



## Corona/COVID-19 Virus Prevention in Schools & Contingency Plans for PAX Good Behavior Game Trainings


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*PAXIS is an international prevention science company*

A hundred years ago, America faced the 1918 Flu Epidemic started in China and spread across the world—killing 50 million people. The focal point of that epidemic in North America, was Fort Riley Army Base, near Junction City, Kansas, because of basic training for WWI soldiers entering the war in 1918. That was not far my hometown where my physician grandfather tended the ill and survived the epidemic himself—though with a heart condition. Now, we have a variation of that same virus causing major impact on the social structures, health, wellbeing, and the world economy. I write this letter as one of the prominent prevention scientists in the United States—for our children, families, educators, schools, communities.

Each day brings forth more knowledge about the emerging world-wide epidemic of Corona/COVID-19 virus. We urge our client sites and funders to the CDC website (<https://www.cdc.gov/coronavirus/2019-ncov/community/index.html>) on this novel virus, which has the potential to cause significant illness. Several facts are worrisome in the connection with this world-wide epidemic and schools:

- ✿ The common cold and Corona/COVID-19 virus cannot be initially distinguished, except by a testing that is not yet available for population-level distribution and analyses in the United States. Testing kits and analyzing labs just started to scale up as of March 8.
- ✿ Children—even newborns—present much milder symptoms than adults [1-5]. Thus, children are potentially more likely transmit the virus to adults and elders (e.g., grandparents) [2]. Children are less likely to present for medical care.
- ✿ China scientists reported a sharp increase in the proportion of infected children (2% before Jan 24 to 13% for Jan 25 to Feb 5;  $P < 0.001$ ), meaning that increased exposure to children low or non-symptomatic increases transmission to family adults, teachers, and others in contact with children could contribute substantially to the epidemic.
- ✿ Experts in epidemics, in some areas, have closed or planning to close school to reduce infections of adult and elders, as is the case in Italy closing all schools (*Wall Street Journal*, March 5, 2020, p. A9).



Thus, it is a significant possibility that schools in communities anywhere in the United States or Canada may be closed to reduce the epidemic. Ohio schools just closed today, as I was proofing this letter. In turn, that reduces or slows the ability to prevent the ability of schools to prevent another epidemic: the well-documented epidemic of mental, emotional, and behavioral disorders among children, teens, and young adults documented by recent reports of the Institute of Medicine [6].

Thus, as a prevention science company we have some PAX evidence-based practices with the motto of PAX Good Behavior Game: *"I Better My World, and I Better Myself."* PAX has the singular purpose of increasing peace, productivity, **health**, and happiness—which has borne out in over 50 high-quality scientific publications.

### Dealing with the Possibility of School Closings to Reduce Corona Contagion and/or Freeze on Air Travel or Quarantines

These events are happening in other countries presently who are earlier in the contagion. Quarantines are an ancient, effective way to reducing contagion. It does create other complications, in this case enabling PAXIS Institute to live up to its contractual obligations to provide one of the most effective prevention strategies in the scientific literature. **Not** providing PAX GBG to teachers, students, and schools increases the risk of poor lifetime academic success, lifetime psychiatric disorders, addictions, violence, unemployment/welfare, child abuse, etc. We do not want to stop one epidemic at the cost of another equally harmful and deadly epidemic of psychiatric disorder (including related suicide, addictions, violence, criminality, etc.).

#### Providing PAX GBG Internet Trainings Under Adverse or Quarantine Conditions

We have two immediate mechanisms to provide PAX Training, if travel is **not-recommended**, **prohibited**, areas are **quarantined**, or **school closures** occur. The PAX Good Behavior Game has two alternative methods of training:

- a. Our on-line course that involves mastery learning and is completely scalable because of the platform and service we purchased. Our on-line course is scientifically proven to be as effective as our in-person training [7]. Teachers/staff can complete the online course at home, at school, etc.
- b. All of our trainings can be delivered remotely by our trainers to groups, which can be delivered to a single group or consolidated group if needed. We understand that it might be necessary to break those sessions into smaller time blocks. We have trainers all over the United States, who can work with people in the same or different time-zones as necessary. We are in the process of selecting the best tools for this.

Please contact our contract team if you wish to inquire about these delivery options:

- ❁ Jessica Hall (Central Time): [jessica@paxis.org](mailto:jessica@paxis.org)
- ❁ Kathy Merrill (MST & PST): [kathy@paxis.org](mailto:kathy@paxis.org)
- ❁ Kimberly Rust (EST): [Kimberly@paxis.org](mailto:Kimberly@paxis.org)



## Providing Materials for PAX GBG Trainings

We have multiple ways to deliver relevant materials for the courses delivered online. It is possible that our package delivery carrier (the United Parcel Service) might or might not have some delays in shipping and delivery, depending on the scale of the epidemic. We can make the manuals viewable online.

Our intention is to provide teachers, support staff, and administrators with powerful strategies to help reduce not only the mental and behavioral health issues PAX is proven to do but also to help reduce the morbidity, spread and harm of this viral world-wide epidemic. As it happens, many of the components of PAX GBG have proven utility to prevent or reduce many other morbidity and mortality issues.

## Reducing the Spread and Adverse Consequences of Corona/COVID-19 Virus Using the Active Ingredients of PAX Good Behavior Game


Fortunately some of the active ingredients (called Evidence Based Kernels [8]) can be used right NOW to reduce the risk of Corona/COVID-19 virus infection. The use of such kernels everyday are “behavioral vaccines” such as handwashing [9]. These are non-pharmaceutical strategies to prevent, reduce or heal diseases or disorders [10], and good hand-washing and reduced touching of the face can reduce the risk of the spread of Corona/COVID-19 virus.

We will provide notices and possible strategies on our websites in the near future, accessible at [www.paxis.org](http://www.paxis.org) and [www.goodbehaviorgame.org](http://www.goodbehaviorgame.org)

If you are a current or pending PAX Good Behavior Game site, we wish to share with you ways that your site, your teachers, your students, your families, and your larger community can make use of PAXIS’ long history of prevention-science for public-health benefits to reduce the risk the Corona virus contagion. These suggestions come from 40 years of prevention science studies by my colleagues and I that go back to my time working with Children’s Television Workshop, the producers of Sesame Street. Those past 40 years have revealed some powerful principles and practices you can use to your school and community’s advantage to protect your students, staff, families and larger community of people from all walks of life.

There are substantial evidence-based practices to reduce both infection of students and staff, as well as reduce infection of families and the community. This is particularly important because children are likely to spread the virus based on prior epidemiological research. Over the coming weeks, we will begin to make available evidence-based strategies culled from published research that can directly protect students, school staff and their families on our PAXIS/PAX Good Behavior Game website to do the following:

- ✿ Use our **children’s PAX Self-hero Stories** that dramatically improved infection control (handwashing, washing surfaces, touch one’s face, using tissues, etc. to reduce infection). This a mechanism that we tested originally with Children’s Television Workshop, then in the context of family interventions funded by a five grant by the U.S. Department of



Education, and later tested with funds from the Centers for Disease Control and the U.S. Department of Defense. We started working on this today.

- ❖ How to increase children's handwashing based using the **PAX vision** (see, hear, do and feel) both more and less.[11-13]
- ❖ Using **Granny's Wacky Prizes** (Premack Principle Reinforcers) to reinforce health-related behaviors throughout the day, independent of the implementation of the actual PAX Good Behavior Game [14-17].
- ❖ Use our **PAX public progress thermometer** to reinforce and celebrate protective health behaviors in the school [15, 17-21].
- ❖ Using **PAX Tootles** (written positive notes, in this case for health related actions) noticed, written and posted by students [22-29].
- ❖ Implementing school-wide **PAX Student Job Roles** that promote peace, productivity, health and happiness have large positive effects on academics as well as indicators associated with **improving public-health** in the school, in the community, and in families. That impact can have a large impact on health in the school and community, such as fewer illnesses at school of any sort previously measured by a Centers for Disease Control epi-team [30, 31] and replicated in another study in middle school [32]. There are specific studies showing reductions in the spread of influenza [33-42].

## PAXIS History Reducing Epidemics

Our scientific work is actually much broader than the PAX Good Behavior Game. Here are some examples:

- ❖ Reducing virtually every type of nurses' office visits in schools (e.g., infections, injuries, somatic complaints) studied and reported by the U.S. Centers for Disease Control (CDC),
- ❖ Reducing tobacco and alcohol use by pregnant mothers and the fathers',
- ❖ Reducing child abuse and sexual abuse at population level,
- ❖ Reducing stress among teachers,
- ❖ Reducing methamphetamine use at population level,
- ❖ Reducing tobacco use by teenagers across states,
- ❖ Reducing accidental injuries to preschool age children at a population level, reducing violent injuries and police calls to schools, and
- ❖ Reducing the stress and behavioral issues among military families during deployments.

Since the late 1970, my colleagues and I have designing, implementing and proving scientific prevention in the United States, New Zealand, Canada, Australia and among indigenous groups (e.g. American Indians, First Nations in Canada, and the Maori in New Zealand). We are leaning into practical strategies that reduce the spread of this epidemic, and helping our children, teachers, schools and communities can be active partners in reducing this serious epidemic.

We will be communicating and cooperating with our national and international prevention-science colleagues to use and share the best practical prevention science to protect our futures. In turn, every child, adult, family, and community can be powerful prevention agent.



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