

Category: Public Health

Title: A Systematic Evaluation of Mpox Public Health Educational Resources

Olagun-Samuel C*, Coulanges E*, Ologunbebi A, Thakker S, Gonzalez W, Cifuentes-Kottkamp A, Adotama P

*These authors contributed equally

Abstract

Background: The 2022 mpox outbreak underscored the critical importance of timely, accessible, and culturally competent public health communication. The prior COVID-19 pandemic highlighted the importance of public health education and communication. With the readability and inclusivity of mpox-related educational resources in the United States remain poorly characterized.

Objective: To systematically evaluate the accessibility, readability, and inclusivity of mpox-related public health materials across U.S. state and local health departments, with comparison to HIV resources.

Methods: Public health information on mpox and HIV was collected from state, metropolitan, and non-metropolitan health department websites across all 50 states. Resources were assessed for availability, readability (using validated Flesch-Kincaid scores), language options, representation across Fitzpatrick Skin Types and Monk Skin Tones), and reference to at-risk populations. Comparative analyses were performed by department type (state vs. metro area).

Results: Of the 50 state health departments, 96% provided mpox information and 88% provided HIV information. Mpox resources were available at significantly higher rates in state versus metro departments ($p < 0.01$). The average Flesch-Kincaid grade level for mpox materials was 10.5, exceeding the recommended 6th–8th grade reading level for public health communications. Visual representation favored darker skin tones (FST IV–VI) in state department resources ($p < 0.01$), though written materials rarely included contextually relevant messaging for these groups. Metro departments offered more multilingual resources but overall fewer prevention, treatment, and diagnostic materials. No significant differences were observed in resource availability by political leaning.

Conclusion: Mpox public health resources across U.S. health departments remain limited in readability and inconsistently inclusive, particularly in metropolitan areas disproportionately affected by the outbreak. Standardization toward plain-language, multilingual, and culturally competent materials is urgently needed to ensure equitable access to health information during future infectious disease crises.