



Undetected Human Cases of Bird Flu Surge in US

Description

An analysis of blood samples taken from 115 dairy workers in Michigan and Colorado has uncovered instances of highly pathogenic bird flu infecting humans without detection. Researchers from the US Centers for Disease Control and Prevention (CDC) identified that 7 percent of those tested between June and August 2024 carried antibodies for the highly virulent H5N1 strain in their blood.

The silver lining in this discovery is that most individuals who have contracted the bird flu have not experienced severe symptoms. Remarkably, half of those with virus antibodies did not even report feeling ill, suggesting they may have only encountered mild manifestations.

Despite the current low risk to public health, experts are apprehensive about the unchecked spread of the virus, which could potentially lead to the emergence of more deadly strains through mutation. An alarming development in Cambodia involving a hybrid strain of bird flu has caused concern, as it exhibits mutations that enhance its ability to spread through the air and infect mammals.

The recent identification of a mutated version of the virus in a Canadian teenager, linked to the outbreak in US dairy cows, has heightened worries. The genetic alterations suggest an increased potential for human infection. While isolated for now, this case underscores the fluid nature of virus risks and highlights the importance of vigilant monitoring and outbreak management.

Efforts are being made to raise awareness among dairy workers about the risk of infection and the necessity of using proper protective equipment. The CDC continues to closely monitor the situation, as over 400 dairy herds have been affected by the highly virulent bird flu across multiple states. Enhanced surveillance and preventive measures are imperative to contain the spread and effectively manage existing outbreaks.

Vocabulary List:

1. **Pathogenic** /ˌpæθəˈdʒɛnɪk/ (adjective): Capable of causing disease.
2. **Virulent** /ˈvɪrʊlənt/ (adjective): Extremely severe or harmful in its effects.
3. **Manifestations** /ˌmænɪfɛsˈteɪʃənz/ (noun): Displays or signs of a disease or condition.
4. **Surveillance** /sərˈveɪləns/ (noun): The careful observation of someone or something.
5. **Mutation** /mjuˈteɪʃən/ (noun): The process of change in a DNA sequence that affects genetic information.
6. **Apprehensive** /ˌæprɪˈhɛnsɪv/ (adjective): Anxious or fearful about the future.

Comprehension Questions



Multiple Choice

1. What percentage of dairy workers tested between June and August 2024 carried antibodies for the highly virulent H5N1 strain?
 - Option: 3%
 - Option: 7%
 - Option: 10%
 - Option: 15%

2. Which region had instances of highly pathogenic bird flu infecting humans without detection in dairy workers?
 - Option: Michigan and California
 - Option: Colorado and Florida
 - Option: Michigan and Colorado
 - Option: California and Texas

3. What did half of the individuals with virus antibodies not report experiencing?
 - Option: Fever
 - Option: Cough
 - Option: Severe symptoms
 - Option: Loss of taste

4. What has caused experts to be apprehensive about the spread of the virus?
 - Option: High mortality rate
 - Option: Potential for mutation
 - Option: Ease of containment
 - Option: Non-human transmission

5. Where was a mutated version of the virus identified in a Canadian teenager?
 - Option: Michigan
 - Option: Colorado
 - Option: California
 - Option: Canada

6. How many dairy herds have been affected by the highly virulent bird flu across multiple states?
 - Option: 200
 - Option: 300
 - Option: 400



Option: 500

True-False

7. Most individuals who have contracted the bird flu experienced severe symptoms.
8. The recent identification of a mutated version of the virus has not raised any concerns.
9. Efforts to raise awareness among dairy workers about the risk of infection are not being made.
10. The CDC is not closely monitoring the situation.
11. Enhanced surveillance and preventive measures are not considered imperative to contain the spread of the virus.
12. The US Centers for Disease Control and Prevention (CDC) conducted the blood sample analysis in Michigan and Texas.

Gap-Fill

13. Researchers from the US Centers for Disease Control and Prevention (CDC) identified that 7 percent of those tested between June and August 2024 carried antibodies for the highly virulent H5N1 strain in their _____.
14. The alarming development in Cambodia involved a hybrid strain of bird flu with mutations that enhance its ability to spread through the _____ and infect mammals.
15. The recent identification of a mutated version of the virus in a Canadian teenager suggests an increased potential for _____ infection.
16. Enhanced surveillance and preventive measures are imperative to contain the _____ and effectively manage existing outbreaks.



17. Efforts are being made to raise awareness among dairy workers about the risk of _____ and the necessity of using proper protective equipment.

18. Over 400 dairy herds have been affected by the highly virulent bird flu across _____ states.

Answer

Multiple Choice: 1. 7% 2. Michigan and Colorado 3. Severe symptoms 4. Potential for mutation 5. Canada 6. 400

True-False: 7. False 8. False 9. False 10. False 11. False 12. False

Gap-Fill: 13. blood 14. air 15. human 16. spread 17. infection 18. multiple

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. What is the term used to describe the community of microorganisms that inhabit a particular environment?

Option: Composition

Option: Diversity

Option: Microbiome

Option: Interaction

2. Which term refers to the ability of an organism to cause disease?

Option: Virulent

Option: Pathogenic

Option: Manifestations

Option: Surveillance

3. What term best describes the process of combining different elements to create a whole?

Option: Mutation

Option: Synthesize

Option: Meticulous

Option: Encoding

4. Which term describes the quality of being correct or precise?



- Option: Revolutionize
- Option: Interface
- Option: Accuracy
- Option: Dissipation

5. What term best describes a work environment where individuals actively work together towards a common goal?

- Option: Gradient
- Option: Collaborative
- Option: Escalating
- Option: Microglia

6. What term refers to a permanent alteration in the DNA sequence that makes up a gene?

- Option: Pre-inflammatory
- Option: Implicated
- Option: Mutation
- Option: Neurodegenerative

7. Which term refers to treatments designed to cure or relieve symptoms of a disease?

- Option: Progression
- Option: Therapies
- Option: Microbiome
- Option: Emergence

8. What term describes the way in which two or more things affect each other?

- Option: Democratizing
- Option: Synthesize
- Option: Interaction
- Option: Meticulous

9. Which term refers to the symptoms or signs of a particular disease?

- Option: Influence
- Option: Manifestations
- Option: Surveillance
- Option: Apprehensive

10. Which term describes a significant and fundamental change in something?

- Option: Accuracy
- Option: Revolutionized
- Option: Dissipation
- Option: Gradient



Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. _____ refers to the gradual disappearance of a trait or condition over time.
12. _____ is the process of coming into view or becoming exposed.
13. The conflict showed signs of _____ tension between the two parties.
14. The color changes of the sky during sunset created a beautiful _____ .
15. The evidence strongly _____ the suspect in the crime.
16. Her teachers had a significant _____ on her decision to pursue a career in science.
17. The artist was known for his _____ attention to detail in his paintings.
18. Alzheimer's disease is an example of a _____ condition that affects the brain.
19. The government increased _____ in the area following reports of criminal activity.
20. The virus was particularly _____ causing severe illness in those infected.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. The of the painting was a blend of vibrant colors and geometric shapes.
22. The internet has played a significant role in access to information worldwide.
23. The medication aims to reduce processes in the body before they escalate into full inflammation.
24. The disease showed a steady worsening over time.
25. are a type of glial cell in the central nervous system that provide support and protection for neurons.
26. Samantha felt about the upcoming exam unsure if she had studied enough.
27. The genetic information in DNA is crucial for the process of proteins in cells.
28. The skin rash and fever were common of the allergic reaction.



29. The invention of the smartphone has helped to the way we communicate and access information.

30. The software developer focused on creating an easy-to-use for the new app.

Answer

Multiple Choice: 1. Microbiome 2. Pathogenic 3. Synthesize 4. Accuracy 5. Collaborative 6. Mutation
7. Therapies 8. Interaction 9. Manifestations 10. Revolutionized

Gap-Fill: 11. Dissipation 12. Emergence 13. Escalating 14. Gradient 15. Implicated 16. Influence 17.
Meticulous 18. Neurodegenerative 19. Surveillance 20. Virulent

Matching sentence: 1. Composition 2. Democratizing 3. Pre-inflammatory 4. Progression 5. Microglia
6. Apprehensive 7. Encoding 8. Manifestations 9. Revolutionize 10. Interface

CATEGORY

1. Health - LEVEL5

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