

August 1, 2019

The Honorable Rosa DeLauro
Chair
Subcommittee on Labor, HHS, and Education
Committee on Appropriations
U.S. House of Representatives
Rayburn House Office Building 2415
Washington, DC 20515

The Honorable Lucille Roybal-Allard
Chair
Subcommittee on Homeland Security
Committee on Appropriations
U.S. House of Representatives
Rayburn House Office Building 2083
Washington, DC 20515

Dear Chair DeLauro and Chair Roybal-Allard:

We are writing as medical and public health professionals to call your attention to the threat of infectious diseases -- particularly influenza -- inside detention centers holding children who have crossed the U.S. Southern border. According to autopsy results, at least three children have died in U.S. custody in part as a result of influenza over since December 2018. These children were ages 2, 6, and 16. These tragic deaths appear to represent more than half of child deaths in the last year in these immigration facilities and to reflect a rate of influenza death substantially higher than that in the general population.

Poor conditions at the facilities may be amplifying the spread of influenza and other infectious diseases, increasing health risks to children. Moreover, we suspect that the Department of Homeland Security and Department of Health and Human Services may not be following best practices with respect to screening, treatment, isolation, and prevention of influenza.

With so many lives at risk, these issues are worthy of Congressional investigation. Another influenza season is around the corner, and there are other types of infectious diseases that pose a threat to detained populations. Timely action is critical. The rest of this letter explains these concerns -- as well as key questions for federal agencies -- in further detail.

The Risk of Influenza

In considering the threat of influenza to children inside detention centers at the Southern border, there are several key considerations.

First, children in these facilities may be more vulnerable to severe influenza than individuals born in the United States. Factors that increase vulnerability include lower rates of immunization, higher rates of other infectious diseases, such as tuberculosis, and inadequate access to healthcare earlier in their lives.¹

Second, detention centers are at high risk for influenza outbreaks. Centers that combine rapid turnover of detainees with long-term detention increase the risk of transmission of influenza. Rapid turnover of detainees increases the spread of influenza by creating an “inflow of people in rapidly consecutive cohorts (a “revolving door” effect). An inflow of susceptible people within a closed or semi-open community experiencing an outbreak, has been shown to slow the creation of immunity in a community and “can amplify risk of transmission.”² This revolving door effect is a growing concern as border facilities designed for short term detention are increasingly being used to detain migrants for longer periods of time.

Third, children who fall ill with influenza in detention center appear to be at higher risk of complications. The complication rate of an influenza outbreak among migrants is estimated to be double that of the general population.³

Child Deaths from Influenza in Detention

According to autopsy results:

Felipe was an 8-year old boy who died of overwhelming infection from the bacteria *Staphylococcus aureus* as a complication of influenza in December 2018. Felipe was in custody of Customs and Border Protection when he developed a sore throat and nasal congestion. He was seen at a local hospital and discharged back into federal custody after testing positive for Influenza B. Later that evening, Felipe developed abdominal pain and vomited blood, prompting

¹ Truman BI, Tinker T, Vaughan E, et al. Pandemic influenza preparedness and response among immigrants and refugees. *Am J Public Health*. 2009;99 Suppl 2(Suppl 2):S278–S286. doi:10.2105/AJPH.2008.154054.

² Riccardo, Flavia, et al. "Key Dimensions for the Prevention and Control of Communicable Diseases in Institutional Settings: A Scoping Review to Guide the Development of a Tool to Strengthen Preparedness at Migrant Holding Centres in the EU/EEA." *International journal of environmental research and public health* 15.6 (2018): 1120.

³ Rojek, Amanda M., et al. "Clinical assessment is a neglected component of outbreak preparedness: evidence from refugee camps in Greece." *BMC medicine* 16.1 (2018): 43.

his father to request that he return to the hospital. Felipe became unresponsive en route to the hospital, where resuscitative efforts upon his arrival were unsuccessful.

Wilmer was a 2-year old boy who died of multiple respiratory infections including influenza, as well as gastrointestinal infections, in May 2019. Wilmer initially presented with respiratory distress to the Emergency Room at Sierra Providence Horizon on April 6, 2019. The severity of his condition prompted his transfer to the Pediatric Intensive Care Unit at the Hospital of Providence Memorial Campus, where he remained admitted for 8 days until his death. Wilmer was found to have multiple respiratory and gastrointestinal infections including: Influenza A, *Ascaris lumbricoides*, *Shigella*, and enteroinvasive *E. coli* detected in stool.

Carlos was a 16 year old boy who died in custody of the Customs and Border Patrol in May 2019 due to influenza, complicated by pneumonia and sepsis. We also understand there have been at least two other deaths of children in federal custody where autopsies were not performed.

Influenza deaths are fairly rare events for children living in the United States. Of the approximately 74 million children, 124 deaths due to influenza were reported to the CDC this past influenza season.⁴ This represents a rate of about one reported death per 600,000 children.

While comparisons are difficult for many reasons, this rate of death from influenza appears to be substantially less than the rate in detention facilities, with at least 3 deaths in as many as 200,000 children detained -- many for less than the length of the season.

Appropriate Precautions to Control Influenza in Detention Centers

Given the known risks of influenza in detention, facilities overseen by the Department of Homeland Security and the Department of Health and Human Services should meet basic standards for screening, isolation, treatment, and prevention. Many of these standards are important to limit the spread of other infectious diseases.

Screening

All children should be screened for symptoms of influenza-like illness upon intake and transfer to a new facility. Symptoms of influenza like illness include history of fever with either cough or sore throat. Infants and children with chronic medical conditions may present

⁴ Centers for Disease Control and Prevention. 2018-2019 Influenza Season Week 28. <https://www.cdc.gov/flu/weekly/index.htm>. Accessed July 24, 2019.

atypically; without fever and with other symptoms including muscle pain, headache, fatigue.⁵ Children may exhibit signs of complications of influenza such as pneumonia, bronchiolitis (congestion and inflammation of the small airways in the lungs), croup, encephalopathy, seizures and myositis (muscle inflammation). Screening should include documentation of a child's past medical history, other conditions, medications and vaccination status. Children who screen positive for influenza-like illness symptoms should be considered for immediate isolation. To aid with the detection of new cases, border control staff should be instructed to report children displaying influenza-like symptoms at the first sign of illness.

Testing

Children with influenza symptoms should be tested for the influenza virus in accordance with the Centre for Disease Control's guidelines for investigating influenza outbreaks in closed settings.^{6,7} Testing results should be interpreted using the Center for Disease Control's Rapid Influenza Diagnostic Tests interpretation guidelines.

Isolation

Children with influenza-like illnesses should be placed in droplet isolation rooms. If separate isolation rooms are not available for each child, children presumed to have the same infection may be placed in the same isolation room. Children with influenza like illnesses should be isolated until they are 5-7 days after the onset of illness or without symptoms for over 24 hours, whichever time period is longer.

Children with influenza-like illnesses should receive regular medical assessments to assist with the early detection of complications. Children with these symptoms should receive scheduled temperature checks, access to fluids, tissue and plastic bags for the proper disposal of tissues and access to soap and water. Frequently touched surfaces in close contact with symptomatic children must be regularly cleaned and disinfected. Toilets and other facilities that are used by such children should be cleaned and disinfected more frequently.

Initial Treatment

⁵ Centers for Disease Control. Guidelines for Clinicians on the Use of Rapid Influenza Diagnostic Tests. 2010. https://www.cdc.gov/flu/pdf/professionals/diagnosis/testing_algorithm.pdf. Accessed July 19, 2019.

⁶ Centers for Disease Control and Prevention Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities. Feb 2, 2017. <https://www.cdc.gov/flu/pdf/professionals/interim-guidance-outbreak-management.pdf> . Accessed July 20, 2019.

⁷Centers for Disease Control and Prevention. Interim Guidance for Correctional and Detention Facilities on Novel Influenza A (H1N1) Virus. May 24, 2009. https://www.cdc.gov/h1n1flu/guidance/correctional_facilities.htm. Accessed July 17, 2019.

Children who screen positive for influenza-like symptoms should be considered for presumptive antiviral treatment with oseltamivir, pending testing for influenza. Treatment is most effective if initiated in the first 48 hours of symptoms, but can still confer benefits after this time period. Children with severe presentations of disease, including respiratory failure and pneumonia, should be immediately transferred to hospital.⁸ Children who clinically deteriorate or fail to improve after receiving 3-5 days of presumptive antiviral treatment should also be promptly transferred to a hospital.

Post-exposure Prophylaxis

Individuals who come into close contact with confirmed influenza cases should be considered for postexposure prophylaxis, which is the preventive medical treatment with oseltamivir to reduce the chance of clinical symptoms developing. Specifically, all children under 2 years of age⁹ and detainees at high risk of complications¹⁰ should be offered medication promptly. Oseltamivir is 70-90% effective in preventing illness from influenza A or B viruses.¹¹

Vaccination

All children older than 6 months should receive the influenza vaccination.¹² Children ages 6 months to 8 years old, who have not previously received 2 doses of the trivalent or quadrivalent influenza vaccine, should receive a total of 2 doses of the influenza vaccine administered 4 weeks apart.¹³ Those who have received 2 doses of the influenza vaccine, only require 1 dose. During the influenza season, vaccination should be offered to all detainees

⁸ Uyeki, T. et. al. Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza, *Clinical Infectious Diseases*, Volume 68, Issue 6, 15 March 2019, Pages e1–e47, <https://doi.org/10.1093/cid/ciy866>

⁹ Centers for Disease Control and Prevention. Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season. December 7, 2009. <https://www.cdc.gov/h1n1flu/recommendations.htm> Accessed July 17, 2019.

¹⁰ High Risk individuals include persons of any age with chronic medical conditions (such as asthma, diabetes, or heart disease), and persons who are immunocompromised (for example, taking immunosuppressive medications or infected with HIV).

¹¹ Centers for Disease Control and Prevention. Influenza Antiviral Medications: Summary for Clinicians. Last updated Dec 17, 2017.

¹² Centers for Disease Control and Prevention. Interim Guidance for Correctional and Detention Facilities on Novel Influenza A (H1N1) Virus. May 24, 2009. https://www.cdc.gov/h1n1flu/guidance/correctional_facilities.htm. Accessed July 17, 2019.

¹³ Centers for Disease Control and Prevention. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices— United States, 2018–19 Influenza Season" August 24, 2018.

promptly upon arrival in order to maximize protection for the youngest and most vulnerable detainees.

In addition, all border control employees and contractors in contact with children should be required to receive the influenza vaccine, just as many healthcare facilities, including federal government facilities, now require the influenza vaccine for their employees. The vaccine both protects the employees as well as reduces the chance of outbreaks.

Surveillance

Tracking influenza and other infectious diseases closely is essential to adequate control. Once a single case of influenza is identified, there is a high likelihood of other undiagnosed cases among exposed individuals.¹⁴ Daily surveillance of exposed individuals for influenza-like symptoms is therefore necessary for at least 1 week after an influenza case is identified.

Independent Forensic Review

The unfortunate deaths of at least 6 children in detention warrants a careful review of their autopsies to identify common trends, outbreaks of lethal infectious diseases and opportunities for prevention. This can be best accomplished through an independent forensic review. Not all of the children who died in the custody of Customs and Border Patrol received autopsies. Deaths of people who were in migrant facilities and are in custody of federal agencies should be considered “deaths under the control of a law enforcement agent” and reported to the medical examiner or coroner for autopsy. Autopsies may be necessary to identify infectious agents in cases of deaths of individuals where exposure to infection occurred in facilities but the migrants were released from custody after hospitalization.

Questions

We recommend that the following questions be posed to the Department of Homeland Security and Department of Health and Human Services, with respect to each individual facility that holds children.

Topic	Questions
Screening	Are all children screened for influenza-like illnesses on intake?

¹⁴ Centers for Disease Control. Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities. Feb 2, 2017. <https://www.cdc.gov/flu/pdf/professionals/interim-guidance-outbreak-management.pdf>. Accessed July 20, 2019.

	How does this screening take place?
Isolation	<p>Are detainees with influenza-like symptoms separated from others, and if so, how are they isolated or cohorted with others?</p> <p>What infection control precautions are implemented for isolated individuals? For how long are individuals with influenza-like symptoms isolated?</p> <p>Who makes the decisions to isolate individuals and to remove them from isolation, and how are those decisions made?</p> <p>Are dedicated infection control personnel involved in the prevention and management of communicable diseases in detention facilities? If not, who is responsible for implementing infection control measures?</p>
Testing	What is the protocol for testing sick children for influenza, including which specific tests are used?
Initial Treatment	<p>What is the protocol for offering treatment to children who have early influenza infections, or children at high risk for complications, with oseltamivir?</p> <p>What is the protocol for assessing children with influenza regularly and referring them to the hospital?</p> <p>How many children with influenza-like illnesses were treated with oseltamivir, sent to the hospital, and admitted to the hospital in the 2018-2019 influenza season?</p>
Post-exposure Prophylaxis	<p>What is the protocol for the facility to provide post-exposure prophylaxis for children at risk for influenza in the setting of an outbreak?</p> <p>How many children received post-exposure prophylaxis during the 2018-2019 influenza season?</p>
Vaccination	<p>Are children routinely offered vaccination against influenza?</p> <p>How many children were vaccinated against influenza in 2018-2019?</p> <p>Are all employees of the facility required to be vaccinated for influenza? What proportion of facility staff were vaccinated by a deadline (such as December 1, 2018)?</p>

Surveillance	How does the facility monitor the incidence and spread of influenza? The facility should share influenza surveillance reports from 2018-2019?
Other Infectious Diseases	Does the facility have plans for outbreaks of other communicable diseases, including measles? The facility should share these plans.

Conclusion

Thank you for your consideration of these issues. Please feel free to contact us for further information.

Sincerely,

Judy Melinek, MD
Forensic Pathologist,
CEO, PathologyExpert Inc.

Alia Sunderji, MD FRCPC
MPH Candidate
Johns Hopkins Bloomberg School of Public Health
Pediatric Emergency Physician

Jonathan P Winickoff, MD, MPH
Professor of Pediatrics
Harvard Medical School
Pediatrician
MassGeneral Hospital for Children

Katherine Narvaez Mena
MPH Candidate
Johns Hopkins Bloomberg School of Public Health

Joshua M. Sharfstein, MD
Professor of the Practice
Johns Hopkins Bloomberg School
of Public Health

Paul Spiegel, MD
Professor of the Practice
Director, Center for Humanitarian Health
Johns Hopkins Bloomberg School of Public Health

The views expressed in this letter represent the views of the individuals who have signed.