

Considerations for School Closure



Recommendations on school closure based on available science, reports from other countries and consultation with school health experts.

1. There is a role for school closure in response to school-based cases of COVID-19 for decontamination and contact tracing (few days of closure), in response to significant absenteeism of staff and students (short to medium length, i.e. 2-4 weeks of closure), or as part of a larger community mitigation strategy for jurisdictions with substantial community spread* (medium to long length, i.e. 4-8 weeks or more of closure).
2. Available modeling data indicate that early, short to medium closures do not impact the epi curve of COVID-19 or available health care measures (e.g., hospitalizations). There may be some impact of much longer closures (8 weeks, 20 weeks) further into community spread, but that modelling also shows that other mitigation efforts (e.g., handwashing, home isolation) have more impact on both spread of disease and health care measures. In other countries, those places who closed school (e.g., Hong Kong) have not had more success in reducing spread than those that did not (e.g., Singapore).
3. In places where school closures are necessary, the anticipated academic and economic impacts and unintended impacts on disease outcomes must be planned for and mitigated. Provision of academic support (e.g., tele-ed), alternatives for school-based meals as well as other services (e.g., behavioral and mental health services) for economically and physically vulnerable children, support for families for whom telework and paid sick leave is not available, ensuring that high risk individuals continue to be protected must all be addressed. Special consideration must be given for health care workers so that school closures do not impact their ability to work.

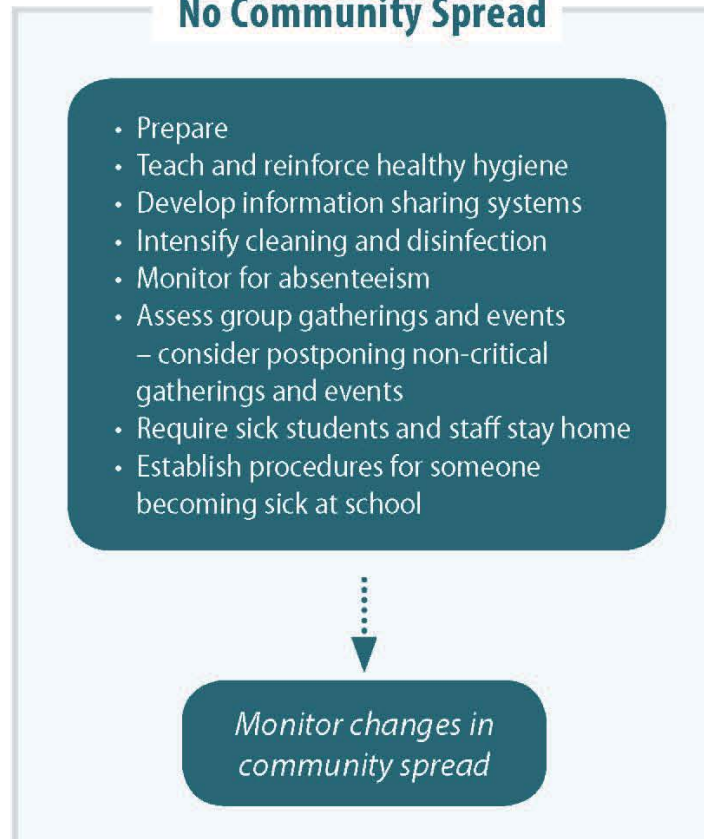
*Substantial community spread is defined as large scale community transmission, health care staffing significantly impacted, multiple cases within communal settings.

School Decision Tree

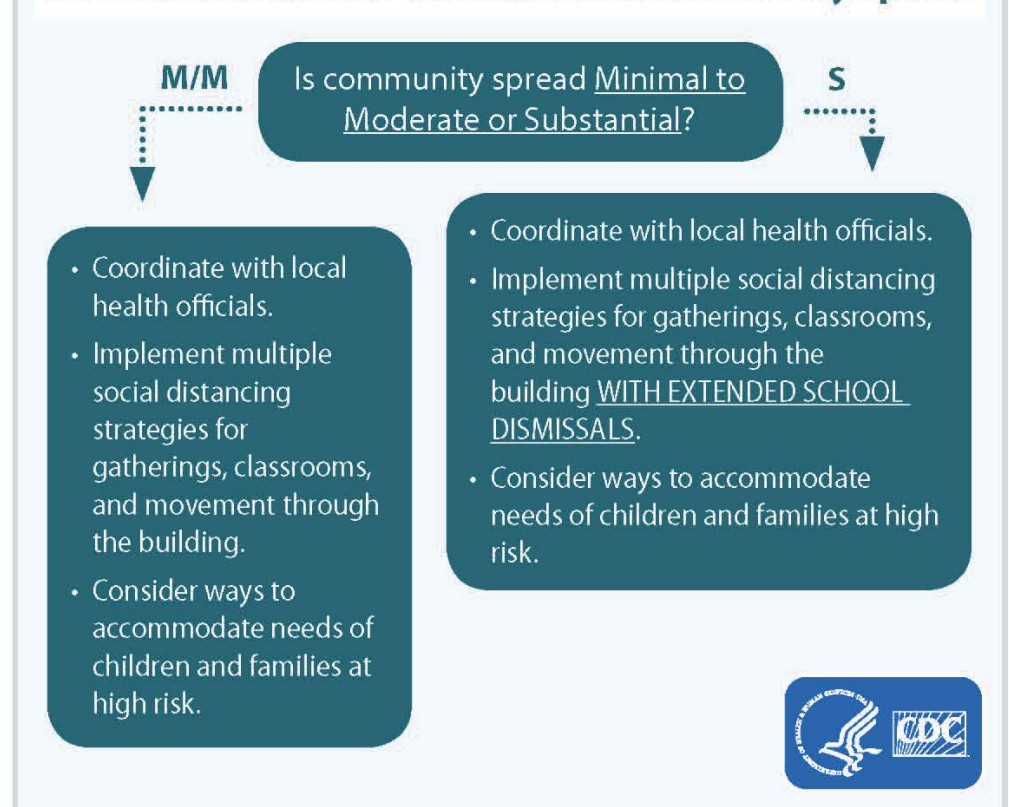
All Schools Regardless of Community Spread



No Community Spread



Minimal to Moderate OR Substantial Community Spread



Factors for Consideration for School Closure

Closing schools early in the spread of disease for a short time (e.g., 2 weeks) will be unlikely to stem the spread of disease or prevent impact on the health care system, while causing significant disruption for families, schools, and those who may be responding to COVID-19 outbreaks in health care settings. It may also increase impact on older adults who care for grandchildren. Waiting to enact school closures until at the correct time in the epidemic (e.g., later in the spread of disease) combined with other social distancing interventions allows for optimal impact despite disruption.

	Factors in favor of school closure	Factors against school closure	Further considerations
In response to school-based case (Less than 1 week closure)	<ul style="list-style-type: none"> • Impact on disease <ul style="list-style-type: none"> ○ Allows for decontamination ○ Allows time for epidemical evaluation and contact tracing; further action can be scaled based on epi investigation. 	<ul style="list-style-type: none"> • Impact on disease <ul style="list-style-type: none"> ○ Social mixing may still occur outside of school with less ability to monitor, especially among older students. 	<ul style="list-style-type: none"> • May occur frequently during a wide-spread outbreak
Short-term (2 weeks closure)	<ul style="list-style-type: none"> • Impact on disease <ul style="list-style-type: none"> ○ Allows time for further understanding of the local COVID-19 situation (e.g., community spread) ○ Increases social distancing amongst immediate school community. ○ Gives time for potentially exposed individuals to develop symptoms while not in school • Impact on families <ul style="list-style-type: none"> ○ Children may be less impacted by social isolation from their peers for shorter time frames • Impact on school <ul style="list-style-type: none"> ○ Schools are better prepared for short-term closures because they've been more likely to have experienced those (e.g., for weather) ○ Given current timing, some schools may be able to take advantage of spring break closures 	<ul style="list-style-type: none"> • Impact on disease <ul style="list-style-type: none"> ○ Modeling data for other respiratory infections where children have higher disease impacts, suggests that early short-term closures are not impactful in terms of overall transmission. ○ Social mixing may still occur outside of school with less ability to monitor, especially among older students. ○ Will increase risk to older adults or those with co-morbidities, as almost 40% of US grandparents provide childcare for grandchildren. School closures will likely increase this percentage. • Impact on families <ul style="list-style-type: none"> ○ Key services are interrupted for students (e.g., meals, other social, 	<ul style="list-style-type: none"> • Disproportionate impact of children being out of school whose parents/family members are hourly and low-wage workers • Research from school staff tells us that schools find closures more acceptable when other events, gatherings, and facilities in the community are also closed or cancelled. • Concerns about household mixing of sick and well family members needs to be addressed • Consider non-closure social distancing first (e.g., staggering recess, cancelling assemblies and inter-school events.) • Economic impact if school staff are not paid during school closure must be considered.

	<ul style="list-style-type: none"> ○ Provides protection for older staff and students and staff with underlying medical conditions 	<p>physical health, and mental health services, after school programs)</p> <ul style="list-style-type: none"> ○ Economic impact for families because of the costs of childcare and lost wages. There may be a loss of productivity even for parents who are able to telework. ○ Some families may not have capacity for students to participate in distance learning (e.g., no computers, internet access issues) even if provided by school. ● Impact on schools <ul style="list-style-type: none"> ○ Potential academic impact because of the disruption to the continuity of learning ● Impact on health care <ul style="list-style-type: none"> ○ Available health care workforce is decreased as HCW stay home with children. 	
<p>Medium-term (4 weeks closure)</p>	<ul style="list-style-type: none"> ● Impact on disease <ul style="list-style-type: none"> ○ Provides more protection for older staff and students and staff with underlying medical conditions ● Impact on schools <ul style="list-style-type: none"> ○ Planned closures of longer periods may be easier for families to plan for than rolling closures with unexpected timing and duration, including possibly last-minute notice 	<ul style="list-style-type: none"> ● Impact on disease <ul style="list-style-type: none"> ○ Longer closures may result in more students congregating outside of school (e.g., other students' homes, shopping malls) ○ Will increase risk to older adults or those with co-morbidities, as almost 40% of US grandparents provide childcare for grandchildren. School closures will likely increase this percentage. ● Impact on families <ul style="list-style-type: none"> ○ Students who rely on key services (e.g., meals, other social, physical health, and mental health services, after school programs) are put at greater risk 	<ul style="list-style-type: none"> ● Disproportionate impact of children being out of school whose parents/family members are hourly and low-wage workers ● If a school closes for this length of time, schools must consider ways to continue key services ● Research from school staff tells us that schools find closures more acceptable when other events, gatherings, and facilities in the community are also closed or cancelled. ● Consider coupling with other social actions to mitigate risk of increased social mixing in other community areas

		<ul style="list-style-type: none"> ○ Economic impact grows with length of closure; furthermore, this may exacerbate disparities among families at different SES levels (e.g., parents with lower wage jobs may lose jobs) ○ High school seniors likely to lose ability to participate in their prom, graduation etc. ○ Some families may not have capacity for students to participate in distance learning (e.g., no computers, internet access issues) even if provided by school. ● Impact on schools <ul style="list-style-type: none"> ○ Significant impact on academic outcomes may occur. Losing one month of learning may prevent students from meeting grade level knowledge and skill expectations and may jeopardize schools' ability to meet standardized testing requirements ○ School staff may be differentially impacted (e.g., hourly workers may be less able to sustain longer closures) ● Impact on health care <ul style="list-style-type: none"> ○ Available health care workforce is decreased as HCW stay home with children. 	<ul style="list-style-type: none"> ● Because closures are likely to increase anxiety among students, families, and community members, excellent messaging is needed along with the school closure. ● Economic impact if school staff are not paid during school closure must be considered.
<p>Long-term (8 weeks, 20 weeks closure)</p>	<ul style="list-style-type: none"> ● Impact on disease <ul style="list-style-type: none"> ○ Modeling data for other respiratory infections where children have higher disease impacts, suggests that longer closures are may have greater impact in terms of overall 	<ul style="list-style-type: none"> ● Impact on disease <ul style="list-style-type: none"> ○ Longer closures may result in more students congregating outside of school (e.g., other students' homes, shopping malls) 	<ul style="list-style-type: none"> ● Disproportionate impact of children being out of school for hourly and low-wage workers (compared to salaried workers who may have more flexible leave and telework opportunities)

	<p>transmission. Provides substantial protection for older staff and students and staff with underlying medical conditions</p> <ul style="list-style-type: none"> • Impact on schools <ul style="list-style-type: none"> ○ Schools without distance learning may see closures of this length as reason to implement distance learning approaches they may not have previously had or used 	<ul style="list-style-type: none"> ○ Will increase risk to older adults or those with co-morbidities, as almost 40% of US grandparents provide childcare for grandchildren. School closures will likely increase this percentage. • Impact on families <ul style="list-style-type: none"> ○ Students who rely on key services (e.g., meals, other social, physical health, and mental health services, after school programs) are put at substantial risk ○ Economic impact grows with length of closure; furthermore, this may exacerbate disparities among families at different SES levels (e.g., parents with lower wage jobs may lose jobs) ○ Student engagement with schools and peers diminishes, which could increase anxiety and other mental health and emotional problems. ○ High school seniors likely to lose ability to participate in their prom, graduation etc. • Impact on schools <ul style="list-style-type: none"> ○ Significant impact on academic outcomes will likely occur; losing 2 months of learning is likely to prevent many students from meeting grade level knowledge and skill expectations and will jeopardize schools' ability to meet standardized testing requirements ○ Loss of educational progress, even having to add an extra semester or 	<ul style="list-style-type: none"> • If a school closes for this length of time, schools must consider ways to continue key services • Research from school staff tells us that schools find closures more acceptable when other events, gatherings, and facilities in the community are also closed or cancelled. • Because closures are likely to increase anxiety among students, families, and community members, excellent messaging is needed along with the school closure. • Given current timing, 20-week closures may not impact schools much more substantially than 8 week closures. Many schools end for the year in late May; some continue until mid-June. • A 20-week scenario could still have substantial impact on parents who need to find summer care for students. If schools are dismissed, one would expect summer camps might be cancelled as well • Economic impact if school staff are not paid during school closure must be considered.
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Points for further consideration, regardless of degree of spread or length of potential closure

- Clear rationale, decision-making and communication with all stakeholders is extremely important. Families need to know who is making decisions, what those decisions are and when school-based mitigation efforts are planned to start and end.
- While we have data that can contribute to decisions about when to dismiss schools, there is almost no available data on the right time to re-start schools. We would advise to plan for a length of time and then evaluate based on continued community spread.
- The relationship between state and local education agencies and state and local public health must be strong and communication must be clear and thorough.
- Critical academic infrastructure and service provision must be considered during school closure.