ABSTRACT# 4

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Title: Reopening Schools After a Novel Coronavirus Surge
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Background: The SARS-CoV-2 pandemic is the worst global respiratory viral emergency since the pandemic influenza of 1918-1919. As of December 2020, nearly 70 million persons have been infected, and 1.5 million lives have been lost to coronavirus disease 2019 (COVID-19). Schools worldwide were drastically impacted as they closed due to illness and absenteeism, transmission, and risk to vulnerable members of the school community, and community concerns. The decision to reopen school during a pandemic will have important implications for the educational and social well-being of school children, but schools must be kept safe from viral spread to ensure the safety of children, families, and teachers and staff. If schools remain closed, children may experience social isolation and have suboptimal educational experiences, especially concerning for youth with special needs. Lower-income families may have more limited computing assets and/or online access.

Method: Literature on school reopening prevention interventions were search and reviewed. We reviewed published, unpublished, and grey literature on the topic of school/facility reopening and summarized the finding. The paper highlighted the risks mitigation strategies and synthesized a safety model to guide school reopening.

Results: Reopening schools requires careful consideration of benefits, risks, and necessary precautions. This paper highlighted the risk-mitigation strategies in school reopening during the COVID-19 pandemic, based on our experiences in the United States. These include fundamental principles of disease control requiring school-directed initiatives (physical distancing and mask use, hand/face and surface cleansing, administrative and engineering controls for air quality and outdoor activities). Most risk mitigation approaches depend on individual-level risk reduction based on maximal adherence to guidelines.

Conclusions: School-initiated “top-down” approaches and individual-level “bottom-up” approaches must be synergized, as no single method will ensure safety. Effective layering of complementary strategies in each educational space (classroom, music, sports, art, drama, workshop, lunchroom, entry/exit) can increase safety. Given the vulnerability of children, we also highlight special considerations for mental health and social support. Safety principles, disease control strategies, and other critical policy issues are key to feasibly and safely reopening schools.

Keywords: Coronavirus, COVID-19, Education, Pandemic, Quarantine, Reopening, School, Disease Control Strategies, Safety, Children, Children’s Health

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