eAppendix

The effect of age on transmission of clinical 2009 pandemic influenza A (H1N1) during an outbreak in a camp and associated households in Washington State, United States

Online Supplementary Materials

LIST OF FIGURES AND TABLES

In this document, we provide 1) a detailed description of the statistical model used to produce the results, 2) eFigures (1-2) and eTables (1-21) presenting the sensitivity analysis results, and 3) eTables 22 and 23 presenting the camp and household data.

STATISTICAL MODEL

Denote the size of the population in the camp and associated household by N. Let H be the number of households with a camp participant as the index case, and let d_h denote the index case for cluster h, $h = 0, 1, \cdots, H$, with $h = 0$ denoting the camp. Note, that since the index cases of the households are also camp participants, the sizes of the clusters, n_h, $h = 0, 1, \cdots, H$ (households plus the camp) do not add up to N.

Let $\tilde{t}_i$ be the symptom onset day for individual i, with the default $\tilde{t}_i = \infty$ if i is not infected, $i = 1, \cdots, N$. If individual i is a camp participant, let t_i^* be the last day of camp attendance. For most camp participants, $t_i^* = 30$, the day that the camp closed, but it is likely that $t_i^* < 30$ given that some camp participants returned home early due to illness. Let d_h denote the camp participant belonging to household h, $h = 0, 1, \cdots, H$. The camp participant and other household members with symptom onset on or before $\tilde{t}_{d_h}$ are considered index (co-primary) cases.

Given their respective index cases, we analyze the data as independent outbreaks in each of the H clusters. For the camp outbreak, a few camp participants fell ill in the week after the camping period, so we break the time period into two segments, the camp-mixing period and the community-mixing period. During the camp-mixing period (April 25-30), we consider only person-to-person transmission, denoted by per-contact transmission probabilities p_1 for daytime contact and p_2 for nighttime contact, and assume the lack of community-to-person transmission ($b_1 = 0$). This assumption is reasonable considering the closed nature of the camp

population during this period. During the community-mixing period (May 1-7), susceptible camp participants were exposed to infectious sources while mixing in the household, neighborhood, and school, but the exact contacts are unmeasured. Consequently, we assume the susceptibles are exposed to a constant community-to-person transmission, denoted by per day probability of infection b_2 .

For the household outbreaks, we consider a person-to-person transmission, denoted by p_3 , the transmission probability per daily within-household contact. In addition, each household contact may be exposed to infection via mixing with other potential sources outside the household, which can be represented by a community-to-person transmission probability per day, b_3 . Since most of the information about household transmission is captured by the secondary infection of household contacts by the index case, the analysis for household outbreaks excludes the period after day $\tilde{t}_{d_h} + 10$. Such a short period also justifies the assumption of a constant community-to-person transmission. Household contacts who did not show any symptom by day $\tilde{t}_{d_h} + 10$ are assumed to have been uninfected.

Denote the last day for analysis for person i as T_i . As a result, $T_i = 37$ for camp participants ($h = 0$), and $T_i = \tilde{t}_{d_h} + 10$ for household members ($h > 0$). The households in this analysis were sampled from the population using the case-ascertained study design. In the study design, each cluster is ascertained by one or more index cases and hence has at least one case, giving rise to selection bias. As an adjustment for selection bias in studies with a case-ascertained design,[1] T_i need not be defined for index cases, since their infection status does not contribute to the overall likelihood. However, household index cases do expose susceptible individuals, thereby contributing to their risk of infection.

We assume that the only covariate affecting transmission probabilities is the age group indicator, x_i [1 for children (0-17 years) and 0 for adults ($\geq$18 years)]. If a person-to-person contact of type k ($k = 1$, for daytime contact within camp; 2, for nighttime contact within cabin; and 3, for daily contact within household) occurred between a susceptible person i and an infectious person j on day t, the age-adjusted probability, $P_{ij}(t,k)$, that person i was infected via this contact is given by

$$\text{logit}(P_{ij}(t,k)) = \text{logit}(\xi(t-\tilde{t}_j)p_k) + \beta x_i \qquad (1.1)$$

where $\xi(t-\tilde{t}_j)$ is the probability of j being infectious on day t given symptom onset on day $\tilde{t}_j$, which solely depends on $t-\tilde{t}_j$ and is assumed known. We also assume the infectious period starts on the day of symptom onset and has a maximum of Δ days. As a result, $\xi(t-\tilde{t}_j) > 0$ for $\tilde{t}_j \leq t \leq \tilde{t}_j + \Delta - 1$ and is 0 otherwise. The probabilities $\xi(t-\tilde{t}_j)$ characterize the distribution of the infectious period for the disease. Similarly, the age-adjusted probability, $B_i(t,k)$, that a susceptible person i is infected by a casual contact of type k ($k = 1$ for camp participants during the week after camp and 2 for household contacts) within his/her community on day t is given by

$$\text{logit}(B_i(t,k)) = \text{logit}(b_k) + \beta x_i. \qquad (1.2)$$

Let $C_i^b(t)$ be the collection of community-to-person contacts, and $C_i^p(t)$ be the collection of person-to-person contacts, that person i made on day t. Let ϕ stand for the empty set. The elements of $C_i^b(t)$ are indexed by the type of community-to-person contact, whereas the elements of $C_i^p(t)$ are indexed by both the infectious person and type of person-to-person contact. For the camp outbreak, we have $C_i^b(t) = \{1\}$ if $t_i^* < t \leq 37$ and $C_i^b(t) = \phi$

otherwise. If a susceptible person i and an infectious person j lodged in the same cabin on day t, then $C_i^p(t)$ should include both $(j,1)$ and $(j,2)$; otherwise, $C_i^p(t)$ includes $(j,1)$ but not $(j,2)$. For the household outbreaks, we have $C_i^b(t) = \{3\}$ all the time, and $C_i^p(t)$ includes $(j,3)$ if a susceptible household member i was exposed to an infectious household member j on day t.

Let $I(\cdot)$ be the indicator function. The probability that a susceptible person i escapes infection from all infective sources on day t is then given by

$$e_i(t) = \left\{ \prod_{k \in C_i^b(t)} (1 - B_i(t,k)) \right\}^{1 - I(C_i^b(t) = \phi)} \left\{ \prod_{(j,k) \in C_i^p(t)} P_{ij}(t,k) \right\}^{1 - I(C_i^p(t) = \phi)}. \tag{1.3}$$

We additionally assume that the duration of the incubation period has a known distribution, denoted by $\eta(\tilde{t}_i - t)$, i.e., the probability of the onset of symptoms on day $\tilde{t}_i$, given infection on day t, which solely depends on $\tilde{t}_i - t$. Let δ_{min} and δ_{max} be the minimum and maximum duration of the incubation period, such that $\eta(\tilde{t}_i - t)$ only if $\tilde{t}_i - \delta_{max} \le t \le \tilde{t}_i - \delta_{min}$. $l = \delta_{min}, \delta_{min} + 1, \cdots, \delta_{max}$. Defining $\tilde{t} = \{\tilde{t}_i, i = 1, \cdots, N\}$, we construct the likelihood for a non-index-case person i as

$$L_i(b_2, b_3, p_1, p_2, p_3, \beta \mid \tilde{t}) = \begin{cases} \prod_{t=1}^{T_i} e_i(t), & i \text{ is not infected,} \\ \sum_{t = \tilde{t}_i - \delta_{max}}^{\tilde{t}_i - \delta_{min}} \left\{ \eta(\tilde{t}_i - t)(1 - e_i(t)) \prod_{\tau=1}^{t-1} e_i(\tau), \right\}, & i \text{ is infected} \end{cases} \tag{1.4}$$

To further adjust for selection bias in the case-ascertained design, the likelihood should be conditioned on the symptom status of person $i \in h$ on the day $\tilde{t}_{d_h}$, i.e., when the index case d_h was ascertained. Following Yang et al.,[1] the marginal probability of having symptom onset later than $\tilde{t}_{d_i}$ is

$$L_i^m(b_2,b_3,p_1,p_2,p_3,\beta \mid \tilde{t}) = \sum_{t=\tilde{t}_{d_h}-\delta_{max}+1}^{\tilde{t}_{d_h}-\delta_{min}} \left\{ \left(\prod_{\tau=\tilde{t}_{d_h}-\delta_{max}+1}^{t-\delta_{min}} e_i(\tau) \right) (1-e_i(t)) \sum_{\tau > \tilde{t}_{d_h}} \left(\eta(\tau-t) \right) \right\} + \prod_{t=\tilde{t}_{d_h}-\delta_{max}+1}^{\tilde{t}_{d_h}-\delta_{min}} e_i(t), \quad (1.5)$$

where $\sum_{\tau > \tilde{t}_{d_h}} \left(\eta(\tau-t) \right)$ is the probability that the incubation period is longer than $\tilde{t}_{d_h} - t$. Let S be

the collection of people who are not index cases (household index cases are considered non-index cases for the camp outbreak). The joint conditional likelihood

$$L^c(b_2,b_3,p_1,p_2,p_3,\beta \mid \tilde{t}) = \prod_{i \in S} \frac{L_i(b_2,b_3,p_1,p_2,p_3,\beta \mid \tilde{t})}{L_i^m(b_2,b_3,p_1,p_2,p_3,\beta \mid \tilde{t})} \qquad (1.6)$$

is maximized to obtain the maximum likelihood estimates (MLE).

The odds ratio of when the susceptible is a child as compared to an adult was estimated as e^β. Since there are an insufficient number of ill adults, we were unable to evaluate the effect of the age group on infectiousness.

For the camp outbreak, another parameter possibly of interest is the cabin-mate transmission probability, the combined probability of transmission resulting from as a result of daytime and nighttime contacts between cabin-mates. This probability, denoted by p_4, can be solved for by using the equation

$$1 - p_4 = (1-p_1)(1-p_2). \qquad (1.7)$$

The secondary attack rate (SAR) of contact type k, defined as the probability of transmission sufficient to caused clinical illness if a susceptible person is exposed to an infectious person via contact of type k during the whole infectious period of the latter, is calculated as

$$SAR_k = 1 - \prod_{z=0}^{\Delta-1}(1-\xi(z)p_k). \qquad (1.8)$$

The local camp reproductive number ($\text{local } R$), defined as the average number of secondary cases that would be expected to develop if a typical case was introduced into a completely susceptible camp population, is calculated as

$$\text{local } R = (n_0 - 1) \text{ x } SAR_1. \tag{1.9}$$

The variances of the estimates for p_4 and the SARs were obtained using the Delta method.

REFERENCE

1. Yang Y, Longini IM, Halloran ME. Design and evaluation of prophylactic interventions using infectious disease incidence data from close contact groups. Applied Statistics 2006;55:317-30.

2. Centers for Disease Control and Prevention. Interim Guidance for Influenza Surveillance: Prioritizing RT-PCR Testing in Laboratories. Atlanta, GA: Centers for Disease Control and Prevention; 2009. (http://www.cdc.gov/h1n1flu/screening.htm). (Accessed October 25, 2009). Vol. 2009.

FIGURE CAPTIONS

eFigure 1. Among ≤ 17 year-olds, for each case definition (Roman numeral labeled subpanels) the sensitivity of Panel A) the household (hollow circles denote 95% confidence intervals [CI]) and cabin-mate (hollow triangles denote 95% CI) secondary attack rates (SAR) and Panel B) the camp local reproductive number (local R: hollow squares denote 95% CI) to several analytic assumptions. Analytic scenario: A = the primary analysis; B = No community-to-person exposure to disease for either the camp participants or household members; C = a common community-to-person exposure to disease in the camp for the 7 days after the end of the camp-period and for the entire household analysis period; D = a shorter, 2-7 day infectious period (mean of 3.4 days); and E = a longer, 5-8 day infectious period (mean of 6.2 days). The solid gray horizontal lines denote a null secondary attack rate of 0% and a null camp local reproductive number of 1.0.

eFigure 2. For each case definition (Roman numeral numbered subpanels) the sensitivity of the odds ratio for susceptibility to clinical disease among ≤ 17 versus ≥ 18 year-old camp participants and household members (hollow circles denote 95% confidence intervals) to several analytic assumptions. Analytic scenario: A = the primary analysis; B = No community-level exposure to disease for either the camp or household; C = a common community-level exposure to disease in the camp for the 7 days after the end of the camp-period and for the entire household analysis period; D = a shorter, 2-7 day infectious period (mean of 3.4 days); and E = a longer, 5-8 day infectious period (mean of 6.2 days). The solid gray horizontal line denotes a null odds ratio of 1.0.
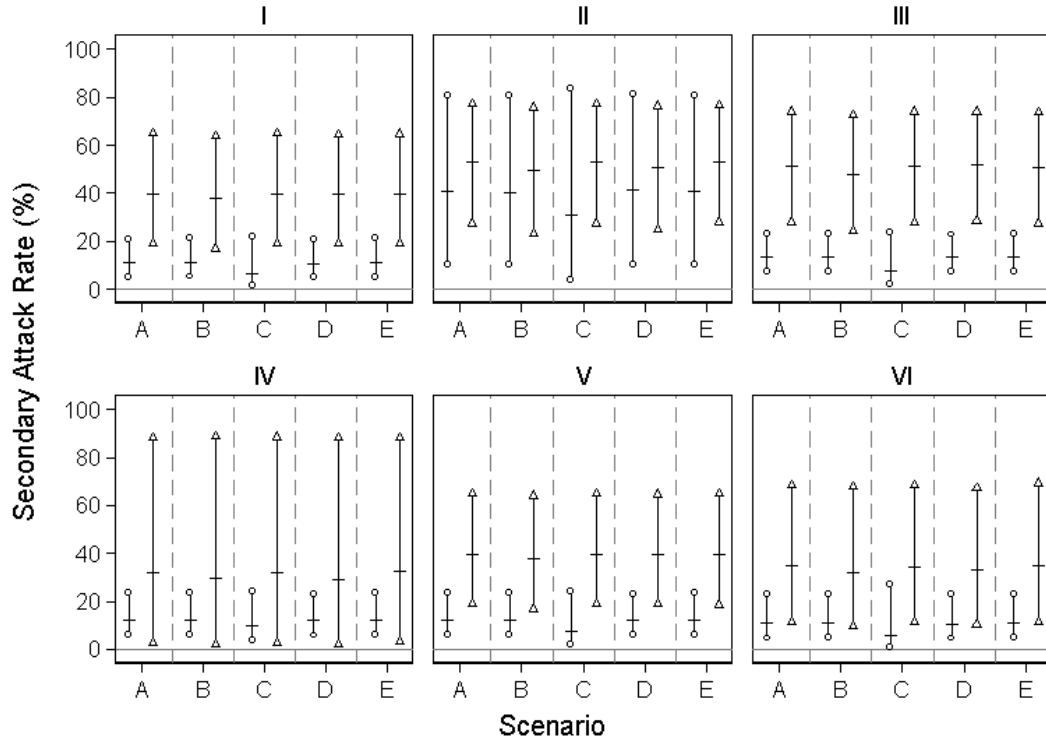
Panel B
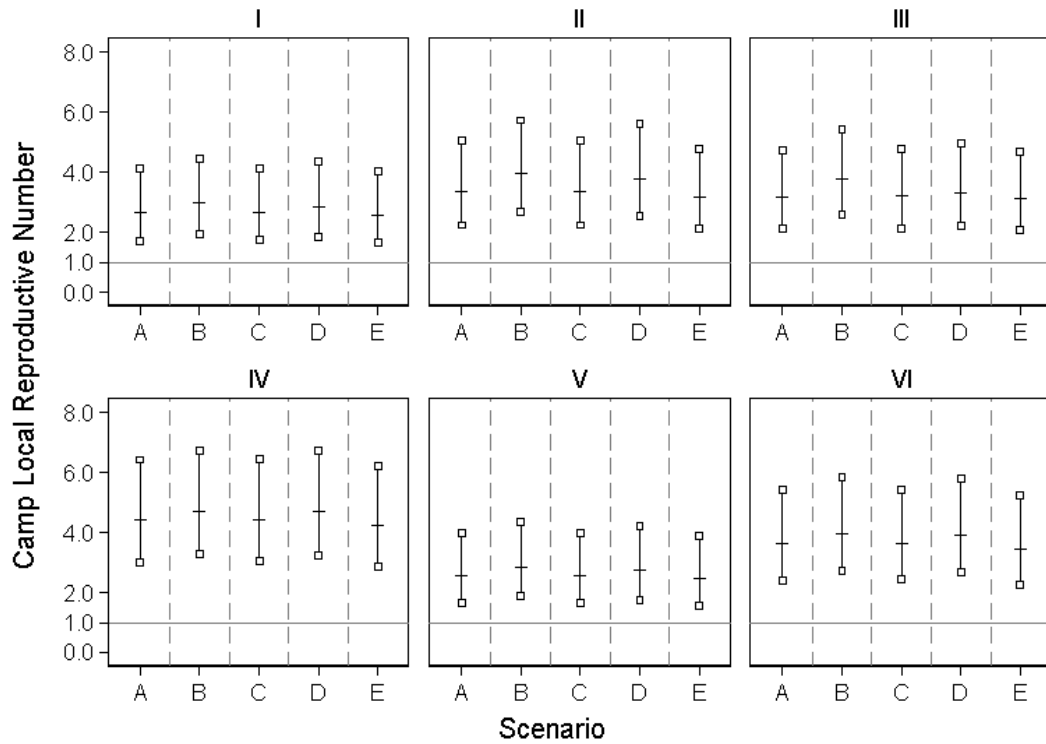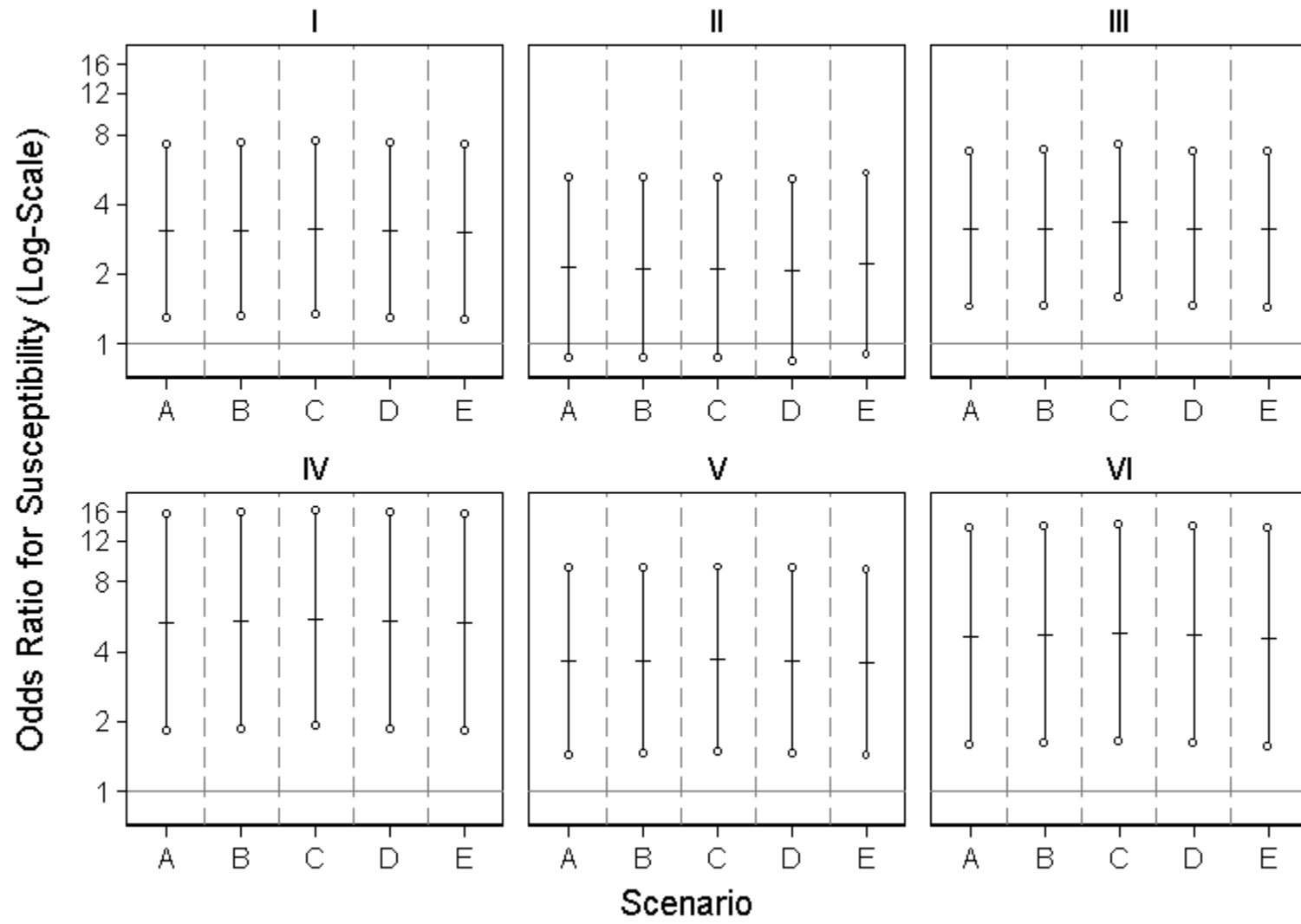
eTable 1. Sensitivity of the Nightly Cabin <u>Secondary Attack Rate</u> (%) to Model Assumptions

Sensitivity variables		A	B	C	D	E
		Analytic Scenario				
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition		*estimate (95% CI)*				
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	41.4 (21.6, 64.3)	39.5 (19.7, 63.4)	41.4 (21.6, 64.3)	41.1 (21.5, 64.0)	41.0 (21.4, 64.1)
II	- At least one of a set of symptoms [f]	51.2 (26.7, 75.1)	47.8 (23.0, 73.7)	51.2 (26.7, 75.1)	49.9 (25.2, 74.7)	50.5 (26.7, 74.0)
III	- Reported Fever or Feverishness	51.3 (29.4, 72.7)	48.6 (26.4, 71.3)	51.3 (29.3, 72.7)	51.6 (29.8, 72.8)	50.9 (28.9, 72.5)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	40.3 (7.1, 85.7)	38.4 (5.9, 86.1)	40.1 (7.0, 85.8)	38.2 (6.5, 84.6)	40.6 (7.2, 85.8)
V	- Fever and - Cough or Sore throat [e]	41.0 (21.3, 64.2)	39.2 (19.4, 63.2)	41.0 (21.3, 64.2)	40.8 (21.1, 63.9)	40.7 (21.0, 63.8)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	39.9 (16.2, 69.5)	37.8 (14.3, 68.7)	39.9 (16.2, 69.5)	38.5 (15.4, 68.2)	40.2 (16.3, 69.8)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 2. Sensitivity of the <u>Nightly Cabin Secondary Attack Rate</u> (%) Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	39.9 (19.2, 65.1)	37.7 (17.0, 64.0)	39.9 (19.2, 65.1)	39.7 (19.1, 64.7)	39.6 (18.9, 64.8)
II	- At least one of a set of symptoms [f]	53.2 (27.5, 77.3)	49.4 (23.3, 75.9)	53.2 (27.4, 77.3)	50.9 (25.0, 76.4)	53.3 (28.2, 76.9)
III	- Reported Fever or Feverishness	51.3 (28.1, 74.0)	48.0 (24.5, 72.5)	51.3 (28.0, 74.1)	51.7 (28.6, 74.1)	50.7 (27.5, 73.7)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	32.0 (2.8, 88.5)	29.5 (2.1, 89.0)	31.7 (2.7, 88.6)	29.1 (2.2, 88.1)	32.8 (3.1, 88.1)
V	- Fever and - Cough or Sore throat [e]	39.8 (19.0, 65.1)	37.6 (16.9, 64.0)	39.8 (19.0, 65.1)	39.6 (19.0, 64.7)	39.5 (18.7, 64.8)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	34.6 (11.4, 68.6)	32.0 (9.5, 67.9)	34.6 (11.3, 68.6)	33.0 (10.6, 67.1)	35.2 (11.6, 69.3)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 3. Sensitivity of the <u>Cabin-mate Secondary Attack Rate</u> (%) to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>	*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>	*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition			*estimate (95% CI)*		
I (ILI) [d] - Reported Fever or Feverishness and - Cough or Sore throat [e]	42.7 (23.1, 64.9)	41.0 (21.4, 64.0)	42.7 (23.1, 64.9)	42.5 (23.0, 64.6)	42.3 (22.8, 64.6)
II - At least one of a set of symptoms [f]	52.7 (28.6, 75.6)	49.7 (25.2, 74.3)	52.7 (28.6, 75.6)	51.7 (27.3, 75.3)	51.9 (28.5, 74.6)
III - Reported Fever or Feverishness	52.7 (31.1, 73.3)	50.2 (28.4, 72.0)	52.6 (31.0, 73.3)	53.0 (31.5, 73.4)	52.2 (30.6, 73.0)
IV - Reported Fever with a temperature >= 100.4°F (38°C)	42.6 (8.6, 85.4)	40.8 (7.4, 85.6)	42.4 (8.5, 85.4)	40.6 (8.1, 84.2)	42.8 (8.6, 85.5)
V - Fever and - Cough or Sore throat [e]	42.3 (22.7, 64.7)	40.6 (21.0, 63.8)	42.3 (22.7, 64.7)	42.1 (22.6, 64.4)	41.9 (22.4, 64.3)
VI - Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	41.7 (18.1, 69.9)	39.8 (16.3, 69.1)	41.7 (18.1, 69.9)	40.4 (17.4, 68.7)	41.9 (18.1, 70.1)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 4. Sensitivity of the <u>Cabin-mate Secondary Attack Rate</u> (%) Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	41.6 (21.0, 65.7)	39.6 (19.1, 64.6)	41.6 (21.0, 65.7)	41.5 (21.1, 65.3)	41.3 (20.7, 65.4)
II	- At least one of a set of symptoms [f]	54.9 (29.3, 78.1)	51.6 (25.6, 76.7)	54.8 (29.3, 78.0)	52.9 (27.2, 77.2)	54.9 (29.9, 77.6)
III	- Reported Fever or Feverishness	53.0 (30.1, 74.6)	50.1 (26.9, 73.2)	53.0 (30.0, 74.7)	53.4 (30.7, 74.8)	52.3 (29.4, 74.3)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	35.2 (4.2, 87.2)	33.0 (3.4, 87.3)	35.0 (4.1, 87.2)	32.6 (3.6, 86.4)	35.9 (4.5, 86.9)
V	- Fever and - Cough or Sore throat [e]	41.4 (20.8, 65.6)	39.5 (18.9, 64.6)	41.4 (20.7, 65.7)	41.3 (20.8, 65.3)	41.0 (20.4, 65.3)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	37.1 (13.7, 68.8)	34.9 (11.9, 67.9)	37.1 (13.6, 68.8)	35.7 (13.1, 67.3)	37.6 (13.8, 69.4)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 5. Sensitivity of the <u>Camp Local R</u> to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
Community-to-person-transmission		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
Infectious period		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	2.17 (1.41, 3.33)	2.40 (1.60, 3.60)	2.17 (1.41, 3.33)	2.31 (1.51, 3.52)	2.10 (1.36, 3.24)
II	- At least one of a set of symptoms [f]	3.02 (2.03, 4.48)	3.52 (2.44, 5.06)	3.02 (2.03, 4.48)	3.36 (2.29, 4.94)	2.85 (1.91, 4.24)
III	- Reported Fever or Feverishness	2.62 (1.76, 3.90)	3.10 (2.15, 4.46)	2.64 (1.77, 3.92)	2.75 (1.85, 4.07)	2.56 (1.71, 3.84)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	3.50 (2.41, 5.08)	3.73 (2.60, 5.33)	3.53 (2.43, 5.11)	3.71 (2.58, 5.33)	3.38 (2.30, 4.93)
V	- Fever and - Cough or Sore throat [e]	2.05 (1.31, 3.18)	2.27 (1.50, 3.45)	2.05 (1.31, 3.18)	2.19 (1.41, 3.38)	1.98 (1.26, 3.09)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	2.83 (1.88, 4.24)	3.09 (2.10, 4.54)	2.83 (1.88, 4.24)	3.06 (2.06, 4.52)	2.70 (1.78, 4.08)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 6. Sensitivity of the <u>Camp Local R</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard* [a]	*Standard*	*Standard*	*Shorter* [b]	*Longer* [c]
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	2.67 (1.73, 4.13)	2.96 (1.96, 4.47)	2.68 (1.73, 4.14)	2.85 (1.86, 4.36)	2.59 (1.66, 4.01)
II	- At least one of a set of symptoms [f]	3.37 (2.24, 5.05)	3.94 (2.70, 5.74)	3.37 (2.24, 5.05)	3.76 (2.53, 5.60)	3.18 (2.11, 4.78)
III	- Reported Fever or Feverishness	3.18 (2.12, 4.75)	3.77 (2.60, 5.45)	3.21 (2.15, 4.80)	3.32 (2.23, 4.96)	3.11 (2.06, 4.68)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	4.42 (3.02, 6.43)	4.70 (3.27, 6.75)	4.44 (3.05, 6.46)	4.68 (3.24, 6.75)	4.25 (2.88, 6.23)
V	- Fever and - Cough or Sore throat [e]	2.56 (1.64, 3.99)	2.85 (1.87, 4.34)	2.56 (1.64, 4.00)	2.74 (1.76, 4.23)	2.47 (1.57, 3.88)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	3.63 (2.42, 5.42)	3.97 (2.71, 5.82)	3.64 (2.43, 5.43)	3.93 (2.66, 5.78)	3.46 (2.27, 5.23)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 7. Sensitivity of the <u>Household Secondary Attack Rate</u> (%) to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	6.2 (3.2, 11.4)	6.2 (3.2, 11.4)	3.1 (0.7, 13.2)	6.1 (3.2, 11.3)	6.2 (3.3, 11.5)
II	- At least one of a set of symptoms [f]	31.5 (8.0, 70.8)	31.5 (8.0, 70.8)	21.6 (2.2, 77.2)	32.6 (8.2, 72.2)	31.3 (7.9, 70.6)
III	- Reported Fever or Feverishness	7.6 (4.4, 12.6)	7.6 (4.4, 12.6)	3.6 (0.9, 14.0)	7.5 (4.4, 12.5)	7.6 (4.5, 12.6)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	6.0 (3.0, 11.5)	6.0 (3.0, 11.5)	4.5 (1.5, 12.3)	5.9 (3.0, 11.4)	6.0 (3.0, 11.5)
V	- Fever and - Cough or Sore throat [e]	6.5 (3.4, 12.0)	6.5 (3.4, 12.0)	3.4 (0.8, 13.6)	6.5 (3.4, 11.9)	6.6 (3.5, 12.1)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	5.4 (2.5, 11.6)	5.4 (2.5, 11.6)	2.2 (0.3, 16.8)	5.4 (2.4, 11.5)	5.5 (2.5, 11.6)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 8. Sensitivity of the <u>Household Secondary Attack Rate</u> (%) Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	10.9 (5.3, 21.0)	10.9 (5.3, 21.1)	6.5 (1.7, 22.2)	10.8 (5.3, 20.8)	10.9 (5.3, 21.1)
II	- At least one of a set of symptoms [f]	40.6 (10.1, 80.6)	40.5 (10.1, 80.5)	30.7 (3.7, 83.5)	41.3 (10.4, 81.1)	40.9 (10.2, 80.9)
III	- Reported Fever or Feverishness	13.3 (7.3, 23.0)	13.4 (7.4, 23.1)	7.6 (2.1, 23.6)	13.2 (7.3, 22.8)	13.4 (7.4, 23.2)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	12.1 (5.9, 23.4)	12.1 (5.9, 23.4)	9.7 (3.6, 23.9)	12.0 (5.8, 23.1)	12.2 (5.9, 23.5)
V	- Fever and - Cough or Sore throat [e]	12.2 (6.0, 23.3)	12.3 (6.0, 23.4)	7.6 (2.1, 24.1)	12.1 (6.0, 23.1)	12.3 (6.0, 23.5)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	10.8 (4.7, 23.1)	10.9 (4.7, 23.2)	5.6 (0.9, 27.3)	10.7 (4.6, 22.9)	10.9 (4.7, 23.2)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 9. Sensitivity of the <u>Household Secondary Attack Rate</u> (%) Among ≥ 18 Year-olds to Model Assumptions

Sensitivity variables		A	B	C	D	E
				Analytic Scenario		
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	3.7 (1.6, 8.3)	3.7 (1.6, 8.3)	2.1 (0.5, 8.0)	3.7 (1.6, 8.2)	3.8 (1.6, 8.4)
II	- At least one of a set of symptoms [f]	22.3 (4.9, 61.5)	22.4 (4.9, 61.7)	16.2 (1.9, 65.7)	23.8 (5.2, 64.0)	21.7 (4.8, 60.6)
III	- Reported Fever or Feverishness	4.5 (2.2, 9.0)	4.5 (2.2, 8.9)	2.3 (0.6, 8.1)	4.5 (2.2, 8.9)	4.6 (2.2, 9.1)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	2.4 (0.8, 6.7)	2.4 (0.8, 6.7)	1.8 (0.5, 6.2)	2.4 (0.8, 6.6)	2.4 (0.9, 6.8)
V	- Fever and - Cough or Sore throat [e]	3.6 (1.5, 8.3)	3.6 (1.5, 8.3)	2.1 (0.6, 7.8)	3.5 (1.5, 8.2)	3.6 (1.5, 8.4)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	2.5 (0.8, 7.2)	2.4 (0.8, 7.1)	1.2 (0.2, 7.5)	2.4 (0.8, 7.1)	2.5 (0.8, 7.3)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 10. Sensitivity of the <u>Age-group Odds Ratio for Symptomatic Disease</u> (≤ 17 vs. ≥ 18 years) to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	B	C	D	E
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	3.05 (1.28, 7.26)	3.10 (1.30, 7.36)	3.14 (1.33, 7.42)	3.08 (1.30, 7.34)	3.03 (1.27, 7.22)
II	- At least one of a set of symptoms [f]	2.13 (0.87, 5.23)	2.11 (0.86, 5.18)	2.11 (0.86, 5.19)	2.07 (0.84, 5.08)	2.21 (0.90, 5.43)
III	- Reported Fever or Feverishness	3.12 (1.44, 6.75)	3.15 (1.46, 6.81)	3.38 (1.57, 7.25)	3.13 (1.45, 6.79)	3.11 (1.44, 6.72)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	5.36 (1.83, 15.73)	5.39 (1.84, 15.82)	5.55 (1.90, 16.25)	5.42 (1.85, 15.91)	5.31 (1.81, 15.63)
V	- Fever and - Cough or Sore throat [e]	3.61 (1.43, 9.10)	3.66 (1.45, 9.20)	3.69 (1.48, 9.24)	3.65 (1.45, 9.20)	3.59 (1.43, 9.04)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	4.64 (1.57, 13.69)	4.71 (1.60, 13.89)	4.77 (1.63, 13.99)	4.71 (1.60, 13.88)	4.59 (1.55, 13.57)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 11. Sensitivity of the <u>Daytime Camp Transmission Probability</u> to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.011 (0.007, 0.018)	0.013 (0.008, 0.019)	0.011 (0.007, 0.018)	0.012 (0.008, 0.019)	0.011 (0.007, 0.017)
II	- At least one of a set of symptoms [f]	0.016 (0.011, 0.024)	0.019 (0.013, 0.027)	0.016 (0.011, 0.024)	0.018 (0.012, 0.026)	0.015 (0.010, 0.023)
III	- Reported Fever or Feverishness	0.014 (0.009, 0.021)	0.016 (0.011, 0.024)	0.014 (0.009, 0.021)	0.015 (0.010, 0.022)	0.014 (0.009, 0.020)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.019 (0.013, 0.027)	0.020 (0.014, 0.028)	0.019 (0.013, 0.027)	0.020 (0.014, 0.028)	0.018 (0.012, 0.026)
V	- Fever and - Cough or Sore throat [e]	0.011 (0.007, 0.017)	0.012 (0.008, 0.018)	0.011 (0.007, 0.017)	0.012 (0.007, 0.018)	0.010 (0.007, 0.016)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.015 (0.010, 0.023)	0.016 (0.011, 0.024)	0.015 (0.010, 0.023)	0.016 (0.011, 0.024)	0.014 (0.009, 0.022)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 12. Sensitivity of the <u>Daytime Camp Transmission Probability</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard* [a]	*Standard*	*Standard*	*Shorter* [b]	*Longer* [c]
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.014 (0.009, 0.022)	0.016 (0.010, 0.024)	0.014 (0.009, 0.022)	0.015 (0.010, 0.023)	0.014 (0.009, 0.021)
II	- At least one of a set of symptoms [f]	0.018 (0.012, 0.027)	0.021 (0.014, 0.031)	0.018 (0.012, 0.027)	0.020 (0.013, 0.030)	0.017 (0.011, 0.025)
III	- Reported Fever or Feverishness	0.017 (0.011, 0.025)	0.020 (0.014, 0.029)	0.017 (0.011, 0.026)	0.018 (0.012, 0.026)	0.016 (0.011, 0.025)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.024 (0.016, 0.034)	0.025 (0.017, 0.036)	0.024 (0.016, 0.035)	0.025 (0.017, 0.036)	0.023 (0.015, 0.033)
V	- Fever and - Cough or Sore throat [e]	0.014 (0.009, 0.021)	0.015 (0.010, 0.023)	0.014 (0.009, 0.021)	0.015 (0.009, 0.022)	0.013 (0.008, 0.021)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.019 (0.013, 0.029)	0.021 (0.014, 0.031)	0.019 (0.013, 0.029)	0.021 (0.014, 0.031)	0.018 (0.012, 0.028)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 13. Sensitivity of the <u>Nighttime Cabin Transmission Probability</u> to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.234 (0.118, 0.412)	0.222 (0.107, 0.405)	0.235 (0.118, 0.412)	0.233 (0.117, 0.410)	0.232 (0.117, 0.410)
II	- At least one of a set of symptoms [f]	0.302 (0.150, 0.515)	0.278 (0.128, 0.502)	0.302 (0.150, 0.515)	0.293 (0.141, 0.511)	0.297 (0.149, 0.504)
III	- Reported Fever or Feverishness	0.303 (0.165, 0.488)	0.283 (0.147, 0.476)	0.302 (0.165, 0.488)	0.305 (0.167, 0.489)	0.300 (0.162, 0.486)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.233 (0.045, 0.665)	0.221 (0.038, 0.673)	0.232 (0.044, 0.666)	0.217 (0.039, 0.654)	0.236 (0.046, 0.664)
V	- Fever and - Cough or Sore throat [e]	0.232 (0.116, 0.411)	0.220 (0.106, 0.404)	0.232 (0.116, 0.411)	0.231 (0.115, 0.408)	0.230 (0.115, 0.408)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.226 (0.089, 0.465)	0.212 (0.079, 0.459)	0.226 (0.089, 0.465)	0.216 (0.084, 0.453)	0.228 (0.090, 0.467)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 14. Sensitivity of the <u>Nighttime Cabin Transmission Probability</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>	*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>	*Standard* [a]	*Standard*	*Standard*	*Shorter* [b]	*Longer* [c]
Clinical case definition			*estimate (95% CI)*		
I (ILI) [d] — Reported Fever or Feverishness and — Cough or Sore throat [e]	0.225 (0.105, 0.420)	0.211 (0.092, 0.412)	0.225 (0.104, 0.421)	0.224 (0.104, 0.417)	0.223 (0.103, 0.418)
II — At least one of a set of symptoms [f]	0.317 (0.155, 0.539)	0.290 (0.131, 0.526)	0.317 (0.155, 0.538)	0.301 (0.141, 0.530)	0.317 (0.159, 0.533)
III — Reported Fever or Feverishness	0.303 (0.158, 0.502)	0.280 (0.137, 0.488)	0.303 (0.157, 0.503)	0.306 (0.161, 0.503)	0.299 (0.154, 0.499)
IV — Reported Fever with a temperature >= 100.4°F (38°C)	0.182 (0.019, 0.719)	0.167 (0.015, 0.733)	0.181 (0.019, 0.721)	0.162 (0.014, 0.722)	0.189 (0.022, 0.709)
V — Fever and — Cough or Sore throat [e]	0.225 (0.104, 0.421)	0.210 (0.092, 0.413)	0.225 (0.103, 0.421)	0.223 (0.103, 0.417)	0.222 (0.102, 0.418)
VI — Reported Fever with a temperature >= 100.4°F (38°C) and — Cough or Sore throat [e]	0.192 (0.062, 0.462)	0.176 (0.052, 0.457)	0.192 (0.062, 0.462)	0.182 (0.057, 0.447)	0.196 (0.064, 0.467)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 15. Sensitivity of the <u>Cabin-mate Transmission Probability</u> to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>		*Standard* [a]	*Standard*	*Standard*	*Shorter* [b]	*Longer* [c]
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.243 (0.126, 0.417)	0.232 (0.117, 0.409)	0.243 (0.126, 0.417)	0.242 (0.126, 0.414)	0.241 (0.125, 0.414)
II	- At least one of a set of symptoms [f]	0.313 (0.161, 0.519)	0.292 (0.141, 0.507)	0.313 (0.162, 0.519)	0.306 (0.154, 0.516)	0.308 (0.160, 0.508)
III	- Reported Fever or Feverishness	0.313 (0.175, 0.493)	0.295 (0.159, 0.482)	0.312 (0.175, 0.493)	0.315 (0.178, 0.494)	0.309 (0.172, 0.491)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.248 (0.054, 0.657)	0.236 (0.047, 0.663)	0.246 (0.053, 0.658)	0.233 (0.048, 0.645)	0.250 (0.055, 0.656)
V	- Fever and - Cough or Sore throat [e]	0.241 (0.124, 0.415)	0.230 (0.114, 0.408)	0.241 (0.124, 0.415)	0.239 (0.124, 0.413)	0.238 (0.122, 0.412)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.237 (0.100, 0.467)	0.225 (0.090, 0.461)	0.237 (0.100, 0.467)	0.229 (0.095, 0.456)	0.239 (0.100, 0.469)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 16. Sensitivity of the <u>Cabin-mate Transmission Probability</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>	*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>	*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition			*estimate (95% CI)*		
I (ILI) [d] - Reported Fever or Feverishness and - Cough or Sore throat [e]	0.236 (0.115, 0.425)	0.223 (0.104, 0.416)	0.236 (0.115, 0.425)	0.235 (0.115, 0.421)	0.234 (0.113, 0.422)
II - At least one of a set of symptoms [f]	0.329 (0.167, 0.546)	0.305 (0.144, 0.533)	0.329 (0.167, 0.545)	0.315 (0.154, 0.537)	0.329 (0.170, 0.540)
III - Reported Fever or Feverishness	0.315 (0.170, 0.508)	0.294 (0.151, 0.495)	0.315 (0.169, 0.509)	0.318 (0.174, 0.509)	0.310 (0.166, 0.505)
IV - Reported Fever with a temperature >= 100.4°F (38°C)	0.202 (0.027, 0.694)	0.188 (0.023, 0.701)	0.200 (0.027, 0.695)	0.183 (0.022, 0.689)	0.207 (0.030, 0.687)
V - Fever and - Cough or Sore throat [e]	0.235 (0.113, 0.425)	0.222 (0.103, 0.417)	0.235 (0.113, 0.425)	0.234 (0.114, 0.422)	0.233 (0.112, 0.422)
VI - Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.208 (0.075, 0.461)	0.194 (0.065, 0.453)	0.208 (0.074, 0.461)	0.199 (0.071, 0.446)	0.211 (0.076, 0.466)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 17. Sensitivity of the <u>Household Transmission Probability</u> to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	**B**	**C**	**D**	**E**
<u>Community-to-person-transmission</u>	*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
<u>Infectious period</u>	*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition			*estimate (95% CI)*		
I (ILI) [d] - Reported Fever or Feverishness and - Cough or Sore throat [e]	0.013 (0.007, 0.024)	0.013 (0.007, 0.024)	0.006 (0.001, 0.029)	0.019 (0.010, 0.036)	0.010 (0.005, 0.020)
II - At least one of a set of symptoms [f]	0.073 (0.018, 0.252)	0.073 (0.018, 0.252)	0.048 (0.005, 0.330)	0.112 (0.028, 0.361)	0.059 (0.015, 0.208)
III - Reported Fever or Feverishness	0.016 (0.009, 0.027)	0.016 (0.009, 0.027)	0.007 (0.002, 0.031)	0.023 (0.013, 0.039)	0.013 (0.007, 0.022)
IV - Reported Fever with a temperature >= 100.4°F (38°C)	0.012 (0.006, 0.024)	0.012 (0.006, 0.024)	0.009 (0.003, 0.026)	0.018 (0.009, 0.036)	0.010 (0.005, 0.020)
V - Fever and - Cough or Sore throat [e]	0.013 (0.007, 0.026)	0.013 (0.007, 0.026)	0.007 (0.002, 0.030)	0.020 (0.010, 0.038)	0.011 (0.006, 0.021)
VI - Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.011 (0.005, 0.025)	0.011 (0.005, 0.025)	0.004 (0.001, 0.038)	0.016 (0.007, 0.036)	0.009 (0.004, 0.020)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 18. Sensitivity of the <u>Household Transmission Probability</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	B	C	D	E
Community-to-person-transmission	Post-camp period	None	Post-camp period and Household	Post-camp period	Post-camp period
Infectious period	Standard [a]	Standard	Standard	Shorter [b]	Longer [c]
Clinical case definition			estimate (95% CI)		
I (ILI) [d] — Reported Fever or Feverishness and — Cough or Sore throat [e]	0.023 (0.011, 0.047)	0.023 (0.011, 0.047)	0.013 (0.003, 0.051)	0.034 (0.016, 0.069)	0.019 (0.009, 0.038)
II — At least one of a set of symptoms [f]	0.100 (0.024, 0.330)	0.099 (0.024, 0.330)	0.071 (0.009, 0.391)	0.150 (0.036, 0.453)	0.082 (0.020, 0.280)
III — Reported Fever or Feverishness	0.028 (0.015, 0.052)	0.028 (0.015, 0.052)	0.016 (0.004, 0.054)	0.042 (0.023, 0.076)	0.023 (0.012, 0.042)
IV — Reported Fever with a temperature >= 100.4°F (38°C)	0.026 (0.012, 0.053)	0.026 (0.012, 0.053)	0.020 (0.007, 0.055)	0.038 (0.018, 0.077)	0.021 (0.010, 0.043)
V — Fever and — Cough or Sore throat [e]	0.026 (0.012, 0.053)	0.026 (0.013, 0.053)	0.016 (0.004, 0.056)	0.038 (0.018, 0.077)	0.021 (0.010, 0.043)
VI — Reported Fever with a temperature >= 100.4°F (38°C) and — Cough or Sore throat [e]	0.023 (0.010, 0.052)	0.023 (0.010, 0.053)	0.011 (0.002, 0.066)	0.033 (0.014, 0.077)	0.018 (0.008, 0.043)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 19. Sensitivity of the <u>Household Transmission Probability</u> Among ≥ 18 Year-olds to Model Assumptions

Sensitivity variables		Analytic Scenario				
		A	**B**	**C**	**D**	**E**
Community-to-person-transmission		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
Infectious period		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.008 (0.003, 0.017)	0.008 (0.003, 0.017)	0.004 (0.001, 0.017)	0.011 (0.005, 0.026)	0.006 (0.003, 0.014)
II	- At least one of a set of symptoms [f]	0.049 (0.011, 0.199)	0.050 (0.011, 0.200)	0.035 (0.004, 0.236)	0.078 (0.017, 0.297)	0.039 (0.008, 0.160)
III	- Reported Fever or Feverishness	0.009 (0.005, 0.019)	0.009 (0.004, 0.019)	0.005 (0.001, 0.017)	0.014 (0.007, 0.028)	0.008 (0.004, 0.015)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.005 (0.002, 0.014)	0.005 (0.002, 0.014)	0.004 (0.001, 0.013)	0.007 (0.002, 0.020)	0.004 (0.001, 0.011)
V	- Fever and - Cough or Sore throat [e]	0.007 (0.003, 0.017)	0.007 (0.003, 0.017)	0.004 (0.001, 0.016)	0.011 (0.004, 0.026)	0.006 (0.002, 0.014)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.005 (0.002, 0.015)	0.005 (0.002, 0.015)	0.002 (0.000, 0.016)	0.007 (0.002, 0.022)	0.004 (0.001, 0.012)

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).
[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).
[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)
[d] Influenza-like illness, similar to the CDC surveillance definition[2]
[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.
[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 20. Sensitivity of the <u>Community-to-Person Transmission Probability</u> to Model Assumptions

Sensitivity variables	Analytic Scenario				
	A	**B**	**C**	**D**	**E**
Community-to-person-transmission	*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
Infectious period	*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition			*estimate (95% CI)*		
I (ILI) [d] - Reported Fever or Feverishness and - Cough or Sore throat [e]	0.006 (0.001, 0.023)	NA	0.003 (0.001, 0.011)	0.006 (0.001, 0.023)	0.006 (0.001, 0.023)
II - At least one of a set of symptoms [f]	0.014 (0.005, 0.040)	NA	0.014 (0.005, 0.040)	0.015 (0.005, 0.041)	0.014 (0.005, 0.040)
III - Reported Fever or Feverishness	0.013 (0.005, 0.036)	NA	0.005 (0.002, 0.013)	0.014 (0.005, 0.036)	0.013 (0.005, 0.036)
IV - Reported Fever with a temperature >= 100.4°F (38°C)	0.004 (0.001, 0.021)	NA	0.002 (0.000, 0.010)	0.005 (0.001, 0.021)	0.004 (0.001, 0.022)
V - Fever and - Cough or Sore throat [e]	0.005 (0.001, 0.021)	NA	0.004 (0.001, 0.011)	0.005 (0.001, 0.021)	0.005 (0.001, 0.021)
VI - Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.005 (0.001, 0.021)	NA	0.003 (0.001, 0.011)	0.005 (0.001, 0.021)	0.005 (0.001, 0.021)

NA – Not applicable

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).

[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).

[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)

[d] Influenza-like illness, similar to the CDC surveillance definition[2]

[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.

[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 21. Sensitivity of the <u>Community-to-Person Transmission Probability</u> Among ≤ 17 Year-olds to Model Assumptions

Sensitivity variables		A	B	C	D	E
				Analytic Scenario		
Community-to-person-transmission		*Post-camp period*	*None*	*Post-camp period and Household*	*Post-camp period*	*Post-camp period*
Infectious period		*Standard [a]*	*Standard*	*Standard*	*Shorter [b]*	*Longer [c]*
Clinical case definition				*estimate (95% CI)*		
I (ILI) [d]	- Reported Fever or Feverishness and - Cough or Sore throat [e]	0.007 (0.002, 0.027)	NA	0.005 (0.002, 0.017)	0.007 (0.002, 0.027)	0.007 (0.002, 0.027)
II	- At least one of a set of symptoms [f]	0.016 (0.005, 0.047)	NA	0.016 (0.005, 0.046)	0.017 (0.006, 0.047)	0.016 (0.005, 0.047)
III	- Reported Fever or Feverishness	0.016 (0.006, 0.044)	NA	0.008 (0.003, 0.022)	0.017 (0.006, 0.044)	0.016 (0.006, 0.044)
IV	- Reported Fever with a temperature >= 100.4°F (38°C)	0.006 (0.001, 0.027)	NA	0.003 (0.001, 0.017)	0.006 (0.001, 0.026)	0.005 (0.001, 0.028)
V	- Fever and - Cough or Sore throat [e]	0.007 (0.002, 0.026)	NA	0.005 (0.002, 0.018)	0.007 (0.002, 0.026)	0.007 (0.002, 0.026)
VI	- Reported Fever with a temperature >= 100.4°F (38°C) and - Cough or Sore throat [e]	0.007 (0.002, 0.027)	NA	0.006 (0.002, 0.018)	0.007 (0.002, 0.027)	0.007 (0.002, 0.027)

NA – Not applicable

[a] Standard infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 1.0, 0.8, 0.6, 0.4, 0.2).

[b] Shorter infectious period: maximum length = 7 and probability of being infectious for day 1-7 = (1.0, 1.0, 0.6, 0.4, 0.2, 0.1, 0.05).

[c] Longer infectious period: maximum length = 8 and probability of being infectious for day 1-8 = (1.0, 1.0, 1.0, 1.0, 1.0, 0.7, 0.4, 0.1)

[d] Influenza-like illness, similar to the CDC surveillance definition[2]

[e] The onset date of 1) fever or feverishness and 2) cough or sore throat must be within a 7 day period.

[f] Fever, feverishness, cough, sore throat, diarrhea, difficulty breathing, runny nose, and vomiting

eTable 22. Sensitivity of the Transmission Probabilities and the Age-Group Odds Ratio for Susceptibility to Assumptions about the Length of Incubation and Infectious Periods

Clinical Case Definition [a]	Parameter	Primary Analysis		Shorter Incubation Period [b]		Shorter Incubation and Very Short Infectious Periods [c]	
		Unadjusted	Age-adjusted	Unadjusted	Age-adjusted	Unadjusted	Age-adjusted
I	Community-to-person transmission probability	0.006 (0.001, 0.023)	0.007 (0.002, 0.027)	0.006 (0.001, 0.023)	0.007 (0.002, 0.027)	0.006 (0.001, 0.023)	0.007 (0.002, 0.027)
	Daily camp transmission probability	0.011 (0.007, 0.018)	0.014 (0.009, 0.022)	0.012 (0.008, 0.018)	0.015 (0.010, 0.022)	0.014 (0.010, 0.021)	0.018 (0.012, 0.026)
	Nightly cabin transmission probability	0.234 (0.118, 0.412)	0.225 (0.105, 0.420)	0.198 (0.092, 0.374)	0.187 (0.079, 0.381)	0.185 (0.083, 0.364)	0.175 (0.071, 0.370)
	Household transmission probability	0.013 (0.007, 0.024)	0.023 (0.011, 0.047)	0.013 (0.007, 0.024)	0.023 (0.011, 0.046)	0.017 (0.008, 0.038)	0.030 (0.013, 0.070)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		3.05 (1.28, 7.26)		3.09 (1.31, 7.30)		3.04 (1.23, 7.55)
II	Community-to-person transmission probability	0.014 (0.005, 0.04)	0.016 (0.005, 0.047)	0.016 (0.006, 0.041)	0.018 (0.007, 0.048)	0.016 (0.006, 0.041)	0.018 (0.007, 0.047)
	Daily camp transmission probability	0.016 (0.011, 0.024)	0.018 (0.012, 0.027)	0.016 (0.011, 0.024)	0.018 (0.012, 0.027)	0.021 (0.015, 0.030)	0.023 (0.016, 0.034)
	Nightly cabin transmission probability	0.302 (0.15, 0.515)	0.317 (0.155, 0.539)	0.239 (0.107, 0.451)	0.247 (0.108, 0.470)	0.201 (0.080, 0.422)	0.198 (0.075, 0.430)
	Household transmission probability	0.073 (0.018, 0.252)	0.100 (0.024, 0.330)	0.072 (0.018, 0.249)	0.097 (0.024, 0.323)	0.079 (0.011, 0.405)	0.106 (0.014, 0.495)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		2.13 (0.87, 5.23)		2.07 (0.85, 5.02)		1.91 (0.79, 4.62)

Clinical Case Definition [a]	Parameter	Primary Analysis		Shorter Incubation Period [b]		Shorter Incubation and Very Short Infectious Periods [c]	
		Unadjusted	Age-adjusted	Unadjusted	Age-adjusted	Unadjusted	Age-adjusted
III	Community-to-person transmission probability	0.013 (0.005, 0.036)	0.016 (0.006, 0.044)	0.017 (0.007, 0.040)	0.021 (0.009, 0.049)	0.017 (0.007, 0.040)	0.020 (0.008, 0.047)
	Daily camp transmission probability	0.014 (0.009, 0.021)	0.017 (0.011, 0.025)	0.014 (0.010, 0.021)	0.017 (0.012, 0.025)	0.014 (0.010, 0.021)	0.017 (0.011, 0.025)
	Nightly cabin transmission probability	0.303 (0.165, 0.488)	0.303 (0.158, 0.502)	0.242 (0.124, 0.419)	0.240 (0.117, 0.432)	0.252 (0.131, 0.429)	0.252 (0.126, 0.44)
	Household transmission probability	0.016 (0.009, 0.027)	0.028 (0.015, 0.052)	0.016 (0.009, 0.027)	0.028 (0.015, 0.051)	0.022 (0.011, 0.041)	0.034 (0.016, 0.07)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		3.12 (1.44, 6.75)		3.14 (1.46, 6.73)		2.32 (1.07, 5.05)
IV	Community-to-person transmission probability	0.004 (0.001, 0.021)	0.006 (0.001, 0.027)	0.008 (0.002, 0.023)	0.01 (0.003, 0.029)	0.008 (0.002, 0.023)	0.009 (0.003, 0.029)
	Daily camp transmission probability	0.019 (0.013, 0.027)	0.024 (0.016, 0.034)	0.018 (0.012, 0.026)	0.022 (0.015, 0.033)	0.020 (0.014, 0.029)	0.025 (0.018, 0.036)
	Nightly cabin transmission probability	0.233 (0.045, 0.665)	0.182 (0.019, 0.719)	0.223 (0.042, 0.654)	0.178 (0.019, 0.709)	0.153 (0.016, 0.660)	0.099 (0.003, 0.818)
	Household transmission probability	0.012 (0.006, 0.024)	0.026 (0.012, 0.053)	0.012 (0.006, 0.024)	0.025 (0.012, 0.052)	0.015 (0.006, 0.036)	0.029 (0.012, 0.072)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		5.36 (1.83, 15.73)		5.31 (1.81, 15.59)		4.29 (1.47, 12.55)

Clinical Case Definition [a]	Parameter	Primary Analysis		Shorter Incubation Period [b]		Shorter Incubation and Very Short Infectious Periods [c]	
		Unadjusted	Age-adjusted	Unadjusted	Age-adjusted	Unadjusted	Age-adjusted
V	Community-to-person transmission probability	0.005 (0.001, 0.021)	0.007 (0.002, 0.026)	0.005 (0.001, 0.022)	0.007 (0.002, 0.026)	0.005 (0.001, 0.022)	0.007 (0.002, 0.026)
	Daily camp transmission probability	0.011 (0.007, 0.017)	0.014 (0.009, 0.021)	0.011 (0.007, 0.017)	0.014 (0.009, 0.022)	0.014 (0.009, 0.020)	0.017 (0.011, 0.026)
	Nightly cabin transmission probability	0.232 (0.116, 0.411)	0.225 (0.104, 0.421)	0.194 (0.089, 0.372)	0.184 (0.077, 0.380)	0.181 (0.079, 0.360)	0.171 (0.068, 0.368)
	Household transmission probability	0.013 (0.007, 0.026)	0.026 (0.012, 0.053)	0.013 (0.007, 0.025)	0.026 (0.012, 0.053)	0.018 (0.008, 0.040)	0.035 (0.015, 0.081)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		3.61 (1.43, 9.10)		3.69 (1.47, 9.26)		3.69 (1.38, 9.89)
VI	Community-to-person transmission probability	0.005 (0.001, 0.021)	0.007 (0.002, 0.027)	0.005 (0.001, 0.021)	0.007 (0.002, 0.027)	0.005 (0.001, 0.021)	0.007 (0.002, 0.027)
	Daily camp transmission probability	0.015 (0.01, 0.023)	0.019 (0.013, 0.029)	0.015 (0.010, 0.023)	0.020 (0.013, 0.029)	0.019 (0.013, 0.027)	0.024 (0.017, 0.035)
	Nightly cabin transmission probability	0.226 (0.089, 0.465)	0.192 (0.062, 0.462)	0.187 (0.065, 0.433)	0.152 (0.041, 0.431)	0.152 (0.046, 0.401)	0.119 (0.027, 0.398)
	Household transmission probability	0.011 (0.005, 0.025)	0.023 (0.010, 0.052)	0.011 (0.005, 0.024)	0.023 (0.010, 0.052)	0.011 (0.004, 0.034)	0.023 (0.007, 0.071)
	Odds ratio for susceptibility: ≤17 vs. ≥18 years		4.64 (1.57, 13.69)		4.73 (1.61, 13.91)		5.20 (1.55, 17.44)

[a] See eTable 1 for the clinical case definitions.
[b] Shorter incubation period: probability of becoming infected on day 1-2 before onset of symptoms = (0.5, 0.5)
[c] Very short infectious period: maximum length = 4 and probability of being infectious for day 1-4 = (1.00, 0.75, 0.50, 0.25)

eTable 23. Camp Outbreak Data, Including Staff Assignment, Age, Sex, Camp Attendance, and the Illness Onset Date[a] and Case Status for Case Definitions I-VI

Cabin ID	ID	Staff 0=No 1=Yes	Age (yr)	Sex 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6		Camp Attendance	
					Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Start Date	End Date
1	0	0	12	2	0		0		0		0		0		0		27	30
1	1	0	12	2	1	30	1	30	1	30	1	30	1	30	1	30	27	30
1	2	0	11	2	1	29	1	30	1	30	1	30	1	29	1	29	27	30
1	3	0	12	2	0		0		0		0		0		0		27	30
1	4	0	11	2	1	29	1	31	1	31	1	31	1	29	1	29	27	30
1	5	0	12	2	1	29	1	29	1	29	1	29	1	29	1	29	27	29
1	6	0	12	2	0		0		0		0		0		0		27	30
2	0	1	15	2	0		1[c]	20	0		0		0		0		27	30
2	1	1	15	2	1	31	1	31	1	31	1	31	1	31	1	31	26	30
2	2	0	11	2	0		0		0		0		0		0		27	30
2	3	0	11	2	1	31	1	31	1	31	1	31	1	31	1	31	27	30
2	4	0	12	2	1	29	1	29	1	29	1	29	1	29	1	29	27	30
2	5	0	12	2	1	30	1	29	1	30	1	30	1	30	1	30	27	29
2	6	0	11	2	0		0		0		0		0		0		27	30
2	7	0	12	2	1	29	1	29	1	29	0		1	29	0	29	27	30
2	8	0	11	2	0		0		0		0		0		0		27	29
2	9	0	11	2	0		1	31	0		0		0		0		27	30
3	0	1	16	2	1	31	1	30	1	31	0		1	31	0	31	27	30
3	1	0	12	2	1	30	1	30	1	30	1	30	1	30	1	30	27	30
3	2	0	12	2	0		0		0		0		0		0		27	30
3	3	0	12	2	1	29	1	29	1	29	1	29	1	29	1	29	27	30
3	4	0	12	2	0		1	30	0		0		0		0		27	30
3	5	0	12	2	1	29	0	29	1	29	1	30	1	30	1	30	27	29
3	6	0	12	2	1	30	1	30	1	30	1	30	1	30	1	30	27	30

Cabin ID	ID	Staff 0=No 1=Yes	Age (yr)	Sex 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6		Camp Attendance	
					Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Start Date	End Date
3	7	0	12	2	1	30	1		1	30	1	30	1	30	1	30	27	30
4	0	1	18	2	1	31	1	31	1	31	0		0		0		25	30
4	1	1	17	2	1	29	1	29	1	29	0		0		0		25	30
4	2	0	12	2	0		0		0		0		0		0		27	27
4	3	0	12	2	1	31	1	31	1	31	0		0		0		27	30
4	4	0	11	2	0		0		0		0		0		0		27	30
4	5	0	11	2	0		1	34	1	34	1	34	0		0		27	30
4	6	0	12	2	1	29	1	29	1	29	1	30	1	29	1	29	27	30
4	7	0	11	2	1	30	1	30	1	30	1	30	1	30	1	30	27	30
4	8	0	12	2	0		1	32	1	32	1	32	0		0		27	30
4	9	0	12	2	1	30	1	30	1	30	1	30	1	30	1	30	27	30
5	0	1	14	2	0		0		0		0		0		0		25	30
5	1	0	12	2	1	34	1	34	1	34	0		1	34	0	34	27	30
5	2	0	11	2	0		0		0		0		0		0		27	30
5	3	0	12	2	0		1	30	1	30	1	30	0		0		27	27
5	4	0	12	2	0		0		0		0		0		0		27	30
5	5	0	11	2	0		0		0		0		0		0		27	29
5	6	0	11	2	0		0		0		0		0		0		27	30
5	7	0	10	2	1	29	1	29	1	29	0		1	29	0	29	27	29
5	8	0	12	2	0		0		0		0		0		0		27	30
5	9	0	12	2	0		1	44	0		0		0		0		27	29
6	0	0	12	1	1	28	1	29	1	29	1	29	1	28	1	28	27	29
6	1	0	12	1	0		0		0		0		0		0		27	30
6	2	0	12	1	1	31	1	31	1	31	0		1	31	0	31	27	30
6	3	0	12	1	1	29	1	29	1	29	1	29	1	29	1	29	27	29
6	4	0	12	1	1	31	0	31	1	31	1	31	1	31	1	31	27	30

Cabin ID	ID	Staff 0=No 1=Yes	Age (yr)	Sex 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6		Camp Attendance	
					Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Start Date	End Date
6	5	0	12	1	1	29	1	28	1	29	1	29	1	29	1	29	27	29
6	6	0	11	1	1	28	1	28	1	28	1	30	1	28	1	28	27	30
7	0	0	12	1	0		0		0		0		0		0		27	30
7	1	0	11	1	1	30	1	29	1	30	1	30	1	30	1	30	27	30
7	2	0	12	1	1	29	1	29	1	30	1	30	1	29	1	29	27	30
7	3	0	12	1	1	29	1	29	1	29	1	29	1	29	1	29	27	29
7	4	0	12	1	0		0		0		0		0		0		27	29
7	5	0	12	1	1	30	1	30	1	30	1	30	1	30	1	30	27	30
8	0	1	16	1	0		1[c]	19	0		0		0		0		25	30
8	1	0	12	1	0		1	31	1	31	1	31	0		0		27	30
8	2	0	11	1	1	31	1		1	31	1	31	1	31	1	31	27	30
8	3	0	12	1	1	30	1	30	1	33	1	33	1	30	1	30	27	30
9	0	0	11	1	0		0		0		0		0		0		27	30
9	1	0	12	1	1	34	1	34	1	34	0		1	34	0	34	27	30
9	2	0	12	1	1	31	1	31	1	31	0		1	31	0	31	27	30
9	3	0	12	1	0		1	30	1	30	1	30	0		0		27	30
10	0	0	12	1	1	28	1	28	1	28	0		1	28	0	28	27	30
10	1	0	12	1	1	30	1	29	1	30	1	30	1	30	1	30	27	30
10	2	0	12	1	0		0		0		0		0		0		27	30
10	3	0	12	1	0		1[c]	20	0		0		0		0		27	30
10	4	0	12	1	1	29	1	29	1	29	1	29	1	29	1	29	27	29
10	5	0	12	1	1	29	1	29	1	29	1	29	1	29	1	29	27	29
10	6	0	12	1	1	29	1	29	1	29	1	29	1	29	1	29	27	30
11[b]	0	1	20	2	1	25	1[c]	25	1	30	1	30	1	25	1	25	27	30
12	0	1	54	2	0		0		0		0		0		0		27	30
12	1	1	20	1	0		0		0		0		0		0		27	30

Cabin ID	ID	Staff 0=No 1=Yes	Age (yr)	Sex 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6		Camp Attendance	
					Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Case 0=No 1=Yes	Onset Day	Start Date	End Date
12	2	1	22	2	0		1		0		0		0		0		27	30
13	0	1	25	2	1	29	1	29	1	29	0		1	29	0	29	27	30
13	1	1	44	1	1	32	1	31	1	32	0		1	32	0	32	27	30
13	2	1	43	2	0		1	29	0		0		0		0		27	30
13	3	1	57	2	0		0		0		0		0		0		27	30
13	4	1	59	2	1	31	1[c]	22	1	31	1	31	1	31	1	31	27	30
Off	0	1	52	2	0		1	31	0		0		0		0		29	29
Off	1	1	57	1	0		0		0		0		0		0		29	29
Off	2	1	58	2	0		0		0		0		0		0		29	29
Off	3	1	22	1	0		1[c]	26	1	26	1	26	0		0		28	30
Off	4	1	24	1	0		1		0		0		0		0		27	30
Off	5	1	19	1	0		0		0		0		0		0		28	30
Off	6	1	31	2	0		0		0		0		0		0		27	30
Unk	0	0	12	1	1	30	1	1	1	30	1	30	1	30	1	30	27	30
Unk	1	0	12	2	0		1	29	1	28	0		0		0		27	29
Unk	2	0	13	1	0		1	29	1	40	1	40	0		0		27	29
Unk	3	0	11	1	0		1		0		0		0		0		27	30
Unk	4	0	12	2	1	30	1	29	1	30	1	30	1	30	1	30	27	30
Unk[b]	5	0	10	1	1	21	1[c]	21	1	21	1	21	1	21	1	21	27	29
Unk	6	1	17	2	0		0		0		0		0		0		27	30

Cabin ID, cabin identification number; ID, cabin member identification number; Off, staff member slept off-campus; Unk, camp participant slept on campus, but his/her cabin assignment is unknown

[a]The illness onset dates were referenced to April 1, 2010.

[b]This individual was a camp index case for all of the case definitions.

[c]This individual was an index case for case definition II.

eTable 24. The Household Outbreak Data, including Age, Sex, and the Illness Onset Date[a] and Index Case Status for Case Definitions I-VI

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1 Onset Day[c]	Case Definition 1 Index Case[d] 1=Yes 0=No	Case Definition 2 Onset Day	Case Definition 2 Index Case 1=Yes 0=No	Case Definition 3 Onset Day	Case Definition 3 Index Case 1=Yes 0=No	Case Definition 4 Onset Day	Case Definition 4 Index Case 1=Yes 0=No	Case Definition 5 Onset Day	Case Definition 5 Index Case 1=Yes 0=No	Case Definition 6 Onset Day	Case Definition 6 Index Case 1=Yes 0=No
0	0	12	1	28	1	28	1	28	1			28	1		
0	1	45	1	31	1	31	1	31	1			31	1		
0	2	39	2		0		0		0				0		
0	3	10	2	12	0		0	12	0			12	0		
0	4	16	2	40	0	40	0	40	0			40	0		
1	0	12	1	28	1	29	1	29	1	29	1	28	1	28	1
1	1	49	1		0		0		0		0		0		0
1	2	48	2	31	0	31	0	31	0		0	31	0		0
1	3	13	2	36	0	36	0	36	0	36	0	36	0	36	0
2	0	11	2						1						
2	1	10	1			37	0								
2	2								0						
3	0	12	2	30	1	30	1	30	1	30	1	30	1	30	1
3	1	44	2		0	35	0	35	0	35	0		0		0
3	2	10	2		0	27	0	27	0	27	0		0		0
4	0	11	2	31	1	31	1	31	1	31	1	31	1	31	1
4	1	41	1		0		0		0		0		0		0
4	2	38	2		0		0		0		0		0		0
4	3	7	1		0		0		0		0		0		0
5	0	12	1			31	1	31	1	31	1				
5	1	45	1				0	28	0	28	0				

Page **41** of **51**

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
5	2	46	2				0		0		0				
5	3	14	2				0		0		0				
5	4	10	2				0		0		0				
6	0	12	1	30	1	29	1	30	1	30	1	30	1	30	1
6	1	47	1		0		0		0		0		0		0
6	2	46	2		0		0		0		0		0		0
6	3	16	1		0		0		0		0		0		0
6	4	15	1		0		0		0		0		0		0
7	0	12	2	29	1	29	1	29	1	29	1	29	1	29	1
7	1	52	1		0		0		0		0		0		0
7	2	48	2		0		0		0		0		0		0
7	3	15	2		0		0		0		0		0		0
8	0	11	2			34	1	34	1	34	1				
8	1	34	2				0		0		0				
8	2	34	1				0		0		0				
8	3	4	1				0		0		0				
8	4	1	1			20	0		0		0				
9	0	12	2			30	1	30	1	30	1				
9	1	31	2				0		0		0				
9	2	34	1				0		0		0				
9	3	8	1				0		0		0				
9	4	7	2				0		0		0				
10	0	12	1	31	1	31	1	31	1			31	1		
10	1	57	1		0	7	0		0				0		

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
10	2	45	2		0		0		0				0		
10	3	8	1		0	45	0		0				0		
11	0	12	2	30	1	29	1	30	1	30	1	30	1	30	1
11	1	45	2		0		0		0		0		0		0
11	2	43	1		0		0		0		0		0		0
12	0	12	1	30	1	1	1	30	1	30	1	30	1	30	1
12	1	47	1		0		0		0		0		0		0
12	2	46	2		0		0		0		0		0		0
12	3	16	2		0		0		0		0		0		0
12	4	9	2		0		0		0		0		0		0
13	0	12	2	29	1	29	1	29	1	29	1	29	1	29	1
13	1	49	2		0		0		0		0		0		0
13	2	48	1		0		0		0		0		0		0
13	3	18	1		0		0		0		0		0		0
13	4	15	1		0		0		0		0		0		0
14	0	12	2			30	1								
14	1	44	1				0								
14	2	50	1				0								
14	3	21	2				0								
14	4	9	2				0								
14	5	1	1				0								
14	6	17	1				0								
15	0	12	1			30	1	30	1	30	1				
15	1	18[e]	2				0		0		0				

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
15	2	18 [e]	1				0		0		0				
15	3	16	1				0		0		0				
15	4	9	2				0		0		0				
16	0	12	2	29	1	29	1	29	1	30	1	29	1	29	1
16	1	56	1		0		0		0		0		0		0
16	2	43	2		0		0		0		0		0		0
16	3	14	2		0	23	0		0		0		0		0
17	0	11	2	30	1	30	1	30	1	30	1	30	1	30	1
17	1	54	1		0		0		0		0		0		0
17	2	59	2		0		0		0		0		0		0
17	3	15	1		0		0		0		0		0		0
18	0	12	2	30	1	30	1	30	1	30	1	30	1	30	1
18	1	46	1		0		0		0		0		0		0
18	2	46	2		0		0		0		0		0		0
18	3	13	1		0		0		0		0		0		0
19	0	12	1	29	1	29	1	30	1	30	1	29	1	29	1
19	1	7	2	37	0	37	0	37	0	37	0	37	0	37	0
19	2	51	1		0		0		0		0		0		0
19	3	46	2		0	45	0		0		0		0		0
20	0	11	1	31	1		1	31	1	31	1	31	1	31	1
20	1	14	2	35	0	35	0	35	0	35	0	35	0	35	0
20	2	41	2	35	0	35	0	35	0		0	35	0		0
20	3	44	1		0	33	0		0		0		0		0
21	0	12	1	29	1	29	1	29	1	29	1	29	1	29	1

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
21	1	39	1		0		0		0		0		0		0
21	2	67	2		0		0		0		0		0		0
21	3	48	2		0		0		0		0		0		0
21	4	13	1		0		0		0		0		0		0
22	0	11	2	29	1	31	1	31	1	31	1	29	1	29	1
22	1	44	2	35	0	35	0	35	0	35	0	35	0	35	0
22	2	42	1		0		0		0		0		0		0
22	3	22	1		0		0		0		0		0		0
22	4	15	1		0		0		0		0		0		0
23	0	12	1	31	1	31	1	31	1			31	1		
23	1	56	2		0		0		0				0		
23	2	62	1		0		0		0				0		
23	3	14	1	32	0	32	0	32	0			32	0		
24	0	12	2	29	1	29	1	29	1			29	1		
24	1	47	2		0		0		0				0		
24	2	47	1		0		0		0				0		
24	3	16	2		0		0		0				0		
25	0	12	2	29	1	29	1	29	1	29	1	29	1	29	1
25	1	36	2		0		0		0		0		0		0
25	2	41	1		0		0		0		0		0		0
25	3	8	1		0		0		0		0		0		0
25	4	38	1		0		0		0		0		0		0
25	5	10	2	29	0	29	0	29	0			29	0		
26	0	13	1			29	1	40	1	40	1				

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
26	1	52	1				0		0		0				
26	2	44	2			32	0	32	0		0				
26	3	18	1				0		0		0				
26	4	9	2			28	0	28	0	28	0				
27	0	12	2			32	1	32	1	32	1				
27	1	39	1				0		0		0				
27	2	37	2				0		0		0				
27	3	15	1				0		0		0				
27	4	2	1				0		0		0				
28	0	12	1	30	1	30	1	33	1	33	1	30	1	30	1
28	1	41	2		0		0		0		0		0		0
28	2	15	2		0		0		0		0		0		0
29	0	12	1	29	1	29	1	29	1	29	1	29	1	29	1
29	1	36	2		0		0		0		0		0		0
29	2	47	1		0		0		0		0		0		0
29	3	4	2		0		0		0		0		0		0
29	4	17[f]			0		0		0		0		0		0
30	0	11	2	32	1	32	1	32	1	32	1	32	1	32	1
30	1	45	1		0		0		0		0		0		0
30	2	44	2		0	47	0		0		0		0		0
30	4	16	1		0	47	0		0		0		0		0
30	5	18		45	0	45	0	45	0		0		0		0
31	0	11	1						1						
31	1	18[e]	2						0						

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
31	2	18[e]	1				0								
32	0	12	1	29	1	29	1	29	1	29	1	29	1	29	1
32	1	50	2		0		0		0		0		0		0
32	2	50	1	29	0	29	0	29	0	29	0	29	0	29	0
32	3	7	1	30	0	30	0	30	0	30	0	30	0	30	0
32	4	10	2	33	0	33	0	33	0	33	0	33	0	33	0
32	5	14	2		0		0		0		0		0		0
33	0	12	1	29	1	29	1	29	1	29	1	29	1	29	1
33	1	34	2		0	35	0		0		0		0		0
33	2	41	1		0		0		0		0		0		0
33	3	54	2		0		0		0		0		0		0
33	4	67	1		0		0		0		0		0		0
33	5	9			0	36	0	36	0		0		0		0
33	6	7			0		0		0		0		0		0
33	7	0.5	1		0	36	0	36	0	36	0		0		0
33	8	31	2		0	35	0		0		0		0		0
34	0	12	1	29	1	28	1	29	1	29	1	29	1	29	1
34	1	49	2		0		0		0		0		0		0
34	2	48	1		0		0		0		0		0		0
34	3	13	2		0		0		0		0		0		0
35	0	12	2	30	1		1	30	1	30	1	30	1	30	1
35	1	43	2		0		0		0		0		0		0
35	2	43	1		0		0		0		0		0		0
35	3	14	1		0		0		0		0		0		0

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
36	0	12	1	30	1	30	1	30	1	30	1	30	1	30	1
36	1	47	1		0		0		0		0		0		0
36	2	48	2		0		0		0		0		0		
37	0	12	2	23	1	25	1	25	1	25	1	23	1	23	1
37	1	40	2		0		0		0		0		0		0
37	2	55	1		0		0	58	0	58	0		0		0
37	3	39			0		0		0		0		0		0
37	4	17			0		0		0		0		0		0
37	5	14	1		0		0		0		0		0		0
37	6	13	2		0		0		0		0		0		0
38	0	12	2			44	1								
38	1	47	1				0								
38	2	43	2				0								
38	3	15	1				0								
39	0	11	2			31	1								
39	1	36	2				0								
39	2	39	1				0								
39	3	9	1				0								
39	4	60	1				0								
39	5	54	2				0								
40	0	11	1	28	1	28	1	28	1	30	1	28	1	28	1
40	1	40	1		0		0		0		0		0		0
40	2	40	2		0		0		0		0		0		0
40	3	10	2		0		0		0		0		0		0

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
40	4	6	1		0	19	0	19	0		0		0		0
41	0	12	1	29	1	29	1	29	1	29	1	29	1	29	1
41	1	57	2		0		0		0		0		0		0
41	2	57	1		0		0		0		0		0		0
42	0	25	2	29	1	29	1	29	1			29	1		
42	1	25			0		0		0				0		
43	0	44	1	32	1	31	1	32	1			32	1		
43	1	74	1		0		0		0				0		
43	2	70	2		0		0		0				0		
44	0	43	2			29	1								
44	1	12					0								
44	2	10				35	0								
44	3	42				17	0								
45	0	59	2	31	1	22	1	31	1	31	1	31	1	31	1
45	1	62			0		0		0		0		0		0
46	0	22	1			26	1	26	1	26	1				
46	1	50	2				0		0		0				
46	2	50	1				0		0		0				
47	0	20	2	25	1	25	1	30	1	30	1	25	1	25	1
47	1	58	1		0		0		0		0		0		0
47	2	51	2		0		0		0		0		0		0
47	3	18	1		0		0		0		0		0		0
48	0	18	2	31	1	31	1	31	1						
48	1	38	2		0	35	0		0						

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
48	2	14	1		0	29	0		0						
48	3				0		0		0						
49	0	16	1			19	1								
49	1	47	1				0								
49	2	38	2				0								
49	3	15	1				0								
49	4	13	2				0								
49	5	11	1				0								
50	0	16	2	31	1	30	1	31	1			31	1		
50	1	40	2		0		0		0				0		
50	2	9	1		0		0		0				0		
50	3	39	1		0		0		0				0		
51	0	17	2	29	1	29	1	29	1						
51	1	50	1		0		0		0						
51	2	48	2		0		0		0						
51	3	14	1		0		0		0						
51	4	9	2		0		0		0						
51	5	45	2		0		0		0						
52	0	15	2			20	1								
52	1	43	2			18	0								
52	2	44	1				0								
52	3	17	1				0								
52	4	14	1				0								
52	5	8	1				0								

HHID	ID	Age[b] (yr)	Sex[b] 1=Male 2=Female	Case Definition 1		Case Definition 2		Case Definition 3		Case Definition 4		Case Definition 5		Case Definition 6	
				Onset Day[c]	Index Case[d] 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No	Onset Day	Index Case 1=Yes 0=No
53	0	15	2	31	1	31	1	31	1	31	1	31	1	31	1
53	1	47	1		0		0		0		0		0		0
53	2	43	2		0	14	0		0		0		0		0
53	3	11	1		0	34	0	34	0		0		0		0
54	0	12	2	29	1			29	1	30	1	30	1	30	1
54	1	48	1		0				0		0		0		0
54	2	45	2		0				0		0		0		0
54	3	9	2		0				0		0		0		0
55	0	12	1	31	1			31	1	31	1	31	1	31	1
55	1	44	1		0				0		0		0		0
55	2	43	2		0				0		0		0		0
55	3	15	1		0				0		0		0		0
55	4	8	1		0				0		0		0		0

HHID, household identification number; ID, household member identification number
[a]The illness onset dates were referenced to April 1, 2010.
[b]A blank cell indicates that the value for this covariate was missing for this individual.
[c]If the Index Case column contains a 1 or 0, a blank cell indicates that the individual was susceptible for the entire household outbreak period.
[d]A blank cell indicates that this individual was a member of a household which was excluded from the analysis for this case definition.
[e]The age of this individual was not reported, but he/she was determined to be an adult (age set equal to 18) based upon the reported relationship and age structure of his/her household.
[f]The age of this individual was not reported, but he/she was determined to be an child (age set equal to 17) based upon the reported relationship and age structure of his/her household.