

# H7N9 Background

- Human infections with an Asian lineage avian influenza A (H7N9) virus (“Asian H7N9”) were first reported in China in March 2013. Annual epidemics of sporadic human infections with Asian H7N9 viruses in China have been reported since that time. China is currently experiencing its 6th epidemic of Asian H7N9 human infections. Since October 1, 2017, there have been only 3 reported human infections.
- During the fifth epidemic, from October 1, 2016 through September 30, 2017, the World Health Organization (WHO) reported 766 human infections with H7N9 virus, making it the largest H7N9 epidemic to date. As of December 7, 2017, the total cumulative number of human infections with Asian lineage H7N9 reported by WHO since 2013 is 1565. During epidemics one through five, about 39 percent of people confirmed with Asian H7N9 virus infection died.

# Scenario

**September 24, 2018** - Cao Lộc, Lang Son, VIETNAM

The Department of Animal Health is conducting intensive active surveillance for H7N9 in the areas near the border in Cao Lộc, Lang Son province after reports of a poultry outbreak in the poultry market in the Quang Tay district in China was reported in the media last week. China has not confirmed the outbreak and no surveillance information has been shared with Vietnam. However, there are reports that massive culling is ongoing in areas close to the border.

Also last week, a community health worker from a commune in Cao Lộc, Lang Son province submitted a report of 2 deaths. Both patients died at home after a short, severe illness that presented clinically like pneumonia. One patient was a 25 year old, previously healthy man, who reportedly travelled to the border area from China looking for work. The other deceased patient was a 43 year old woman who developed respiratory symptoms and died within a day. The two persons did not know each other.

Laboratory specimens were collected for both patients and the results are positive for H7N9

# Scenario

**September 26, 2018** - Cao Lộc, Lang Son, VIETNAM

The nearby hospital in the same district (Cao Lộc, Lang Son province) has several new cases of unusual pneumonia and 1 death. The cases are from 2 different communes near the border with Quang Tay province in China. Two of the cases, a mother and a 6 year old, are from the same household. The mother is in the hospital and the 6 year old died this morning.

The national reference lab for confirmed positive to H7N9 infection after specimen collection.

# Context

- **Cao Lộc** is a rural district of Lang Son Province in the Northeast region of Vietnam. As of 2003, the district had a population of 75,980. The district covers an area of 644km<sup>2</sup>. The district capital lies at **Đồng Đăng**.
- While cell phone penetration is high, only 12% of the population has access to smartphones. The majority of the population use feature phones and many have two sim cards (one for each major provider). From a recent ethnographic study, you learn that 60% of women respondents share their phones with their husbands and receive information through word of mouth.



# H7N9 Context

Most human infections with avian influenza viruses, including Asian H7N9 virus, occur after exposure to infected poultry or contaminated environments. Asian H7N9 viruses continue to circulate in poultry in China. Most reported patients with H7N9 virus infection have had severe respiratory illness (e.g., pneumonia). Rare instances of limited person-to-person spread of this virus have been identified in China, but there is no evidence of sustained person-to-person spread. Some human infections with Asian H7N9 virus have been reported outside of mainland China, Hong Kong or Macao but all of these infections have occurred among people who had traveled to China before becoming ill.

# Discussion Questions

When answering the discussion questions, consider the scenario and your mandate to prevent a pandemic H7N9 influenza outbreak from occurring in Cao Lộc district and nearby border towns in Vietnam. You and your colleagues represent senior decision-makers from the Ministry of Health - General Department of Preventative Medicine. This department has overall authority for all Emergency Operations Centers, border health quarantine, etc.

1. Which of the five stages of risk communication would you place this scenario?
2. Who are your key stakeholder groups?
3. What are your key risk reduction messages to the public and other stakeholder groups?
4. What appropriate ICT technologies will you deploy to communicate your message?