease is spreading.

Support public health
planning and decision
making.

By measuring incidence,
public health authorities
can take early action to
protect schools and the
wider community.

Conclusion:



Measuring the incidence of infectious diseases is an important part of public health.

Information collected from healthcare services, schools and laboratories helps identify new cases and detect outbreaks early.

This allows public health professionals to respond quickly and protect the community.

The other members of the group will now discuss how outbreaks can be monitored and controlled, and the public health strategies used in the United Kingdom.

References:

Centers for Disease Control and Prevention (2023), Chickenpox (Varicella). Available at: <https://www.cdc.gov/chickenpox/> (Accessed: 9 March 2026).

National Health Service (2023) Chickenpox. Available at: <https://www.nhs.uk/conditions/chickenpox/> (Accessed: 9 March 2026).

Uk Health Security Agency (2023) Infectious disease surveillance. Available at: <https://www.gov.uk/> (Accessed: 9 March 2026).

World Health Organization (2024) Varicella (chickenpox). Available at: <https://www.who.int/> (Accessed: 9 March 2026).

Title: Monitoring the Incidence case of Chicken Pox in the Local Community

Module name : Introduction of Public Health

Module Code: LCHS 4008

Student name: Elisa Monares

Student ID: 2510396

Group 1: Dana, Elisa, Bossy & Yam

Lecturer name: Pascal Navelle

Date : 16 March 2026



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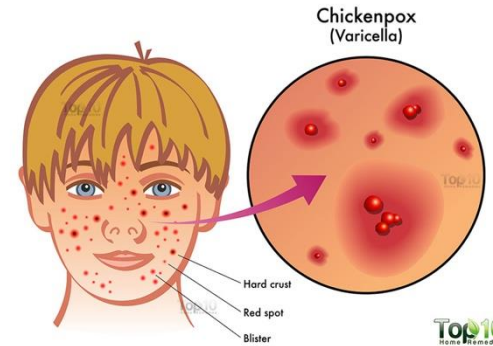
Introduction

Slide Content:

- Monitoring incidence helps detect outbreaks and guide prevention
- Caused by the varicella zoster virus

(World Health Organization, 2023)

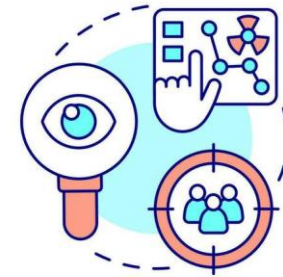
- Common in children but can affect adults
- Chicken is highly contagious viral infection



Routine Disease Surveillance

Slide Content

- Helps track trends and detect outbreaks
 - Healthcare providers report cases to public health authorities
 - Age and location of patients
- (Centers for Disease Control and Prevention, 2022)
- Number of cases
 - Time of infection
 - Data collected includes



**Public Health
Surveillance**

EDITABLE STROKE

Sentinel and Laboratory Surveillance

Slide content

Sentinel Surveillance

- Provides early warning of increases in case
- Selected hospital or GP practices report detailed data (Public Health England,2021)

Laboratory Surveillance

- Improve accuracy of diagnosis and monitoring
- Lab confirmation of Varicella zoster virus



Laboratory Surveillance

Slide points

- Supports epidemiological investigation
- Detects varicella -zoster virus (WHO,2023)
- Improves accuracy of case reporting
- Laboratory testing confirm infection



Vaccination Coverage Monitoring

Slide points

- Support vaccination programs
- Identifies communities with low coverage
(CDC,2023)
- Monitoring immunization rate
- Helps prevent outbreaks



References

(Harvard Style)

Centres for Disease Control and Prevention
(2023) Varicella
Surveillance and reporting. Available
at: <https://www.cdc.gov>
(Accessed: 7March 2026)

Public Health England (2022)
Guidance of varicella (Chickenpox)
Infection. London: PHE.

World Health Organization (2023)
Varicella and herpes zoster vaccines:
WHO position paper. Geneva: WHO.



Chicken pox

ABOSEDE BANJO [251 629 1]

INTRODUCTION TO PUBLIC HEALTH

Lecture's Name: Dr Pascal Navelle

Module: LCHS4008: Introduction to Public Health



INTRODUCTION:

- Chicken pox is an infection caused by the **Varicella-Zoster** virus
- it can be noticed by an itchy, blister-like skin rash also it is contagious, from person to person.
- According to the case study the teacher noticed that Roma had spots on her hand and was not feeling well and went home the next day Maria and Mona had gotten chicken pox, this shows chicken pox can spread if not controlled.
- The main approaches and strategies that can be used to control chicken pox because it is an infectious disease outbreak is in the slides below

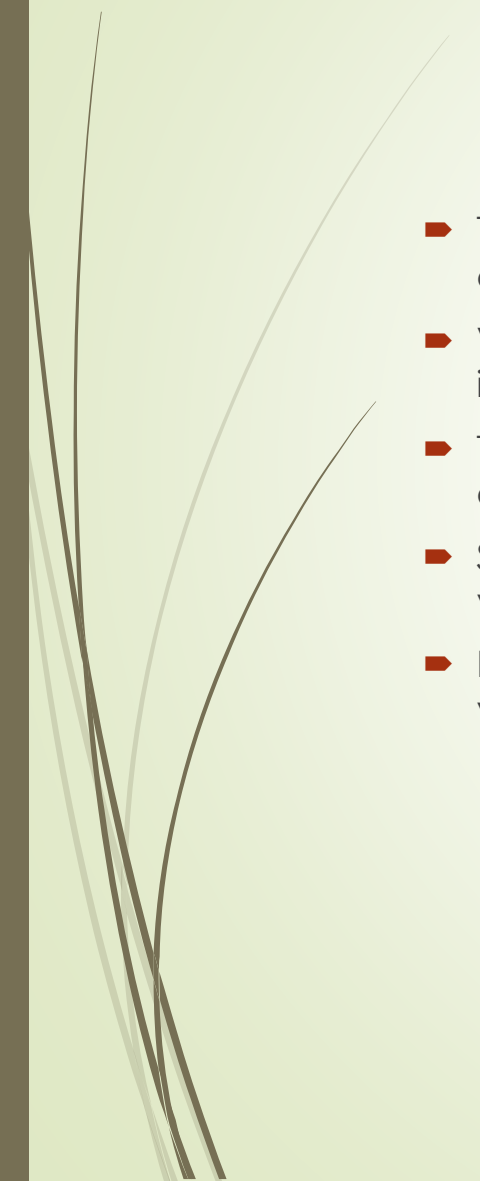


Early identification and Isolation of cases.

- According to case study immediately the teacher saw spots on Roma hand she called the attention of her parents and she was taken home.
- Also the next day two of her classmates didn't come to school because they had chicken pox.
- Children who develop symptoms should main at home until all the blisters have dried and formed blisters
- This takes about five to seven days or even more.



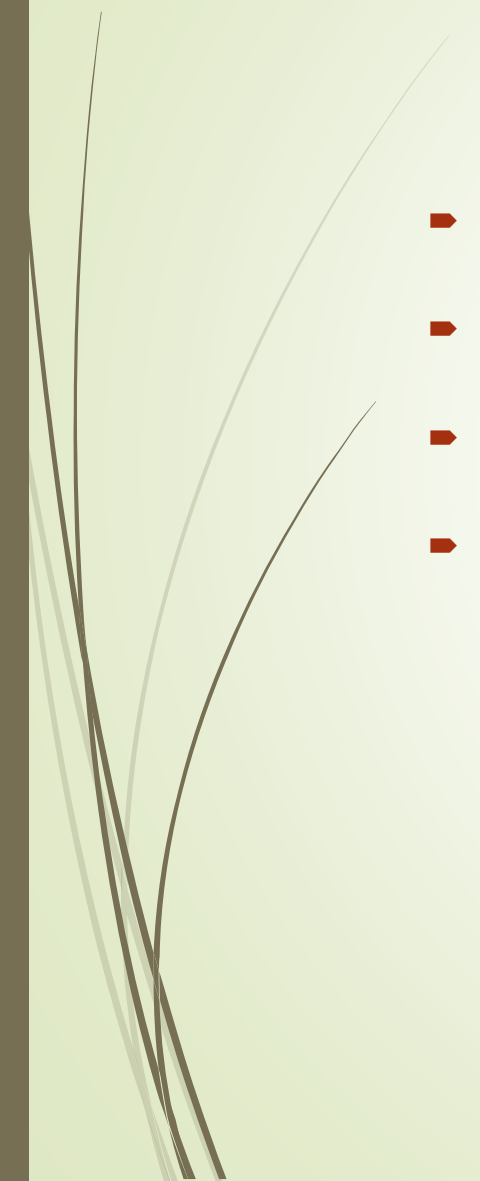
Vaccination



- The case study says Roma, Maria and Nora has symptoms of chickenpox,.
- Vaccination would reduce the risk of infection and lowers the symptoms if infection occurs.
- The Varicella vaccine is the most effect way to prevent and control outbreaks of chicken pox.
- School settings vaccination programs can help to reduce the spread of the virus among class mates.
- Parents must encourage their children to receive recommended vaccinations before they attend school.



Good Hygiene Practices



- ▶ According to the case study three children has stayed home because of the symptoms of the virus.
- ▶ the school must encourage the children to cover their mouth when coughing and sneezing.
- ▶ children should avoid sharing personal items such as towels and clothing According to the (Public Health England 2017)s
- ▶ Hand washing with soap and water, cleaning of shared toys, desks and door handles.

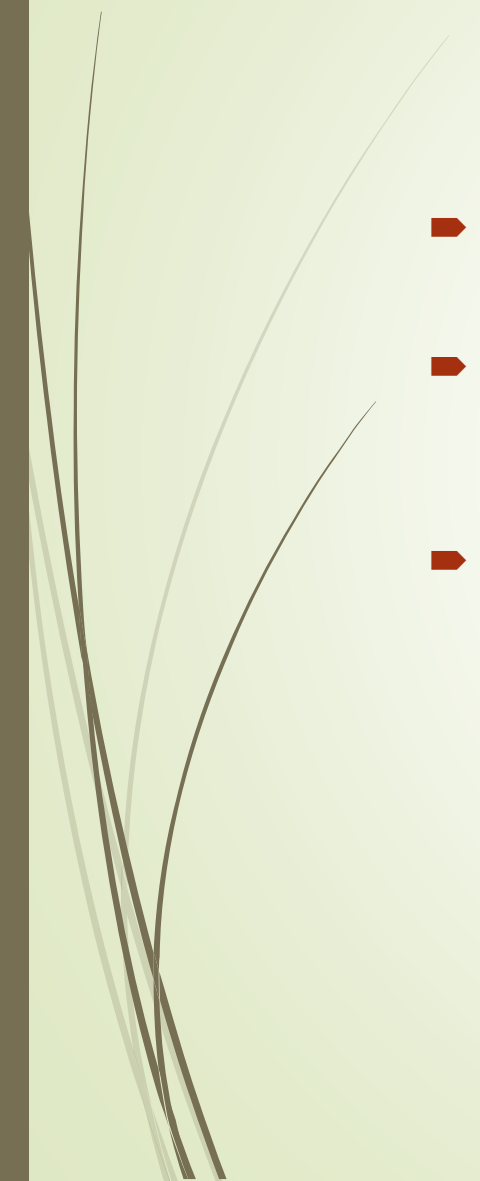


Health Education and Awareness

- School can organize awareness programs to educate parents , teachers and students about the symptoms , transmission and prevention of the disease.
- Educating children about personal hygiene and infections prevention also contributes to the control of disease
- According to Naidoo and wills (2016) health education encourages people to adapt ways to promote health and prevent disease.



Collaboration with Public Health Authorities

- Schools should inform the local health department so that the right measures can be made.
 - Public health can guidance on infection control practices and educational resources for staff and parents .
 - The collaboration would make sure the outbreak is managed well and that the prevention measures are implemented.
- 



Treatment and Medication for children with small pox

- and Paracetamol is commonly used because it is safe for children.
- To stop the itching soothing lotion can be used for example calamine lotion.
- A lot of rest and drinking of fluids , also the skin must be kept clean which would help to recover quickly .



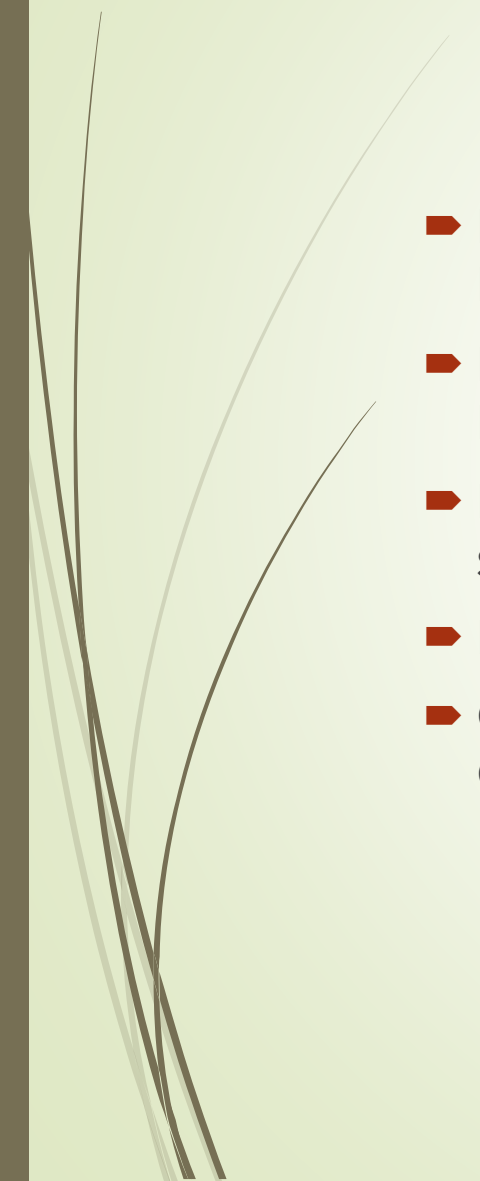
Conclusion



To be able to control chickenpox it requires combination of strategies ,isolation, vaccination ,health education, hygiene practice with all these measures are implemented in school setting , they would help reduce the spreading of chicken pox and would protect the health of both students and staff.



References



- NHS (2023) Chickenpox treatment and advice London; National Health Service.
- NICE (2022) Management of Chickenpox. London: National Institute for Health and Care Excellence.
- Public Health England (2017) Health protection in schools and other care Excellence.
- Naidoo, j. and wills, J. (2016) Foundations for
- Centers for Disease Control and Prevention (2022) Chickenpox (Varicella);

Introduction to Public Health

Student name: Yam Bahadur Gurung

Student Id: 2515709

Introduction

- This slide discusses factors that can influence the health and wellbeing of individuals affected by chickenpox, based on the case study.
- Chickenpox can affect both the physical health and emotional wellbeing of children.

Physical Factors

- Chickenpox causes symptoms such as:

Itchy rash and blisters, fever, tiredness

These symptoms can make the child feel uncomfortable and weak. Scratching the blisters may also lead to skin infections.

Emotional and Social Factors:

- Children with chickenpox usually need to stay at home to avoid spreading the infection.
- Because of this they may: miss school, feel bored, miss spending time with friends. Support from parents and teachers is important.

Conclusion:

- In conclusion, chickenpox can affect a child's physical health, emotional wellbeing and daily life.
- Understanding these factors helps parents, teachers and health professionals support the child better.

References:

- Nhs (2023) Chickenpox.
- Public health England (2017)
- World health Organization