# Scientific facts of zombies essay



Informative Speech Outline Specific Purpose: To inform my audience about the science behind zombies and the "zombie virus" as well as provide information on how to survive after an outbreak of this virus. Central Idea: Through science and expert advice we can observe why zombies act the way that they do and what can be done to cause it intentionally, prevent it, or even create it. Introduction I. Play trailer for National Geographic's "The Truth About Zombies" II. The NatGeo video will reveal the topic III. The legend of zombies has been around for almost 100 years.

There is not one person in this room who does NOT know what a zombie is, or has some general idea of what they do. As a native of Southern California, there are not many reasons to be a gun enthusiast like I am. I started of shooting at the ranges; indoor, outdoor, skeet shooting with shotguns etc. As my love for firearms increased, I started to think of a reason as to why I might need to have a small arsenal at my house... ZOMBIES!!! As ridiculous as this sounds, a zombie apocalypse is as good a reason as any to be prepared for the future.

After looking into the folklore of zombies and the numerous urban zombie survival guides, I started to become intrigued with the science of zombies. IV. What I plan on doing today is summarize a few existing viruses and diseases that COULD combine, mutate, or switch species to cause something LIKE the " zombie-virus" as well as touching on a few expert opinions and studies along the way. Transition: Now that you know my qualifications and the purpose of my speech, let's go ahead and get started with the legend of a zombie. Body I.

I will first touch on how zombies look and behave from a legendary point of view according to Monstrous. com. A. Zombies have an insatiable desire for living flesh. B. Zombies are often noted to have strength which surpasses that of a live being. 1. This can be attributed to " hysterical strength"; this is the body's natural inhibition to use all of the strength available in order to avoid injury and fatigue. ©endlesshumanpotential. com C. Zombies have no personality and a one track mind, BRAINS!!! This hunger for human flesh is more of a procreation response as opposed to physical hunger.

D. Zombies often show signs of tissue decay, most importantly brain tissue, or lack thereof, which is a good transition to my next main point. II. Zombie neurobiology is something that I would like to explore very quickly, as it is much too involved to dive into completely. Mark Strauss, senior editor at Smithsonian magazine cited Dr. Steven C. Schlozman, lecturer at the Harvard School of Education-Psychiatry as describing zombie's neurobiology. A. The Frontal Lobe 1. Enables us to think clearly and solve problems 2. Must stay partially intact in order for the zombies to sense where we are. Probably just enough activity to "listen" to the Thalamus, where sensory input is received. 4. According to Dr. Francisco de Assis Aquino Gondim of emedicine, the frontal lobe can be affected by viral encephalitis, measles, polio, rabies, HIV, Herpes simplex and West Nile virus through bites from insects and other animals, including humans... B. The Amygdala 1. Houses base emotions such as rage, aggression, fear, anger, and lust. a. Since zombies' frontal lobes are affected, they tend to be driven entirely by base emotions from the Amygdala.

C. Cerebellum and Basal Ganglia 1. These make coordinating movement fluidly and with balance possible, so there is obviously a dysfunction in these parts of the brain as well. 2. The Mayo Clinic website defines a condition known as " ataxia" as a lack of muscle coordination during voluntary movement, such as walking. This condition is a result of damage to your cerebellum. This is usually known as " Post Viral Cerebellar Ataxia" following infections such as Chickenpox, Lyme disease, Epstein-Barr, and HIV. D.

Now that we've looked at what parts of the brain have to be affected and what viruses can cause these symptoms, let's see if there are any credible sources for a viral mutation or combination that might lead to these symptoms. III. In light of all that we've looked at so far, are there rightminded people in our society that agree that a " zombie-virus" is possible to be produced? A. George Dvorsky, chair of the IEET (Institute for Ethics and Emerging Technologies) Board of Directors says that a zombie virus is definitely possible to be made, although it would not be apocalyptic in the end. 1.

It could definitely be scripted to use in nefarious ways, such as slave labor or military usage. 2. By using the rabies virus and engineering it so that it would be more contagious, faster acting and could result in more aggressive behavior. 3. Nanotechnology is another path that Dvorsky believes could be possible by using nanobots to maintain essential bodily functions and even reanimate a corpse. B. Federal Governmental program the CDC (Centers for Disease Control and Prevention) has a Zombie Preparedness webpage in order to keep people prepared for the unlikely event of a zombie outbreak.

Director of the CDC, Dr. Ali Khan, states, " If you are generally well equipped to deal with a zombie apocalypse you will be prepared for a hurricane, pandemic, earthquake, or terrorist attack. " C. Samita Andreansky, a virologist at the University of Miami's Miller School of medicine can theorize a zombie virus in a few different ways according to an article in National Geographic in 2010. 1. Combining rabies with the ability of a flu virus such as bird flu or swine flu, and you might have the makings for a zombie apocalypse. 2.

A viral mutation of the rabies virus could be "entirely plausible" Andreansky said, "If a rabies virus can mutate fast enough, it could cause infection within an hour or a few hours." 3. A specifically designed and engineered virus is probably the most frightening of all the scenarios. Andreansky said " Sure, I could imagine a scenario where you mix rabies with a flu virus to get airborne transmission, a measles virus to get personality changes, the encephalitis virus to cook your brain with fever"—and thus increase aggression even further—" and throw in the Ebola virus to cause you to bleed from your guts.

Combine all these things, and you'll get something like a zombie virus. " IV. How to survive in case of an apocalypse? – Destroy the brain stem ( Conclusion Now that we've taken a quick look at the outward appearance of zombies, we will know how to recognize them in case we ever encounter one. Taking a more in depth look at the physiology of a zombies' brain gives us a deeper understanding of what makes them work and why. Showing the plausibility of a condition like this arriving in the future keeps us prepared for what many would consider an unpredictable situation.

I want to leave you with a question that the video opened up with. " Could the living dead be dead real? " Reference Page Centers for Disease Control and Prevention. (January 31, 2012) " Zombie Preparedness" Retrieved on March 01, 2012 from http://www. cdc. gov/phpr/zombies. htm De Assis Aquino Gondim, Francisco. (August 28, 2011) " Viral Encephalitis" Retrieved on March 4, 2012from http://emedicine. medscape. com/article/1166498overview#a0104 Dvorsky, George. (December 18, 2010) " How to Engineer a Zombie Virus"

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