I. Introduction of Topic:

The dictionary of epidemiology defines pandemics as “an epidemic of infectious disease that has spread through human populations across a large region”\(^1\): annually, 2.3 billion people a year are affected by such catastrophes. There are several ways that these diseases begin to spread; however, there are just as many ways they can be prevented. Considering the rapid pace of technology and subsequent development of technology, this is not surprising. These global pandemics are transmitted not only through people but also by imported and exported merchandise. China’s highest point of exportation in January 2014 reached 2077.42 hundred million US dollars and reached everywhere from the US, European Union, and Asia. The US export industry attracts consumers that are just as widespread. As the global marketplace increases, the opportunity for disease to transmit is immense.

The struggle to contain outbreaks is heightened by the technological basis on which we rely on today; building on that that risk are the individual conflicts between nations is a threat to global peace but also health. World leaders are convinced that in order to combat the spread of disease, cross-border cooperation must be improved.

II. Background:

The virus H1N1 subtype of Influenza, A first appeared in1918; its reappearance in 2009 is one of the most relevant and well-known pandemics. Its initial introduction infected around 500 million people and resulted in 3 to 5% of the world’s population deceased. The 2009 outbreak took on a different magnitude due to how widespread it was. There were cases reported in North America, Europe and Asia, highlighting the key difference between the first and more recent outbreak; in 1918 the virus remained somewhat isolated, but in the twenty first century, the affected areas were much more widespread. The increase of travel could be held responsible for this development.

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The National Center for Biotechnology Information states as of May of 2011 that the H1N1 virus resulted in 12,469 deaths (from the 60.8 million infected). The decrease adequately represents the level at which we are at now when it comes to tackling these situations. Yet, the numbers can still be greatly reduced.

H5N1 is another Influenza A virus subtype that caused global turmoil. After two major outbreaks one from June 2006-2007 and June 2008 there have been numerous attempts made to minimize the threat of endemic. Vaccines have been developed in the US, Canada and areas of Europe to combat the virus.

III. Relevant International Agreements, Conventions, Organizations and Resolutions:

- **2003**: Foundation of Middle East Consortium on Infectious Disease Surveillance (MECIDS) - an organization that allows for the constant flow of communication about disease outbreaks in the Middle East. MECIDS is focused on tackling the issue in Middle Eastern regions such as the West Bank or the Gaza Strip, which are not part of the IHR.

- **2005**: International Health Regulations (IHR) revise their legal requirements obliging nations to inform the World Health Organization (WHO) when there are signs of an epidemic in that respective nation. The setback with this system is that not all countries are members of the IHR and so some potential pandemic threats are not made aware of fast enough in order to be handled correctly.

- **2006**: United Nations Country Profile document is written as a response to the Avian Flu dating from December to July. This is a useful source to receive information on individual country’s position in terms of handling pandemics.

- **2010**: 63rd Annual World Health Assembly, resolution on “Pandemic influenza preparedness: sharing of influenza viruses and access to vaccines and other benefits” is discussed.


IV. Main Issues:

**Communication:**

A key component of cooperation is communication. The question of cross-border cooperation centers on the sticky topic of improving international relations. The risk of disease outbreaks relies on those relations and how well they hold up during uncertain times. Previous outbreaks such as SARS have managed to show us that countries are prepared to open access in order to protect their people. “However, such measures must be the result of inclusive and transparent procedures by a legitimate authority responding, based on the best available scientific evidence, to a demonstrable threat. They must also be accompanied by the ability to provide assistance such as the international mobilization of expertise and resources for disease
containment and harm mitigation. The steady flow of communication will allow countries to be more accessible. Forums already exist to facilitate this task. Organs such as the WHO work relentlessly to gain support so that they are prepared when the time comes.

**Containment:**

The quicker an outbreak is identified, the easier it then is to contain it. Containment policies must work hand in hand with improved communication. The reason a simple disease becomes a full-fledged pandemic is due to the simple deficiency in containing the virus. In order to prevent the spread first the disease must be detected and then measures must be taken to reduce the chances of the virus leaving the affected zone.

In containing the disease, though, nations must ensure that they do not contain unaffected peoples with it - essentially trapping those who need to escape any contact. This is an obvious consideration on the domestic level, but often happens unintentionally on the international scale. If there is an outbreak in a country, and all it’s neighbors try and contain the disease, themselves, by closing borders then “innocent” citizens can be trapped in the countries. Countries with high rates of outbreak of a particular disease are often subject to unintentional economic isolation as well, given the ability of disease to create instability in a society, thus affecting economic growth and development. However, without these economic relations, individual governments and states do not have the necessary funds to create resources to attack the problems literally plaguing their societies.

**Prevention:**

Reducing the risks of pandemics across the globe must be a current priority. We must take advantage of the face that currently we are “healthy” and not facing any pandemics. This allows us to make the necessary advancements to prevent any further disease outbreaks. In order to minimize the threat we must create a better understanding of the viruses, which means increasing the amount of research being done. When we don’t understand the way a virus works a cure cannot be found. In addition current systems of control must be identified and evaluated in order to see

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the necessary adjustments that must be made and recognizing which techniques are the most efficient.

V. Additional Resources:

Dictionary of Epidemiology, offers a valid definition of pandemics
http://books.google.gr/books?id=3Dr8dyuzvTkC&pg=PA179&redir_esc=y#v=onepage&q&f=false

FLU.gov a website that provides enough information for a basic overview of flu viruses such as H1N1
http://www.flu.gov/about_the_flu/h1n1/

Centers for Disease Control and Prevention gives further information on the H1N1 virus in particular its 2009 outbreak
http://www.cdc.gov/h1n1flu/

WHO Public Health Research Agenda for Influenza
http://www.who.int/influenza/resources/research/2010_04_29_global_influenza_research_agenda_version_01_en.pdf?ua=1

WHO published on their bulletin a report titled: Progress and shortcomings in European national strategic plans for pandemic influenza
http://www.who.int/bulletin/volumes/85/12/06-039834/en/

Ministry of Heath Singapore, Influenza Pandemic Readiness and Response Plan written July 2005

It is advisable, before starting any research on specific issues on the agenda, to browse extensively the <WWW Virtual Library: International Affairs resources>, one of the best portal with scores of valuable links: http://www2.etown.edu/vl/ and of course the main UN portal: http://www.un.org/ as well as the invaluable UN cyber-school-bus website: http://www.un.org/cyberschoolbus/ . The THIMUN website, http://www.thimun.org/ also has an extensive and efficient <Research> section worth browsing. For comprehensive academic documents on international crisis: http://www.crisisgroup.org/ has numerous reports in PDF format.

Procedural Reminder
Delegates are reminded that at PAMUN conference, they are not expected to arrive with full-fledged resolutions. One or two solid clauses with which to caucus and kick-off the debates is all that is required. These clauses should arise from the <Main Issues> section in the Research Reports, which aims at directing the attention of the delegates to the pending issues which are in need of finding a solution, which is what the debates in the committees seek to achieve. At PAMUN, Resolutions are expected to emerge from the clause by clause debates in the committees.