The Biology of Influenza and its Effects

Organizational Pattern: Topical Organization

URL Link: <http://www.youtube.com/watch?v=9RllT96vpFs&feature=youtu.be>

1. Introduction
	1. Did you know that influenza is most commonly referred to as the flu? Did you know that 36,000 adults die each year from influenza?
	2. **According to St. Jude Children’s Research Hospital in an article entitled**, **“Influenza Facts**,” influenza is the 6th leading cause of death among American adults (2012).
	3. Thesis Statement: The goal of my speech is to provide information on the following subtopics
		1. Define influenza and the biology behind the word
		2. Influenza’s symptoms
		3. Ways to prevent the spread of the virus

Transition: First, I would like to define influenza and describe the process within the human body.

Visual Aid #1

1. Definition of Influenza and its categories
	1. **According to the Health Care Network in an article entitled**, “Influenza”, influenza comes from the Italian language meaning “influence” and describes the cause of the disease. After time, the word evolved to describe “influences of the cold” due to the similarities of the common cold and influenza itself (2011).
	2. **According to Medicine Network**, **in an article entitled,“Definition of Flu”,** influenza is defined as “an acute, highly contagious infection of the respiratory tract which commonly occurs in the winter” (2012).
		1. Caused by RNA viruses of the family Orthomyxoviridae (the influenza viruses), that affects birds and mammals.
	3. Categories of influenza
		1. **According to the Center of Disease Control and Prevention (CDC**), **“Recommendations of the Advisory Committee on Immunization Practices**”, influenza is broken down into 3 categories (2012).
		2. Influenzavirus A are usually carried by wild aquatic birds and sometimes transmitted to other species and may cause devastating outbreaks.
			1. Most infectiousness
			2. Mutates the fastest
			3. Most genetically diverse
		3. Influenzavirus B exclusively infects humans and are “responsible for epidemics of respiratory illness that occur each season and often associated with rates for hospitalization and death”.
			1. The only other mammals that are known to get infected with types B influenza are seals and ferrets.
			2. Mutates 2-3 times slower than influenza A.
			3. Less genetically diverse
		4. Influenzavirus C is an infection that usually causes very mild respiratory illness or no symptoms at all; it does not cause epidemics and does not have the severe public health impact that influenza types A and B do.
			1. Humans, dogs, and pigs
			2. Less common types of influenza

Transition: Second, what are the influenza symptoms?

1. Symptoms of Influenza

Visual Aid #2

* 1. Influenza virus usually last between 5-7 days; however, it varies from person to person. In this time period, the host is extremely contagious.
	2. **According to the Children’s Hospital of the King’s Daughter**, the symptoms of influenza vary from person to person, but the general symptoms include the following (2012).
		1. High-grade fevers (103° F to 105° F)
		2. Aches and pains all over the body
		3. Headache
		4. Cough that is nonproductive
		5. Sore throat
		6. Stuffy nose with clear nasal discharge
		7. Nausea
		8. Vomiting
		9. Diarrhea
		10. Extreme Fatigue

Transition: Lastly, how can influenza be prevented and what are the precautionary measurements you can take to protect yourself?

Visual Aid #3

1. Arming yourself against the virus and preventing the spread of influenza
	1. **According to St. Jude’s Children Research Hospital**, 70-90% of people who take the annual influenza vaccination are effective in fighting the virus (2012).
	2. According to the Healthcare Network, a FluMist is also recommended and is said to work similarly to the influenza vaccination (2011).
	3. **According to Healthcare Network**, ways to prevent the spread of influenza are the following (2011).
		1. Avoid crowded places such as markets, shopping centers, and theaters during the epidemic
		2. Good personal health
		3. Good hygiene habits
		4. Keep distance from other people
		5. Get plenty of rest
		6. Exercise to boost immunity
		7. Keep yourself hydrated
		8. Wash hands frequently with soap (antibacterial if possible).
		9. Cover coughs with sleeves or tissue, not your hands
		10. Avoid touching your face
		11. Staying home if you are sick
		12. Face masks
		13. Avoid spitting
		14. Sanitizing surfaces frequently ie. Doorknobs, counters, etc.

In conclusion

1. Conclusion
	1. Influenza is an extremely contagious virus, but with precautionary actions and knowledge of how the virus contaminates the human body, the flu season may not be a contagious as one would think.
	2. Needs memorable conclusion

Works Cited

“Cleaning, Locks Prevent Influenza.” *Do Changes.* Scientific Weekly, 2012. Web. 26 February 2012.

“Definition of Flu.” *MedicineNetwork.com.* MedicineNetwork, Inc., 2012. Web. 26 February

 2012.

“Infectious Diseases.” *Children’s Hospital of the King’s Daughter.* Children’s Network of the

 King’s Daughter, 2012. Web. 26 February 2012.

 “Influenza.” *The HealthCareNetwork, Inc.* The HealthCareNetwork, Inc., 2011. Web. 26

 February 2012.

“Influenza Facts.” *St. Jude Children Research Hospital.* St. Jude Children Research Hospital,

 2012. Web. 26 February 2012.

Love, Jamie. “Flu – Recombinant Genes on the Loose!” *Science Explained.* Science Explained, 2012. Web. 26 February 2012.

“Recommendations of the Advisory Committee on Immunization Practices (ACIP).” *Center for*

 *Disease Control.* Center for Disease Control and Prevention, 2008. Web. 26 February

 2012.

“What is the Flu?” *SuperHomeRemedies.* Home Remedies, 2012. Web. 26 February 2012.