**Supplementary Material**

Table S1. Assessment Tool

|  |  |  |
| --- | --- | --- |
| Topic Area | Question | Values |
| Background information | Please indicate your role/position | State public health officialTerritorial public health officialLocal public health officialDisaster/emergency preparedness coordinatorEpidemiologistPlannerPolicy analystPublic information officer/communications specialistOther: please specify |
| Status of pre-pandemic planning | Are you aware of the updated HHS/CDC Community Mitigation Guidelines to Prevent Pandemic Influenza – United States, 2017? | YesNo |
| Have you read the 2017 Community Mitigation Guidelines? | YesNo |
| Have you incorporated the updated guidelines into your pandemic influenza preparedness plan? | CompletedIn progressDo not know / Not sureNot started |
| Feasibility and acceptability\* | To what extent will the recommendation for voluntary home quarantine of exposed, non-ill household members be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for voluntary home quarantine of exposed, non-ill household members be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for use of face masks by ill persons be feasible to implement in your jurisdiction (assuming supplies are sufficient)? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for use of face masks by ill persons be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for temporary childcare facility closures or dismissals be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for temporary childcare facility closures or dismissals be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be feasible to implement in your jurisdiction if the duration of closures or dismissals is up to 2 weeks? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be feasible to implement in your jurisdiction if the duration of closures or dismissals is up to 6 weeks? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be feasible to implement in your jurisdiction if the duration of closures or dismissals is up to 6 months? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be acceptable to stakeholders (including your agency) in your jurisdiction if the duration of closures or dismissals is up to 2 weeks? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be acceptable to stakeholders (including your agency) in your jurisdiction if the duration of closures or dismissals is up to 6 weeks? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for preemptive K-12 school closures or dismissals be acceptable to stakeholders (including your agency) in your jurisdiction if the duration of closures or dismissals is up to 6 months? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for temporary Institutes of Higher Education (colleges and universities) closures or dismissals be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for temporary Institutes of Higher Education (colleges and universities) closures or dismissals be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for social distancing measures at schools (e.g., dividing classes into smaller groups of students, rearranging desks so students are spaced at least 3 feet from each other) be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for social distancing measures at workplaces (e.g., offering telecommuting, replacing in-person meetings with telephone or video conferences, staggering work hours) be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for social distancing measures at mass gatherings (modifying, postponing, or canceling large events) be feasible to implement in your jurisdiction? | High feasibilityModerately high feasibilityModerately low feasibilityLow feasibility Do not know / Not sure |
| To what extent will the recommendation for social distancing at schools be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for social distancing at workplaces be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| To what extent will the recommendation for social distancing at mass gatherings be acceptable to stakeholders (including your agency) in your jurisdiction? | High acceptabilityModerately high acceptabilityModerately low acceptabilityLow acceptability Do not know / Not sure |
| Potential triggers to activate non-pharmaceutical interventions | Does your jurisdiction have the following influenza surveillance data?1. Number of patient visits to outpatient health care providers for influenza-like illness (ILI) in jurisdiction
 | Yes, in near real-timeYes, but not in near real-timeNo Do not know / Not sure |
| 1. Estimated weekly level of geographic spread of influenza activity reported by local health department(s)
 |
| 1. Proportion of respiratory specimens that test positive for influenza virus in jurisdiction
 |
| 1. Absenteeism rates in jurisdiction due to ILI in childcare facilities, K-12 schools, or IHEs (reflects number of ILI cases)
 |
| 1. Number of laboratory-confirmed influenza cases among students, teachers, and staff in jurisdiction
 |
| 1. Number of influenza-associated hospitalizations in jurisdiction
 |
| 1. Total number of deaths attributed to influenza in jurisdiction
 |
| 1. Number of influenza-associated deaths among those <18 years old in jurisdiction
 |
| Please rate the usefulness of these influenza surveillance indicators for deciding when to trigger the activation of NPIs in your jurisdiction.1. Number of patient visits to outpatient health care providers for influenza-like illness (ILI) in jurisdiction
 | Extremely usefulVery usefulModerately usefulSlightly usefulNot at all usefulDo not know / Not sureNot applicable (do not have near real-time data) |
| 1. Estimated weekly level of geographic spread of influenza activity reported by local health department(s)
 |
| 1. Proportion of respiratory specimens that test positive for influenza virus in jurisdiction
 |
| 1. Absenteeism rates in jurisdiction due to ILI in childcare facilities, K-12 schools, or IHEs (reflects number of ILI cases)
 |
| 1. Number of laboratory-confirmed influenza cases among students, teachers, and staff in jurisdiction
 |
| 1. Number of influenza-associated hospitalizations in jurisdiction
 |
| 1. Total number of deaths attributed to influenza in jurisdiction
 |
| 1. Number of influenza-associated deaths among those <18 years old in jurisdiction
 |

\*If moderately low or low was selected, the respondent was asked to explain their reason and describe the barriers.

Table S2. Voluntary Home Quarantine during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

| **Thematic Category** | **States and Territories (N=13)** | **Local Health Departments****(N=37)** |
| --- | --- | --- |
| Disruptive to ability to work (may not get paid depending on job). The number of people without paid sick leave or unable to work from home | ✓ | ✓ |
| Economics: Most families need two incomes to survive, reluctant to miss work because of lost wages | ✓ | ✓ |
| Rural composition of state/sparse population density would make compliance and enforcement problematic | ✓ | ✓ |
| People (especially those in rural communities) do not want “government” interfering with their lives | ✓ | ✓ |
| People will be reluctant to miss work if they are NOT sick | ✓ | ✓ |
| There will be a significant portion of the public who will not follow the recommendation | ✓ |  |
| Health literacy: Not fully understanding voluntary home quarantine |  | ✓ |
| Communal spaces and population density in urban areas (homeless shelters, jails) |  | ✓ |

N represents number of respondents (unweighted).

Table S3. Voluntary Home Quarantine during an Influenza Pandemic: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low, 2019

| **Thematic Categories** | **State and Territories****(N=9)** | **Local Health Departments** **(N=53)** |
| --- | --- | --- |
| People do not like or are not used to having their movements restricted | ✓ | ✓ |
| Negative impact on low-income/low-wage parents | ✓ | ✓ |
| Many will feel the need to go to work, especially those living paycheck to paycheck. Barriers are financial. | ✓ | ✓ |
| Lack of education and understanding regarding transmissibility | ✓ |  |
| Unavailability of childcare during the school year | ✓ |  |
| Variances between jurisdictions accepting closures | ✓ |  |
| Enforcement would be difficult due to geography (rural) | ✓ |  |
| Depends on how people perceive the severity of the pandemic and likelihood of becoming ill  | ✓ |  |
| People (especially those in rural communities) do not want “government” interfering with their lives |  | ✓ |
| Businesses and services having strict leave policies and that keeps workers from being able to home quarantine |  | ✓ |
| People do not want to miss work, especially if they are not ill |  | ✓ |

Table S4. Use of Face Masks by Ill Persons during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

| **Thematic Category** | **States and Territories (N=3)** | **Local Health Departments** **(N=29)** |
| --- | --- | --- |
| Identifying ill persons and providing them with face masks | ✓ |  |
| Supply of masks (potential shortage of masks)  | ✓ |  |
| Prioritizing masks for healthcare workers if there is a shortage | ✓ |  |
| Face mask distribution (will people purchase their own, are they being distributed to certain populations?)  | ✓ |  |
| Mistrust of the government and personal liberties |  | ✓ |
| Masks being perceived as uncomfortable |  | ✓ |
| Belief that masks not only used for the ill, but those who are well (not ill) |  | ✓ |
| Consistency in training on how to use the masks, this may be difficult to implement & enforce |  | ✓ |

Table S5. Use of Face Masks by Ill Persons during an Influenza Pandemic: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low, 2019

|  |  |  |
| --- | --- | --- |
| **Thematic Categories** | **State and Territories****(N=3)** | **Local Health Departments** **(N=14)** |
| Cost of providing masks | ✓ |  |
| Community disruption | ✓ |  |
| Adequately conveying messages to the community | ✓ |  |
| Compliance among ill individuals to wear the mask | ✓ |  |
| Stigma associated with face masks |  | ✓ |

Table S6. Childcare Facility Closures or Dismissals during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

|  |  |  |
| --- | --- | --- |
| **Thematic Category** | **States and Territories (N=10)** | **Local Health Departments** **(N=37)** |
| Disruptive to parent's ability to work (may not get paid depending on job) | ✓ | ✓ |
| Barrier is lack of alternative childcare if parents cannot miss work | ✓ | ✓ |
| Students can congregate in other places outside of school | ✓ | ✓ |
| Inability to access breakfast/lunch at childcare facilitiesLoss of vaccination setting | ✓ | ✓ |
| Community disruptions and work disruptions | ✓ | ✓ |
| Concern about business and personal finance continuity when parents have to stay home with children | ✓ |  |
| Oversight and authority over unregulated childcare programs would not be possible | ✓ |  |
| Rural composition of state/sparse population density would make compliance and enforcement problematic | ✓ |  |
| Schools and childcare facilities are “safe places” for kids, and removal of this safe space may be problematic |  | ✓ |
| Would require coordination across multiple stakeholders and levels (state, school districts, parents, teachers etc.) |  | ✓ |

Table S7. Childcare Facility Closures or Dismissals during an Influenza Pandemic: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low, 2019

| **Thematic Categories** | **State and Territories****(N=16)** | **Local Health Departments** **(N=42)** |
| --- | --- | --- |
| Loss of income generated for childcare facilities  | ✓ | ✓ |
| Lack of alternative childcare for working parents | ✓ | ✓ |
| Negative impact on daycare staff | ✓ | ✓ |
| Negative impact on the general community | ✓ | ✓ |
| State and local school districts and boards do not always follow public health recommendations | ✓ | ✓ |
| Depends on how people perceive the severity of the pandemic and likelihood of becoming ill  | ✓ | ✓ |
| Variances between jurisdictions accepting closures | ✓ | ✓ |
| Parents need to work | ✓ |  |
| Would be difficult to enforce with unlicensed programs  | ✓ |  |
| Negative impact on partner workforce | ✓ |  |
| Negative impact on low-income/low-wage parents | ✓ |  |
| Lost ability to access breakfast/lunch | ✓ |  |
| Hard to use disease surveillance to time the recommendation for closure | ✓ |  |
| If these facilities close, ad hoc operators will emerge thereby negating the intended results.  | ✓ |  |

Table S8. Preemptive K-12 School Closures or Dismissals during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

| **Thematic Category***[timeframe of closures, if included]* | **States and Territories (N=30)** | **Local Health Departments** **(N=37)** |
| --- | --- | --- |
| Barrier is lack of alternative childcare if parents cannot miss work*[2 weeks, up to 6 weeks, 6 months]* | ✓ | ✓ |
| Disruptive to parents’ ability to work (may not get paid depending on job) *[2 weeks, up to 6 weeks, 6 months]* | ✓ |  |
| Community disruptions and work disruptions (impact on local economy, loss in tax revenues) *[6 months]* | ✓ | ✓ |
| Children to rely on free/reduced-cost breakfast/lunch at school would lose access *[up to 6 weeks, 6 months]* | ✓ | ✓ |
| Learning lags in children’s education. Not all parents/school districts are equipped to move to online/web-based teaching and learning *[up to 6 weeks, 6 months]* | ✓ | ✓ |
| Concern about business and personal finance continuity when parents have to stay home with children | ✓ |  |
| Special needs of low-income parents and their children |  | ✓ |
| Low-income families and some rural families may not have adequate resources for distance learning  |  | ✓ |

Table S9. Preemptive K-12 School Closures or Dismissals during an Influenza Pandemic: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low, 2019

| **Thematic Categories** | **State and Territories****(N=30)** | **Local Health Departments** **(N=81)** |
| --- | --- | --- |
| Perceived level of threat or the odds of contracting the illness | ✓ | ✓ |
| Lack of alternative childcare | ✓ | ✓ |
| Financial impact/economic sustainability (personal and business) | ✓ | ✓ |
| Parents’ inability to take significant time off work | ✓ |  |
| The longer the timeframe for the closure, the less accepted it will be |  | ✓ |

Table S10. Temporary Closures or Dismissals of Colleges and Universities during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

| **Thematic Category** | **States and Territories (N=5)** | **Local Health Departments** **(N=26)** |
| --- | --- | --- |
| Economic impact, societal impact and other hardships created | ✓ | ✓ |
| Closures of public colleges and universities would be more feasible than closures of private schools (states have less authority) | ✓ |  |
| Short-term students can stay in their dorm or local apartments to continue working. Long-term students would move back home leaving essential jobs vacant | ✓ |  |
| Financial hardship on the colleges and universities |  | ✓ |
| Belief that getting ill is good for the immune system |  | ✓ |

Table S11. Temporary Closures or Dismissals of Colleges and Universities during an Influenza Pandemic: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low, 2019

| **Thematic Categories** | **State and Territories (N=4)** | **Local Health Departments** **(N=28)** |
| --- | --- | --- |
| Costs associated with temporary closure (reimbursement of student fees, etc.) | ✓ | ✓ |
| Perceived level of threat or the odds of contracting the illness | ✓ |  |
| Impact on college/university employees and employers; including partner workforce | ✓ |  |
| Closure would be up to the discretion of the institution | ✓ |  |
| Pressure to maintain residential units for students (in particular, foreign students who have no other options for housing) | ✓ |  |
| Accreditation issues/concerns |  | ✓ |
| Students’ ability to complete their programs/degrees |  | ✓ |
| Economic impact on the community |  | ✓ |
| Concerned about the long-term impact of the closures |  | ✓ |

Table S12. Social Distancing during an Influenza Pandemic: Reasons/Barriers for Rating the Feasibility of this Recommendation as Moderately Low or Low, 2019

| **Thematic Category** | **States and Territories (N=20)** | **Local Health Departments** **(N=55)** |
| --- | --- | --- |
| **Schools** |
| Overcrowded classrooms and limited physical space  | ✓ | ✓ |
| Lack of personnel/teachers and monetary resources to accommodate social distancing | ✓ | ✓ |
| Lack of knowledge about social distancing measures | ✓ |  |
| Schools do not have control over where students congregate outside of the classroom | ✓ |  |
| Staggering schedules could be difficult | ✓ |  |
| Schools are ill-equipped to handle proper handwashing | ✓ |  |
| Special considerations for children living in poverty |  | ✓ |
| **Workplaces** |
| Working remotely/teleworking/telecommuting is not feasible in all industries | ✓ | ✓ |
| Social distancing cannot be incorporated for all industries | ✓ | ✓ |
| Creates hardship (financial) | ✓ | ✓ |
| Internet bandwidth, information technology capability may not be available in all areas. These resources would have to be increased. | ✓ | ✓ |
| Disruption of community, education and reimbursement | ✓ |  |
| Officials may not want to impose on the private industry | ✓ |  |
| **Mass Gatherings** |
| Lost revenue/financial reasons (including those experienced by local colleges/universities, businesses, and community at large)  | ✓ | ✓ |
| Adverse social impacts on the faith community | ✓ | ✓ |
| Entertainers and participants who have traveled long distances to the venue | ✓ |  |
| Creates hardship | ✓ |  |
| Disruption of community, education and reimbursement | ✓ |  |
| Lack of buy-in from businesses  |  | ✓ |

Table S13. Social Distancing: Reasons/Barriers for Rating the Acceptability of this Recommendation as Moderately Low or Low

| **Thematic Category** | **States and Territories (N=20)** | **Local Health Departments** **(N=47)** |
| --- | --- | --- |
| **Schools** |
| Staggering school schedules which is less effective than closures, and the push back associated with closing schools | ✓ |  |
| Economic impact on schools that cannot fill classrooms |  | ✓ |
| Adverse impact on parents’ paychecks |  | ✓ |
| Inadequate capacity to monitor and enforce the recommendation |  | ✓ |
| Pushback from community members when sporting events/large school events are cancelled | ✓ |  |
| **Workplaces** |
| Lack of adequate messaging to persuade businesses |  | ✓ |
| Economic impact on employees |  | ✓ |
| Inability to enforce recommendation |  | ✓ |
| **Mass Gatherings**  |
| Cancelling sporting events can have political ramifications  | ✓ |  |
| Public resistance to cancelled sporting events could have political concerns | ✓ |  |
| Faith leaders not buying in |  | ✓ |
| Lack of effective messaging to get the public to comply with the recommendation |  | ✓ |
| Financial implications for employees in mass gathering settings |  | ✓ |