

Mask Research Analysis

Jessica Maslan, BSN, RN



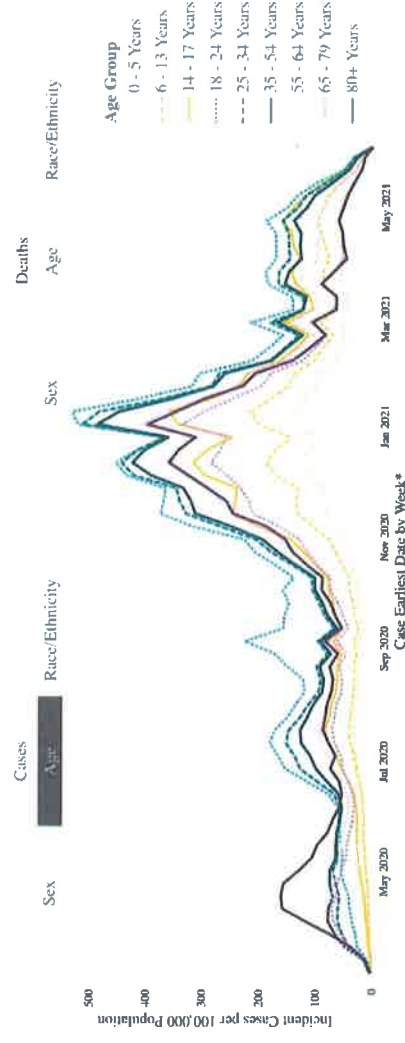
Why are children forced to wear masks at school?
It is due to unnecessary fear of asymptomatic spread of SARS-CoV-2. Facts:

1. Rates of Covid cases are low in children



COVID-19 Weekly Cases per 100,000
Population by Age Group, United States

March 1, 2020 - June 3, 2021



Percentage of correctly identified cases - 55% (1992)

¹Case Eastern Dairies is the conflict of the *Union of dairy-relevant by others* or *spies* (more fully than said), because for a *Union of dairy-relevant by others* in the *Public Interest* in CFC.

- **Cause-Effect Data** is the content of the **causal data** (related to allness or presence) collected and stored in a database for analysis by CD.

Submitted: 12/15/2014; Accepted: 01/20/2015; Published: 02/02/2015

100

100



2. Transmission among or from students is uncommon.

The California Department of Public Health themselves observed this!

- Australian study when masks were not used at the time showing 0.3% rate of child-to-child transmission, 1% for child-to-adult transmission, 1.5% for adult-to-child transmission, and 4.4% for adult-to-adult transmission.

www.cdph.ca.gov Found in "Safe Schools For All Plan"

3. Asymptomatic transmission has never been the driver of respiratory virus outbreaks.

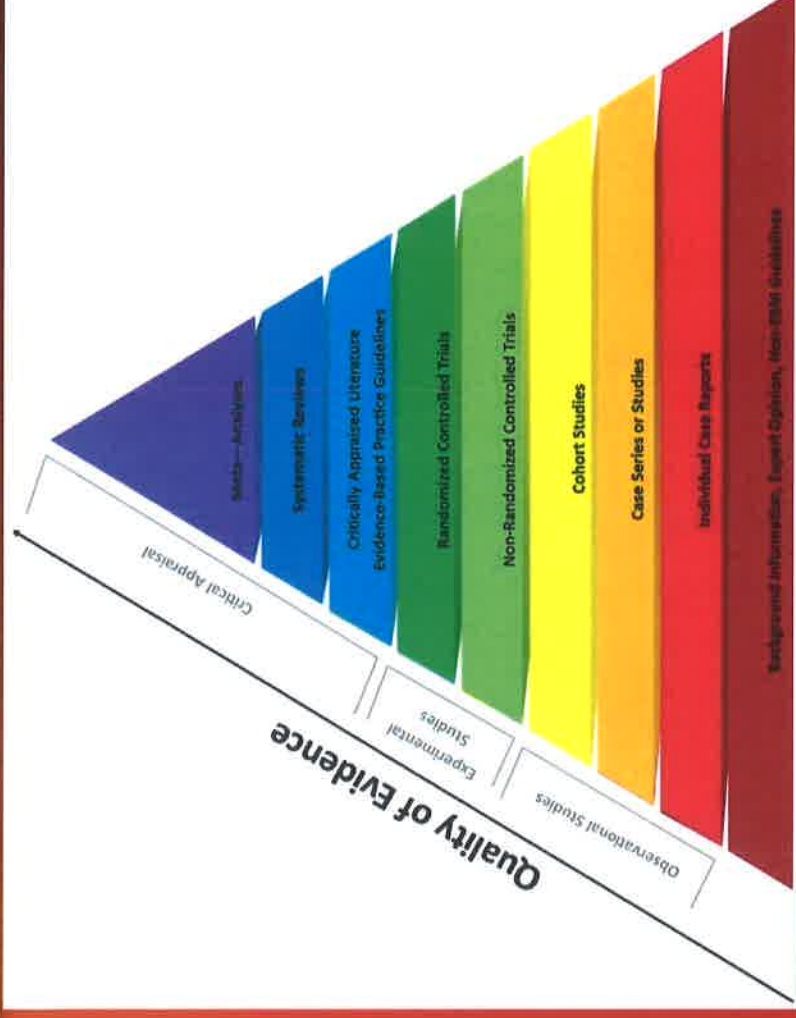
- A large study of nearly 10 million residents of Wuhan, China showed the asymptomatic positive rates in Covid were only 0.321%. Of the 300 asymptomatic cases found, NONE of their close contacts tested positive.

https://www.nature.com/articles/s41467-020-19802-w?fbclid=IwAR3aRvcG9KJ3vtL_b00kN-kp-0kCJhc2JCfArU4pFPXZgZW0GA-cYVWQ-Y



Quality of Evidence Matters

Nearly all the scientific studies referenced on the CDC website regarding the effectiveness of masks were low-level cohort studies.



The "Gold Standard" in research is a randomized controlled trial (RCT). The decades of quality research on masks PRIOR to Covid has been ignored.

Masks are NOT effective

CDC Meta-Analysis:

“In our systematic review, we identified 10 RCTs that reported estimates of the effectiveness of face masks in reducing laboratory-confirmed influenza virus infections in the community from literature published during 1946-July 27, 2018. In pooled analysis, we found no significant reduction in influenza transmission with the use of face masks.”

https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article

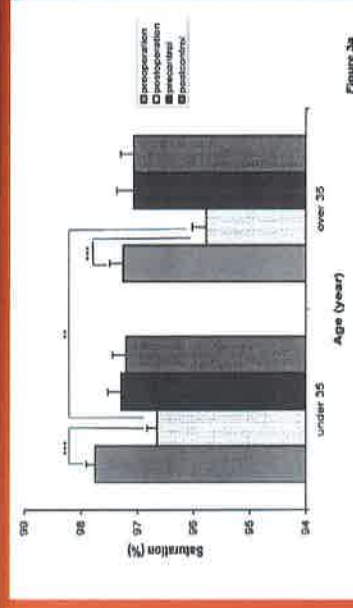
Association of American Physicians and Surgeons (AAPS):

“A cloth mask or face covering does very little to prevent the emission or inhalation of small particles. All the cloth masks and materials had near zero efficiency at 0.3 μm , a particle size that easily penetrates into the lung (SARS-CoV-2 is 0.125 μm).”

<https://aapsonline.org/mask-facts/>



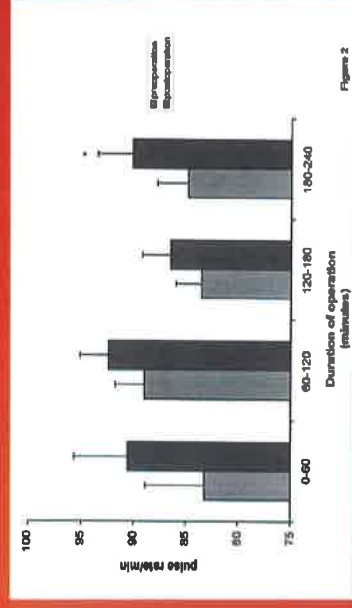
Masks Pose Risks to the Healthy



They decrease oxygen levels

“Pulse rates of the surgeon’s increase and SpO2 decrease after the FIRST HOUR. This early change in SpO2 may be either due to the facial mask or the operational stress. A very small decrease in saturation at this level reflects a large decrease in PaO2.”

School kids are wearing masks for much longer than even this study shows!



They raise heart rate

<https://www.semanticscholar.org/paper/Preliminary-report-on-surgical-mask-induced-during-Belder-Buyukkokak/0b5fee031ea82f3ac03c7c5b832c6b6040280a>

CDC sites only ONE child mask safety study

- Low quality cohort study
- Only had 25 children over the age of two
- Only measured respiratory parameters for 30 minutes with a mask, then 12 minutes walking with a mask

https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html#anchor_1619457210222

This is shameful. We should demand better research to justify forcing our children to wear masks all day.

Physiological Burdens of Masks

- Headaches, fatigue, shortness of breath
- Increased acidity and toxicity
- ↑ stress hormones and impair immunity
- Moisture retention, reuse of cloth masks and poor filtration may result in ↑ risk of infection.
- Increased incidence of skin reactions and infections under masks.
- Cloth masks ↑ aerosolization of viral particles, which is counterproductive since smaller particles are airborne longer than large droplets.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4420971/>

<https://www.technocracy.news/blaylock-face-masks-pose-serious-risks-to-the-healthy>



Psychological Burdens of Masks

- Can interfere with task performances and reduce work efficiency.
- The very process of learning is facilitated by emotions, and masks block emotional signaling.
- A major threat to a child's development which is highly dependent on the emotional connection with others.
- Promotes the idea that the mask can prevent or treat a disease, which is an illegal deceptive practice.



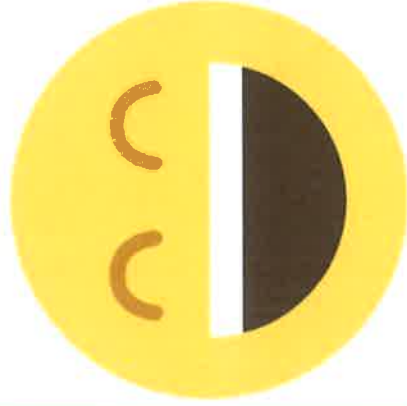
<https://americafrontlinedoctors.org/files/review-of-scientific-reports-of-harms-caused-by-face-masks-up-to-february-2021/>

What message are kids getting?

- That people are pathogens
- Their breath is potentially poisonous
- The world is a terrifying and dangerous place
- That their very presence in the world is a health threat to everyone

Mask Risks Outweigh Benefits

The California Department of Public Health should be held accountable for enforcing protocols that are not based on quality evidence. Join our legal fight!



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*Be on the
right side of
history,
stand up for
our kids!*



Marysville Joint Unified School District
1919 B Street, Marysville, CA 95901

PUBLIC COMMENT

April 27, 2021

Open session begins at 5:30pm

Name: Jessica Maslan

Phone Number: 530-329-3125

E-mail Address: jessicamaslan@gmail.com

Topic: As a follow up from my public comment on 4/27/21 explaining how mandating masks without providing informed consent is illegal, I would like to educate the board and community about the research available regarding continuous mask wearing. I have many concerns regarding the safety and efficacy of our children being forced to wear masks for multiple hours a day, multiple days a week. We are not "following the science", as touted by many people in the community. I also ask that the mask policy currently in place for students and staff be added to the next board meeting agenda for open discussion.

Sincerely,
Jessica Maslan, BSN, RN

If you would like to participate by video instead of phone during the public comment section, you can do so by joining the Zoom session using this link:

<https://mjusd.zoom.us/j/92928423075?pwd=djVZTXo5bDd1dk9lcjNjWnRvd0lNUT09>

To join via phone, please call 1-669-900-9128. The meeting ID is 929 2842 3075.

ARTICLE



<https://doi.org/10.1038/s41467-020-19802-w>

OPEN

Post-lockdown SARS-CoV-2 nucleic acid screening in nearly ten million residents of Wuhan, China

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Chuanzhu Lv¹⁰✉, Fujian Song¹⁰✉, Xiaoxv Yin¹⁰✉ & Zuxun Lu¹⁰✉

Stringent COVID-19 control measures were imposed in Wuhan between January 23 and April 8, 2020. Estimates of the prevalence of infection following the release of restrictions could inform post-lockdown pandemic management. Here, we describe a city-wide SARS-CoV-2 nucleic acid screening programme between May 14 and June 1, 2020 in Wuhan. All city residents aged six years or older were eligible and 9,899,828 (92.9%) participated. No new symptomatic cases and 300 asymptomatic cases (detection rate 0.303/10,000, 95% CI 0.270–0.339/10,000) were identified. There were no positive tests amongst 1,174 close contacts of asymptomatic cases. 107 of 34,424 previously recovered COVID-19 patients tested positive again (re-positive rate 0.31%, 95% CI 0.423–0.574%). The prevalence of SARS-CoV-2 infection in Wuhan was therefore very low five to eight weeks after the end of lockdown.

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The Coronavirus Disease 2019 (COVID-19) was first reported in December 2019, and was classified as a pandemic by the World Health Organization on March 11, 2020¹. Following strict lockdown measures, the COVID-19 epidemic was generally under control in China, and the whole country has progressed into a post-lockdown phase. In this phase, countries face new problems and challenges, including how to accurately assess the post-lockdown risk of the COVID-19 epidemic, how to avoid new waves of COVID-19 outbreaks, and how to facilitate the resumption of economy and normal social life. As the city most severely affected by COVID-19 in China, Wuhan had been under lockdown measures from January 23 until April 8, 2020. During the first 2 months after city's reopening, there were only a few sporadic COVID-19 cases in Wuhan (six newly confirmed cases from April 8 to May 10, 2020²). However, there was still concern about the risk of COVID-19 in Wuhan, which seriously affected the resumption of industrial production and social services, and hampered the normal lives of residents. In order to ascertain the current status of the COVID-19 epidemic, the city government of Wuhan carried out a comprehensive citywide nucleic acid screening of SARS-CoV-2 infection from May 14, 2020 to June 1, 2020.

The citywide screening of SARS-CoV-2 infection in Wuhan is a mass screening programme in post-lockdown settings, and provided invaluable experiences or lessons with international relevance as more countries and cities around the world entering the post-lockdown phase. In this study, we report the organisation process, detailed technical methods used, and results of this citywide nucleic acid screening.

Results

There were 10,652,513 eligible people aged ≥ 6 years in Wuhan (94.1% of the total population). The nucleic acid screening was completed in 19 days (from May 14, 2020 to Jun 1, 2020), and tested a total of 9,899,828 persons from the 10,652,513 eligible people (participation rate, 92.9%). Of the 9899,828 participants, 9,865,404 had no previous diagnosis of COVID-19, and 34,424 were recovered COVID-19 patients.

The screening of the 9,865,404 participants without a history of COVID-19 found no newly confirmed COVID-19 cases, and identified 300 asymptomatic positive cases with a detection rate of 0.303 (95% CI 0.270–0.339)/10,000. The median age-stratified Ct-values of the asymptomatic cases were shown in Supplementary Table 1. Of the 300 asymptomatic positive cases, two cases came from one family and another two were from another family. There were no previously confirmed COVID-19 patients in these two families. A total of 1174 close contacts of the asymptomatic positive cases were traced, and they all tested negative for the COVID-19. There were 34,424 previously recovered COVID-19 cases who participated in the screening. Of the 34,424 participants with a history of COVID-19, 107 tested positive again, giving a repositive rate of 0.310% (95% CI 0.423–0.574%).

Virus cultures were negative for all asymptomatic positive and repositive cases, indicating no “viable virus” in positive cases detected in this study.

All asymptomatic positive cases, repositive cases and their close contacts were isolated for at least 2 weeks until the results of nucleic acid testing were negative. None of detected positive cases or their close contacts became symptomatic or newly confirmed with COVID-19 during the isolation period. In this screening programme, single and mixed testing was performed, respectively, for 76.7% and 23.3% of the collected samples. The asymptomatic positive rates were 0.321 (95% CI 0.282–0.364)/10,000 and 0.243 (95% CI 0.183–0.315)/10,000, respectively.

The 300 asymptomatic positive persons aged from 10 to 89 years, included 132 males (0.256/10,000) and 168 females (0.355/10,000). The asymptomatic positive rate was the lowest in children or adolescents aged 17 and below (0.124/10,000), and the highest among the elderly aged 60 years and above (0.442/10,000) (Table 1). The asymptomatic positive rate in females (0.355/10,000) was higher than that in males (0.256/10,000).

The asymptomatic positive cases were mainly domestic and unemployed residents (24.3%), retired older adults (21.3%), and public service workers (11.7%) (Fig. 1).

The asymptomatic positive rate in urban districts was on average 0.456/10,000, ranging from 0.317/10,000 in Hongshan to 0.807/10,000 in Wuchang district. A lower rate of asymptomatic positive cases was found in suburban districts (0.132/10,000), ranging from 0.047/10,000 in Xinzhou to 0.237/10,000 in Jiangnan district (Fig. 2).

Among the 7280 residential communities in Wuhan, asymptomatic positive cases were identified in 265 (3.6%) communities (only one case detected in 246 communities), while no asymptomatic positive cases were found in other 96.4% communities.

Testing of antibody against SARS-CoV-2 virus was positive IgG (+) in 190 of the 300 asymptomatic cases, indicating that 63.3% (95% CI 57.6–68.8%) of asymptomatic positive cases were actually infected. The proportion of asymptomatic positive cases with both IgM (–) and IgG (–) was 36.7% (95% CI: 31.2–42.4%; $n = 110$), indicating the possibility of infection window or false positive results of the nucleic acid testing (Table 2).

Higher detection rates of asymptomatic infected persons were in Wuchang, Qingshan and Qiaokou districts, and the prevalence of previously confirmed COVID-19 cases were 68.243/10,000, 53.767/10,000, and 100.047/10,000, respectively, in the three districts. Figure 3 shows that districts with a high detection rate of asymptomatic positive persons generally had a high prevalence of confirmed COVID-19 cases ($r_s = 0.729$, $P = 0.002$).

Discussion

The citywide nucleic acid screening of SARS-CoV-2 infection in Wuhan recruited nearly 10 million people, and found no newly confirmed cases with COVID-19. The detection rate of asymptomatic positive cases was very low, and there was no evidence of transmission from asymptomatic positive persons to traced close contacts. There were no asymptomatic positive cases in 96.4% of the residential communities.

Previous studies have shown that asymptomatic individuals infected with SARS-CoV-2 virus were infectious³, and might subsequently become symptomatic⁴. Compared with symptomatic patients, asymptomatic infected persons generally have low quantity of viral loads and a short duration of viral shedding, which decrease the transmission risk of SARS-CoV-2⁵. In the present study, virus culture was carried out on samples from asymptomatic positive cases, and found no viable SARS-CoV-2 virus. All close contacts of the asymptomatic positive cases tested negative, indicating that the asymptomatic positive cases detected in this study were unlikely to be infectious.

There was a low repositive rate in recovered COVID-19 patients in Wuhan. Results of virus culturing and contact tracing found no evidence that repositive cases in recovered COVID-19 patients were infectious, which is consistent with evidence from other sources. A study in Korea found no confirmed COVID-19 cases by monitoring 790 contacts of 285 repositive cases⁶. The official surveillance of recovered COVID-19 patients in China also revealed no evidence on the infectiousness of repositive cases⁷. Considering the strong force of infection of COVID-19^{8–10}, it is expected that the number of confirmed cases is associated with the risk of being infected in communities. We

Table 1 Characteristics of asymptomatic positive individuals.

	Total (%)	Asymptomatic positive persons (%)	Detection rate per 10,000 (95% CI)	P value
Total	9,899,828 (100.0)	300 (100.0)	0.303 (0.270–0.339)	
Sex				
Male	5,162,960 (52.2)	132 (44.0)	0.256 (0.214–0.303)	0.005
Female	4,736,868 (47.8)	168 (56.0)	0.355 (0.303–0.413)	
Age (years old)				
≤17	969,014 (9.8)	12 (4.0)	0.124 (0.064–0.216)	<0.001
18–44	4,448,230 (44.9)	104 (34.7)	0.234 (0.191–0.283)	
45–59	2,492,943 (25.2)	96 (32.0)	0.385 (0.312–0.470)	
≥60	1,989,641 (20.1)	88 (29.3)	0.442 (0.355–0.545)	
Administrative Districts in Wuhan				
Wuchang	904,636 (9.1)	73 (24.3)	0.807 (0.633–1.015)	<0.001
Qingshan	414,312 (4.2)	23 (7.7)	0.555 (0.352–0.833)	
Qiaokou	583,440 (5.9)	32 (10.7)	0.548 (0.375–0.774)	
Hanyang	717,429 (7.2)	29 (9.7)	0.404 (0.271–0.581)	
Jiangnan	524,224 (5.3)	19 (6.3)	0.362 (0.218–0.566)	
Hongshan	1,103,079 (11.1)	35 (11.7)	0.317 (0.221–0.441)	
East Lake High-tech Development Area	782,987 (7.9)	19 (6.3)	0.243 (0.146–0.379)	
Jiangan	800,440 (8.1)	19 (6.3)	0.237 (0.143–0.371)	
Caidian	503,595 (5.1)	11 (3.7)	0.218 (0.109–0.391)	
Jiangxia	671,248 (6.8)	14 (4.7)	0.209 (0.114–0.350)	
Huangpi	979,920 (9.9)	14 (4.7)	0.143 (0.078–0.240)	
Hannan	417,022 (4.2)	4 (1.3)	0.096 (0.026–0.246)	
Dongxihu	777,204 (7.9)	5 (1.7)	0.064 (0.021–0.150)	
Xinzhou	634,408 (6.4)	3 (1.0)	0.047 (0.010–0.138)	
East Lake Scenic Area of Wuhan	85,884 (0.9)	0 (0.0)	0.000 (0.000–0.430)	

χ^2 test was used to assess the association between the detection rate of asymptomatic cases increased and sex and age. Urban districts of Wuhan includes Wuchang, Qingshan, Qiaokou, Hanyang, Jiangnan, Jiangnan, and Hongshan; Suburban districts of Wuhan includes Hannan, Caidian, Dongxihu, Xinzhou, Jiangxia, Huangpi, East Lake High-tech Development Area, and East Lake Scenic Area of Wuhan.

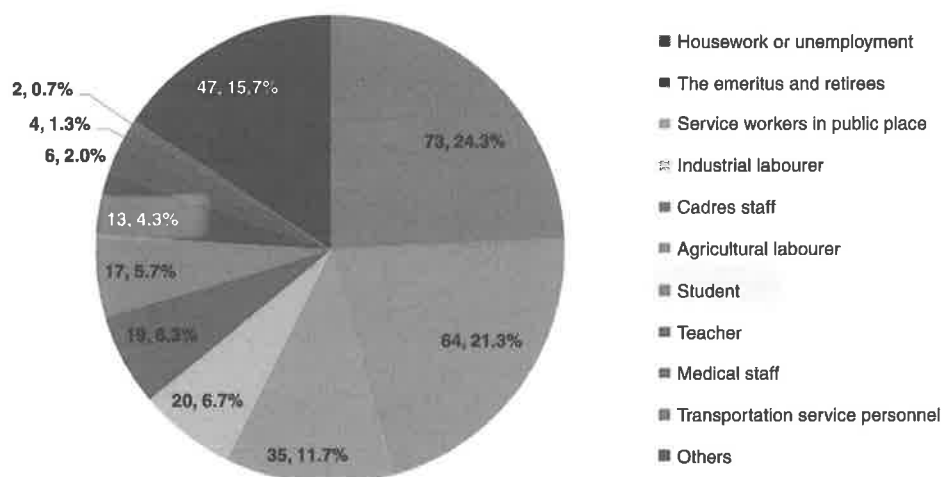


Fig. 1 The occupation distribution of asymptomatic positive cases (%). Note: Others included the self-employed, military personnel, and so on. (Source data are provided as a Source Data file.).

found that asymptomatic positive rates in different districts of Wuhan were correlated with the prevalence of previously confirmed cases. This is in line with the temporal and spatial evolution (especially the long-tailed characteristic) of infectious diseases¹¹.

Existing laboratory virus culture and genetic studies^{9,10} showed that the virulence of SARS-CoV-2 virus may be weakening over time, and the newly infected persons were more likely to be asymptomatic and with a lower viral load than earlier infected cases. With the centralized isolation and treatment of all COVID-19 cases during the lockdown period in Wuhan, the risk of residents being infected in the community has been greatly reduced. When susceptible residents are exposed to a low dose of virus, they may tend to be asymptomatic as a result of their own

immunity. Serological antibody testing in the current study found that at least 63% of asymptomatic positive cases were actually infected with SARS-CoV-2 virus. Nonetheless, it is too early to be complacent, because of the existence of asymptomatic positive cases and high level of susceptibility in residents in Wuhan. Public health measures for the prevention and control of COVID-19 epidemic, including wearing masks, keeping safe social distancing in Wuhan should be sustained. Especially, vulnerable populations with weakened immunity or co-morbidities, or both, should continue to be appropriately shielded.

Findings from this study show that COVID-19 was well controlled in Wuhan at the time of the screening programme. After two months since the screening programme (by August 9, 2020), there were no newly confirmed COVID-19 cases in Wuhan.

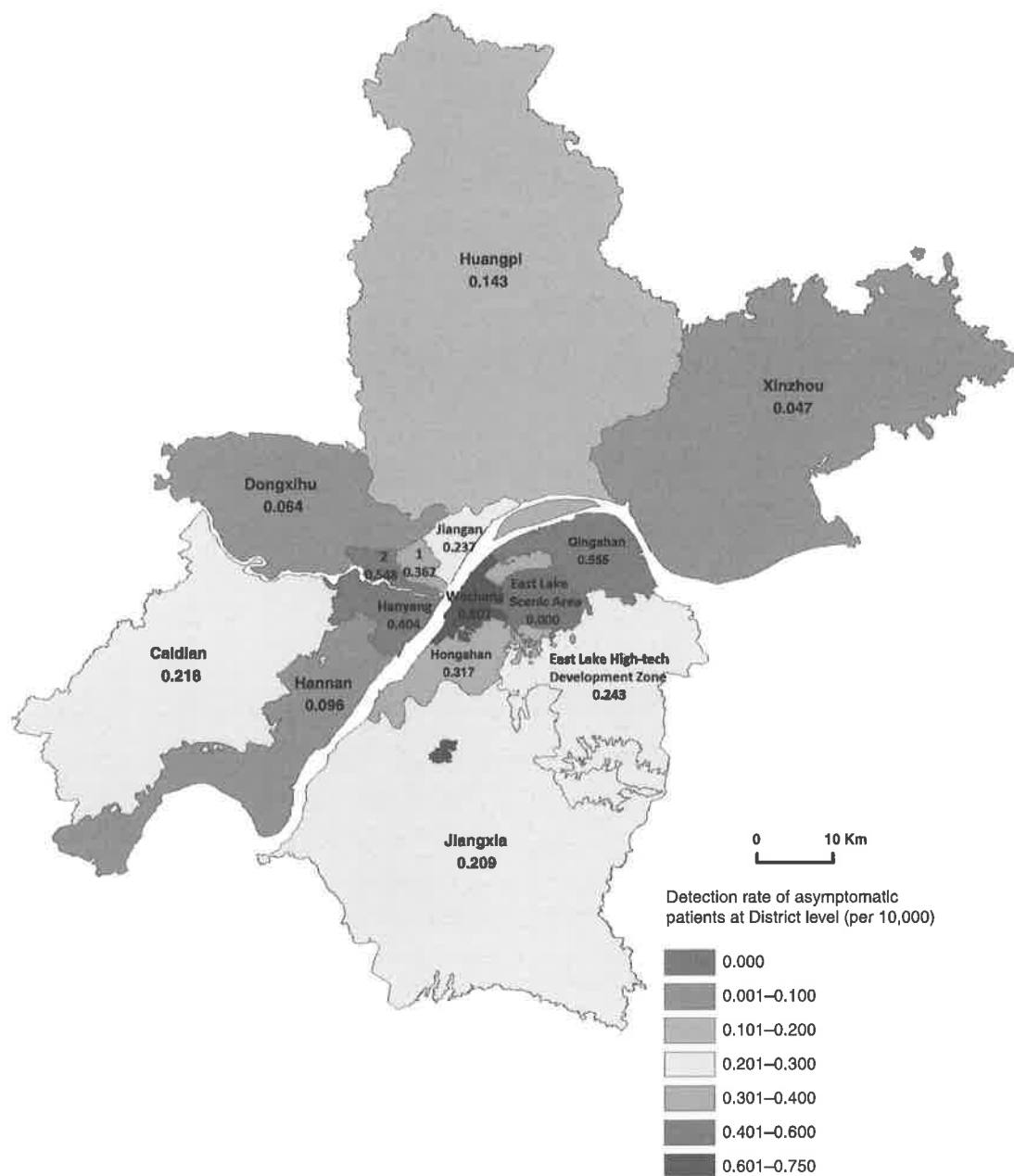


Fig. 2 The geographic distribution of the detection rate of asymptomatic positive cases. Note: 1 represents Jiangnan district; 2 represents Qiaokou district. (Source data are provided as a Source Data file.).

Table 2 Results of the detection of antibody in 300 asymptomatic positive persons.

IgM	IgG	Asymptomatic positive persons	% (95% CI)
Results			
–	+	161	53.7 (47.8–59.4)
–	–	110	36.7 (31.2–42.4)
+	+	29	9.7 (6.6–13.6)
+	–	0	0.0 (0.0–1.2)

“–” indicates negative; “+” indicates positive.

Further testing of SARS-CoV-2 in samples collected from market environment settings in Wuhan were conducted, and found no positive results after checking a total of 52,312 samples from 1795 market setting during June 13 to July 2, 2020¹².

This study has several limitations that need to be discussed. First, this was a cross-sectional screening programme, and we are unable to assess the changes over time in asymptomatic positive and reoperative results. Second, although a positive result of nucleic acid testing reveals the existence of the viral RNAs, some false negative results were likely to have occurred, in particular due to the relatively low level of virus loads in asymptomatic infected individuals, inadequate collection of samples, and limited accuracy of the testing technology¹³. Although the screening programme provided no direct evidence on the sensitivity and specificity of the testing method used, a meta-analysis reported a

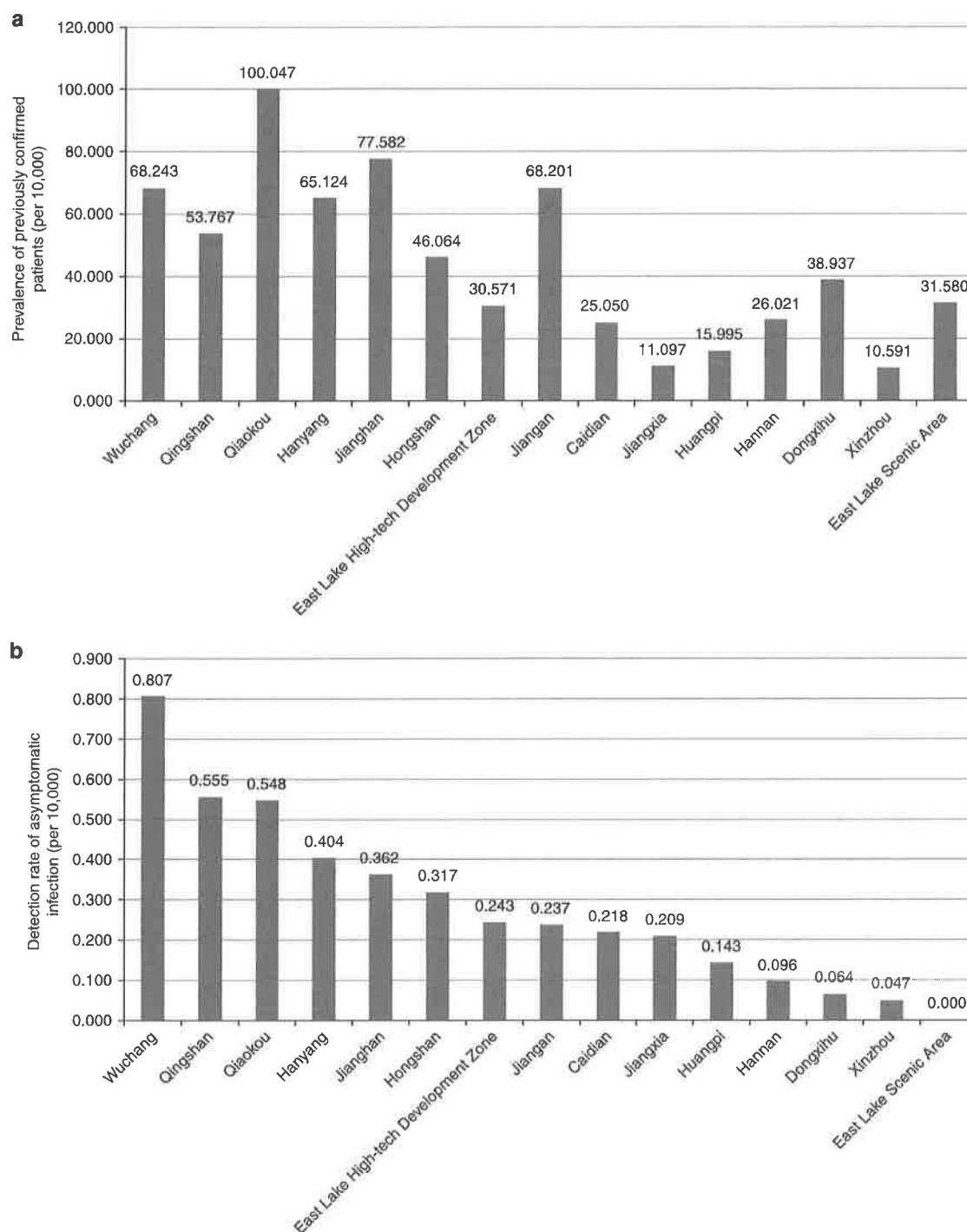


Fig. 3 The prevalence of previously confirmed patients and the detection rate of asymptomatic positive cases of COVID-19 in each district in Wuhan. **a** The prevalence of previously confirmed patients of COVID-19 in each district in Wuhan. **b** The detection rate of asymptomatic positive cases of COVID-19 in each district in Wuhan. (Source data are provided as a Source Data file.).

pooled sensitivity of 73% (95% CI 68–78%) for nasopharyngeal and throat swab testing of COVID-19¹⁴. Testing kits used in the screening programme were publicly purchased by the government and these kits have been widely used in China and other countries. Multiple measures were taken to possibly minimise false negative results in the screening programme. For example, standard training was provided to health workers for sample collection to ensure the sample quality. The experiment procedures, including specimen collection, extraction, PCR, were according to

official guidelines (Supplementary Note 1). For the real-time RT-PCR assay, two target genes were simultaneously tested. Even so, false negative results remained possible, particularly in any mass screening programmes. However, even if test sensitivity was as low as 50%, then the actual prevalence would be twice as high as reported in this study, but would still be very low. Around 7.1% of eligible residents did not participate in the citywide nucleic acid screening and the screening programme did not collect detailed data on reasons for nonparticipation, which is a limitation of this

study. Although there were no official statistics, a large number of migrant workers and university students left Wuhan before the lockdown, joining their families in other cities or provinces for traditional Chinese New Year. Therefore, it is likely that most nonparticipants were not in Wuhan at the time of the screening. The main objective of the screening programme was to assess the risk of COVID-19 epidemic in residents who were actually living in the post-lockdown Wuhan. Therefore, the estimated positive rates are unlikely to be materially influenced by nonparticipation of residents who were not in Wuhan or some residents who did not participate in the screening for other reasons. Moreover, people who left Wuhan were the target population for monitoring in other provinces and cities and were required to take nucleic acid testing. Although there was no official statistics showing the positive rate of nucleic acid testing in this population, there was no report that shown a higher positive rate of nucleic acid testing than our findings.

In summary, the detection rate of asymptomatic positive cases in the post-lockdown Wuhan was very low (0.303/10,000), and there was no evidence that the identified asymptomatic positive cases were infectious. These findings enabled decision makers to adjust prevention and control strategies in the post-lockdown period. Further studies are required to fully evaluate the impacts and cost-effectiveness of the citywide screening of SARS-CoV-2 infections on population's health, health behaviours, economy, and society.

Methods

Study population and ethical approvals. Wuhan has about 11 million residents in total, with seven urban and eight suburban districts. Residents are living in 7280 residential communities (or residential enclosures, “xiao-qu” in Chinese), and each residential community could be physically isolated from other communities for preventing transmission of COVID-19.

The screening programme recruited residents (including recovered COVID-19 patients) currently living in Wuhan who were aged ≥ 6 years (5,162,960 males, 52.2%). All participants provided written or verbal informed consent after reading a statement that explained the purpose of the testing. For participants who aged 6–17 years old, consent was obtained from their parents or guardians. The study protocol for an evaluation of the programme based on anonymized screening data was approved by the Ethics Committee of the Tongji Medical College Institutional Review Board, Huazhong University of Science and Technology, Wuhan, China (No. IROG0003571).

Organizational guarantee and community mobilization. A citywide nucleic acid screening group was formed, with specialized task teams contributing to comprehensive coordination, technical guidance, quality control, participation invitation, information management, communication, and supervision of the screening. The city government invested 900 million yuan (RMB) in the testing programme. From 14 May to 1 June 2020, in the peak time, up to 2907 sample collection sites were functioning at the same time in Wuhan. Each sample collection site had an assigned sample collection group, including several health professionals (staffed according to the number of communities' residents), 2–4 community managers, 1–2 police officers, and 1–2 inspectors. The sampling sites were set up based on the number and accessibility of local residents. Local community workers were responsible for a safe and orderly sampling process to minimise the waiting time. In addition, mobile sampling teams were formed by primary health care professionals and volunteers to conduct door-to-door sampling for residents who had physical difficulties or were unable to walk.

About 50,000 health professionals (mainly doctors and nurses from community health centers) and more than 280,000 person-times of community workers and volunteers contributed to sample collection, transport of equipment and samples collected, arrangement of participation process, and maintaining order of sampling sites. Public information communication and participant invitation were implemented through mass media, mobile messages, WeChat groups, and residential community broadcasts, so as to increase residents' awareness and the participation.

Acquisition, preservation, and transport of samples. All sampling personnel received standard training for the collection of oropharyngeal swab samples. To minimise the risk of cross-infection, the sampling process strictly followed a disinfection process and environmental ventilation were ensured. The collected samples were stored in a virus preservation solution or immersed in isotonic saline, tissue culture solution, or phosphate buffer (Supplementary note 1). Then, all samples were sent to testing institutions within 4 h using delivery boxes for

biological samples refrigerated with dry ice to guarantee the stability of nucleic acid samples.

Technical methods for laboratory testing of collected samples. A total of 63 nucleic acid testing laboratories, 1451 laboratory workers and 701 testing equipment were involved in the nucleic acid testing. Received samples were stored at 4 °C and tested within 24 h of collection. Any samples that could not be tested within 24 h were stored at -70 °C or below (Supplementary note 1). In addition to “single testing” (i.e., separate testing of a single sample), “mixed testing” was also performed for 23% of the collected samples to increase efficiency, in which five samples were mixed in equal amounts, and tested in the same test tube. If a mixed testing was positive for COVID-19, all individual samples were separately retested within 24 h¹⁵.

Details regarding technical methods for sequencing and virus culture were provided in Supplementary note 1. Real-time reverse transcriptase-polymerase chain reaction (RT-PCR) assay method was used for the nucleic acid testing. We simultaneously amplified and tested the two target genes: open reading frame 1ab (ORF1ab) and nucleocapsid protein (N) (Supplementary Note 1). A cycle threshold value (Ct-value) less than 37 was defined as a positive result, and no Ct-value or a Ct-value of 40 or more was defined as a negative result. For Ct-values ranging from 37 to 40, the sample was retested. If the retest result remained less than 40 and the amplification curve had obvious peak, the sample was classified as positive; otherwise, it was reported as being negative. These diagnostic criteria were based on China's official recommendations¹⁶.

For asymptomatic positive cases, virus culture was carried out in biosafety level-3 laboratories. The colloidal gold antibody test was also performed for asymptomatic positive cases (Supplementary note 1). All testing results were double entered into a specifically designed database, and managed by the Big Data and Investigation Group of the COVID-19 Prevention and Control Centre in Wuhan, which was established to collect and manage data relevant to the COVID-19 epidemic.

Participant data collection and management. Before sample collection, residents electronically (using a specifically designed smartphone application) self-uploaded their personal information, including ID number, name, sex, age, and place of residence. Then, the electronic machine system generated a unique personal bar-code and stuck it on the sample tube to ensure the match between the sample and the participant. Then trained staff interviewed each individual regarding the history of COVID-19 and previous nucleic acid testing. There was a database of confirmed COVID-19 cases in Wuhan, which can be used to validate the self-reported previous COVID-19 infection. All information was entered into a central database. The testing results were continually uploaded to the central database by testing institutions. Contact tracing investigations were conducted on participants who tested positive for SARS-CoV-2, to track and manage their close contacts. The pre-existing unique identification code for each resident was used as the programme's identification number, to ensure information accuracy during the whole process of screening, from sampling, nucleic acid testing, result reporting, the isolation of detected positive cases, and tracing of close contacts of positive cases. All screening information was kept strictly confidential and was not allowed to be disclosed or used for other purposes other than clinical and public health management. Personal information of asymptomatic positive cases was only disclosed to designated medical institutions and community health centres for the purpose of medical isolation and identification of close contacts. Researcher was blind to the study hypothesis during data collection.

Biological security guarantee. Nucleic acid testing was performed in biosafety level-2 (BSL-2) laboratories, and virus culture was conducted in biosafety level-3 laboratories. Sampling and testing personnel adopted the personal protective measures according to the standard of biosafety level-3 laboratories. Participating laboratories implemented control measures to guarantee biological safety in accordance with relevant regulations¹⁷.

Result query and feedback. Two to three days after sample collection, participants could inquire about their test results using WeChat or Alipay application by their unique ID numbers. The results included text descriptions of nucleic acid testing and coloured health codes. A green coloured health code refers to a negative result, and a red coloured health code indicates a positive result.

Definition and management of identified confirmed cases and close contacts. In this study, all confirmed COVID-19 cases were diagnosed by designated medical institutions according to National Guidelines for the Prevention and Control of COVID-19 (Supplementary Note 2). Asymptomatic positive cases referred to individuals who had a positive result during screening, and they had neither a history of COVID-19 diagnosis, nor any clinical symptoms at the time of the nucleic acid testing. Close contacts were individuals who closely contacted with an asymptomatic positive person since 2 days before the nucleic acid sampling¹⁶. Repositive cases refer to individuals who recovered from previously confirmed COVID-19 disease and had a positive testing again in the screening programme. All repositive cases, asymptomatic positive persons, and their close contacts were

isolated for at least 2 weeks in designated hotels managed by primary health care professionals, and they were released from isolation only if two consecutive nucleic acid tests were negative.

Statistical analysis. Detection rate of asymptomatic positive or repositive cases was calculated by dividing the number of individuals with a positive result of nucleic acid testing by the number of participants tested. Because of extremely low detection rates, we calculated 95% confidence intervals of estimated proportions using Pearson–Klopper exact method, implemented through R package “binom” version 1.1-1¹⁸. SPSS version 22.0 was used for other statistical analyses. We analyzed the distribution of asymptomatic positive cases and assessed the Spearman correlation between the asymptomatic positive rate and the prevalence of previously confirmed COVID-19 cases in different districts of Wuhan. Differences in asymptomatic positive rates by sex and age groups were assessed using the χ^2 test. ArcGIS 10.0 was used to draw a geographic distribution map of asymptomatic positive cases. A value of $P < 0.05$ (two-tailed) was considered statistically significant.

Reporting summary. Further information on research design is available in the Nature Research Reporting Summary linked to this article.

Data availability

Detailed data directly used to generate each figure or table of this study are available within the article, Supplementary Information and source data are provided with this paper.

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Author contributions

S.Y.C., C.W., X.X.Y., and Z.X.L. conceived the study. C.W., Y.C.H., T.T.W., K.L., H.B.X., and X.S. participated in the acquisition of data. S.B.W. and J.G. were responsible for the on-site specimen collection, laboratory testing quality evaluation, and control. Y.C.H., T.T.W., and L.Q.L. analyzed the data. H.J., Y.H.G., and F.J.S. gave advice on methodology. Q.F.T. and C.Z.L. investigated the responses to the citywide nucleic acid testing among residents lived in outside of Wuhan city. S.Y.C., Y.G., C.W., and X.X.Y. drafted the manuscript. Y.G., M.B., and F.J.S. revised the manuscript, and M.B., C.Z.L., and F.J.S. critically commented and edited the manuscript. All authors read and approved the final manuscript. Z.X.L. is the guarantor of this study.

Competing interests

The authors declare no competing interests.

Additional information

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Blaylock: Face Masks Pose Serious Risks To The Healthy



Dr. Russell Blaylock warns that not only do face masks fail to protect the healthy from getting sick, but they also create serious health risks to the wearer. The bottom line is that if you are not sick, you should not wear a face mask.

As businesses reopen, many are requiring shoppers and employees to wear a face mask. Costco, for instance, will not allow shoppers into the store without wearing a face mask. Many employers are requiring all employees to wear a face mask while at work. In some jurisdictions, all citizens must wear a face mask if they are outside of their own home. □

TN Editor

With the advent of the so-called COVID-19 pandemic, we have seen a number of medical practices that have little or no scientific support as regards reducing the spread of this infection. One of these measures is the wearing of facial masks, either a surgical-type mask, bandana or N95 respirator mask. When this pandemic began and we knew little about the virus itself or its epidemiologic behavior, it was assumed that it would behave, in terms of spread among communities, like other respiratory

viruses. Little has presented itself after intense study of this virus and its behavior to change this perception.

This is somewhat of an unusual virus in that for the vast majority of people infected by the virus, one experiences either no illness (asymptomatic) or very little sickness. Only a very small number of people are at risk of a potentially serious outcome from the infection—mainly those with underlying serious medical conditions in conjunction with advanced age and frailty, those with immune compromising conditions and nursing home patients near the end of their lives. There is growing evidence that the treatment protocol issued to treating doctors by the Center for Disease Control and Prevention (CDC), mainly intubation and use of a ventilator (respirator), may have contributed significantly to the high death rate in these select individuals.

By wearing a mask, the exhaled viruses will not be able to escape and will concentrate in the nasal passages, enter the olfactory nerves and travel into the brain.

Russell Blaylock, MD

As for the scientific support for the use of face mask, a recent careful examination of the literature, in which 17 of the best studies were analyzed, concluded that, "None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection."¹ Keep in mind, no studies have been done to demonstrate that either a cloth mask or the N95 mask has any effect on transmission of the COVID-19 virus. Any recommendations, therefore, have to be based on studies of influenza virus transmission. And, as you have seen, there is no conclusive evidence of their efficiency in controlling flu virus transmission.

It is also instructive to know that until recently, the CDC did not recommend wearing a face mask or covering of any kind, unless a person was known to be infected, that is, until recently. Non-infected people need not wear a mask. When a person has TB we have them wear

a mask, not the entire community of non-infected. The recommendations by the CDC and the WHO are not based on any studies of this virus and have never been used to contain any other virus pandemic or epidemic in history.

Now that we have established that there is no scientific evidence necessitating the wearing of a face mask for prevention, are there dangers to wearing a face mask, especially for long periods? Several studies have indeed found significant problems with wearing such a mask. This can vary from headaches, to increased airway resistance, carbon dioxide accumulation, to hypoxia, all the way to serious life-threatening complications.

There is a difference between the N95 respirator mask and the surgical mask (cloth or paper mask) in terms of side effects. The N95 mask, which filters out 95% of particles with a median diameter $>0.3 \mu\text{m}^2$, because it impairs respiratory exchange (breathing) to a greater degree than a soft mask, and is more often associated with headaches. In one such study, researchers surveyed 212 healthcare workers (47 males and 165 females) asking about presence of headaches with N95 mask use, duration of the headaches, type of headaches and if the person had preexisting headaches.²

How is Coronavirus Getting Into the Brain?

Vaccine Reaction

They found that about a third of the workers developed headaches with use of the mask, most had preexisting headaches that were worsened by the mask wearing, and 60% required pain medications for relief. As to the cause of the headaches, while straps and pressure from the mask could be causative, the bulk of the evidence points toward hypoxia and/or hypercapnia as the cause. That is, a reduction in blood oxygenation (hypoxia) or an elevation in blood CO₂ (hypercapnia). It is known that the N95 mask, if worn for hours, can reduce blood oxygenation as much as 20%, which can lead to a loss of consciousness, as happened to the hapless fellow driving around alone in his car

wearing an N95 mask, causing him to pass out, and to crash his car and sustain injuries. I am sure that we have several cases of elderly individuals or any person with poor lung function passing out, hitting their head. This, of course, can lead to death.

A more recent study involving 159 healthcare workers aged 21 to 35 years of age found that 81% developed headaches from wearing a face mask.³ Some had pre-existing headaches that were precipitated by the masks. All felt like the headaches affected their work performance.

Unfortunately, no one is telling the frail elderly and those with lung diseases, such as COPD, emphysema or pulmonary fibrosis, of these dangers when wearing a facial mask of any kind—which can cause a severe worsening of lung function. This also includes lung cancer patients and people having had lung surgery, especially with partial resection or even the removal of a whole lung.

While most agree that the N95 mask can cause significant hypoxia and hypercapnia, another study of surgical masks found significant reductions in blood oxygen as well. In this study, researchers examined the blood oxygen levels in 53 surgeons using an oximeter. They measured blood oxygenation before surgery as well as at the end of surgeries.⁴ The researchers found that the mask reduced the blood oxygen levels (paO_2) significantly. The longer the duration of wearing the mask, the greater the fall in blood oxygen levels.

The importance of these findings is that a drop in oxygen levels (hypoxia) is associated with an impairment in immunity. Studies have shown that hypoxia can inhibit the type of main immune cells used to fight viral infections called the CD4+ T-lymphocyte. This occurs because the hypoxia increases the level of a compound called hypoxia inducible factor-1 (HIF-1), which inhibits T-lymphocytes and stimulates a powerful immune inhibitor cell called the Tregs. . This sets the stage for contracting any infection, including COVID-19 and making the consequences of that infection much graver. In essence, your mask may very well put you at an increased risk of infections and if so, having a much worse outcome.^{5,6,7}

People with cancer, especially if the cancer has spread, will be at a further risk from prolonged hypoxia as the cancer grows best in a microenvironment that is low in oxygen. Low oxygen also promotes inflammation which can promote the growth, invasion and spread of cancers.^{8,9} Repeated episodes of hypoxia has been proposed as a significant factor in atherosclerosis and hence increases all cardiovascular (heart attacks) and cerebrovascular (strokes) diseases.¹⁰

There is another danger to wearing these masks on a daily basis, especially if worn for several hours. When a person is infected with a respiratory virus, they will expel some of the virus with each breath. If they are wearing a mask, especially an N95 mask or other tightly fitting mask, they will be constantly rebreathing the viruses, raising the concentration of the virus in the lungs and the nasal passages. We know that people who have the worst reactions to the coronavirus have the highest concentrations of the virus early on. And this leads to the deadly cytokine storm in a selected number.

It gets even more frightening. Newer evidence suggests that in some cases the virus can enter the brain.^{11,12} In most instances it enters the brain by way of the olfactory nerves (smell nerves), which connect directly with the area of the brain dealing with recent memory and memory consolidation. By wearing a mask, the exhaled viruses will not be able to escape and will concentrate in the nasal passages, enter the olfactory nerves and travel into the brain.¹³

It is evident from this review that there is insufficient evidence that wearing a mask of any kind can have a significant impact in preventing the spread of this virus. The fact that this virus is a relatively benign infection for the vast majority of the population and that most of the at-risk group also survive, from an infectious disease and epidemiological standpoint, by letting the virus spread through the healthier population we will reach a herd immunity level rather quickly that will end this pandemic quickly and prevent a return next winter. During this time, we need to protect the at-risk population by avoiding close contact, boosting their immunity with compounds that boost cellular immunity and in

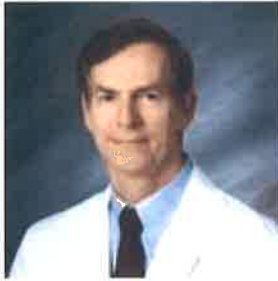
general, care for them.

One should not attack and insult those who have chosen not to wear a mask, as these studies suggest that is the wise choice to make.

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Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures

Jingyi Xiao,¹ Eunice Y. C. Shiu,¹ Huizhi Gao, Jessica Y. Wong, Min W. Fong, Sukhyun Ryu, Benjamin J. Cowling

There were 3 influenza pandemics in the 20th century, and there has been 1 so far in the 21st century. Local, national, and international health authorities regularly update their plans for mitigating the next influenza pandemic in light of the latest available evidence on the effectiveness of various control measures in reducing transmission. Here, we review the evidence base on the effectiveness of nonpharmaceutical personal protective measures and environmental hygiene measures in nonhealthcare settings and discuss their potential inclusion in pandemic plans. Although mechanistic studies support the potential effect of hand hygiene or face masks, evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza. We similarly found limited evidence on the effectiveness of improved hygiene and environmental cleaning. We identified several major knowledge gaps requiring further research, most fundamentally an improved characterization of the modes of person-to-person transmission.

Influenza pandemics occur at irregular intervals when new strains of influenza A virus spread in humans (1). Influenza pandemics cause considerable health and social impact that exceeds that of typical seasonal (interpandemic) influenza epidemics. One of the characteristics of influenza pandemics is the high incidence of infections in all age groups because of the lack of population immunity. Although influenza vaccines are the cornerstone of seasonal influenza control, specific vaccines for a novel pandemic strain are not expected to be available for the first 5–6 months of the next pandemic. Antiviral drugs will be available in some locations to treat more severe infections but are unlikely to be available in the

quantities that might be required to control transmission in the general community. Thus, efforts to control the next pandemic will rely largely on nonpharmaceutical interventions.

Most influenza virus infections cause mild and self-limiting disease; only a small fraction of case-patients require hospitalization. Therefore, influenza virus infections spread mainly in the community. Influenza virus is believed to be transmitted predominantly by respiratory droplets, but the size distribution of particles responsible for transmission remains unclear, and in particular, there is a lack of consensus on the role of fine particle aerosols in transmission (2,3). In healthcare settings, droplet precautions are recommended in addition to standard precautions for healthcare personnel when interacting with influenza patients and for all visitors during influenza seasons (4). Outside healthcare settings, hand hygiene is recommended in most national pandemic plans (5), and medical face masks were a common sight during the influenza pandemic in 2009. Hand hygiene has been proven to prevent many infectious diseases and might be considered a major component in influenza pandemic plans, whether or not it has proven effectiveness against influenza virus transmission, specifically because of its potential to reduce other infections and thereby reduce pressure on healthcare services.

In this article, we review the evidence base for personal protective measures and environmental hygiene measures, and specifically the evidence for the effectiveness of these measures in reducing transmission of laboratory-confirmed influenza in the community. We also discuss the implications of the evidence base for inclusion of these measures in pandemic plans.

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¹These first authors contributed equally to this article.

Methods and Results

We conducted systematic reviews to evaluate the effectiveness of personal protective measures on influenza virus transmission, including hand hygiene, respiratory etiquette, and face masks, and a systematic review of surface and object cleaning as an environmental measure (Table 1). We searched 4 databases (Medline, PubMed, EMBASE, and CENTRAL) for literature in all languages. We aimed to identify randomized controlled trials (RCTs) of each measure for laboratory-confirmed influenza outcomes for each of the measures because RCTs provide the highest quality of evidence. For respiratory etiquette and surface and object cleaning, because of a lack of RCTs for laboratory-confirmed influenza, we also searched for RCTs reporting effects of these interventions on influenza-like illness (ILI) and respiratory illness outcomes and then for observational studies on laboratory-confirmed influenza, ILI, and respiratory illness outcomes. For each review, 2 authors (E.Y.C.S. and J.X.) screened titles and abstracts and reviewed full texts independently.

We performed meta-analysis for hand hygiene and face mask interventions and estimated the effect of these measures on laboratory-confirmed influenza prevention by risk ratios (RRs). We used a fixed-effects model to estimate the overall effect in a pooled analysis or subgroup analysis. No overall effect would be generated if there was considerable heterogeneity on the basis of I^2 statistic $\geq 75\%$ (6). We performed quality assessment of evidence on hand hygiene and face mask interventions by using the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach (7). We provide additional details of the search strategies, selection of articles, summaries of the selected articles, and

quality assessment (Appendix, <https://wwwnc.cdc.gov/EID/article/26/5/19-0994-App1.pdf>).

Personal Protective Measures

Hand Hygiene

We identified a recent systematic review by Wong et al. on RCTs designed to assess the efficacy of hand hygiene interventions against transmission of laboratory-confirmed influenza (8). We used this review as a starting point and then searched for additional literature published after 2013; we found 3 additional eligible articles published during the search period of January 1, 2013–August 13, 2018. In total, we identified 12 articles (9–20), of which 3 articles were from the updated search and 9 articles from Wong et al. (8). Two articles relied on the same underlying dataset (16,19); therefore, we counted these 2 articles as 1 study, which resulted in 11 RCTs. We further selected 10 studies with $>10,000$ participants for inclusion in the meta-analysis (Figure 1). We excluded 1 study from the meta-analysis because it provided estimates of infection risks only at the household level, not the individual level (20). We did not generate an overall pooled effect of hand hygiene only or of hand hygiene with or without face mask because of high heterogeneity in individual estimates (I^2 87 and 82%, respectively). The effect of hand hygiene combined with face masks on laboratory-confirmed influenza was not statistically significant (RR 0.91, 95% CI 0.73–1.13; I^2 = 35%, p = 0.39). Some studies reported being underpowered because of limited sample size, and low adherence to hand hygiene interventions was observed in some studies.

We further analyzed the effect of hand hygiene by setting because transmission routes might vary

Table 1. Summary of literature searches for systematic review on personal and environmental nonpharmaceutical interventions for pandemic influenza*

Types of interventions	No. studies identified	Study designs included†	Main findings
Hand hygiene	12	RCT	The evidence from RCTs suggested that hand hygiene interventions do not have a substantial effect on influenza transmission.
Respiratory etiquette	0	NA	We did not identify research evaluating the effectiveness of respiratory etiquette on influenza transmission.
Face masks	10	RCT	The evidence from RCTs suggested that the use of face masks either by infected persons or by uninfected persons does not have a substantial effect on influenza transmission.
Surface and object cleaning	3	RCT, observational studies	There was a limited amount of evidence suggesting that surface and object cleaning does not have a substantial effect on influenza transmission.

*NA, not available; RCT randomized controlled trial.

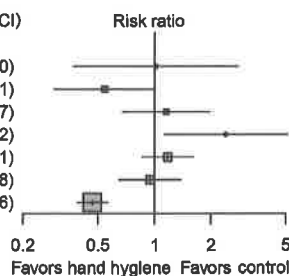
†In these systematic reviews, we prioritized RCTs, and only considered observational studies if there were a small number of RCTs. Our rationale was that with evidence from a larger number of RCTs, additional evidence from observational studies would be unlikely to change overall conclusions.

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Author (reference)	Hand hygiene		Control		Weight	Risk ratio (95% CI)
	Events	Total	Events	Total		
Cowling et al. 2008 (12)	5	84	12	205	1.5%	1.02 (0.37–2.80)
Cowling et al. 2009 (11)	14	257	28	279	5.9%	0.54 (0.29–1.01)
Larson et al. 2010 (13)	29	946	24	904	5.4%	1.15 (0.68–1.97)
Ram et al. 2015 (14)	17	177	10	250	1.8%	2.40 (1.13–5.12)
Simmerman et al. 2011 (15)	66	292	58	302	12.6%	1.18 (0.88–1.61)
Stebbins et al. 2011 (16)	51	1,695	53	1,665	11.8%	0.95 (0.65–1.38)
Talaat et al. 2011 (18)	125	808	281	848	60.8%	0.47 (0.39–0.56)

Heterogeneity: $I^2 = 87\%$, $\tau^2 = 0.2837$, $p < 0.01$

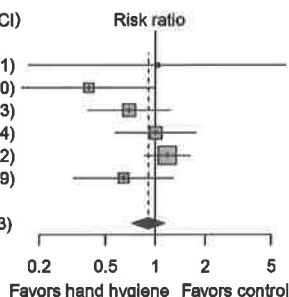


B

Author (reference)	Hand hygiene		Control		Weight	Risk ratio (95% CI)
	Events	Total	Events	Total		
Aiello et al. 2010 (9)	2	316	3	487	1.6%	1.03 (0.17–6.11)
Aiello et al. 2012 (10)	6	349	16	370	10.8%	0.40 (0.16–1.00)
Cowling et al. 2009 (11)	18	258	28	279	18.8%	0.70 (0.39–1.23)
Larson et al. 2010 (13)	25	938	24	904	17.1%	1.00 (0.58–1.74)
Simmerman et al. 2011 (15)	66	291	58	302	39.7%	1.18 (0.86–1.62)
Suess et al. 2012 (17)	10	67	19	82	11.9%	0.64 (0.32–1.29)
Fixed effect model	2,219		2,424		100.0%	0.91 (0.73–1.13)

Heterogeneity: $I^2 = 35\%$, $\tau^2 = 0.0511$, $p = 0.17$

Test for overall effect: $z = -0.85$ ($p = 0.39$)



C

Author (reference)	Hand hygiene		Control		Weight	Risk ratio (95% CI)
	Events	Total	Events	Total		
Aiello et al. 2010 (9)	2	316	3	487	0.5%	1.03 (0.17–6.11)
Aiello et al. 2012 (10)	6	349	16	370	3.0%	0.40 (0.16–1.00)
Cowling et al. 2008 (12)	5	84	12	205	1.3%	1.02 (0.37–2.80)
Cowling et al. 2009 (11)	32	515	28	279	6.9%	0.82 (0.38–1.01)
Larson et al. 2010 (13)	54	1,884	24	904	6.2%	1.08 (0.67–1.73)
Ram et al. 2015 (14)	17	177	10	250	1.6%	2.40 (1.13–5.12)
Simmerman et al. 2011 (15)	132	583	58	302	14.6%	1.18 (0.89–1.55)
Stebbins et al. 2011 (16)	51	1,695	53	1,665	10.2%	0.95 (0.65–1.38)
Suess et al. 2012 (17)	10	67	19	82	3.3%	0.64 (0.32–1.29)
Talaat et al. 2011 (18)	125	808	281	848	52.4%	0.47 (0.39–0.56)

Heterogeneity: $I^2 = 82\%$, $\tau^2 = 0.2286$, $p < 0.01$

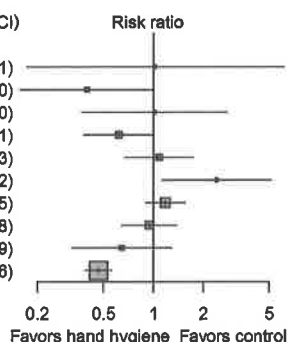


Figure 1. Meta-analysis of risk ratios for the effect of hand hygiene with or without face mask use on laboratory-confirmed influenza from 10 randomized controlled trials with >11,000 participants. A) Hand hygiene alone; B) hand hygiene and face mask; C) hand hygiene with or without face mask. Pooled estimates were not made if there was high heterogeneity ($I^2 \geq 75\%$). Squares indicate risk ratio for each of the included studies, horizontal line indicates 95% CIs, dashed vertical line indicates pooled estimation of risk ratio, and diamond indicates pooled estimation of risk ratio. Diamond width corresponds to the 95% CI.

in different settings. We found 6 studies in household settings examining the effect of hand hygiene with or without face masks, but the overall pooled effect was not statistically significant (RR 1.05, 95% CI 0.86–1.27; $I^2 = 57\%$, $p = 0.65$) (Appendix Figure 4) (11–15,17). The findings of 2 studies in school settings were different (Appendix Figure 5). A study conducted in the United States (16) showed no major effect of hand hygiene, whereas a study in Egypt (18) reported that hand hygiene reduced the risk for influenza by >50%. A pooled analysis of 2 studies in university residential halls reported a marginally significant protective effect of a combination of hand hygiene plus face masks worn by all residents (RR 0.48, 95% CI 0.21–1.08; $I^2 = 0\%$, $p = 0.08$) (Appendix Figure 6) (9,10).

In support of hand hygiene as an effective measure, experimental studies have reported that

influenza virus could survive on human hands for a short time and could transmit between hands and contaminated surfaces (2,21). Some field studies reported that influenza A(H1N1)pdm09 and influenza A(H3N2) virus RNA and viable influenza virus could be detected on the hands of persons with laboratory-confirmed influenza (22,23), supporting the potential of direct and indirect contact transmission to play a role in the spread of influenza. Other experimental studies also demonstrated that hand hygiene could reduce or remove infectious influenza virus from human hands (24,25). However, results from our meta-analysis on RCTs did not provide evidence to support a protective effect of hand hygiene against transmission of laboratory-confirmed influenza. One study did report a major effect, but in this trial of hand hygiene in schools in Egypt, running water had to be installed and soap and hand-drying

material had to be introduced into the intervention schools as part of the project (18). Therefore, the impact of hand hygiene might also be a reflection of the introduction of soap and running water into primary schools in a lower-income setting. If one considers all of the evidence from RCTs together, it is useful to note that some studies might have underestimated the true effect of hand hygiene because of the complexity of implementing these intervention studies. For instance, the control group would not typically have zero knowledge or use of hand hygiene, and the intervention group might not adhere to optimal hand hygiene practices (11,13,15).

Hand hygiene is also effective in preventing other infectious diseases, including diarrheal diseases and some respiratory diseases (8,26). The need for hand hygiene in disease prevention is well recognized among most communities. Hand hygiene has been accepted as a personal protective measure in >50% of national preparedness plans for pandemic influenza (5). Hand hygiene practice is commonly performed with soap and water, alcohol-based hand rub, or other waterless hand disinfectants, all of which are easily accessible, available, affordable, and well accepted in most communities. However, resource limitations in some areas are a concern when clean running water or alcohol-based hand rub are not available. There are few adverse effects of hand hygiene except for skin irritation caused by some hand hygiene products (27). However, because of certain social or religious practices, alcohol-based hand sanitizers might not be permitted in some locations (28). Compliance with proper hand hygiene practice tends to be low because habitual behaviors are difficult to change (29). Therefore, hand hygiene promotion programs are needed to advocate and encourage proper and effective hand hygiene.

Respiratory Etiquette

Respiratory etiquette is defined as covering the nose and mouth with a tissue or a mask (but not a hand) when coughing or sneezing, followed by proper disposal of used tissues, and proper hand hygiene after contact with respiratory secretions (30). Other descriptions of this measure have included turning the head and covering the mouth when coughing and coughing or sneezing into a sleeve or elbow, rather than a hand. The rationale for not coughing into hands is to prevent subsequent contamination of other surfaces or objects (31). We conducted a search on November 6, 2018, and identified literature that was available in the databases during 1946–November 5, 2018. We did not identify any published research on

the effectiveness of respiratory etiquette in reducing the risk for laboratory-confirmed influenza or ILI. One observational study reported a similar incidence rate of self-reported respiratory illness (defined by >1 symptoms: cough, congestion, sore throat, sneezing, or breathing problems) among US pilgrims with or without practicing respiratory etiquette during the Hajj (32). The authors did not specify the type of respiratory etiquette used by participants in the study. A laboratory-based study reported that common respiratory etiquette, including covering the mouth by hands, tissue, or sleeve/arm, was fairly ineffective in blocking the release and dispersion of droplets into the surrounding environment on the basis of measurement of emitted droplets with a laser diffraction system (31).

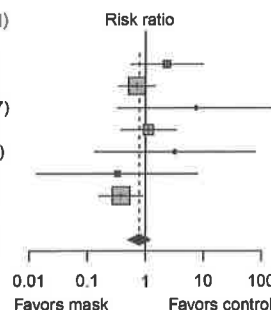
Respiratory etiquette is often listed as a preventive measure for respiratory infections. However, there is a lack of scientific evidence to support this measure. Whether respiratory etiquette is an effective nonpharmaceutical intervention in preventing influenza virus transmission remains questionable, and worthy of further research.

Face Masks

In our systematic review, we identified 10 RCTs that reported estimates of the effectiveness of face masks in reducing laboratory-confirmed influenza virus infections in the community from literature published during 1946–July 27, 2018. In pooled analysis, we found no significant reduction in influenza transmission with the use of face masks (RR 0.78, 95% CI 0.51–1.20; $I^2 = 30\%$, $p = 0.25$) (Figure 2). One study evaluated the use of masks among pilgrims from Australia during the Hajj pilgrimage and reported no major difference in the risk for laboratory-confirmed influenza virus infection in the control or mask group (33). Two studies in university settings assessed the effectiveness of face masks for primary protection by monitoring the incidence of laboratory-confirmed influenza among student hall residents for 5 months (9,10). The overall reduction in ILI or laboratory-confirmed influenza cases in the face mask group was not significant in either studies (9,10). Study designs in the 7 household studies were slightly different: 1 study provided face masks and P2 respirators for household contacts only (34), another study evaluated face mask use as a source control for infected persons only (35), and the remaining studies provided masks for the infected persons as well as their close contacts (11–13,15,17). None of the household studies reported a significant reduction in secondary laboratory-confirmed influenza virus infections in the face

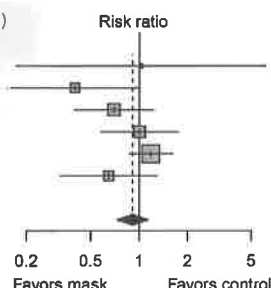
A

Author (reference)	Mask Events Total	Control Events Total	Weight	Risk ratio (95% CI)
Aiello et al. 2010 (19)	5 347	3 487	5.7%	2.34 (0.56–9.72)
Aiello et al. 2012 (10)	12 392	16 370	37.3%	0.71 (0.34–1.48)
Barasheed et al. 2014 (33)	1 11	0 28	0.7%	7.43 (0.33–169.47)
Cowling et al. 2008 (12)	4 61	12 205	12.5%	1.12 (0.37–3.35)
MacIntyre et al. 2009 (34)	1 94	0 100	1.1%	3.19 (0.13–77.36)
MacIntyre et al. 2016 (35)	0 302	1 295	3.4%	0.33 (0.01–7.96)
Suess et al. 2012 (17)	6 69	19 82	39.4%	0.38 (0.16–0.89)
Fixed effect model	1,276	1,567	100.0%	0.78 (0.51–1.20)
Heterogeneity: $I^2 = 30\%$, $\tau^2 = 0.1899$, $p = 0.20$				
Test for overall effect: $z = -1.15$ ($p = 0.25$)				



B

Author (reference)	Mask Events Total	Control Events Total	Weight	Risk ratio (95% CI)
Aiello et al. 2010 (9)	2 316	3 487	1.6%	1.03 (0.17–6.11)
Aiello et al. 2012 (10)	6 349	16 370	10.8%	0.40 (0.16–1.00)
Cowling et al. 2009 (11)	18 258	28 279	18.8%	0.70 (0.39–1.23)
Larson et al. 2010 (13)	25 938	24 904	17.1%	1.00 (0.58–1.74)
Simmerman et al. 2011 (15)	66 291	58 302	39.7%	1.18 (0.86–1.62)
Suess et al. 2012 (17)	10 67	19 82	11.9%	0.64 (0.32–1.29)
Fixed effect model	2,219	2,424	100.0%	0.91 (0.73–1.13)
Heterogeneity: $I^2 = 35\%$, $\tau^2 = 0.0511$, $p = 0.17$				
Test for overall effect: $z = -0.85$ ($p = 0.39$)				



C

Author (reference)	Mask Events Total	Control Events Total	Weight	Risk ratio (95% CI)
Aiello et al. 2010 (9)	7 663	3 487	2.1%	1.71 (0.45–6.59)
Aiello et al. 2012 (10)	18 741	16 370	13.0%	0.56 (0.29–1.09)
Barasheed et al. 2014 (33)	1 11	0 28	0.2%	7.43 (0.33–169.47)
Cowling et al. 2009 (11)	18 258	28 279	16.3%	0.70 (0.39–1.23)
Cowling et al. 2008 (12)	4 61	12 205	3.3%	1.12 (0.37–3.35)
Larson et al. 2010 (13)	25 938	24 904	14.9%	1.00 (0.58–1.74)
MacIntyre et al. 2009 (34)	1 94	0 100	0.3%	3.19 (0.13–77.36)
MacIntyre et al. 2016 (35)	0 302	1 295	0.9%	0.33 (0.01–7.96)
Simmerman et al. 2011 (15)	66 291	58 302	34.6%	1.18 (0.86–1.62)
Suess et al. 2012 (17)	16 136	19 82	14.4%	0.51 (0.28–0.93)
Fixed effect model	3,495	3,052	100.0%	0.92 (0.75–1.12)
Heterogeneity: $I^2 = 30\%$, $\tau^2 = 0.0593$, $p = 0.17$				
Test for overall effect: $z = -0.84$ ($p = 0.40$)				

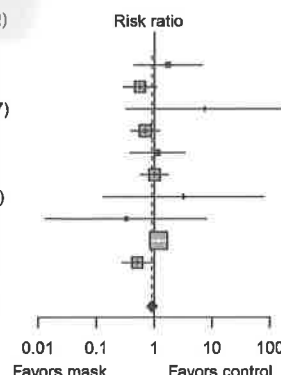


Figure 2. Meta-analysis of risk ratios for the effect of face mask use with or without enhanced hand hygiene on laboratory-confirmed influenza from 10 randomized controlled trials with >6,500 participants. A) Face mask use alone; B) face mask and hand hygiene; C) face mask with or without hand hygiene. Pooled estimates were not made if there was high heterogeneity ($I^2 \geq 75\%$). Squares indicate risk ratio for each of the included studies, horizontal lines indicate 95% CIs, dashed vertical lines indicate pooled estimation of risk ratio, and diamonds indicate pooled estimation of risk ratio. Diamond width corresponds to the 95% CI.

mask group (11–13,15,17,34,35). Most studies were underpowered because of limited sample size, and some studies also reported suboptimal adherence in the face mask group.

Disposable medical masks (also known as surgical masks) are loose-fitting devices that were designed to be worn by medical personnel to protect accidental contamination of patient wounds, and to protect the wearer against splashes or sprays of bodily fluids (36). There is limited evidence for their effectiveness in preventing influenza virus transmission either when worn by the infected person for source control or when worn by uninfected persons to reduce exposure. Our systematic review found no significant effect of face masks on transmission of laboratory-confirmed influenza.

We did not consider the use of respirators in the community. Respirators are tight-fitting masks that can protect the wearer from fine particles (37) and should provide better protection against influenza virus exposures when properly worn because of higher filtration efficiency. However, respirators, such as N95 and P2 masks, work best when they are fit-tested, and these masks will be in limited supply during the next pandemic. These specialist devices should be reserved for use in healthcare settings or in special subpopulations such as immunocompromised persons in the community, first responders, and those performing other critical community functions, as supplies permit.

In lower-income settings, it is more likely that reusable cloth masks will be used rather than

disposable medical masks because of cost and availability (38). There are still few uncertainties in the practice of face mask use, such as who should wear the mask and how long it should be used for. In theory, transmission should be reduced the most if both infected members and other contacts wear masks, but compliance in uninfected close contacts could be a problem (12,34). Proper use of face masks is essential because improper use might increase the risk for transmission (39). Thus, education on the proper use and disposal of used face masks, including hand hygiene, is also needed.

Environmental Measures

Surface and Object Cleaning

For the search period from 1946 through October 14, 2018, we identified 2 RCTs and 1 observational study about surface and object cleaning measures for inclusion in our systematic review (40–42). One RCT conducted in day care nurseries found that bi-weekly cleaning and disinfection of toys and linen reduced the detection of multiple viruses, including adenovirus, rhinovirus, and respiratory syncytial virus in the environment, but this intervention was not significant in reducing detection of influenza virus, and it had no major protective effect on acute respiratory illness (41). Another RCT found that hand hygiene with hand sanitizer together with surface disinfection reduced absenteeism related to gastrointestinal illness in elementary schools, but there was no major reduction in absenteeism related to respiratory illness (42). A cross-sectional study found that passive contact with bleach was associated with a major increase in self-reported influenza (40).

Given that influenza virus can survive on some surfaces for prolonged periods (43), and that cleaning or disinfection procedures can effectively reduce or inactivate influenza virus from surfaces and objects in experimental studies (44), there is a theoretical basis to believe that environmental cleaning could reduce influenza transmission. As an illustration of this proposal, a modeling study estimated that cleaning of extensively touched surfaces could reduce influenza A infection by 2% (45). However, most studies of influenza virus in the environment are based on detection of virus RNA by PCR, and few studies reported detection of viable virus.

Although we found no evidence that surface and object cleaning could reduce influenza transmission, this measure does have an established impact on prevention of other infectious diseases (42).

It should be feasible to implement this measure in most settings, subject to the availability of water and cleaning products. Although irritation caused by cleaning products is limited, safety remains a concern because some cleaning products can be toxic or cause allergies (40).

Discussion

In this review, we did not find evidence to support a protective effect of personal protective measures or environmental measures in reducing influenza transmission. Although these measures have mechanistic support based on our knowledge of how influenza is transmitted from person to person, randomized trials of hand hygiene and face masks have not demonstrated protection against laboratory-confirmed influenza, with 1 exception (18). We identified only 2 RCTs on environmental cleaning and no RCTs on cough etiquette.

Hand hygiene is a widely used intervention and has been shown to effectively reduce the transmission of gastrointestinal infections and respiratory infections (26). However, in our systematic review, updating the findings of Wong et al. (8), we did not find evidence of a major effect of hand hygiene on laboratory-confirmed influenza virus transmission (Figure 1). Nevertheless, hand hygiene might be included in influenza pandemic plans as part of general hygiene and infection prevention.

We did not find evidence that surgical-type face masks are effective in reducing laboratory-confirmed influenza transmission, either when worn by infected persons (source control) or by persons in the general community to reduce their susceptibility (Figure 2). However, as with hand hygiene, face masks might be able to reduce the transmission of other infections and therefore have value in an influenza pandemic when healthcare resources are stretched.

It is essential to note that the mechanisms of person-to-person transmission in the community have not been fully determined. Controversy remains over the role of transmission through fine-particle aerosols (3,46). Transmission by indirect contact requires transfer of viable virus from respiratory mucosa onto hands and other surfaces, survival on those surfaces, and successful inoculation into the respiratory mucosa of another person. All of these components of the transmission route have not been studied extensively. The impact of environmental factors, such as temperature and humidity, on influenza transmission is also uncertain (47). These uncertainties over basic transmission modes and mechanisms hinder the optimization of control measures.

Table 2. Knowledge gaps for personal protective and environmental nonpharmaceutical interventions for pandemic influenza*

Intervention	Knowledge gaps	Suggested studies
Hand hygiene	There are major gaps in our knowledge of the mechanisms of person-to-person transmission of influenza, including the role of direct and indirect contact, the degree of viral contamination on hands and various types of surfaces in different settings, and the potential for contact transmission to occur in different locations and under different environmental conditions. There is little information on whether greater reductions in transmission could be possible with combinations of personal intervention (e.g., isolation away from family members as much as possible, plus using face masks and enhancing hand hygiene).	Additional high-quality RCTs of efficacy of hand hygiene against laboratory-confirmed influenza in other nonhealthcare settings, except households and university residential halls, would be valuable. In particular, studies in school settings are needed to solve the discrepancy between the two studies from the United States and Egypt.
Respiratory etiquette	There is no evidence about the quantitative effectiveness of respiratory etiquette against influenza virus.	RCTs of interventions to demonstrate the effectiveness of respiratory etiquette in reducing influenza transmission would be valuable.
Face mask	There are major gaps in our knowledge of the mechanisms of person-to-person transmission of influenza, including the importance of transmission through droplets of different sizes including small particle aerosols, and the potential for droplet and aerosol transmission to occur in different locations and with environmental conditions.	Additional high-quality RCTs of efficacy of face masks against laboratory-confirmed influenza would be valuable. Effectiveness of face masks or respirator use to prevent influenza prevention in special subpopulation, such as immunocompromised persons, would be valuable.
Surface and object cleaning	The effectiveness of different cleaning products in preventing influenza transmission—in terms of cleaning frequency, cleaning dosage, cleaning time point, and cleaning targeted surface and object material—remains unknown.	RCTs of interventions to demonstrate the effectiveness of surface and object cleaning in reducing influenza transmission would be valuable. Studies that can demonstrate the reduction of environmental detection of influenza virus through cleaning of surfaces and objects would also be valuable.

*RCT, randomized control trial.

In this review, we focused on 3 personal protective measures and 1 environmental measure. Other potential environmental measures include humidification in dry environments (48), increasing ventilation (49), and use of upper-room UV light (50), but there is limited evidence to support these measures. Further investigations on the effectiveness of respiratory etiquette and surface cleaning through conducting RCTs would be helpful to provide evidence with higher quality; evaluation of the effectiveness of these measures targeting specific population groups, such as immunocompromised persons, would also be beneficial (Table 2). Future cost-effectiveness evaluations could provide more support for the potential use of these measures. Further research on transmission modes and alternative interventions to reduce influenza transmission would be valuable in improving pandemic preparedness. Finally, although our review focused on nonpharmaceutical measures to be taken during influenza pandemics, the findings could also apply to severe seasonal influenza epidemics. Evidence from RCTs of hand hygiene or face masks did not support a substantial effect on transmission of laboratory-confirmed influenza, and limited evidence was available on other environmental measures.

This study was conducted in preparation for the development of guidelines by the World Health Organization on the use of nonpharmaceutical interventions for pandemic influenza in nonmedical settings.

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35

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Address for correspondence: Benjamin J. Cowling, World Health Organization Collaborating Centre for Infectious Disease Epidemiology and Control, School of Public Health, Li Ka Shing Faculty of Medicine, University of Hong Kong, 1/F Patrick Manson Bldg (North Wing), 7 Sassoon Rd, Hong Kong, China; email: bcowling@hku.hk

COPY OF CONTRACT - REVISED

**Marysville Joint Unified School District
And
The Cosca Group
(TCG Leadership Development Corporation)**

AGREEMENT

THIS AGREEMENT made and entered into this 15th day of June, 2021, by Marysville Joint Unified School District, a political subdivision of the State of California (hereinafter "DISTRICT") and TCG Leadership Development Corporation, (hereinafter, "CONSULTANT").

I.

The DISTRICT desires to retain a CONSULTANT to perform special services for the search and recruitment of the superintendent.

II.

CONSULTANT is specially trained, experienced and competent to perform such special services and render such advice.

III.

1. CONSULTANT, upon notice to proceed from the DISTRICT, shall provide to the DISTRICT such special services and advice more particularly set forth in Exhibit "A" (the proposal to conduct a superintendent search) which is incorporated by reference herein. CONSULTANT and DISTRICT both agree to be bound by all of the terms and conditions set forth in said Exhibit "A".
2. In consideration of the foregoing, DISTRICT shall pay CONSULTANT A FEE NOT TO EXCEED \$21,500. CONSULTANT shall invoice DISTRICT in three installments as follows:
 - (1) \$7,167.00 at the time of the development and presentation of the profile.
 - (2) \$7,167.00 at the presentation of a slate of final candidates.
 - (3) \$7,167.00 at the appointment of the new superintendent.

Terms of payment shall be net 45 days.

3. CONSULTANT shall well and faithfully perform each and all of the obligations set forth in the Agreement. CONSULTANT shall at all times be deemed an independent contractor, and neither the CONSULTANT nor any of its employees shall be considered employees of the DISTRICT for any purpose.
4. At all times, CONSULTANT shall work in cooperation with, and pursuant to the direction of the Board of Trustees of the DISTRICT, or the Board's designee.

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Business Services Department

Approval: RL

Date: 6/8/21

5. The DISTRICT shall have the right to terminate this Agreement at any time upon fifteen (15) calendar days' prior written notice. Should the Agreement be terminated, the DISTRICT shall be responsible for payment related to all services provided by the CONSULTANT up to the point of termination.

WHEREFORE, the parties have executed this Agreement on the date first above written:

FOR:

Marysville Joint Unified School District

Dated:

By: _____
Signature

Name (print)

Title

FOR:

TCG Leadership Development Corporation

Dated: *June 8, 2021*

By: *Joel Shapiro*
Joel Shapiro,
President, TCG Leadership Development
Corporation

TCG Leadership Development Corp. mailing address:
2290 La Mer Court
Costa Mesa, CA 92627
Phone: (714) 318-1826

Federal I.D. Number: 33-0972414



Consultant Agreement

Loving Guidance, LLC - P.O. Box 622407 - Oviedo, FL 32762-2407 - Contract 5316

This agreement dated 6/1/2021, is made by and between Loving Guidance, LLC (herein after referred to as CONSULTANT) and by the party named below as Hiring Party (herein referred to as HIRING PARTY). The CONSULTANT hereby agrees to perform the following services satisfactorily:

Our virtual sessions are a special offering in support of COVID-19 restrictions. It is a limited time offering and subject to change. These offerings are exclusively available to pre-existing Conscious Discipline clients. Session time and audience limits apply. Video content is licensed for exclusive client use and may not be shared or distributed. Internet and video conferencing platform access is required for all virtual offerings. Audio and video recordings of virtual sessions are prohibited.

HIRING PARTY

Marysville Joint Unified School District
Rocco Greco
1919 B st
Marysville, CA 95901
P: (530) 749-6159
C: (530) 329-6049
E: ahale@mjud.com

Billing Information (if different):

Marysville Joint Unified School District
Angela Hale
1919 B st
Marysville, Ca 95901
ahale@mjud.com
ahale@mjud.com
(530) 749-6159

EVENT INFORMATION

6/9/2021 8:30am - 11:30am PT Jenny Barkac, Certified Instructor 3 Hour Virtual Training

SPEAKING FEE AND EXPENSES

Speaking Fee: \$1,485 for a 3 Hour Virtual Training.

Payment for services should be to Loving Guidance, LLC (Fed ID #59-3386731). HIRING PARTY will be invoiced for speaking fees upon signing. Payment is due 30 days after service is completed.

Loving Guidance reserves the right to substitute speaker(s) for this event.

EVENT DETAILS

CONSULTANT will supply a handout for the workshop. The HIRING PARTY is responsible for the duplication of handouts for attendees.

Speaking site: Virtual Platform

Site address: 1919 B st

City, State, Zip: Marysville, CA 95901

Age group of children: N/A

Number of attendees: 60

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Business Services Department

Approval: [Signature]

Date: 6/1/21

Both the HIRING PARTY and the CONSULTANT agree that the CONSULTANT will act as an independent contractor in the performance of its duties under this contract.

COPYRIGHT

All content used during contracted sessions, including, but not limited to, handouts, graphics, images, photographs, audio clips, and video clips, all improvements or modifications thereof, all derivative works based thereon, and any collection, arrangement, and assembly are owned by LOVING GUIDANCE, LLC or its content suppliers and is protected by United States and international copyright laws.

The HIRING PARTY recognizes and acknowledges that making or creating audio and video recordings are prohibited. The HIRING PARTY also recognizes and acknowledges any unauthorized use, copying, or reproduction, including any and all dissemination, of content is strictly prohibited. Presentation material used by CONSULTANT, including, but not limited to, the handout, is Intellectual Property owned by LOVING GUIDANCE, LLC.

TRADEMARK

Numerous marks, such as, but not limited to, LOVING GUIDANCE and CONSCIOUS DISCIPLINE are common law trademarks, registered trademarks or trade dress owned by LOVING GUIDANCE, LLC in the U.S. and/or other countries. LOVING GUIDANCE's trademarks and trade dress may not be used in connection with any product or service that is not owned or authorized by LOVING GUIDANCE, LLC, in any manner that is likely to cause confusion among consumers, or in any manner that disparages or discredits LOVING GUIDANCE, LLC.

CANCELLATION POLICY

If cancellation is necessary for any reason, CONSULTANT must be notified in writing via certified mail 45 days prior to the event date(s) agreed to within this contract. Cancellation after that time is subject to required payment of speaking fees and any purchased non-refundable travel arrangements.

Acts of God, war, government, regulation, riots, disaster, strikes, and acts of terrorism, which make performance impossible will not be penalized. Should cancellation be the direct responsibility of the CONSULTANT or it's associates, another member of the CONSULTANT team will be substituted for your presentation needs.

Any on-site contracted event(s) will be put on hold if affected by COVID-19 restrictions. The HIRING PARTY must reschedule the event(s) within one year from the date the hold was placed. After this time, the HIRING PARTY is responsible for change and/or cancellation fees. It is the responsibility of the HIRING PARTY to notify the CONSULTANT 45 days prior of any new contracted date(s) to ensure availability.

To insure scheduling on the requested date, this contract must be signed and returned within 30 days of the agreement date.

In witness to their understanding and agreement to these terms and conditions, the parties hereby affix their signatures below. This agreement will remain tentative and non-binding until the contract is endorsed by the CONSULTANT and HIRING PARTY, and both parties are in receipt of the ratified contract.

DocuSigned by:

Nicholas Persaud

6/1/2021

E5D0053FAAA245E

Nicholas Persaud, Director of Contracts & IT

Date

Conscious Discipline

DocuSigned by:

Renny Lauseng

6/1/2021

145F107A105120C
Authorized Signature, Hiring Party

Date

Renny Lauseng, Asst. Supt. of Business Services
Print Name & Title

SIGN AND RETURN COMPLETED COPY TO: Loving Guidance, LLC
ashley.ragoobir@consciousdiscipline.com

AGREEMENT

This Agreement is made and entered into this 15 day of June, 2021, by and between Marysville Joint Unified School District, hereinafter referred to as "District," and the County of Yuba, a political subdivision of the State of California, hereinafter referred to as "County."

WHEREAS, the primary objectives of the Probation and Schools Success (PASS) Program are to reduce the dropout rate amongst students, assist school administrators with the safe operation of their schools, reduce disciplinary problems within the school, and enhance the individual potential of students as a means of protecting the welfare of the community and its youth; and

WHEREAS, it is a further objective of PASS to involve the parents, school and criminal justice personnel in a collaborative effort of support for educational achievement by youth; and

WHEREAS, the County is willing to provide the employment of a Deputy Probation Officer through the Probation Department to be funded by the District;

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1. County will employ one qualified full-time Deputy Probation Officer for 12 months beginning July 1, 2021 and ending June 30, 2022.
2. Said employee will be appointed and supervised by the Chief Probation Officer or his designee. Qualifications for said position will include those requirements mandated by law for peace officers within the State of California as well as skills requirements necessary to carry out the functions of the position and program service delivery components.
3. The County will provide clerical support for the position. The District will provide office space for the position.
4. The Deputy Probation Officer will provide intervention services to all students referred for program participation by the designated school administrators at Lindhurst High School.
5. The Deputy Probation Officer will provide services to parents as required or requested.
6. The District will pay to the County the costs of this program in an amount not to exceed \$94,886 as provided in Attachment A "PASS Budget." The County will bill the District for actual costs of the program on a quarterly basis. Payment for actual program costs shall be made by the District on a quarterly basis within 30 days of said billing. Failure to make timely payments will be considered a material breach of contract.
7. The District will provide school time and space for program service delivery and designate personnel at each participating school for the referral of students for program participation.

8. The Probation Program Manager and the School Site Administrator (Principal) will jointly evaluate the performance of the Deputy Probation Officer assigned pursuant to this agreement.
9. The Parties agree to jointly participate in an evaluative outcome process to assess the effectiveness of the Program and make modifications as appropriate.
10. Annually, the Chief Probation Officer and Superintendent will meet to review the evaluative components of the Agreement.
11. District agrees to indemnify, defend and save harmless County, its officers, agents and employees from any and all claims and losses occurring or resulting to any person, firm, corporation or entity who may be injured or damaged by the District in the performance of this contract, including attorney fees and costs.
County agrees to indemnify, defend and save harmless District, its officers, agents and employees from any and all claims and losses occurring or resulting to any person, firm, corporation or entity who may be injured or damaged by the County in the performance of this contract.
12. This contract may be terminated by either party for material breach or by providing the other party 60 days written notice.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the day and date first above shown.


ATTEST: Rachel Ferris
Clerk of the Board of Supervisors

COUNTY OF YUBA:

Chairman of the Board of Supervisors

Approved as to form:

MARYSVILLE JOINT UNIFIED
SCHOOL DISTRICT:

BY: 

Michael J. Ciccozzi
County Counsel

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Superintendent of Schools

ATTACHMENT A

PROBATION AND SCHOOL SUCCESS PROGRAM

YUBA COUNTY PROBATION

PROJECT (PASS) BUDGET

BUDGET CATEGORY AND LINE ITEM DETAIL		COST
Actual Salary & Benefit Cost:		\$118,607
Salary	\$ 76,284	
Medicare	1,106	
PERS	27,986	
Health Ins	10,444	
Life Ins	107	
Unemployment Ins	229	
Workers Compensation	2,451	
Salary & Benefits to be paid by Yuba County Non-General Funds:		(23,721)
A	Salary to be paid by Marysville Joint Unified School District:	
	1 - Deputy Probation Officer	61,027
B.	Benefits to be paid by Marysville Unified School District:	
	Medicare	885
	PERS	22,389
	Health & Life Insurance	8,441
	Unemployment Insurance	183
	Workers Comp	<u>1,961</u>
	Subtotal Benefits:	\$ 33,859
	Total Salary and Benefits:	94,886
TOTAL CONTRACT AMOUNT		\$94,886

AGREEMENT

This Agreement is made and entered into this 15 day of June, 2021, by and between Marysville Joint Unified School District, hereinafter referred to as "District," and the County of Yuba, a political subdivision of the State of California, hereinafter referred to as "County."

WHEREAS, the primary objectives of the Probation and Schools Success (PASS) Program are to reduce the dropout rate amongst students, assist school administrators with the safe operation of their schools, reduce disciplinary problems within the school, and enhance the individual potential of students as a means of protecting the welfare of the community and its youth; and

WHEREAS, it is a further objective of PASS to involve the parents, school and criminal justice personnel in a collaborative effort of support for educational achievement by youth; and

WHEREAS, the County is willing to provide the employment of a Deputy Probation Officer through the Probation Department to be funded by the District;

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

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2. Said employee will be appointed and supervised by the Chief Probation Officer or his designee. Qualifications for said position will include those requirements mandated by law for peace officers within the State of California as well as skills requirements necessary to carry out the functions of the position and program service delivery components.
3. The County will provide clerical support for the position. The District will provide office space for the position.
4. The Deputy Probation Officer will provide intervention services to all students referred for program participation by the designated school administrators at Marysville High School.
5. The Deputy Probation Officer will provide services to parents as required or requested.
6. The District will pay to the County the costs of this program in an amount not to exceed \$108,863c as provided in Attachment A "PASS Budget." The County will bill the District for actual costs of the program on a quarterly basis. Payment for actual program costs shall be made by the District on a quarterly basis within 30 days of said billing. Failure to make timely payments will be considered a material breach of contract.
7. The District will provide school time and space for program service delivery and designate personnel at each participating school for the referral of students for program participation.

8. The Probation Program Manager and the School Site Administrator (Principal) will jointly evaluate the performance of the Deputy Probation Officer assigned pursuant to this agreement.
9. The Parties agree to jointly participate in an evaluative outcome process to assess the effectiveness of the Program and make modifications as appropriate.
10. Annually, the Chief Probation Officer and Superintendent will meet to review the evaluative components of the Agreement.
11. District agrees to indemnify, defend and save harmless County, its officers, agents and employees from any and all claims and losses occurring or resulting to any person, firm, corporation or entity who may be injured or damaged by the District in the performance of this contract, including attorney fees and costs.
12. This contract may be terminated by either party for material breach or by providing the other party 60 days written notice.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the day and date first above shown.

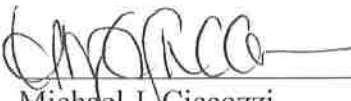
ATTEST: Rachel Ferris
Clerk of the Board of Supervisors

COUNTY OF YUBA:

Chairman of the Board of Supervisors

Approved as to form:

MARYSVILLE JOINT UNIFIED
SCHOOL DISTRICT:

BY: 

Michael J. Ciccozzi
County Counsel

Superintendent of Schools

ATTACHMENT A
PROBATION AND SCHOOL SUCCESS PROGRAM
YUBA COUNTY PROBATION
PROJECT (PASS) BUDGET

BUDGET CATEGORY AND LINE ITEM DETAIL		COST
Actual Salary & Benefit Costs:		\$ 136,079
Salary	\$ 78,552	
Medicare	1,140	
PERS	30,377	
Health Insurance	23,216	
Life Insurance	107	
Unemployment Insurance	236	
Worker's Compensation	2,451	
Salary & Benefits to be paid by Yuba County Non-General Funds:		(27,216)
A	Salary:	
	1 – Deputy Probation Officer	\$ 62,842
B.	Benefits:	
	Medicare	911
	PERS	24,302
	Health & Life Insurance	18,658
	Unemployment Insurance	189
	Workers Compensation	1961
	Subtotal Benefits:	\$ 46,021
	Total Salary and Benefits:	\$ 108,863
TOTAL CONTRACT AMOUNT		\$ 108,863

RaaWee K12 TDPS Licensing Contract

Date Prepared: 05/20/2021	Project Name: Truancy & Dropout Prevention System (TDPS)
Client Name: Marysville Joint Unified School District	Executive Contact & Title: Ms. Jolie Critchfield, Director of Attendance
RaaWee Account Manager: Mr. Randy Graham	Project Managers: MJUSD Team Lead: Ms. Jolie Critchfield RaaWee Team Lead: Mr. Saad Shaikh

Project Scope:

In reference to RaaWee K12's proposal dated May. 12th, 2021; Marysville Joint Unified School District agrees to hire RaaWee K12 Solutions to implement proposed CORE Version and following of Add-ons from RaaWee K12 Truancy & Dropout Prevention System.

- Automatic TEXT Notification in English for Truancy Letters
- E-Sign capability for SART and SARB Contracts

This software-licensing contract is valid from 07/01/2021 to 06/30/2022. Contract may be renewed annually with mutual consent.

Project Cost:

Software License Fee for the school year 2021-2022: \$45,900


* Fee will be charged for full school year irrespective of the month system goes live.

Customization:

- Implementation of Marysville Joint Unified School District 's Truancy Prevention Plan and Excessive Excused Absences Prevention Letters in line with TDPS workflow

Any additional customization will be separately quoted for approval on Time & Material basis

Business Services Department

 Approval: 
 Date: 6-6-21

Schedule:

Module	Start Date
Project Kick-off	1 week after the contract award
Expected Training Dates	5 weeks after the Document Templates, Intervention Plan, Required Servers for Hosting and Required Data is provided by MJUSD to RaaWee
Ready for Roll-out in Production	2 Weeks after the Training

Training:

- Pre-training Webinar: One (1) pre-training webinar for the users. This webinar lasts for about 1.5 hour and introduces the system to the users prior to actual hands-on training.
- Three 2-hour duration online trainings: These 3 sessions will be the same. The goal is to make it easier for the users to pick sessions based on their preferences.
- Online Refresher Training: Two (2) online training sessions (up to 1.5 hours long) can also be scheduled at mutually convenient times. These sessions are typically for those users who are already trained, and they may have questions or need a refresher course. These training sessions can be requested and scheduled by the District in the first three months when system goes live.
- Free Topic Targeted Online Training Sessions: RaaWee offers free 20 minutes online training sessions geared to one topic/tool to its partner districts from time to time during the school year. Users can register for these online Topic/Tool targeted training sessions for FREE.

Project Completion Criteria:

The following criteria shall determine the project completion:

1. The Developed System covers all the features of CORE Version and selected Add-on
2. Application is approved by the users upon User Acceptance Test completion in the Staging Environment
3. UAT approved application is rolled out in production

Changes after the project Completion:

Changes in the implemented system can be requested by the district after the project completion for a Fee. Only those changes and/or enhancement requests can be accepted for implementation by RaaWee that will not affect or change the workflow and database structure of the product.

Payment Schedule:**Invoicing Terms:**

Project Initiation: 50% of the Yearly Fee for the SY 2021-2022

Balance Payment: Immediately after User Training

DEPENDENCIES:

A timely end-to-end execution of the project plan and meeting the agreed upon cost shall depend on the following factors:

1. Timely Provisioning of Document Templates and Intervention Plan by Marysville Joint Unified School District in line with the TDPS workflow.
2. Timely Provisioning of required Server for hosting and Data by Marysville Joint Unified School District.
3. Timely clearance of due invoices

LIMITATION OF DAMAGES

UNDER NO CIRCUMSTANCES WILL MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT BE LIABLE TO RAAWEE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES (EVEN IF MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES), ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT.

UNDER NO CIRCUMSTANCES WILL RAAWEE BE LIABLE TO MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES (EVEN IF RAAWEE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES), ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT.

Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of California without giving effect to any principles of conflicts of law.

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//
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Non-Solicitation of RaaWee Team

Marysville Joint Unified School District agrees to not initiate or pursue negotiations directly or indirectly, for itself or on behalf of or in conjunction with any other person, partnership, corporation, business or organization, solicit, hire, contract with or engage the Employee or Contractor of RaaWee for contract renewal or full-time hire unless authorized in writing by RaaWee for a period of two (2) years commencing on the last day of the contract, or in the event the contract has expired the last day Employee or Contractor of RaaWee performs any work, labor or service for Marysville Joint Unified School District .

Non-Disclosure & Intellectual Property

Marysville Joint Unified School District acknowledges that RaaWee owns the software being licensed under this contract to be used by the Marysville Joint Unified School District. This is a proprietary intellectual property of RaaWee that it is provided and customized for Services to District. RaaWee shall own and retain all intellectual property rights in any and all reports, statistics, and other works of authorship, products or processes produced in the performance of Services or provision of Software hereunder.

The license granted to Marysville Joint Unified School District in this Contract are subject to the following: (i) District shall not license, transfer, assign, demonstrate, host, disclose RaaWee Materials provided to the Marysville Joint Unified School District to any third party other than an authorized user; (ii) District shall not modify, make derivative works of, disassemble, reverse compile, or reverse engineer any part of the Software or RaaWee Materials or access the RaaWee Software or Materials in order to build a similar or competitive product, software or service; (iii) except as expressly stated herein, no part of the RaaWee Software or Materials may be copied, reproduced, distributed, republished, downloaded, displayed, posted or transmitted in any form or by any means (including but not limited to electronic, mechanical, photocopying, recording, or other means); (iv) District shall not disclose any review of the RaaWee Software (including but not limited to the results of any performance tests) to any third party without RaaWee's prior written approval; (v) District agrees to make every reasonable effort to prevent unauthorized third parties from accessing the RaaWee Software; and (vi) District acknowledges and agrees that RaaWee or its third-party providers shall own all right, title and interest in and to all intellectual property rights (including all derivatives or improvements thereof) in the RaaWee Software and Materials and any suggestions, enhancement requests, feedback, recommendations or other information provided by District or any other party relating to the RaaWee Software or other Materials related to RaaWee Software.

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Reviewed & Accepted By:

Marysville Joint Unified School District Authorized Signature: _____

Date: _____

Name & Title: Penny Lausen, Asst. Supt. of Business Services

District's Business Address: 1919 B Street, Marysville, CA 95901

RaaWee's Authorized Signature: [Signature] Date: 05/26/2021

Name: Saleem Qazi, CEO



MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT

AGREEMENT FOR INSPECTION SERVICES

PROJECT: **Energy Efficiency Measures and Solar Systems at Multiple School Sites**

This agreement is made and entered into on this **15th day of June, 2021**, by and between the **Marysville Joint Unified School District** hereinafter referred to as "DISTRICT", and **Nielsen Inspection Services, Inc.** referred to as "INSPECTOR".

WITNESSETH:

WHEREAS, DISTRICT is causing general construction, repairs and/or replacement to be constructed on DISTRICT property in Yuba County, State of California; and

WHEREAS, INSPECTOR is fully licensed and authorized by the State of California to provide inspections on school buildings, portable school buildings, and other structures.

NOW, THEREFORE, in consideration of the mutual promises and agreements herein contained, IT is AGREED by and between the parties hereto as follows:

1.0. Scope of Work

DISTRICT hereby hires INSPECTOR as an independent contractor to perform inspection services on DISTRICT project(s). Such services shall include, but shall not be limited to:

1.1. Specifications

Inspection of the work during construction to assure that all work is done in accordance with the approved plans and specifications and applicable federal, state, and local building codes.

1.2. Log

The maintenance of a detailed daily inspection log.

1.3. Certification

The certification of work completed and in progress, by the contractor, including material and equipment on or off site for pay request verification purposes.

1.4. Other

Such other services as may be designated by the DISTRICT.

2.0. Term

The term of this agreement shall commence on the date the District determines inspection services are necessary, and shall continue until the District determines inspection services are no longer required.

3.1. Rate

DISTRICT shall compensate INSPECTOR at the rate of:

\$70.00 per hour for DSA Class I;
\$65.00 per hour for DSA Class II;
\$60.00 per hour for DSA Class III & IV

for all time worked during normal working hours, Monday through Friday up to eight (8) hours per day. Hours worked in excess of eight (8) hours per day, forty (40) hours per week, and on Saturdays shall be compensated at the rate of 1.5 times the hourly rate stated above. All hours worked on Sundays and holidays shall be compensated at the rate of 2.0 times the hourly rate stated above. All overtime work shall be authorized in advance by the DISTRICT Assistant Superintendent, Business Services or designee.

The total fees (including reimbursable expenses) not-to-exceed: **\$ 157,050.00**

3.2. Reimbursable Expenses

DISTRICT shall reimburse INSPECTOR for necessary out of pocket expenses, i.e., plan reproductions, long distance telephone calls, and/or film and development costs used for provided services.

3.3. Time Sheets and Payment

INSPECTOR shall submit monthly invoices at the end of each month identifying regular time, overtime, mileage log and receipts for out of pocket expenses. Payment shall be made in full by DISTRICT to INSPECTOR within thirty (30) working days after approval by the District Business Office.

4.0. Records

INSPECTOR shall maintain at all times complete detailed records and an inspection log with regard to the services performed under this agreement. The records shall be the property of the DISTRICT.

5.0. Non-assignability

This agreement and the rights and duties hereunder shall not be assigned in whole or in part without written consent of the DISTRICT.

6.0. Insurance

INSPECTOR shall provide any required insurance at his/her own expense.

7.0 Fingerprint Certification

INSPECTOR will maintain compliance at all times with Education Code Section 45125.2.

This agreement may be canceled by the DISTRICT or the INSPECTOR upon the giving of thirty (30) calendar days' advance written notice. Such notice shall be personally served or given by United States Mail. In the event of cancellation, the INSPECTOR shall be paid for all services performed up to the date of the cancellation.

IN WITNESS WHEREOF, this agreement has been executed on the day, month, and year first above written.

For "DISTRICT":

Penny Lauseng, Assistant Superintendent, Business Services

Date

"INSPECTOR"



Nielson Inspection Services, Inc.

June 15, 2021
Date

SOLAR DSA Inspector of Record - Marysville JUSD - Facility Solutions Agreement

Scope of Work:

Field Inspections, daily reports, semi-monthly reports, DSA form 5 & 6 Filing, correspondence with Architect, design engineers, special inspection teams and DSA office. Assist with project certification and close out.

Inspector of Record Fees - DSA Solar Projects

<u>Site</u>	<u>System KW</u>	<u>Inspection Fee</u>
<u>Phase 1</u>		
Browns valley	44.4	\$ 7,000
Cedar Lane	185.3	\$ 9,000
Cordua	44.4	\$ 7,000
Covillaud	70.5	\$ 7,500
Edgewater	250.6	\$ 10,000
Ella	140.9	\$ 8,000
Foothill	140.9	\$ 8,000
Johnson Park	140.9	\$ 8,000
Kynoch	185.3	\$ 9,000
Linda	185.3	\$ 9,000
Lindhurst		
POI1/POI2	1040.9	\$ 20,000
Marysville HS		
POI1/POI2	1017.9	\$ 20,000
McKenny	211.4	\$ 9,000
Olivehurst	206.2	\$ 9,000
Yuba Gardens	352.4	\$ 11,000
<u>Phase 2</u>		
Arboga	162.9	\$ 8,500
Dobbins	102.4	\$ 7,500
Loma Rica	45.4	\$ 7,000
Subtotal:		\$ 174,500
Discount for all sites:		\$ (17,450)
		\$ 157,050



Email: pgant@kblegal.us

May 18, 2021

VIA EMAIL ONLY

Marysville Joint Unified School District
Gary Cena, Superintendent
1919 "B" Street
Marysville, CA 95901

Re: Kingsley Bogard LLP
Billing Rates for Fiscal Year 2021/2022

Dear Superintendent Cena:

Set forth below are Kingsley Bogard's hourly billing rates that will be effective July 1, 2021 for the fiscal year 2021/2022.

Associate:	\$220 - \$260
Senior Associate	\$270 - \$290
Partners	\$295 - \$330
Of Counsel	\$295 - \$310
Paralegal	\$150 - \$185

Please sign the enclosed acknowledgment and return a copy to us by email.

We value Marysville Joint Unified School District's business. If you require further information, please contact me.

Very truly yours,

KINGSLEY BOGARD LLP

PAUL R. GANT

PRG:tc
Enclosure



**ACKNOWLEDGMENT OF
2021/2022 FISCAL YEAR
LEGAL SERVICES BILLING RATES**

Associate:	\$220 - \$260
Senior Associate	\$270 - \$290
Partners	\$295 - \$330
Of Counsel	\$295 - \$310
Paralegal	\$150 - \$185

Please acknowledge receipt of Kingsley Bogard's 2021/2022 fiscal year billing rates for legal services by signing and returning this form to:

Paul R. Gant
Kingsley Bogard LLP
600 Coolidge Drive, Suite 160
Folsom, CA 95630
pgant@kblegal.us

FOR: Marysville Joint Unified School District

Date: _____, 2021

Signature: _____

Name: Penny Lausong

Title: ASST. Supt. of Business Services



220 Alexander St.
Suite 400
Rochester, NY 14607

Services Agreement Reinstatement

Name of Employer: Marysville Joint Unified School District

The Services Agreement for the fiscal year Jul 1, 2020 – Jun 30, 2021 entered into by your organization and U.S. OMNI is hereby reinstated and amended for the fiscal year Jul 1, 2021 - Jun 30, 2022 with the following fee schedule below:

FEE SCHEDULE FOR 2021-2022 YEAR

<u>Description</u>	<u>No. of Accounts</u>	<u>Rate</u>	<u>Annual Amount</u>
<u>403(b) Accounts*</u>	190	37	\$ 7,030.00
<u>457(b) Accounts</u>	3	37	\$ 111.00
<u>Vanguard Accounts</u>	11	37	\$ 407.00
<u>Great American Accounts</u>	12	37	\$ 444.00
<u>Total 2021-2022</u>			\$ 7,992.00

**Includes 403(b) ROTH Accounts*

EMPLOYER:

OMNI FINANCIAL GROUP, INC.

By: _____

Penny Lauseng

Name: _____

Brad Hope

Title: _____

Asst. Supt. of Business Services

By: _____

Brad Hope, Managing Director

Date: _____

Date: _____

May 14, 2021

PLEASE RETURN A SIGNED COPY BY JULY 1, 2021

CA-5638

Business Services Department

Approval: *PL*

Date: *5-20-21*

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CONTRACT SERVICES AGREEMENT

Rick Wise- At Risk Consultant

THIS CONTRACT SERVICES AGREEMENT ("Agreement") June 15, 2021 (hereinafter, the "Effective Date"), by and between the MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT ("DISTRICT") and Rick Wise (hereinafter, "CONTRACTOR"). For the purposes of this Agreement DISTRICT and CONTRACTOR may be referred to collectively by the capitalized term "Parties." The capitalized term "Party" may refer to DISTRICT or CONTRACTOR interchangeably.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, DISTRICT and CONTRACTOR agree as follows:

I. ENGAGEMENT TERMS

1.1 **SCOPE OF WORK:** Subject to the terms and conditions set forth in this Agreement and all exhibits attached and incorporated hereto, CONTRACTOR agrees to perform the services and tasks set forth in **Exhibit "A"** (hereinafter referred to as the "**Scope of Work**"). CONTRACTOR further agrees to furnish to DISTRICT all labor, materials, tools, supplies, equipment, services, tasks and incidental and customary work necessary to competently perform and timely complete the services and tasks set forth in the Scope of Work. For the purposes of this Agreement the aforementioned services and tasks set forth in the Scope of Work shall hereinafter be referred to generally by the capitalized term "Work." CONTRACTOR shall not commence with the performance of the Work until such time as DISTRICT issues a written Notice to Proceed.

1.2 **TERM:** This Agreement shall have a term of 2021-2022 commencing from August 11, 2021 - June 30, 2022

1.3 **COMPENSATION:**

A. CONTRACTOR shall perform the various services and tasks set forth in the Scope of Services in accordance with the compensation schedule which is **see Exhibit A.**(hereinafter, the "Approved Rate Schedule").

B. Section 1.3(A) notwithstanding, CONTRACTOR's total compensation during the Term of this Agreement or any extension term shall not exceed the budgeted aggregate sum **FIFTY THOUSAND DOLLARS AND NO CENTS (\$50,000.00)** (hereinafter, the "Not-to-Exceed Sum"), unless such added expenditure is first approved by the DISTRICT acting in consultation with the Superintendent and the Director of Fiscal Services. In the event CONTRACTOR's charges are projected to exceed the Not-to-Exceed Sum prior to the expiration of the Term or any single extension term, DISTRICT may suspend CONTRACTOR's performance pending DISTRICT approval of any anticipated expenditures in excess of the Not-to-Exceed Sum or any other DISTRICT-approved amendment to the compensation terms of this Agreement.

1.4 **PAYMENT OF COMPENSATION:** The Not-to-Exceed Sum shall be paid to CONTRACTOR in 11 increments of four thousand five hundred and forty five dollars and forty five cents (\$4545.45) as the Work is completed. Following the conclusion of each calendar month, CONTRACTOR shall submit to DISTRICT an itemized invoice indicating the services performed and tasks completed during the recently concluded calendar month, including services and tasks performed and the reimbursable out-of-pocket expenses incurred. If the amount of CONTRACTOR's monthly compensation is a function of hours works by CONTRACTOR's personnel, the invoice shall indicate the number of hours worked in the recently concluded calendar month, the persons responsible for performing the Work, the rate of compensation at which such services and tasks were performed, the subtotal for each tasks and service performed and a grand total for all services performed. Within THIRTY (30) calendar days of receipt of each invoice, DISTRICT shall notify CONTRACTOR in writing of any disputed amounts included in the invoice. Within FORTY-

each invoice, DISTRICT shall pay all undisputed amounts included on the invoice. DISTRICT shall not withhold applicable taxes or other authorized deductions from payments made to CONTRACTOR.

- 1.5 ACCOUNTING RECORDS: CONTRACTOR shall maintain complete and accurate records with respect to all matters covered under this Agreement for a period of three (3) years after the expiration or termination of this Agreement. DISTRICT shall have the right to access and examine such records, without charge, during normal business hours. DISTRICT shall further have the right to audit such records, to make transcripts therefrom and to inspect all program data, documents, proceedings, and activities.
- 1.6 ABANDONMENT BY CONTRACTOR: In the event CONTRACTOR ceases to perform the Work agreed to under this Agreement or otherwise abandons the undertaking contemplated herein prior to the expiration of this Agreement or prior to completion of any or all tasks set forth in the Scope of Work, CONTRACTOR shall deliver to DISTRICT immediately and without delay, all materials, records and other work product prepared or obtained by CONTRACTOR in the performance of this Agreement. Furthermore, CONTRACTOR shall only be compensated for the reasonable value of the services, tasks and other work performed up to the time of cessation or abandonment, less a deduction for any damages, costs or additional expenses which DISTRICT may incur as a result of CONTRACTOR's cessation or abandonment.

II. PERFORMANCE OF AGREEMENT

- 2.1 DISTRICT'S REPRESENTATIVES: The DISTRICT hereby designates Representative, Jim Hays principal of YGS (hereinafter, the "DISTRICT Representatives") to act as its representatives for the performance of this Agreement. The Superintendent shall be the chief DISTRICT Representative. The DISTRICT Representatives or their designee shall act on behalf of the DISTRICT for all purposes under this Agreement. CONTRACTOR shall not accept directions or orders from any person other than the DISTRICT Representatives or their designee.
- 2.2 CONTRACTOR REPRESENTATIVE: CONTRACTOR hereby, Rick Wise to act as its representative for the performance of this Agreement (hereinafter, "CONTRACTOR Representative"). CONTRACTOR Representative shall have full authority to represent and act on behalf of the CONTRACTOR for all purposes under this Agreement. CONTRACTOR Representative or his designee shall supervise and direct the performance of the Work, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Agreement. Notice to the CONTRACTOR Representative shall constitute notice to CONTRACTOR.
- 2.3 COORDINATION OF SERVICE; CONFORMANCE WITH REQUIREMENTS: CONTRACTOR agrees to work closely with DISTRICT staff in the performance of the Work and this Agreement and shall be available to DISTRICT staff and the DISTRICT Representatives at all reasonable times. All work prepared by CONTRACTOR shall be subject to inspection and approval by DISTRICT Representatives or their designees.
- 2.4 STANDARD OF CARE; PERFORMANCE OF EMPLOYEES: CONTRACTOR represents, acknowledges and agrees to the following:
- A. CONTRACTOR shall perform all Work skillfully, competently and to the highest standards of CONTRACTOR's profession;
 - B. CONTRACTOR shall perform all Work in a manner reasonably satisfactory to the DISTRICT;
 - C. CONTRACTOR shall comply with all applicable federal, state and local laws and regulations, including the conflict of interest provisions of Government code Section 1090 and the Political Reform Act (Government Code Section 81000 *et seq.*);
 - D. CONTRACTOR understands the nature and scope of the Work to be performed under this Agreement as well as any and all schedules of performance;
 - E. All of CONTRACTOR's employees and agents possess sufficient skill, knowledge, training and experience to perform those services and tasks assigned to them by CONTRACTOR; and

- F. All of CONTRACTOR's employees and agents (including but not limited subcontractors and subconsultants) possess all licenses, permits, certificates, qualifications and approvals of whatever nature that are legally required to perform the tasks and services contemplated under this Agreement and all such licenses, permits, certificates, qualifications and approvals shall be maintained throughout the term of this Agreement and made available to DISTRICT for copying and inspection.
- 2.5 ASSIGNMENT: The skills, training, knowledge and experience of CONTRACTOR are material to DISTRICT's willingness to enter into this Agreement. Accordingly, DISTRICT has an interest in the qualifications and capabilities of the person(s) who will perform the services and tasks to be undertaken by CONTRACTOR or on behalf of CONTRACTOR in the performance of this Agreement. In recognition of this interest, CONTRACTOR agrees that it shall not assign or transfer, either directly or indirectly or by operation of law, this Agreement or the performance of any of CONTRACTOR's duties or obligations under this Agreement without the prior written consent of the DISTRICT. In the absence of DISTRICT's prior written consent, any attempted assignment or transfer shall be ineffective, null and void and shall constitute a material breach of this Agreement.
- 2.6 CONTROL AND PAYMENT OF SUBORDINATES; INDEPENDENT CONTRACTOR: The Work shall be performed by CONTRACTOR or under CONTRACTOR's strict supervision. CONTRACTOR will determine the means, methods and details of performing the Work subject to the requirements of this Agreement. DISTRICT retains CONTRACTOR on an independent contractor basis and not as an employee. CONTRACTOR reserves the right to perform similar or different services for other principals during the term of this Agreement, provided such work does not unduly interfere with CONTRACTOR's competent and timely performance of the Work contemplated under this Agreement and provided the performance of such services does not result in the unauthorized disclosure of DISTRICT's confidential or proprietary information. Any additional personnel performing the Work under this Agreement on behalf of CONTRACTOR are not employees of DISTRICT and shall at all times be under CONTRACTOR's exclusive direction and control. CONTRACTOR shall pay all wages, salaries and other amounts due such personnel and shall assume responsibility for all benefits, payroll taxes, social security and Medicare payments and the like. CONTRACTOR shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, workers' compensation insurance and the like.
- 2.7 REMOVAL OF EMPLOYEES OR AGENTS: If any of CONTRACTOR's officers, employees, agents, contractors, subcontractors or subconsultants is determined by the DISTRICT Representatives to be uncooperative, incompetent, a threat to the adequate or timely performance of the tasks assigned to CONTRACTOR, a threat to persons or property, or if any of CONTRACTOR's officers, employees, agents, contractors, subcontractors or subconsultants fail or refuse to perform the Work in a manner acceptable to the DISTRICT, such officer, employee, agent, contractor, subcontractor or subconsultant shall be promptly removed by CONTRACTOR and shall not be re-assigned to perform any of the Work.
- 2.8 COMPLIANCE WITH LAWS: CONTRACTOR shall keep itself informed of and in compliance with all applicable federal, State or local laws to the extent such laws control or otherwise govern the performance of the Work. CONTRACTOR's compliance with applicable laws shall include without limitation compliance with all applicable Cal/OSHA requirements.
- 2.9 NON-DISCRIMINATION: In the performance of this Agreement, CONTRACTOR shall not discriminate against any employee, subcontractor, subconsultant, or applicant for employment because of race, color, creed, religion, sex, marital status, sexual orientation, national origin, ancestry, age, physical or mental disability or medical condition.
- 2.10. INDEPENDENT CONTRACTOR STATUS: The Parties acknowledge, understand and agree that CONTRACTOR and all persons retained or employed by CONTRACTOR are, and shall at all times remain, wholly independent contractors and are not officials, officers, employees, departments or subdivisions of DISTRICT. CONTRACTOR shall be solely responsible for the negligent acts and/or omissions of its employees, agents, contractors, subcontractors and subconsultants. CONTRACTOR and all persons retained or employed by CONTRACTOR shall have no authority, express or implied, to bind DISTRICT in any manner, nor to incur any obligation, debt or liability of any kind on behalf of, or against, DISTRICT, whether by contract or otherwise, unless such authority is expressly conferred to CONTRACTOR under this Agreement or is otherwise expressly conferred by DISTRICT in writing.

III. INSURANCE

- 3.1 DUTY TO PROCURE AND MAINTAIN INSURANCE: Prior to the beginning of and throughout the duration of the Work, CONTRACTOR will procure and maintain policies of insurance that meet the requirements and specifications set forth under this Article. CONTRACTOR shall procure and maintain the following insurance coverage, at its own expense:
- A. Commercial General Liability Insurance: CONTRACTOR shall procure and maintain Commercial General Liability Insurance ("CGL Coverage") as broad as Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001) or its equivalent. Such CGL Coverage shall have minimum limits of no less than One Million Dollars (\$1,000,000.00) per occurrence and Two Million Dollars (\$2,000,000.00) in the general aggregate for bodily injury, personal injury, property damage, operations, products and completed operations, and contractual liability.
 - B. Automobile Liability Insurance: CONTRACTOR shall procure and maintain Automobile Liability Insurance as broad as Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto). Such Automobile Liability Insurance shall have minimum limits of no less than One Million Dollars (\$1,000,000.00) per accident for bodily injury and property damage.
 - C. Workers' Compensation Insurance/ Employer's Liability Insurance: A policy of workers' compensation insurance in such amount as will fully comply with the laws of the State of California and which shall indemnify, insure and provide legal defense for both CONTRACTOR and DISTRICT against any loss, claim or damage arising from any injuries or occupational diseases occurring to any worker employed by or any persons retained by CONTRACTOR in the course of carrying out the Work contemplated in this Agreement. Policy shall contain a waiver of subrogation against the all parties named as additional insureds under this subsection arising from work performed by the CONTRACTOR.
- 3.2 ADDITIONAL INSURED REQUIREMENTS: The CGL Coverage and the Automobile Liability Insurance shall contain an endorsement naming the DISTRICT and DISTRICT's elected and appointed officials, officers, employees, agents and volunteers as additional insureds.
- 3.3 REQUIRED CARRIER RATING: All varieties of insurance required under this Agreement shall be procured from insurers admitted in the State of California and authorized to issue policies directly to California insureds. Except as otherwise provided elsewhere under this Article, all required insurance shall be procured from insurers, who according to the latest edition of the Best's Insurance Guide have an A.M. Best's rating of no less than A:VII. DISTRICT may also accept policies procured by insurance carriers with a Standard & Poor's rating of no less than BBB according to the latest published edition the Standard & Poor's rating guide. As to Workers' Compensation Insurance/ Employer's Liability Insurance, the DISTRICT Representatives are authorized to authorize lower ratings than those set forth in this Section.
- 3.4 PRIMACY OF CONSULTANT'S INSURANCE: All policies of insurance provided by CONTRACTOR shall be primary to any coverage available to DISTRICT or DISTRICT's elected or appointed officials, officers, employees, agents or volunteers. Any insurance or self-insurance maintained by DISTRICT or DISTRICT's elected or appointed officials, officers, employees, agents or volunteers shall be in excess of CONTRACTOR's insurance and shall not contribute with it.
- 3.5 WAIVER OF SUBROGATION: All insurance coverage provided pursuant to this Agreement shall not prohibit CONTRACTOR or CONTRACTOR's officers, employees, agents, subcontractors or subconsultants from waiving the right of subrogation prior to a loss. CONTRACTOR hereby waives all rights of subrogation against DISTRICT.
- 3.6 VERIFICATION OF COVERAGE: CONTRACTOR acknowledges, understands and agrees, that DISTRICT's ability to verify the procurement and maintenance of the insurance required under this Article is critical to safeguarding DISTRICT's financial well-being and, indirectly, the collective well-being of the residents of the DISTRICT. Accordingly, CONTRACTOR warrants, represents and agrees that it shall furnish DISTRICT with original certificates of insurance and endorsements evidencing the coverage required under this Article on forms satisfactory to DISTRICT in its sole and absolute discretion. **The certificates of insurance and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind**

coverage on its behalf, and shall be on forms provided by the DISTRICT if requested. All certificates of insurance and endorsements shall be received and approved by DISTRICT as a condition precedent to CONTRACTOR's commencement of any work or any of the Work. Upon DISTRICT's written request, CONTRACTOR shall also provide DISTRICT with certified copies of all required insurance policies and endorsements.

IV. INDEMNIFICATION

- 4.1 The Parties agree that DISTRICT and DISTRICT's elected and appointed officials, officers, employees, agents and volunteers (hereinafter, the "DISTRICT Indemnitees") should, to the fullest extent permitted by law, be protected from any and all loss, injury, damage, claim, lawsuit, cost, expense, attorneys' fees, litigation costs, or any other cost arising out of or in any way related to the performance of this Agreement. Accordingly, the provisions of this indemnity provision are intended by the Parties to be interpreted and construed to provide the DISTRICT Indemnitees with the fullest protection possible under the law. CONTRACTOR acknowledges that DISTRICT would not enter into this Agreement in the absence of CONTRACTOR's commitment to indemnify, defend and protect DISTRICT as set forth herein.
- 4.2 To the fullest extent permitted by law, CONTRACTOR shall indemnify, hold harmless and defend the DISTRICT Indemnitees from and against all liability, loss, damage, expense, cost (including without limitation reasonable attorney's fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with CONTRACTOR's performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole negligence or willful misconduct of the CITY.
- 4.3 DISTRICT shall have the right to offset against the amount of any compensation due CONTRACTOR under this Agreement any amount due DISTRICT from CONTRACTOR as a result of CONTRACTOR's failure to pay DISTRICT promptly any indemnification arising under this Article and related to CONTRACTOR's failure to either (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.
- 4.4 The obligations of CONTRACTOR under this Article will not be limited by the provisions of any workers' compensation act or similar act. CONTRACTOR expressly waives its statutory immunity under such statutes or laws as to DISTRICT and DISTRICT's elected and appointed officials, officers, employees, agents and volunteers.
- 4.5 CONTRACTOR agrees to obtain executed indemnity agreements with provisions identical to those set forth here in this Article from each and every subcontractor or any other person or entity involved by, for, with or on behalf of CONTRACTOR in the performance of this Agreement. In the event CONTRACTOR fails to obtain such indemnity obligations from others as required herein, CONTRACTOR agrees to be fully responsible and indemnify, hold harmless and defend DISTRICT and DISTRICT's elected and appointed officials, officers, employees, agents and volunteers from and against any and all claims and losses, costs or expenses for any damage due to death or injury to any person and injury to any property resulting from any alleged intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONTRACTOR's subcontractors or any other person or entity involved by, for, with or on behalf of CONTRACTOR in the performance of this Agreement. Such costs and expenses shall include reasonable attorneys' fees incurred by counsel of DISTRICT's choice.
- 4.6 DISTRICT does not, and shall not, waive any rights that it may possess against CONTRACTOR because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provision shall apply regardless of whether or not any insurance policies are determined to be applicable to the claim, demand, damage, liability, loss, cost or expense.
- 4.7 This Article and all provisions contained herein (including but not limited to the duty to indemnify, defend and hold free and harmless) shall survive the termination or normal expiration of this Agreement and is in addition to any other rights or remedies which the DISTRICT may have at law or in equity.

V. TERMINATION

5.1 TERMINATION WITHOUT CAUSE: DISTRICT may terminate this Agreement at any time for convenience and without cause by giving CONTRACTOR a minimum of five (5) calendar days prior written notice of DISTRICT's intent to terminate this Agreement. Upon such termination for convenience, CONTRACTOR shall be compensated only for those services and tasks which have been performed by CONTRACTOR up to the effective date of the termination. CONTRACTOR may not terminate this Agreement except for cause as provided under Section 5.2, below. If this Agreement is terminated as provided herein, DISTRICT may require CONTRACTOR to provide all finished or unfinished Documents and Data, as defined in Section 7.1 below, and other information of any kind prepared by CONTRACTOR in connection with the performance of the Work. CONTRACTOR shall be required to provide such Documents and Data within fifteen (15) calendar days of DISTRICT's written request. No actual or asserted breach of this Agreement on the part of DISTRICT pursuant to Section 5.2, below, shall operate to prohibit or otherwise restrict DISTRICT's ability to terminate this Agreement for convenience as provided under this Section.

5.2 EVENTS OF DEFAULT; BREACH OF AGREEMENT:

A. In the event either Party fails to perform any duty, obligation, service or task set forth under this Agreement (or fails to timely perform or properly perform any such duty, obligation, service or task set forth under this Agreement), an event of default (hereinafter, "Event of Default") shall occur. For all Events of Default, the Party alleging an Event of Default shall give written notice to the defaulting Party (hereinafter referred to as a "Default Notice") which shall specify: (i) the nature of the Event of Default; (ii) the action required to cure the Event of Default; (iii) a date by which the Event of Default shall be cured, which shall not be less than the applicable cure period set forth under Sections 5.2.B and 5.2.C below or if a cure is not reasonably possible within the applicable cure period, to begin such cure and diligently prosecute the such cure to completion. The Event of Default shall constitute a breach of this Agreement if the defaulting Party fails to cure the Event of Default within the applicable cure period or any extended cure period allowed under this Agreement.

B. CONTRACTOR shall cure the following Events of Defaults within the following time periods:

- i. Within three (3) business days of DISTRICT's issuance of a Default Notice for any failure of CONTRACTOR to timely provide DISTRICT or DISTRICT's employees or agents with any information and/or written reports, documentation or work product which CONTRACTOR is obligated to provide to DISTRICT or DISTRICT's employees or agents under this Agreement. Prior to the expiration of the 3-day cure period, CONTRACTOR may submit a written request for additional time to cure the Event of Default upon a showing that CONTRACTOR has commenced efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 3-day cure period. The foregoing notwithstanding, DISTRICT shall be under no obligation to grant additional time for the cure of an Event of Default under this Section 5.2 B.i. that exceeds seven (7) calendar days from the end of the initial 3-day cure period; or
- ii. Within fourteen (14) calendar days of DISTRICT's issuance of a Default Notice for any other Event of Default under this Agreement. Prior to the expiration of the 14-day cure period, CONTRACTOR may submit a written request for additional time to cure the Event of Default upon a showing that CONTRACTOR has commenced efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 14-day cure period. The foregoing notwithstanding, DISTRICT shall be under no obligation to grant additional time for the cure of an Event of Default under this Section 5.2B.ii that exceeds thirty (30) calendar days from the end of the initial 14-day cure period. .

In addition to any other failure on the part of CONTRACTOR to perform any duty, obligation, service or task set forth under this Agreement (or the failure to timely perform or properly perform any such duty, obligation, service or task), an Event of Default on the part of CONTRACTOR shall include, but shall not be limited to the following: (i) CONTRACTOR's refusal or failure to perform any of the services or tasks called for under the Scope of Work; (ii) CONTRACTOR's failure to fulfill or perform its obligations under this Agreement within the specified time or if no time is specified, within a reasonable time; (iii) CONTRACTOR's and/or its employees' disregard or violation of any federal, state, local law, rule, procedure or regulation; (iv) the initiation of proceedings under any bankruptcy, insolvency, receivership, reorganization, or similar legislation as relates to CONTRACTOR, whether voluntary or involuntary; (v) CONTRACTOR's refusal or failure to perform or observe any covenant, condition, obligation or provision of this Agreement; and/or (vii) DISTRICT's discovery that a

statement representation or warranty by CONTRACTOR relating to this Agreement is false, misleading or erroneous in any material respect.

- C. DISTRICT shall cure any Event of Default asserted by CONTRACTOR within FORTY-FIVE (45) calendar days of CONTRACTOR's issuance of a Default Notice, unless the Event of Default cannot reasonably be cured within the 45-day cure period. Prior to the expiration of the 45-day cure period, DISTRICT may submit a written request for additional time to cure the Event of Default upon a showing that DISTRICT has commenced its efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 45-day cure period. The foregoing notwithstanding, an Event of Default dealing with DISTRICT's failure to timely pay any undisputed sums to CONTRACTOR as provided under Section 1.4, above, shall be cured by DISTRICT within five (5) calendar days from the date of CONTRACTOR's Default Notice to DISTRICT.
- D. DISTRICT, in its sole and absolute discretion, may also immediately suspend CONTRACTOR's performance under this Agreement pending CONTRACTOR's cure of any Event of Default by giving CONTRACTOR written notice of DISTRICT's intent to suspend CONTRACTOR's performance (hereinafter, a "Suspension Notice"). DISTRICT may issue the Suspension Notice at any time upon the occurrence of an Event of Default. Upon such suspension, CONTRACTOR shall be compensated only for those services and tasks which have been rendered by CONTRACTOR to the reasonable satisfaction of DISTRICT up to the effective date of the suspension. No actual or asserted breach of this Agreement on the part of DISTRICT shall operate to prohibit or otherwise restrict DISTRICT's ability to suspend this Agreement as provided herein.
- E. No waiver of any Event of Default or breach under this Agreement shall constitute a waiver of any other or subsequent Event of Default or breach. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- F. The duties and obligations imposed under this Agreement and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. In addition to any other remedies available to DISTRICT at law or under this Agreement in the event of any breach of this Agreement, DISTRICT, in its sole and absolute discretion, may also pursue any one or more of the following remedies:
 - i. Upon written notice to CONTRACTOR, the DISTRICT may immediately terminate this Agreement in whole or in part;
 - ii. Upon written notice to CONTRACTOR, the DISTRICT may extend the time of performance;
 - iii. The DISTRICT may proceed by appropriate court action to enforce the terms of the Agreement to recover damages for CONTRACTOR's breach of the Agreement or to terminate the Agreement; or
 - iv. The DISTRICT may exercise any other available and lawful right or remedy.

CONTRACTOR shall be liable for all legal fees plus other costs and expenses that DISTRICT incurs upon a breach of this Agreement or in the DISTRICT's exercise of its remedies under this Agreement.

- G. In the event DISTRICT is in breach of this Agreement, CONTRACTOR's sole remedy shall be the suspension or termination of this Agreement and/or the recovery of any unpaid sums lawfully owed to CONTRACTOR under this Agreement for completed services and tasks.

5.3 **SCOPE OF WAIVER:** No waiver of any default or breach under this Agreement shall constitute a waiver of any other default or breach, whether of the same or other covenant, warranty, agreement, term, condition, duty or requirement contained in this Agreement. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.

5.4 **SURVIVING ARTICLES, SECTIONS AND PROVISIONS:** The termination of this Agreement pursuant to any provision of this Article or by normal expiration of its term or any extension thereto shall not operate to terminate any Article, Section or provision contained herein which provides that it shall survive the termination or normal expiration of this Agreement.

VI. MISCELLANEOUS PROVISIONS

- 6.1 DOCUMENTS & DATA; LICENSING OF INTELLECTUAL PROPERTY: All Documents and Data shall be and remain the property of DISTRICT without restriction or limitation upon their use or dissemination by DISTRICT. For purposes of this Agreement, the term "Documents and Data" means and includes all reports, analyses, correspondence, plans, drawings, designs, renderings, specifications, notes, summaries, strategies, charts, schedules, spreadsheets, calculations, lists, data compilations, documents or other materials developed and/or assembled by or on behalf of CONTRACTOR in the performance of this Agreement and fixed in any tangible medium of expression, including but not limited to Documents and Data stored digitally, magnetically and/or electronically. This Agreement creates, at no cost to DISTRICT, a perpetual license for DISTRICT to copy, use, reuse, disseminate and/or retain any and all copyrights, designs, and other intellectual property embodied in all Documents and Data. CONTRACTOR shall require all subcontractors and subconsultants working on behalf of CONTRACTOR in the performance of this Agreement to agree in writing that DISTRICT shall be granted the same right to copy, use, reuse, disseminate and retain Documents and Data prepared or assembled by any subcontractor or subconsultant as applies to Documents and Data prepared by CONTRACTOR in the performance of this Agreement.
- 6.2 CONFIDENTIALITY: All data, documents, discussion, or other information developed or received by CONTRACTOR or provided for performance of this Agreement are deemed confidential and shall not be disclosed by CONTRACTOR without prior written consent by DISTRICT. DISTRICT shall grant such consent if disclosure is legally required. Upon request, all DISTRICT data shall be returned to DISTRICT upon the termination or expiration of this Agreement. CONTRACTOR shall not use DISTRICT's name or insignia, photographs, or any publicity pertaining to the Work in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of DISTRICT.
- 6.3 FINGERPRINTING. CONTRACTOR shall comply with all applicable provisions of Education Code Section 45125.1. CONTRACTOR will conduct criminal background checks of all employees, agents and/or representatives assigned performing any services and tasks on DISTRICT property on CONTRACTOR's behalf. CONTRACTOR will certify in writing that no such employees, agents and representatives who have been convicted of a violent or serious felony as described in the Notice Re: Criminal Records will have contact with DISTRICT's pupils. CONTRACTOR will provide DISTRICT with a list of all employees providing services pursuant to this Agreement. To the extent permitted under Education Code Section 45125.1, the DISTRICT Representatives may waive any fingerprinting requirements where it is determined that the CONTRACTOR, its employees and agents will have limited or no contact with pupils in the performance of any services and tasks called for under this Agreement. The waiver of the requirements of Education Code Section 45125.1 must be made in writing signed by one or both of the DISTRICT Representatives.
- 6.4 DRUG FREE WORKPLACE CERTIFICATION. CONTRACTOR shall apprise its officials and employees of the Drug-Free Workplace Act of 1990 (Govt. Code Section 8350 et seq.) (hereinafter, the "Act") which requires that every person or organization awarded a contract or grant for the procurement of property or services from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred. CONTRACTOR shall comply with the requirements publication and notification requirements of Government Code Section 8355 as to all employees performing services and tasks under this Agreement on DISTRICT property or from DISTRICT facilities.
- 6.5 FALSE CLAIMS ACT. CONTRACTOR warrants and represents that neither CONTRACTOR nor any person who is an officer of, in a managing position with, or has an ownership interest in CONTRACTOR has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act, 31 U.S.C., Section 3789 *et seq.* and the California False Claims Act, Government Code Section 12650 *et seq.*
- 6.6 NOTICES: All notices permitted or required under this Agreement shall be given to the respective Parties at the following addresses, or at such other address as the respective Parties may provide in writing for this purpose:

CONTRACTOR:

Rick Wise
1628 Cattail Court
Marysville, CA 95901
Phone: 530-455-5419

DISTRICT:

Marysville Joint Unified School District
1919 B Street
Marysville, CA 95901
Phone: 749-6114
Fax: 742-0573

Such notices shall be deemed effective when personally delivered or successfully transmitted by facsimile as evidenced by a fax confirmation slip or when mailed, forty-eight (48) hours after deposit with the United States Postal Service, first class postage prepared and addressed to the Party at its applicable address.

- 6.7 COOPERATION; FURTHER ACTS: The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as is reasonably necessary, appropriate or convenient to achieve the purposes of this Agreement.
- 6.8 SUBCONTRACTING: CONTRACTOR shall not subcontract any portion of the Work required by this Agreement, except as expressly stated herein, without the prior written approval of DISTRICT. Subcontracts (including without limitation subcontracts with subconsultants), if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including provisions relating to insurance requirements and indemnification.
- 6.9 DISTRICT'S RIGHT TO EMPLOY OTHER CONTRACTORS: DISTRICT reserves the right to employ other contractors in connection with the various projects worked upon by CONTRACTOR.
- 6.10 PROHIBITED INTERESTS: CONTRACTOR warrants, represents and maintains that it has not employed nor retained any company or person, other than a *bona fide* employee working solely for CONTRACTOR, to solicit or secure this Agreement. Further, CONTRACTOR warrants and represents that it has not paid nor has it agreed to pay any company or person, other than a *bona fide* employee working solely for CONTRACTOR, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, DISTRICT shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of DISTRICT, during the term of his or her service with DISTRICT, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.
- 6.11 TIME IS OF THE ESSENCE: Time is of the essence for each and every provision of this Agreement.
- 6.12 GOVERNING LAW AND VENUE: This Agreement shall be interpreted and governed according to the laws of the State of California. In the event of litigation between the Parties, venue, without exception, shall be in the Yuba County Superior Court of the State of California. If, and only if, applicable law requires that all or part of any such litigation be tried exclusively in federal court, venue, without exception, shall be in the Northern District of California located in the City of San Francisco, California.
- 6.13 ATTORNEY'S FEES: If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorney's fees and all other costs of such action.
- 6.14 SUCCESSORS AND ASSIGNS: This Agreement shall be binding on the successors and assigns of the Parties.
- 6.15 NO THIRD PARTY BENEFIT: There are no intended third party beneficiaries of any right or obligation assumed by the Parties. All rights and benefits under this Agreement inure exclusively to the Parties.
- 6.16 CONSTRUCTION OF AGREEMENT: This Agreement shall not be construed in favor of, or against, either Party but shall be construed as if the Parties prepared this Agreement together through a process of negotiation and with the advice of their respective attorneys.

6.16 **CONSTRUCTION OF AGREEMENT:** This Agreement shall not be construed in favor of, or against, either Party but shall be construed as if the Parties prepared this Agreement together through a process of negotiation and with the advice of their respective attorneys.

6.17 **SEVERABILITY:** If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

6.18 **AMENDMENT; MODIFICATION:** No amendment, modification or supplement of this Agreement shall be valid or binding unless executed in writing and signed by both Parties, subject to DISTRICT approval. The requirement for written amendments, modifications or supplements cannot be waived and any attempted waiver shall be void and invalid.

6.19 **CAPTIONS:** The captions of the various articles, sections and paragraphs are for convenience and ease of reference only, and do not define, limits, augment, or describe the scope, content, or intent of this Agreement.

6.20 **INCONSISTENCIES OR CONFLICTS:** In the event of any conflict or inconsistency between the provisions of this Agreement and any of the exhibits attached hereto, the provisions of this Agreement shall control.

6.21 **ENTIRE AGREEMENT:** This Agreement including all attached exhibits is the entire, complete, final and exclusive expression of the Parties with respect to the matters addressed herein and supersedes all other agreements or understandings, whether oral or written, or entered into between DISTRICT and CONTRACTOR prior to the execution of this Agreement. No statements, representations or other agreements, whether oral or written, made by any Party which are not embodied herein shall be valid or binding. No amendment, modification or supplement to this Agreement shall be valid and binding unless in writing and duly executed by the Parties pursuant to Section 6.15, above.

6.22 **COUNTERPARTS:** This Agreement shall be executed in TWO (2) original counterparts each of which shall be of equal force and effect. No handwritten or typewritten amendment, modification or supplement to any one counterparts shall be valid or binding unless made to all three counterparts in conformity with Section 6.15, above.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed the day and year first appearing in this Agreement, above.

MARYSVILLE JOINT UNIFIED SCHOOL
DISTRICT:

Date: _____
By: _____
Penny Lauseng, Assistant Superintendent of
Business Services

Contractor

Date: 5-26-21
By: _____
Name: [Signature]
Title: Pop. Services

Consultant Name and Site

Exhibit A

Scope of Work

Beginning on: August 11, 2021

Concluding on: June 30, 2022

Payment: \$50,000.00

Service: Through academic, social and behavioral counseling, Rick Wise will assist the site to increase student academic achievement, positive attendance and work directly with our most at risk student population. Consultant for 185 days of service to be rendered in order to receive compensation equal to but not exceed annual total as reflected in the agreement. An amount equal to a daily average shall be deducted from monthly total of \$4,545.45. for non-service days each month.

SUNPOWER®

April 30, 2021

Marysville Joint Unified School District
Attn: Penny Lauseng
1919 B Street
Marysville, CA 95901
Sent in advance via email to: plauseng@mjud.k12.ca.us

Marysville Joint Unified School District
Attn: Mike Hodson
1919 B Street
Marysville, CA 95901
Sent in advance via email to: mhodson@mjud.k12.ca.us

RE: Power Purchase Agreement dated March 29th, 2019 (the "Agreement") by and between Marysville Joint Unified School District ("District" or "you") and Marysville Unified School District Solar, LLC ("Provider"), a wholly owned, indirect subsidiary of SunPower Corporation ("SunPower")

Dear Ms. Lauseng and Mr. Hodson:

Reference is made to SunPower's letter to the District dated March 7, 2019 (the "March 7 letter"), to the District's letter to SunPower dated May 27, 2020 (the "May 27 letter"), and to Section 1.4(i) of the Agreement. Capitalized terms used but not otherwise defined in this letter have the meanings given such terms in the Agreement.

As previously discussed between SunPower and the District, the costs for necessary utility upgrades to build the Systems exceeded \$300,000.00. SunPower notified the District of such costs in the March 7 letter. The Parties were unable to agree upon an increased Energy Rate to compensate the Provider for the additional costs of such utility upgrades. In the May 27 letter, the District's attorney requested that the Provider formally cancel the Agreement pursuant to Section 1.4(i) of the Agreement.

This letter serves as notice to the District that the Provider is exercising its right to terminate the Agreement pursuant to Section 1.4(i) thereof, effective as of the date of this letter. Pursuant to Section 1.4(i), neither Party shall have any liability to the other under the Agreement upon such termination.

While we request the District's acknowledgement of the termination of the Agreement by countersigning and returning a copy of this letter to SunPower by email to LegalNoticeSunPower@sunpowercorp.com, the termination shall be effective in any case as of the date of this letter.

Should you have any questions about this letter or the termination of the Agreement, please contact Cindy Burda, Associate General Counsel, C&I Solutions at cindy.burda@sunpowercorp.com.

Sincerely,

Business Services Department

Approval: PL

Date: 6-6-21

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PROVIDER

Marysville Unified Public School District Solar, LLC
By: SunPower AssetCo, LLC, its sole member and manager

By: Eric Potts
Name: Eric Potts
Title: Vice President

Acknowledged:

DISTRICT

Marysville Joint Unified School District

By: Penny Lauseng
Name: Penny Lauseng
Title: Assistant Superintendent
Business Services

Cc: James Traber via email to jtraber@f3law.com



520 Capitol Mall, Suite 400
Sacramento, CA 95814
Main: 916-443-0000
Fax: 916-443-0030
www.f3law.com

James Traber
Direct Dial: (916) 604-3083
jtraber@f3law.com

July 1, 2020

Solar Star Marysville, LLC
c/o SunPower Corporation
14141 Harbour Way South, Suite 1901
Richmond, CA 94804

SunPower AssetCo LLC
Attn: Whitney Mack
1414 Harbour Way South, Suite 1901
Richmond, CA 94804

Re: Termination of Marysville Joint Unified School District Power Purchase Agreement

To Whom it May Concern:

We write on behalf of the Marysville Joint Unified School District ("District") regarding the Power Purchase Agreement (the "Agreement") between the District and SunPower AssetCo LLC ("SunPower," and with the District, the "Parties").

Section 3.8 of the Agreement required that SunPower complete the Project on or before October 15, 2019. Section 3.8(d) of the Agreement allowed SunPower to request an extension. However, if an extension was requested, SunPower was required to provide a new Commercial Operation Date by which the project would be operational.

On March 7, 2019 SunPower notified the District that it would not proceed with the project, or meet the Commercial Operation Deadline, because the costs for necessary utility upgrades exceeded the Agreement's allowance of \$300,000. The letter stated that by the end of March 2019, the District would have the option of moving the project, paying a higher cost, or having SunPower terminate the Agreement under section 1.4.

The March 7th letter did not provide a new Commercial Operation Deadline as required by section 3.8(d). As a result, the Commercial Operation Deadline was not extended. Additionally, although SunPower has proposed alternative sites, SunPower has acknowledged that completion of the project as envisioned under the Agreement is not possible.

Under section 3.8(d) of the Agreement, because the project was not completed by the October 15, 2019 Commercial Operation Deadline, the District has the right to declare SunPower in default and terminate the Agreement after 180 days (which expired on April 12, 2020).

July 1, 2020
Page 2

Section 3.8(c) also allows the District to recover liquidated damages of \$500 per day for 180 days.

The District hereby exercises its right to terminate the agreement pursuant to section 3.8(d). The District does not currently plan to pursue such liquidated damages or costs, but reserves the right to do so should it become necessary.

Very truly yours,

FAGEN FRIEDMAN & FULFROST, LLP

A handwritten signature in black ink, appearing to be 'James Traber', with a stylized, cursive script.

James Traber

CONSULTING SERVICES AGREEMENT

This Agreement is entered into effective the 1st day of June, 2021 by and between Total Compensation Systems, Inc. ("Consultant"), a California corporation with principal offices located at 5655 Lindero Canyon Road, Suite 223, Westlake Village, California, 91362 and Marysville Joint Unified School District ("Customer").

The following shall govern the provision of consulting services by Consultant to Customer.

1. Consulting Services. Consultant shall provide the consulting services described on Schedule 1 attached hereto.
2. Compensation to Consultant. Customer shall pay Consultant for the consulting services described on Schedule 1 attached hereto the compensation set forth on Schedule 2 attached hereto.
3. Term and Termination. (a) Term. This Agreement shall commence on the date first written above and shall continue in effect until December 31, 2023, or until all consulting services described on Schedule 1 have been performed, whichever occurs first, unless sooner terminated in accordance with the provisions of this Agreement. (b) Termination Without Cause. This agreement may be terminated at any time by either party upon sixty (60) days prior written notice to the other party. (c) Termination With Cause. Either party shall have the right to terminate this Agreement upon the failure of either party to observe any of the covenants and agreements required to be observed by it under this Agreement, and such failure continues for a period of thirty (30) days after written notice thereof. (d) Rights and Obligations after Termination. Termination of this agreement shall not relieve either party of any rights or obligations arising out of the Agreement prior to termination, with the exception that the amount of the final payment that shall be made by Customer shall be based solely upon the percentage of work that was completed by Consultant.
4. Customer Will Provide Information. Customer shall provide Consultant with the information necessary for Consultant to provide the consulting services described on Schedule 1 attached hereto.
5. Authorization to Acquire Information. Customer hereby authorizes Consultant to acquire the necessary information reasonably required by Consultant to provide the consulting services described on Schedule 1 attached hereto from any agency, agencies, source or sources.
6. Customer's Right to Provide Information. Customer represents and warrants to Consultant that it has the right to provide the information that will be given by Customer to Consultant, or which will be acquired by Consultant pursuant to paragraphs 4 and 5 above.
7. Limitation on Services. Customer understands that Customer retains sole authority and responsibility for the operation and design of all Customer's employee benefit plans.
8. Ownership of Systems and Materials. All systems, programs, operating instructions, forms and other documentation prepared by or for Consultant shall be and remain the property of Consultant. All data source documents provided by Customer shall remain the property of Customer.
9. Indemnification. (a) By Customer. Customer hereby agrees to defend and indemnify Consultant and hold Consultant harmless against any claims, injury, costs or damages (including actual attorneys' fees incurred) resulting from Customer's gross negligence or willful misconduct. (b) By Consultant. Consultant hereby agrees to defend and indemnify Customer and hold Customer harmless against any claims, injury, costs or damages (including actual attorneys' fees incurred) resulting from Consultant's gross negligence or willful misconduct.

10. General.

- a. Relationship of the Parties. The relationship between Consultant and Customer established by this Agreement is that of independent contractors. Consultant and Customer shall each conduct its respective business at its own initiative, responsibility, and expense, and shall have no authority to incur any obligations on behalf of the other.
- b. Force Majeure. No party shall have liability for damages or non-performance under this Agreement due to fire, explosion, strikes or labor disputes, water, acts of God, war, civil disturbances, acts of civil or military authorities or the public enemy, transportation, facilities, labor, fuel or energy shortages, or other causes beyond that party's control.
- c. Entire Agreement. This Agreement and the Schedules attached hereto contain the entire agreement between the parties and supersedes all previous agreements and proposals, oral or written, and all negotiations, conversations, or discussions between the parties related to the subject matter of this Agreement. This Agreement shall not be deemed or construed to be modified, amended, rescinded, canceled or waived in whole or in part, except by written amendment signed by both of the parties hereto.

11. Confidentiality. Consultant recognizes that its work will bring it into close contact with confidential information of Customer, including personal information about employees of Customer. Consultant agrees not to disclose anything that is the confidential information of Customer, or that is proprietary to Customer, including its software, its legacy applications, and its databases, to any third party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as set forth below.

"CONSULTANT"
TOTAL COMPENSATION SYSTEMS, INC.

"CUSTOMER"
MARYSVILLE JOINT UNIFIED SCHOOL
DISTRICT

Signed: 

Signed: _____

By: Geoffrey L. Kischuk

By: 

Title: President

Title: ASST. Supt. of Business Services

Date: May 28, 2021

Date: _____

SCHEDULE 1

For the purposes of this Agreement, "consulting services" shall include the following services provided by Consultant to Customer:

Consulting reports including all actuarial information necessary for Customer to comply with the requirements of current GASB accounting standards 74/75 related to retiree health benefits for two years, including one full valuation and one "roll-forward" valuation. Study results will be separated between five employee classifications. Consultant will provide as many copies of the final reports as Customer shall reasonably request.

Services do not include Consultant's attendance at any meetings, unless requested by Customer at the fee shown in Schedule 2. Services also do not include a funding valuation unless requested by Customer.

SCHEDULE 2

Customer shall pay Consultant for the retiree health valuation report based on the full valuation a total of \$8,600. One-half, or \$4,300 shall be due within 30 days of the commencement of work by Consultant. One-half, or \$4,300 shall be due within 30 days of the delivery by Consultant to Customer of the draft consulting report for the full valuation (or within 30 days of contract termination, if earlier). Customer shall also pay Consultant for the retiree valuation report based on the "roll-forward" valuation a total of \$4,300 within 30 days of the delivery by Consultant to Customer of the draft consulting report for the "roll-forward" valuation (or within 30 days of contract termination, if earlier)

If Consultant receives a non-refundable deposit from Customer of \$3,870 by July 31, 2021, all amounts shown above shall be reduced by 10%.

In addition to the above fees, Customer agrees to pay Consultant an all-inclusive fee of \$1,900 per meeting to attend meetings related to the consulting services. Customer shall pay such meeting fees within 30 days of the meeting, and such fee is not subject to the above discount or to any other discounts.

INITIAL BARGAINING PROPOSAL
from the
MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT
to the
MARYSVILLE UNIFIED TEACHERS ASSOCIATION
For a Successor Agreement

The Marysville Joint Unified School District (District) presents the following initial bargaining proposal to the Marysville Unified Teachers Association (MUTA) for the 2020-21 school year, pursuant to the Educational Employment Relations Act and the Collective Bargaining Agreement between the District and MUTA.

TOTAL COMPENSATION:

- A. ARTICLES XIV: HEALTH AND WELFARE FRINGE BENEFITS
- B. ARTICLE XV: SALARY

ADDITIONAL TOPICS OF INTEREST

ARTICLE I: THE AGREEMENT
ARTICLE V: TRANSFERS AND REASSIGNMENTS

**Marysville Unified Teachers Association
Initial Proposal to
Marysville Joint Unified School District
for Contract Year 2020-2021**

The Marysville Unified Teachers Association and the Marysville Joint Unified School District are parties to a Collective Bargaining Agreement (CBA) which remains in full effect until June 30, 2023. The Marysville Unified Teachers Association wishes to explore changes to the following articles:

ARTICLE VIII: HOURS of EMPLOYMENT
ARTICLE IV: LEAVES and ABSENCES
ARTICLE XIV: HEALTH and WELFARE FRINGE BENEFITS
ARTICLE XV: SALARY and APPENDICES

And any other Article(s) mutually agreed upon by both parties.

Angela Stegall, President
Marysville Unified Teachers Association

Date

**INITIAL PROPOSAL
of the
MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT
to the
CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION #326
for
2020-2021**

The Marysville Joint Unified School District ("District") and the California School Employees Association Chapter #326 ("CSEA326") are parties to an agreement, which expires June 30, 2020. Pursuant to Article I, Reopeners are:

Total Compensation Package Including:

- 1) ARTICLE 10: Health and Welfare Benefits
- 2) ARTICLE 11: Salary

In addition, the District is interested to reopen on the following articles:

- ARTICLE 3: Organizational Security and Payroll Deductions
- ARTICLE 4: Hours and Overtime
- ARTICLE 19: Duration of Agreement

**INITIAL PROPOSAL
of the
MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT
to the
CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION #648
for
2020-2021 School Year**

The Marysville Joint Unified School District ("District") and the California School Employees Association Chapter #648 ("CSEA648") are parties to an agreement, which expires June 30, 2023. Pursuant to Article I, Reopeners are:

Total Compensation Package Including:

- 1) ARTICLE 10: Health and Welfare Benefits
- 2) ARTICLE 11: Salary

In addition, the District reopens on the following articles:

- ARTICLE 3: Fair Share and Payroll Deductions
- ARTICLE 16: Duration of Agreement