

Flushing doc talks 'Contagion'

Film explores outbreak in sophisticated way, DiJohn says

by **Jason Pafundi**

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"Contagion," the recent thriller starring Matt Damon about the spread of a deadly virus, has left many to wonder whether such an outbreak is possible in today's world and how close to reality is the fictional movie.

Dr. David DiJohn, the director of pediatric infectious disease at Flushing Hospital Medical Center, one of the epicenters of the outbreaks of West Nile virus in 1999 and the H1N1 influenza in 2008, said the idea isn't impossible and similar outbreaks have happened already.

"We seen things like that through history," DiJohn said. "With H1N1 influenza, we saw how widespread that became very, very quickly with most countries in the world reporting significant numbers of cases in a very short time period. And that lasted for many, many months."

He said that there have been many examples of outbreaks like the one depicted in the movie.

In the early 1980s, AIDS, DiJohn said, "probably started in a small part of the world, and in the modern, jet-travel age got out and became very widespread."

He said the movie did a good job depicting things that have happened and things that could happen again.

Prevention of a deadly viral outbreak

depends on how an agent gets transmitted, DiJohn said.

For example, HIV, which causes AIDS, and herpes simplex are spread through close physical contact, most commonly through sexual contact, and they are somewhat limited in how they are transmitted.

Other things, he said, can be transmitted in respiratory droplets or by other forms of direct or indirect contact, and the film delved into the concept of transmission through fomites, which DiJohn said was "interesting and sophisticated."

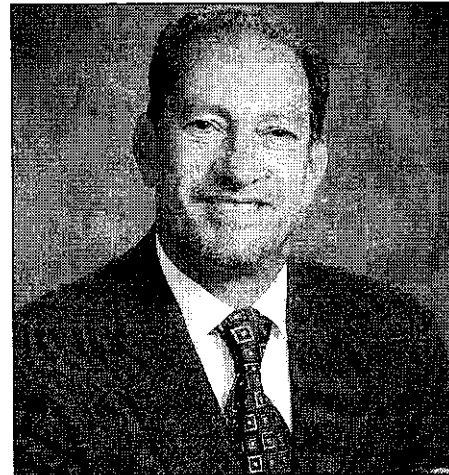
A fomite is an inanimate object, like a door knob, that can be important in transmitting a virus, he said.

DiJohn noted that if someone with a virus sneezes and is smart enough to cover their face with their hands, but then touch a computer keyboard or a door knob or another person's hand, that is a quick way to spread an infection.

He said the movie does a good job emphasizing that a virus doesn't necessarily have to be transmitted through direct contact, a common misnomer.

A lot of viruses start in underdeveloped parts of the world where people don't have access to vaccines and other medicines or diagnostic methods, making outbreaks in those areas much more likely.

According to DiJohn, new viruses appear all the time and there is surveillance



Dr. David DiJohn of Flushing Hospital Medical Center says the film "Contagion" does a good job depicting the spread of a deadly virus.

PHOTO COURTESY FLUSHING HOSPITAL MEDICAL CENTER

being done to see where something is located, how it spreads and how viruses change.

"Influenza is notorious for being able to reinvent itself through a process called reassortment," DiJohn said. "There is surveillance out there to see how these changes occur."

"There are always new things that emerge, viruses that change, and we need to continue to be vigilant." ☐