

# 2018 International Emory Global Health Case Competition

## An Epidemic Offsides: Containing an Outbreak During the 2022 World Cup in Qatar



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## Emory Global Health Institute

2018 International Emory Global Health Case Competition Case Writing Team:

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*The characters and scenarios described in this case are fictional. The hypothetical case scenario is complex and does not necessarily have a correct or perfect solution, and thus encourages a judicious balance of creative yet perceptive approaches. The authors have provided informative facts and figures within the case and appendices to help teams. The data provided are derived from independent sources, may have been adapted for use in this case, and are clearly cited such that teams can verify or contest the findings within their recommendations, if it is pertinent to do so. Teams are responsible for justifying the accuracy and validity of all data and calculations that they use in their presentations, as well as defending their assertions in front of a panel of knowledgeable judges.*

## Introduction

“Sandhya, go to your room.” Sandhya scurried back into her room, shaking at the images of her father suffering from a high fever and persistent cough. She and her family moved from India to Qatar nearly four years ago so that her father could pursue work. As a migrant worker, he spent the past few years working to build Lusail Stadium, the site of the 2022 World Cup Opening Ceremony. She first heard reports of the deadly “FIFA Virus” that had killed another migrant worker only one week prior. Her father was not the only migrant worker to fall ill this week, and many of the workers began to fear that death was imminent. Her father worked long and hard hours his whole life—it wasn’t fair that he had to suffer, she thought. Sandhya closed her bedroom door and began to cry.

On November 21, 2022, as Sandhya pondered the outcome of her father’s health, Bruno Mars—the headline performer of the Opening Ceremony—sat panicked in his hotel room in the capital city of Doha. He had envisioned his performance at the Opening Ceremony to be one of grandeur and delight. However, just two hours prior, his performance was stopped prematurely. Key support staff, including stage crew members and security personnel, had fallen ill during his rehearsal and performance. The show was finally cancelled after an emergency medical call was made, reporting a gentleman in the high-priced field seats who stopped breathing. This gentleman, like the support staff, had been exhibiting severe acute respiratory symptoms. The crowd and stadium personnel panicked and suspected the worst amidst all of the uncertainty. In his hotel room, Mr. Mars worries about his own health. He has been advised by several medical professionals that he should not travel or leave his suite until he has been observed for symptoms of the FIFA Virus in the coming days. He could only think of spending time with his children who were back in the United States, but rumors of travel restrictions were circulating.

Later that evening, another attendee of the World Cup Opening Ceremony also became ill and died. A cascade of subsequent cases was observed over the next 24 hours. Following the Opening Ceremony, international headlines were made, creating a media frenzy and inciting fear in football fans from all over the world who are in Qatar to cheer on their countries. With the opening matches set to occur the next day (November 22, 2022), the Qatari government was particularly concerned about the negative economic consequences that a botched response to the FIFA Virus could create. The World Cup—one of the most watched and attended sporting events in the world—is an opportunity for Qatar to not only host millions of foreign tourists, but also to showcase the country to the world. It has been preparing for the World Cup for over a decade and desperately wants to avoid squandering this opportunity.

## I. Prompt

Hours after the Opening Ceremony, the country's Emir has summoned your team—a multi-disciplinary advisory board—to propose a comprehensive strategy to address the many challenges presented by the FIFA Virus. Following the emergence of a novel pathogen of epidemic levels, there is a need for a targeted response protocol to (1) prevent the spread of disease to non-infected susceptible persons, (2) deliver prophylactic care to persons who are suspected of being infected or have been potentially exposed, (3) treat infected persons, and (4) mitigate fear related to the spread of an infectious agent at a major international event (See Part II for additional information on the disease).

The Emir is prepared to give your team up to USD 50 million to implement your proposal, with even more funds available if they are appropriately justified by necessary public health actions and economic analyses. Your proposal should incorporate a multi-disciplinary approach, including public health techniques, ethics/human rights and legal analyses, medical or clinical assessments, and business and marketing strategies, including media messaging frameworks and a comprehensive and justifiable budget. In the wake of widespread criticism of Qatar's treatment of migrant workers, the Emir wants your team to ensure that your proposed response includes a strategy to protect this vulnerable population.

At the time your team is summoned (the evening of November 21, 2022), there have been roughly 50 confirmed cases of the FIFA Virus. However, there is currently great uncertainty around surveillance, reporting, and diagnosis. These challenges are amplified by the fact that this outbreak is occurring during the period of routine influenza circulation in the Eastern Mediterranean Region. It is widely suspected that the number of FIFA Virus cases has been underreported, and that some earlier cases of the FIFA Virus may have been reported as "traditional" influenza.

*"WINIT" Drug*—The Qatari Ministry of Public Health recently discovered that a promising new anti-viral drug is currently in Phase III clinical trials. Although the drug—"WINIT"—is currently being developed to treat other respiratory diseases in the same family as the FIFA Virus, some providers in the clinical trials have used it in patients that the providers now suspect had the FIFA Virus. These providers are reporting that the drug has been remarkably effective against the FIFA Virus. The drug reduces the risk of death by 90% in confirmed cases, but only if it is administered within the first 48 hours of symptoms presenting. The drug can also prevent the incidence of disease in exposed populations by 100% if taken before symptoms present. The treatment course for confirmed cases of the FIFA Virus is 2 doses (1 dose per day for 2 days). A single dose of WINIT can prevent the incidence of disease in exposed populations.

Emergency use declarations for WINIT are issued immediately after the Opening Ceremony. However, as a new pharmaceutical, only 50,000 doses of the drugs are able to be diverted from the clinical trials. Procurement of the 50,000 doses will cost your team USD 12.5 Million. The manufacturer of the drug is only willing to sell all 50,000 doses. If your team chooses to purchase WINIT, the 50,000 doses will be delivered within 12 hours.

Nearly 75,000 people attended the World Cup Opening Ceremony and there is not enough of the drug to prophylactically treat everyone who attended (and their families or friends who were not present). While laboratory testing can establish priorities for whom to administer the drug to first, based on whether they are carriers of the virus or not, mass laboratory testing is expensive (~USD 2 Million for 100,000 people) and time-consuming. Delays associated with actively recruiting people for testing and waiting for results can lead to the disease spreading to more individuals. Consider who should be given priority for the drug, as well as other, more cost-effective methods of preventing disease transmission.

A decision has to be made. If the games are cancelled or re-scheduled, the country and many other stakeholders will suffer an economic loss. If the games are continued without proper action being taken to mitigate the spread of disease, there is a potential for the FIFA Virus to spread internationally, as visitors from all over the world fly in and out of Qatar.

Your proposal should consider the following factors:

*Outbreak Response and Surveillance*—How will you ensure that the people in Qatar are safe? How will you deal with suspected cases and treat existing cases, so as to contain the outbreak beyond national borders? Further, how will you protect foreign travelers, including high profile celebrities and athletes, who are visiting Qatar during a large-scale international event?

Consider how you will track new cases among potentially exposed groups. While the names of all ticket purchasers can be made available, are there any legal or privacy barriers associated with actively pursuing exposed cases? What about family, friends, and visitors to Qatar who were not attending the World Cup events with whom there may have been close interaction?

*Coordination of Stakeholders*—Your team may want, and need, to coordinate responses across different levels (e.g. Qatari Ministry of Public Health, World Health Organization (“WHO”), Eastern Mediterranean Regional office of the WHO, linkages with other countries’ centers for disease control). Will you allocate response activities to other stakeholders? If so, how will you do it in a way that ensures a coordinated and efficient response?

Additionally, in order to maximize your resources, you may want to consider if and how you can integrate your response into the existing activities, personnel, and/or activities of the Qatari health system.

*Public Relations*—How will you mitigate fear and decrease media frenzy drawing negative attention to Qatar, FIFA, and the Middle-East at large? How can you instill faith in stakeholders that these issues are adequately addressed? Your proposal should consider that economically, Qatar has a lot at stake. Failure to control the spread of disease or, alternatively, overly restrictive measures could harm Qatar's reputation and trade relations. Consider how your response strategy will be received by other countries and the international community as a whole.

*Legal/Ethical Issues*— Special attention should be paid to the high level of migration, and large number of vulnerable migrant workers in Qatar. Your proposal should comply with relevant international laws and address any ethical and human rights considerations. Please bear in mind any legal obligations associated with quarantine, isolation, or travel restrictions, especially among non-Qatari nationals who may wish to leave the country immediately.

*Budget*—You should present a detailed budget and be prepared to justify your budgetary choices.

*Notable Dates and Events:*

November 21, 2022: World Cup Opening Ceremony

November 21, 2022: Emir Sheikh Tamim bin Hamad Al Thani summons your team for consultation following the Opening Ceremony.

November 22, 2022–December 18, 2022: Matches are played.

Your proposal should assume that millions of fans from the six major continents have already arrived in Qatar for the World Cup. Although the case is set in the future, please also assume that conditions in Qatar and the world as of March 17, 2018 generally prevail at the time this case takes place (other than the issues specifically discussed in the Introduction and Prompt). Finally, the judges are familiar with the case, so please primarily focus your presentation on the specifics of your proposal. Additionally, you may use slide appendices to assist you during the Question and Answer session your team has with the competition judges.

## II. Infectious Disease Profile and Outbreak Response Techniques

While there is limited knowledge of the emerging “FIFA virus,” the clinical presentation of the illness is similar to several other acute viral respiratory syndromes that have previously been identified. To assist your team in its decision-making, assume the following information regarding the novel “FIFA virus” to be true.

<b>Disease Profile of “FIFA Virus”</b>	
<b>Infectious agent</b>	Virus. Family of Coronaviruses, similar to Severe Acute Respiratory Syndrome (SARS) and Middle Eastern Respiratory Syndrome (MERS).
<b>Clinical manifestation (symptoms)</b>	Flu-like symptoms, including coughing, sneezing, headache, sore throat and high fever (103 degrees F).
<b>Mode of transmission (mechanism by which infectious agent is spread to susceptible persons)</b>	Inhalation of respiratory droplets, passed through direct person-to-person contact, including oral contact. Indirect transmission of virus particles on hands or contaminated objects, e.g. doorknobs, handkerchiefs, eating utensils.
<b>Reservoir</b>	Dromedary Camels
<b>Incubation period (time between exposure to virus and appearance of first symptoms)</b>	2-3 days. But, infected individuals are able to transmit the disease for 1 day prior to presentation of symptoms.
<b>Case Fatality Rate (proportion of persons with a condition who die from that condition)</b>	High. ~75%. However, please note that for new diseases the case fatality rate (“CFR”) often looks very high because only the most serious cases (which are most likely to be fatal) are initially identified. Experts estimate that after additional surveillance, the actual CFR will drop to about 40–50%.

<p><b>Treatment</b></p>	<p>There is currently an anti-viral drug in Phase 3 trials—WINIT—that some medical providers have reported works well in patients with the FIFA Virus. The drug relieves symptoms and reduces fatality rates by nearly 90% in confirmed cases. Early identification and treatment (within 48 hours of presentation of symptoms) is critical for the drug to be successful. Follow-up treatment generally involves bed rest and hydration.</p>
<p><b>Prevention</b></p>	<p>Minimizing person-to-person contact among persons exhibiting symptoms. Handwashing and maintaining personal hygiene. Mask-wearing.</p> <p>For exposed persons, prophylactic treatment with WINIT will prevent 100% of incident cases.</p>

By the time your team has been summoned for consultation, Qatari public health workers have begun basic epidemiologic surveillance surrounding the existing cases. Following techniques described in the Control of Communicable Diseases Manual, the public health workers have provided your team with the following information and guidance.<sup>1</sup>

1. **Confirm the existence of an outbreak:** In this case, the infectious agent is a novel, emergent pathogen with no previous data upon which we can establish an endemic level of the “FIFA virus.” For purposes of this case, assume that the relatively few (but growing) number of cases of this novel viral pathogen represent a “FIFA virus” epidemic.
2. **Verify the diagnosis:** For purposes of this case, assume the infectious agent has already been determined through laboratory testing. The FIFA Virus is a viral agent within the coronavirus family. It causes acute respiratory syndrome symptoms (see “Disease Profile of “FIFA Virus”” chart above for more information).
3. **Construct a working case definition:** For this case, we know that some cases have been linked to contact with migrant workers, but there is now a potential exposure to

other Qatari regions and foreign visitors due to the cases cited at the World Cup Opening Ceremony. Case definitions are established to set parameters around an outbreak, defining the outbreak in terms of person, place, and time. The case definition allows healthcare workers to determine if someone presenting with signs of illness may be considered exposed, non-exposed, or a confirmed case during an epidemic. For purposes of this case, assume the following case definitions:

- A **confirmed case** of “FIFA virus” is defined as: Any migrant worker or person who attended the World Cup Opening Ceremony presenting with severe acute respiratory syndrome, characterized by flu-like symptoms, including coughing, sneezing, headache, sore throat, or high fever ( $\geq 103$  degrees F), with a laboratory confirmed diagnosis of “FIFA Virus” in November or December 2022.
- A **suspected case** of “FIFA virus” is defined as: Any person coming into close contact with infected migrant workers or having attended—or coming into close contact with infected persons who attended—the World Cup Opening Ceremony who present with severe acute respiratory syndrome, characterized by flu-like symptoms, including coughing, sneezing, headache, sore throat, or high fever ( $\geq 103$  degrees F) in November or December 2022.
- 4. Investigate the population at risk and find new cases:** The Ministry of Public Health seeks your counsel regarding how to deal with persons who may be exposed.
  - 5. Describe the outbreak using epidemiologic techniques:** As of November 21, 2022, epidemiologists have tracked roughly 50 confirmed cases of the FIFA Virus. The results of their findings have helped to develop the working case definition and have led to the findings outlined in the disease profile.
  - 6. Formulate a hypothesis regarding the source and spread of the outbreak:** For this case, assume that the source case is a migrant worker living in Doha, Qatar. While further epidemiologic research may be needed, the source of the virus is believed to have originated among the dromedary camel.
  - 7. Contain the outbreak.** Keep in mind that the incubation period for the disease is short. Those who have been exposed will typically exhibit symptoms within days. The short incubation period and window for successful treatment puts your team in a time crunch to decide how available resources will be used and how funds should be spent.

### III. Background on Qatar

Qatar is a small, wealthy independent emirate located on the west coast of the Persian Gulf (See Appendix A for a map of the region).<sup>2</sup> Formerly a British protectorate, Qatar gained its independence in 1971.<sup>3</sup> Previously known primarily for pearling, the discovery and exploitation of vast oil and natural gas resources in the mid-1900s transformed the economy and country as a whole.<sup>4</sup>

#### *A. Economy*

Qatar is the richest country in the world, according to the World Bank's GDP per capita purchasing-power-parity metric.<sup>5</sup> Oil and natural gas are the drivers of the economy. In 2017, the hydrocarbon sector accounted for 80% of Qatar's export earnings and 90% of government revenues.<sup>6</sup> In the last decade, however, there have been increased efforts to diversify the economy away from oil and natural gas.<sup>7</sup> The current Emir, Sheikh Tamim bin Hamad Al Thani, has prioritized the improvement of his people's household prosperity. He intends to advance the education and healthcare systems, as well as increase the country's infrastructure through the development of a new stadium, sporting facilities, light rail system, roads, and a new port as the country prepares to host the 2022 World Cup.<sup>8</sup>

#### *B. Demographics and Migrant Workers*

As of January 2018, there were 2,643,728 people living in Qatar.<sup>9</sup> More than 75% of the population is male, largely due to the high number of male migrant workers in the country.<sup>10</sup> Although the government does not report population data disaggregated by nationality, one think tank estimated that roughly 85% of those living in Qatar in 2010 were non-nationals.<sup>11</sup> There are an estimated two million migrant workers in Qatar (representing 95% of the country's workforce), with the majority coming from India, Nepal, and Bangladesh.<sup>12</sup> A 2013 study of "low-income" migrant workers found that the median duration of stay for these workers was four years<sup>13</sup> (See Appendix B for a list of nationalities of people living in Qatar).

Most migrant workers are employed as "low-skilled" workers in industries such as construction, oil and gas, and domestic work.<sup>14</sup> These workers often experience dangerous working conditions, maltreatment, poor living environments, debt bondage, salaries that are delayed or completely withheld, and denial of exit permits.<sup>15</sup> Many migrant workers, including those constructing the World Cup stadiums, have reported being forced to live in cramped and unsanitary conditions.<sup>16</sup>

### *C. Government*

Qatar is a constitutional monarchy ruled by the Al-Thani dynasty.<sup>17</sup> The Emir, who is the Qatari head of state, is vested with executive authority.<sup>18</sup> Nearly all the major ministerial posts are held by members of the large and fragmented royal family.<sup>19</sup> The current Emir, Sheikh Tamim bin Hamad Al Thani, succeeded his father in 2013.<sup>20</sup> Sheikh Tamim also heads Qatar's 2022 Supreme Committee, the body responsible for preparing the country to host the 2022 World Cup.<sup>21</sup>

The Al-Shoura Council possesses legislative authority.<sup>22</sup> This Council is composed of 45 members—2/3 of whom are elected by popular vote, and 1/3 appointed by the Emir.<sup>23</sup> The Emir has the power to veto any legislation adopted by the Al-Shoura Council; however, a 2/3 vote in the Council can override a veto.<sup>24</sup> According to the constitution, Sharia law is the main source of legislation.<sup>25</sup>

Qatar has a constitutionally-mandated independent judicial system, unified under the Supreme Judicial Council.<sup>26</sup> However, there have been concerns over executive interference in the judicial process, particularly in cases involving high-profile individuals and businesses.<sup>27</sup> Additionally, a United Nations human rights expert expressed concerns over reported violations of due process and fair trial guarantees, most often in cases involving foreigners, women, and migrant and domestic workers.<sup>28</sup>

On June 5, 2017, four Arab countries—Saudi Arabia, the United Arab Emirates, Egypt, and Bahrain—cut diplomatic ties with Qatar and instituted a trade boycott against the country.<sup>29</sup> These four countries accuse Qatar of financing militant groups and compromising regional security by aligning itself with their regional rival Iran.<sup>30</sup> Qatar denies these allegations.<sup>31</sup>

### *D. Healthcare System*

The quality of health care in Qatar is high, even compared to other industrialized countries.<sup>32</sup> This is due in large part to the country's heavy investments in the public healthcare sector. In 2014, nearly 86% of total healthcare expenditures came from the public sector.<sup>33</sup> Qataris are guaranteed free healthcare and highly subsidized medicines.<sup>34</sup> Expatriates may apply for a health card, which allows them to access highly subsidized care.<sup>35</sup>

The Ministry of Public Health regulates the provision of healthcare services in both the public and private sectors.<sup>36</sup> It is responsible for drafting and overseeing the implementation of Qatar's health policy and regulatory framework.<sup>37</sup> The Ministry of Public Health also oversees public health policy and programs, including those related to vaccinations and the control of infectious diseases.<sup>38</sup>

Qatar has a robust public health care sector. The two main public providers are the Hamad Medical Corporation and the Primary Health Care Corporation. The Hamad Medical Corporation, established by Emiri decree in 1979, is the largest healthcare provider in the country.<sup>39</sup> As of 2014, it managed eight hospitals, five pediatric emergency centers, the national ambulance service, and a home healthcare service.<sup>40</sup> In 2014, more than 70% of all hospital admissions, 59% of outpatient services, and 81% of all emergency visits in the country were to a Hamad facility.<sup>41</sup>

The Primary Health Care Corporation, established in 2012 by Emiri decree, is comprised of 21 health centers: thirteen of which are located in Doha, with the other eight spread across the rest of the country.<sup>42</sup> Of all the primary care visits to public or semi-public (parastatal) providers in 2014, nearly 60% were to a Primary Health Care Corporation health center.<sup>43</sup>

The private health care sector in Qatar is significantly smaller but growing. In 2014, the country had four private hospitals, roughly 300 medical and dental clinics and polyclinics, thirty-two diagnostic centers, and more than 300 pharmacies.<sup>44</sup>

Migrants in Qatar are eligible to receive resident permits, which allow them to access highly-subsidized medical care.<sup>45</sup> However, an Amnesty International official reports that employers often abuse the migrant worker sponsorship system, leaving workers with no identification papers and thus no access to the subsidized health system.<sup>46</sup>

## IV. FIFA and the World Cup

The Fédération Internationale de Football Association (“FIFA”) is the self-described global governing body of association football (or soccer).<sup>47</sup> Based in Zurich, Switzerland, FIFA is responsible for organizing major international football tournaments, most notably the World Cup. Every four years, teams from 32 countries compete in the World Cup, one of the largest sporting events in the world.

The World Cup attracts visitors from all over the world. According to the Brazilian government, over 1 million foreign tourists visited the country for the 2014 tournament.<sup>48</sup> The total attendance for the 64 matches of the 2014 World Cup was 3,429,873.<sup>49</sup> In addition, 5,154,386 people attended FIFA Fan Fests in Brazil<sup>50</sup>—events held outside the stadiums that build excitement for the matches, often complete with live music and celebrity appearances.<sup>51</sup>

### *A. Economics of the World Cup*

Countries compete to host a World Cup for a variety of reasons, but no reason is likely more compelling than the economic boon a host country expects.<sup>52</sup> Estimates of the economic impact of hosting a World Cup vary dramatically.<sup>53</sup> Some scholars have claimed that while the World Cup is profitable for FIFA, the economic benefits that a host country experiences has been exaggerated.<sup>54</sup> Regardless of who profits, the World Cup is big business: the 2014 World Cup in Brazil generated USD 2.4 billion in TV rights fees, USD 1.6 billion in sponsorships, and USD 527 million in ticket sales for FIFA.<sup>55</sup>

The World Cup and other major sporting events also offer host countries the opportunity to present itself in a flattering light and may lead to long-term economic benefits for that country. China, for example, was able to capitalize on its opportunity and is cited as presenting itself positively when it hosted the 2008 Summer Olympics.<sup>56</sup> Researchers note that countries hosting a large sporting event, such as the World Cup, are uniquely positioned to raise “destination awareness” among potential tourists and investors, which may lead to increased future revenues.<sup>57</sup> These long-term economic benefits, however, are premised on the assumption that the event is adequately managed and there are no delivery problems.<sup>58</sup> A late cancellation of the World Cup would likely have devastating short- and long-term financial consequences for the host country, as well as a negative impact on FIFA, broadcast rights holders, and sponsors.

### *B. 2022 World Cup*

In December 2010, FIFA announced that it had selected Russia to host the 2018 FIFA World Cup and Qatar to host the 2022 FIFA World Cup.<sup>59</sup> These announcements were promptly met with allegations of bribery and corruption, claims that had dogged FIFA even prior to this announcement.<sup>60</sup> Qatar, in particular, was an unlikely choice given its high summer temperatures—which FIFA itself called a “potential health risk”—and history of alleged human rights violations.<sup>61</sup> In 2015, FIFA announced that the 2022 World Cup matches in Qatar will be played in November and December—rather than the normal schedule of June and July—due to the high summer temperatures.<sup>62</sup>

The fallout from the host selections has been significant. Shortly after the vote, a report surfaced that a former FIFA executive committee member from Qatar had funneled USD 5 million to soccer officials in exchange for their support.<sup>63</sup> Law enforcement from multiple countries have also become involved. In 2015, the United States Federal Bureau of Investigation (“FBI”) indicted thirty FIFA and corporate officials on charges of racketeering conspiracy and corruption.<sup>64</sup> Although the FBI investigation was initiated in response to the 2018 and 2022 World Cup bidding processes, it widened to also include three of the previous

five tournaments.<sup>65</sup> Swiss prosecutors have also investigated senior level FIFA officials—most notably long-time FIFA President Sepp Blatter—related to a wide range of alleged improprieties.<sup>66</sup> FIFA reports that it has enacted governance reforms to “provide the most stable and sustainable foundations for the game.”<sup>67</sup> Qatar has consistently denied any wrongdoing related to its bid for the tournament.<sup>68</sup>

Qatar’s preparations for the World Cup have been expensive and somewhat controversial. Despite recent reductions in planned spending, Qatar expects tournament infrastructure, alone, to cost between USD 8–10 billion.<sup>69</sup> The treatment of migrant workers has drawn widespread condemnation from the international community, with blame being leveled at both Qatar and FIFA.<sup>70</sup> A 2014 report by the International Trades Union Confederation estimated that 1,200 construction workers from Nepal and India alone—the home countries of about 60% of Qatar’s migrant workers—had died since the World Cup was awarded to Qatar in 2010.<sup>71</sup> The trade group estimated that an additional 4,000 workers could die before the event takes place in 2022.<sup>72</sup> This number, however, relates to migrant workers engaged in any type of construction, not solely those working on World Cup stadiums.<sup>73</sup> In addition, Amnesty International has blasted “FIFA’s shocking indifference to appalling treatment of migrant workers” with some workers reporting labor practices that would amount to forced labor under international law.<sup>74</sup>

## V. Global Pandemic Surveillance and Response

### A. *The World Health Organization’s Role*

The WHO addresses influenza-like pandemics through its Global Influenza Program (“GIP”).<sup>75</sup> A major initiative of GIP is to analyze trends in epidemiologic data to track influenza incidence and spread across regions.<sup>76</sup> Ongoing surveillance conducted through GIP can be utilized by countries to prepare for epidemics in nearby regions, understand the clinical presentation of an emerging global threat, and also aid in the production of an influenza vaccine for the upcoming year.<sup>77</sup> The WHO outlines plans for pandemic influenza risk management, helps countries build capacities to manage these risks, and assists countries in responding to public health emergencies.<sup>78</sup> The WHO states that it “is committed to fulfilling critical functions in emergency response: leadership; partner coordination; information and planning; health operations; operations support and logistics; and management and administration.”<sup>79</sup>

The WHO can set recommendations for travel, including vaccine recommendations and guidance for how to remain disease-free when traveling to certain regions that pose specific health risks. The WHO cannot, however, enforce travel restrictions or quarantine and isolation

guidelines, as these are determined by each state.<sup>80</sup> While travel bans may be necessary to prevent disease transmission, they can potentially have a negative impact on foreign relations, further fuel public hysteria, and impact human rights.

## VI. Ethical and Legal Considerations

### A. *International Health Regulations*

The International Health Regulations (“IHR”) are an international legal instrument designed to “prevent, protect against, control and provide a public health response to the international spread of diseases in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.”<sup>81</sup> They are currently binding on 196 states, including Qatar.<sup>82</sup>

The IHR defines the core capacities that State Parties must develop to ensure they are able to detect and respond appropriately to public health emergencies.<sup>83</sup> The IHR also lay out State Parties’ reporting requirements. State Parties are required to notify the WHO within 24 hours of any health-related events within their territories that may constitute a public health emergency of international concern (“PHEIC”).<sup>84</sup> A PHEIC is defined as “an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response.”<sup>85</sup> State Parties, as far as practicable, shall also report events occurring outside their territory that may lead to international disease spread.<sup>86</sup> The Director-General of the WHO has the sole authority to declare a PHEIC.<sup>87</sup> Since the revised IHR went into effect in 2007, there have only been four PHEIC declarations: H1N1 influenza (2009), polio (2014), Ebola (2014), and Zika (2016).<sup>88</sup>

The IHR expressly endorses allowing State Parties to restrict travel and trade in limited circumstances. In particular, when it is necessary to determine whether a public health risk exists, State Parties may require incoming travelers to undergo a host of measures, including medical examinations, vaccinations, or additional measures that prevent or control the spread of disease, including isolation or quarantine.<sup>89</sup> There are, however, constraints on this authority. When determining whether to implement these measures, State Parties must base their assessments on available scientific evidence on the risk to human health, evidence that the proposed measure will help control that risk, and guidance from the WHO.<sup>90</sup> In addition, State Parties must treat travelers “with respect for their dignity, human rights, and fundamental freedoms and minimize any discomfort or distress associated with such measures” when implementing these measures.<sup>91</sup>

Pandemic responses create challenging ethical and legal issues. These include (1) ensuring equitable access to health services, (2) defining the obligations of healthcare workers, and (3) striking an appropriate balance between reducing the spread of disease through isolation and travel restrictions while respecting individuals' right to freedom of movement.<sup>92</sup>

When a major disease outbreak occurs, there are compelling moral reasons to save as many people as possible while ensuring the distribution of scarce medical resources are fair and equitable.<sup>93</sup> Pandemic responses—specifically decisions regarding how limited medical resources in a strained healthcare system will be allocated—can often bring these principles of efficiency and equity into conflict.<sup>94</sup>

Another ethical concern in pandemic responses is defining the obligations of healthcare workers, who are an indispensable part of any response. Healthcare workers and their families are at greater risk than the general population of contracting a communicable disease during a pandemic response. While healthcare workers have responded to communicable diseases with remarkable self-sacrifice, questions have been raised about the extent to which healthcare workers will—and should be expected to—tolerate the risks of infection.<sup>95</sup> Adequate protections to safeguard these workers' health is critical in a pandemic response.

Finally, freedom of movement is a fundamental human right.<sup>96</sup> International law generally requires that individuals be free to both travel within a country, as well as leave any country, including their own.<sup>97</sup> However, countries can restrict this freedom of movement in limited situations, including when such a restriction is necessary to protect the public health or national security.<sup>98</sup> Arbitrarily denying an individual the right to re-enter her own country is expressly forbidden by the International Covenant on Civil and Political Rights.<sup>99</sup> This requires travel restrictions to be narrowly tailored and based on a legitimate threat.<sup>100</sup> Scientific uncertainty surrounding a disease often complicates this narrow tailoring and produces a tension between respect for civil liberties and the protection of the public's health.<sup>101</sup>

## Appendix A: Map of Qatar



Source: Qatar, BING MAPS, <https://www.bing.com/maps>.

## Appendix B: Estimated List of Nationalities in Qatar

<b>Nationality</b>	<b>Population</b>	<b>Percent of Total Population*</b>	<b>Data Recency</b>
India	650,000	25.00%	Dec. 2016
Nepal	>350,000	13.50%	Jan. 2017
Qatar	313,000	12.10%	June 2016
Bangladesh	280,000	10.80%	May 2016
Philippines	260,000	10.00%	Jan. 2017
Egypt	200,000	8.60%	Feb. 2015
Sri Lanka	145,256	5.60%	Dec. 2016
Pakistan	125,000	4.80%	Oct. 2016
Syria	54,000	2.20%	Nov. 2015

\*Percentages correspond to the total population of Qatar at the time the data is derived from.

Source: Jure Snoj, *Population of Qatar by Nationality-2017 Report*, PRIYA DSOUZA COMM. (Feb. 7, 2017), <http://priyadsouza.com/population-of-qatar-by-nationality-in-2017/>.

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