

Letter to the Editor



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Measles Outbreak in Texas – Urgent Need for Attention

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Abstract

Measles (rubeola) caused by measles virus is highly contagious and can be transmitted via respiratory droplets or can spread via sneezing or coughing of an infected person. In January 2025, two cases of measles associated with international travel seen in unvaccinated individuals of Harris County were reported by the Houston Health Department. This disease which was once declared eradicated from United States (US) in the year 2000, unfortunately has affected a total of 607 cases since January 2025, across the US, with highest number of cases recorded in Texas. Majority of the cases are witnessed in the paediatric population, especially the ones who are unvaccinated or have an uncertain vaccination history. Unfortunately, vaccine hesitancy is an important barrier in achieving measles eradication, and it is more imperative than ever to address this issue in a timely manner. There is an urgent need of virus containment measures to be taken by public health authorities to curb its spread, specifically by reinforcing the importance and safety of vaccinations, debunking myths and educating parents that the recommended two doses of vaccination not only serve as a safety net for their child but also for the community as a whole.

Measles Outbreak in Texas – Urgent Need for Attention

Dear Editor,

Measles (rubeola) is caused by measles virus, a highly contagious, single stranded, enveloped virus, a part of the Paramyxoviridae family. It can be transmitted via respiratory droplets or can spread via sneezing or coughing of an infected person. Symptoms include runny nose, bloodshot eyes, and a maculopapular rash that spreads from the face to the trunk and then to rest of the body.¹ It has numerous complications, such as pneumonia, blindness, and encephalitis, which can lead to frightening long-term effects.¹

This disease, which was once declared eradicated from US in the year 2000, has resurfaced and affected a total of 607 patients since January 2025 across the US, with Texas having most of the cases.² As of April 4, 2025, a total of 481 cases have been reported in Texas; 56 patients have been hospitalized and 1 confirmed death in an unvaccinated child has been notified.³ This is an alarming situation warranting an urgent need to swiftly control the transmission of this deadly outbreak.

The best way of protection against this contagious airborne disease is by measles-mumps-rubella (MMR) vaccination.³ According to the CDC recommendation in US, children should receive the first dose of measles vaccine between 12–15 months of age, and the second dose between 4–6 years age.⁴ Most of the cases are witnessed in the pediatric population, especially the ones who are unvaccinated or have an uncertain vaccination history.²

In Texas, vaccine exemption rules permit students to remain unvaccinated if they are willing to do so, due to religious or personal preferences.⁴ Since 2003, the number of students willingly wanting to remain unvaccinated has risen from 2300 to 64 000.⁴ Unfortunately, vaccine hesitancy is an important barrier in achieving measles eradication, and it is more imperative than ever to address this issue in a timely manner.

To counter vaccine hesitancy, it is pertinent to use evidence-based and culturally appropriate techniques when interacting with communities (Figure 1). Additionally, motivational interviewing, a counselling strategy which guides people to find motivation to make positive behavior change, can be adopted. Among people with reduced health literacy levels, icon arrays and decision aids can be employed to help them understand better. Furthermore, active community involvement and use of vaccine champions who can engage in positive dialogue among the masses, can help alleviate vaccine hesitancy. Importantly, myths on social media should be debunked and any misinformation seen online should be discredited.⁵ Moreover, educational institutes and day care centers with unvaccinated students or staff should take protective measures by keeping track of vaccination records of all

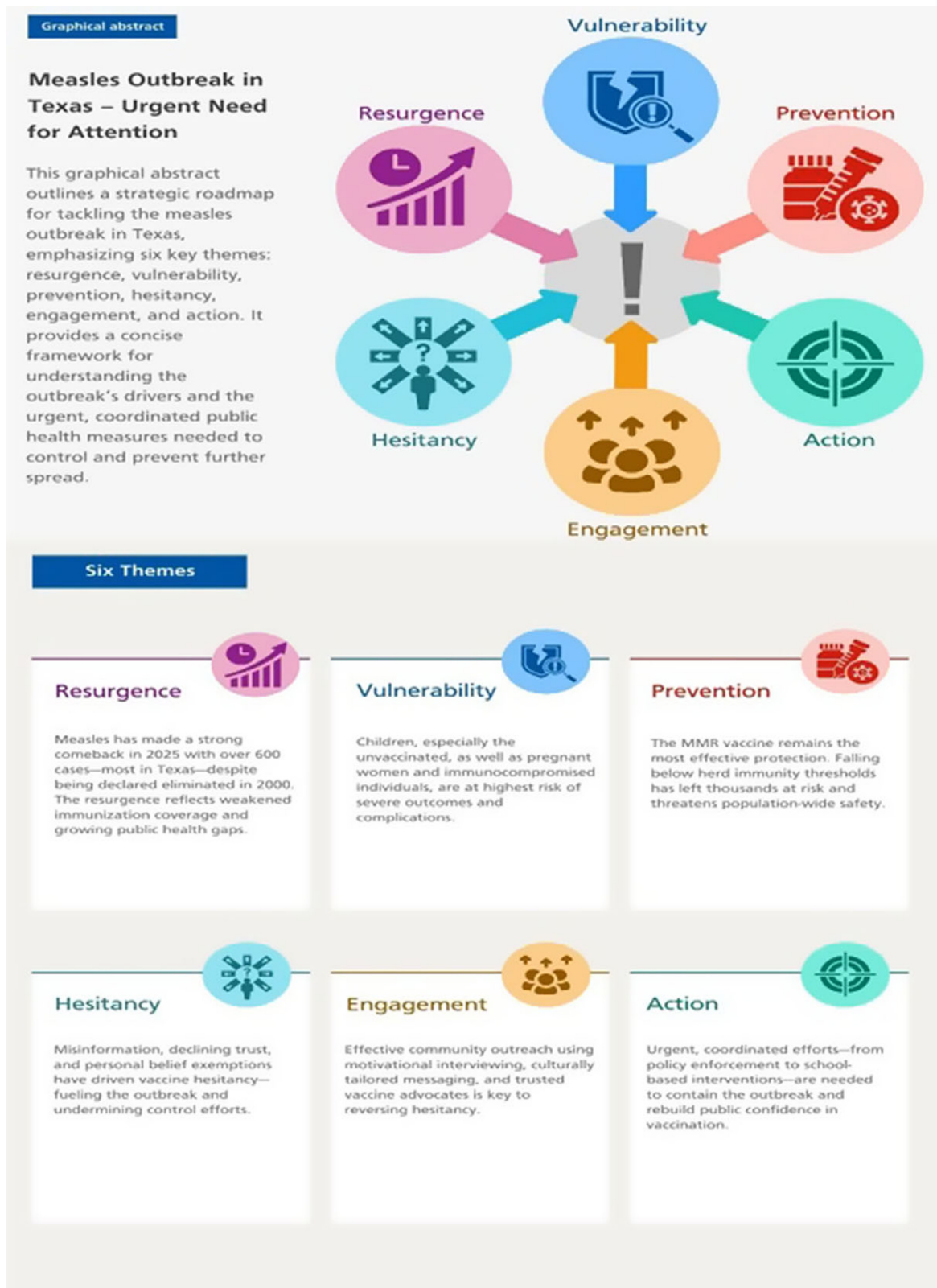


Figure 1. Roadmap for post-measles outbreak response: a 6-theme approach to address the public health emergency.

workers, encouraging students to get the required 2 doses of vaccine if they are still unvaccinated, and by highlighting the importance of hand hygiene and coughing etiquettes. Other measures include isolating suspected cases and frequent cleaning of contaminated surfaces.

In view of the above, urgent virus containment measures must be taken by public health authorities to curb the spread and protect the community.

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