



# THE NEED FOR A PANDEMIC **INFLUENZA PREPAREDNESS STRATEGY IN SOUTH SUDAN**

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This collection of policy briefs explores national security priorities in the Transitional Period. Published jointly by the Center for Strategic and Policy Studies (CSPS) and the Security Studies Network (SSN), the policy briefs offer succinct and actionable recommendations for South Sudanese policymakers.

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## SUMMARY

- Pandemics are not only a public health emergency concern but also constitute a national security risk. South Sudan's legacy of weak institutions and political instability means pandemics can increase political tension, weaken the economy, and affect the country negatively. Policymakers in South Sudan should develop a comprehensive pandemic influenza preparedness strategy to boost processes for detecting disease in the country and mobilizing a response.
- South Sudan should test the reliability and robustness of the strategy through regular simulation drills to identify issues and rectify them.
- South Sudan should provide adequate funds to support the preparedness strategy at all levels of implementation.

### **INTRODUCTION**

Policymakers in South Sudan should develop a pandemic influenza preparedness plan that will guide future response to global pandemics to prevent entry and spread, enhance early detection of cases, and support case management. With the support of the World Health Organization (WHO), South Sudan has already put in place the elements for responding to disease outbreaks like cholera, epidemic viral meningitis, and Ebola Virus Disease (EVD) through mechanisms such as the Public Health Emergency Operation Center (PHEOC) in 2018, the Integrated Disease Surveillance and Response (IDSR) strategy in 2006,<sup>1</sup> and the introduction in 2015 of the Early Warning, Alert and Response System (EWARS),<sup>2</sup> for which WHO continues to train more health workers.<sup>3</sup> These are good stepping stones to a focused influenza pandemic preparedness strategy.

In addition, the draft South Sudan Public Health Emergency Response Plan, which broadly aims to "outline the procedures and processes for prevention, preparedness, response, and recovery of public health events in South Sudan, in order to limit health risks and reduce morbidity and mortality that might emerge from both natural and man-made hazards," is a welcome move on which a focused pandemic influenza preparedness strategy can be built.<sup>4</sup>

Furthermore, it is already spelled out in the National Health Policy objective "to ensure universal health coverage for all communities through effective, affordable and comprehensive delivery of the Basic Packages of Health and Nutrition Services (BPHNS)," that the government shall:

"Enhance Epidemics, Emergencies, and Disaster Preparedness and response capability; for International Health Regulation, disaster risk reduction, prompt response, and recovery to mitigate the impact of adverse public health events." <sup>5</sup>

John Rumunu, et al, "Integrated Disease Surveillance and Response in Humanitarian Context: South Sudan Experience," The Pan African Medical Journal, 42, Suppl 1 (2021), <u>https://www.panafrican-med-journal.com/content/series/42/1/13/full/</u>
World Health Organization, "WHO Launches New Early Warning System in a Box to Help 500 000 People for only \$USD 15 000,

WHO News, (December, 14 2015), <u>https://www.afro.who.int/news/who-launches-new-early-warning-system-box-help-500-000-people-only-usd-15-000</u>

<sup>3.</sup> World Health Organization, "WHO and World Bank Bolstered Disease Surveillance and Response in South Sudan," WHO News, August 30, 2022, https://www.afro.who.int/countries/south-sudan/news/who-and-world-bank-bolstered-disease-surveillanceand-response-south-sudan

<sup>4.</sup> Ministry of Health, "South Sudan Public Health Emergency Response Plan (draft)," September 2022.

<sup>5.</sup> Ministry of Health, "National Health Policy, 2016-2026."



#### WHY PREPARE FOR A PANDEMIC INFLUENZA?

A pandemic is "a disease outbreak occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people." The causes of such global outbreaks are mainly viruses, such as influenza. Not only do pandemics cause

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deaths and destroy families, but they also affect the economy thousands of as people are kept work off because sickness. Cities of enforce lockdowns and countries close borders or restrict entry. In countries with weak health

systems like South Sudan that lack trained health cadres to handle outbreaks, pandemics could overwhelm the health infrastructure with the sick and dying.

One of the most devastating outbreaks was the 1918 influenza pandemic, which affected more than 500 million people globally and killed more than 50 million people.<sup>6</sup> Across the African continent, the influenza pandemic annihilated about 2 percent of the population within 6 months—2.5 million out of an estimated 130 million.<sup>7</sup> Another recent viral pandemic of concern was the swine flu of 2009, which was quickly contained.

The re-emergence of Ebola Virus Disease (EVD) in Uganda in September 2022 is concerning because of its contagious nature and high fatality rate, as well as the potential to spread.<sup>8</sup> South Sudan has increased surveillance and screening activities to prevent Ebola from getting into the country, as news of possible spread appears.<sup>9</sup> South Sudan has seen previous outbreaks in 1976, 1979, 2004, and has been at risk of a deadly Ebola outbreak since. South Sudan had to scramble to put in place surveillance and awareness processes in the border areas to prevent entry and spread into the country.<sup>10</sup>

The most recent and current pandemic is the COVID-19 pandemic, caused by a virus known as Severe Acute Respiratory Syndrome Coronavirus Type 2. COVID-19 first emerged in Wuhan, China, in December 2019 and spread globally quickly, leading to the World Health Organization (WHO) declaring it a public health emergency of international concern on 30 January 2020. By the end of September 2022, there were

<sup>6.</sup> Jeffrey Taubenberger and David Morens, "1918 Influenza: The Mother of All Pandemics," Emerging Infectious Diseases 12:1 (2006), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3291398/

<sup>7.</sup> Africa Center for Strategic Studies, "Lessons From the 1918-1919 Spanish Flu Pandemic in Africa," May 13, 2020, <u>https://africacenter.org/spotlight/lessons-1918-1919-spanish-flu-africa/</u>

<sup>8.</sup> Reuters, "Uganda Declares Ebola Outbreak after Sudan Strain Found, Reuters News, September 20, 2022 <u>https://www.reuters.com/world/africa/uganda-health-ministry-confirms-ebola-outbreak-2022-09-20/</u>

<sup>9.</sup> Africa Times, "Uganda's Ebola Outbreak Suspected to Have Crossed into South Sudan, October 3, 2022 <u>https://africatimes.</u> <u>com/2022/10/03/ugandas-ebola-outbreak-suspected-to-have-crossed-into-south-sudan/</u>

<sup>10.</sup> Richard Lako and Otim Ramadan, "Ebola on Our Doorstep: Ebola Virus Disease Preparedness in South Sudan," South Sudan Medical Journal, 11:4 (2018), <a href="http://www.southsudanmedicaljournal.com/archive/november-2018/ebola-on-our-doorstep-ebola-virus-disease-preparedness-in-south-sudan.html">http://www.southsudanmedicaljournal.com/archive/november-2018/ebola-on-our-doorstep-ebola-virus-disease-preparedness-in-south-sudan.html</a>



613,410,796 confirmed cases of COVID-19, including 6,518,749 deaths, as reported to WHO.<sup>11</sup> The spread of COVID-19 caused significant disruptions around the world, such as the grounding of international and national flights, the closure of schools, factories, and some offices, as countries took steps to stop the transmission of the virus. In South Sudan, the first case of COVID-19 was reported on April 5, 2020. The number of cases and deaths as of September 2022 stands at 17,683 and 138 deaths, respectively. With the support of the WHO and other organizations, the government formed a national task force to enforce and coordinate prevention measures (social distancing, handwashing, and the wearing of face masks), implement testing and treatment, and train health workers using a preparedness and response plan developed for COVID-19.<sup>12</sup> However, the only national treatment and isolation center for COVID-19 is the John Garang Infectious Disease Center, which is wholly inadequate for a country of over 12 million people.

Although COVID-19 did not cause as much devastation and deaths in many African countries, including South Sudan, as in the USA, India, or Brazil, it could have been worse. Considering the poor health infrastructure and high poverty levels, South Sudan was spared a potentially worse outcome. Some researchers, however, attributed the low spread to "early government community-wide actions, population distribution, social contacts, and ecology of human habitation."<sup>13</sup> The whole continent reported only 37,000 deaths, compared with about 580,000 in the Americas, 230,000 in Europe, and 205,000 in Asia.

Pandemics are not only a public health emergency but are also a national security issue. Pandemics are not only a public health emergency but are also a national security issue.<sup>14</sup> A review of pandemics risks, impact, and mitigation by Nita et al showed that "in countries with weak institutions and legacies of political instability, pandemics can increase political stresses and tensions. In these contexts, outbreak response measures such as quarantines have sparked

violence and tension between states and citizens."<sup>15</sup> This calls for close cooperation with the ministries of interior and defense in the use of the police and armed forces to control security breakdowns resulting from lockdowns and other measures.

It is worth noting to policymakers that in the Global Health Security (GHS) Index report of 2021, South Sudan scored 21.3 out of 100 possible perfect health security scenarios.<sup>16</sup> South Sudan is ranked 185 out of 195 countries. This index shows that South Sudan is woefully unprepared for future epidemic and pandemic threats if the situation remains the same.<sup>17</sup> This index is "a detailed and comprehensive framework of 140 questions, organized

12. Ministry of Health, "South Sudan Strategic Preparedness, Readiness and Response Plan COVID-19," 1 June

2022-31 May 2023, <u>https://reliefweb.int/attachments/201167dc-4981-47d6-aef9-dfb1bea9a445/covid-19\_sprp\_south\_sudan\_1jun2022-31may2023.pdf</u>

<sup>11.</sup> World Health Organization, "WHO Coronavirus (COVID-19) Dashboard," https://covid19.who.int/

<sup>13.</sup> Richard G. Wamai et al, "What Could Explain the Lower COVID-19 Burden in Africa Despite Considerable Circulation of the SARS-CoV-2 Virus? International Journal of Environmental Research and Public Health, 18(16), (2021) <u>https://doi.org/10.3390/</u> ijerph18168638

<sup>14.</sup> Sara E. Davies, "National Security and Pandemics," UN Chronicle, No. 2 Vol. L, (August 2013), <u>https://www.un.org/en/</u> <u>chronicle/article/national-security-and-pandemics</u>

<sup>15.</sup> Nita Madhav et al, "Pandemics: Risks, Impacts, and Mitigation" in Disease Control Priorities: Improving Health and Reducing Poverty, ed. DT Jamison et al (2017), <u>https://www.ncbi.nlm.nih.gov/books/NBK525302/</u>

<sup>16.</sup> GHS Index, "South Sudan 2021," <u>https://www.ghsindex.org/wp-content/uploads/2019/08/South-Sudan-1.pdf</u> 17. Ibid.



across six categories, 34 indicators, and 85 sub-indicators to assess a country's capability to prevent and mitigate epidemics and pandemics. The six categories are prevention, detection and reporting, rapid response, health system, compliance with international norms, and risk environment."

Based on these reasons, it is time for policymakers to develop a more comprehensive pandemic influenza preparedness strategy that is multisectoral and effective in mitigating the impact of future pandemics. News outlets quoted the head of the WHO Emergencies Program as saying that "the next pandemic may be more severe."<sup>18</sup> It is time to prepare.

#### CONCLUSION

Although South Sudan was spared the devastating effects of COVID-19, compared to other countries, it may not be the case in the next pandemic. In a globalized world, a new deadly virus can spread quickly. Policymakers should ensure South Sudan develops a pandemic influenza preparedness strategy. If implemented well, the strategy would prevent or slow the entry of the virus into the country, increase surveillance, detection and reduce its spread within the country, and prepare for mass casualties and hospitalization. At the same time, the strategy would ensure that the critical functions of the government and health systems continue to run seamlessly. The strategy should be a living document that is updated regularly and tested through simulations and live drills. For all these to happen, there should be adequate funding at the national level to ensure the preparations and implementations go smoothly.

#### RECOMMENDATIONS

To develop a robust pandemic influenza preparedness plan for South Sudan, here are some objectives to consider and critical actions to include in the response.

### ESTABLISH A PERMANENT NATIONAL PANDEMIC PREPAREDNESS AND RESPONSE COORDINATING BODY

A national coordinating body should regularly sit to review the preparedness and response plans and should be composed of members drawn from all the line ministries, donor partners, and organizations. Some of the key ministries to include are the Ministry of Health, the Ministry of Finance and Economic planning, the Ministry of Defense and Veteran Affairs, the Ministry of Interior, the Ministry of Humanitarian Affairs and Disaster

<sup>18.</sup> Ephraim Kossaify, "WHO official: Next Pandemic May be More Severe," Arab News, December 29, 2020, <u>https://www.arabnews.com/node/1784546/world</u>



Management, the Ministry of Livestock and Fisheries, the Ministry of Wildlife, Conservation and Tourism, the Ministry of Agriculture and Food Security, the Ministry of Transport/ Civil Aviation Authority, the Ministry of Roads, and Bridges. The body should add other ministries as seen fit.

This body will be triggered into action when a pandemic is declared globally, or an outbreak of public health concern occurs within the region. The permanence of the body would ensure members are trained and knowledgeable instead of bringing in new people every time there is an outbreak or pandemic. It would provide leadership and coordination.

### FOCUS ON PREVENTING ENTRY OF THE DISEASE INTO THE COUNTRY

The strategy must include activities to reduce the chances of the influenza virus entering the country. These include identifying critical border points requiring entry restrictions and where screening and testing would be maintained. Other entry points would be the international airport in Juba and the river port entries on the River Nile from Sudan. The plan should set up standby teams trained and ready to be deployed or identify groups of health workers across the country who would be trained quickly in case of detection.

### ESTABLISH SURVEILLANCE SYSTEMS FOR EARLY DETECTION OF CASES

The plan should ensure the installation of surveillance systems for case detection of suspected cases. Once confirmed, cases should be isolated at pre-arranged quarantine across the country and managed accordingly. Continuous surveillance should ensure quick identification that cases are identified quickly and prevent the spread of the virus.

#### **SET UP PREVENTION STRATEGIES AND ACTIVITIES**

The overall strategy should ensure plans for preventing the spread of influenza within the country by enacting measures such as lockdowns if necessary, curtailing the gathering of crowds in churches and markets, and closure of schools, and communications on prevention methods such as the use of face masks and use of sanitizers.

#### PREPARE FOR MASS CASUALTIES AND HOSPITALIZATIONS NATIONWIDE

As seen by the emergence of COVID-19, pandemics can spread quickly from the source to all corners of the globe, even with robust global mitigations. Once it has entered the country, it its effects can be devastating. A pandemic preparedness strategy must factor in mass casualties and hospitalizations. South Sudan should identify and map locations in each large city for field hospitals for triage and management of cases, such as schools, sports centers, and large open fields. Establishing solid lines of communication with supply chains for essential supplies such as tents and other equipment to support these sites' rapid construction, is of great importance.

#### PREPARE TO MAINTAIN CRITICAL FUNCTIONS AND RECOVERY AFTER THE PANDEMIC

A pandemic preparedness strategy should also plan for possible disruptions of critical functions of government when procedures such as lockdowns, closure of schools and offices, as well as the movement of people and goods, are enacted. The strategy should methodically detail actions to maintain the functions of government and the economy without hurting the citizens too much.

#### MOBILIZE AND TRAIN MEMBERS OF THE ORGANIZED FORCES FOR RIOT PREVENTION AND CROWD CONTROL

Policymakers should ensure that there is great coordination and implementation of the plan with the ministry of defense and interior in terms of security issues that may arise due to pandemic responses such as lockdowns and other extreme measures.

### PROVIDE ADEQUATE FUNDING TO SUPPORT THE RAPID IMPLEMENTATION OF THE PLAN

Policymakers should ensure that the budget for preparedness and response is secured. These funds should go toward prevention activities, purchase of medical supplies, training needs, and logistics associated with plans for setting up isolation and quarantine centers.



### **ABOUT THE AUTHOR**

Dr. Edward Eremugo Kenyi is a writer and public health physician with over 15 years of experience. He graduated from the University of Juba, College of Medicine in 1999 and in 2007, earned a Master of Science degree in International Public Health from the University of Heidelberg in Germany. He has worked for several international organizations in Sudan and South Sudan in the delivery of integrated health services such as malaria prevention, family planning, maternal and newborn health, and health system strengthening.

Dr. Kenyi has a deep interest in ensuring the development of health services in South Sudan. He was the Founding President of the South Sudan Doctors' Association in 2004 and served on the board of the first South Sudan Medical Council. He is currently editor-in-chief of the South Sudan Medical Journal (SSMJ), the only medical journal in South Sudan.

He is also a recipient of the prestigious United States Department of State's Hubert Humphrey Fellowship, which he completed in 2016 at the Rollins School of Public Health at Emory University in Atlanta, Georgia.

Dr. Kenyi has published several short stories in various online portals such as Author-me. com, the *Kalahari Review*, and *Warscapes*. His stories have also been featured in two anthologies. His short story collection *Sacrifice and Other Short Stories* was published in July 2020 by Africa World Books (Australia).

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#### **BIBLIOGRAPHY**

Africa Center for Strategic Studies. "Lessons From the 1918-1919 Spanish Flu Pandemic in Africa." May 13, 2020, <u>https://africacenter.org/</u> spotlight/lessons-1918-1919-spanish-flu-africa/

Africa Times. "Uganda's Ebola Outbreak Suspected to Have Crossed into South Sudan." October 3, 2022 <u>https://africatimes.</u> <u>com/2022/10/03/ugandas-ebola-outbreak-suspected-to-have-crossed-into-south-sudan/</u>

Davies, Sara E. "National Security and Pandemics." *UN Chronicle*, No. 2 Vol. L, (August 2013). <u>https://www.un.org/en/chronicle/article/</u> national-security-and-pandemics

GHS Index. "South Sudan 2021." https://www.ghsindex.org/wp-content/uploads/2019/08/South-Sudan-1.pdf

Lako, Richard and Otim Ramadan. "Ebola on Our Doorstep: Ebola Virus Disease Preparedness in

South Sudan." *South Sudan Medical Journal*, 11:4 (2018), <u>http://www.southsudanmedicaljournal.com/archive/november-2018/ebo-</u> la-on-our-doorstep-ebola-virus-disease-preparedness-in-south-sudan.html

Kossaify, Ephraim. "WHO official: Next Pandemic May be More Severe." *Arab News*. December 29, 2020. <u>https://www.arabnews.com/</u> node/1784546/world

Last, John, ed. A Dictionary of Epidemiology, 4th edition. New York: Oxford University Press; 2001).

Madhav, Nita et al. "Pandemics: Risks, Impacts, and Mitigation." In *Disease Control Priorities: Improving Health and Reducing Poverty*, edited by DT Jamison et al. <u>https://www.ncbi.nlm.nih.gov/books/NBK525302/</u>

Ministry of Health. "Public Health Emergency Operation Center, South Sudan." https://moh.gov.ss/pheoc.php

Ministry of Health. "South Sudan Public Health Emergency Response Plan (draft)." September 2022.

Ministry of Health. "National Health Policy, 2016-2026."

Ministry of Health. "South Sudan Strategic Preparedness, Readiness and Response Plan COVID-19," 1 June 2022-31 May 2023. <u>https://</u>reliefweb.int/attachments/201167dc-4981-47d6-aef9-dfb1bea9a445/covid-19\_sprp\_south\_sudan\_1jun2022-31may2023.pdf

Reuters. "Uganda Declares Ebola Outbreak after Sudan Strain Found." *Reuters News*, September 20, 2022 <u>https://www.reuters.com/world/</u> <u>africa/uganda-health-ministry-confirms-ebola-outbreak-2022-09-20/</u>

Rumunu, John et al. "Integrated Disease Surveillance and Response in Humanitarian Context: South Sudan Experience." *The Pan African Medical Journal*, 42, Suppl 1 (2021). <u>https://www.panafrican-med-journal.com/content/series/42/1/13/full/</u>

Taubenberger, Jeffrey and David Morens. "1918 Influenza: The Mother of All Pandemics." *Emerging Infectious Diseases* 12:1 (2006). <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3291398/</u>

Wamai, Richard G et al. "What Could Explain the Lower COVID-19 Burden in Africa Despite Considerable Circulation of the SARS-CoV-2 Virus? *International Journal of Environmental Research and Public Health*, 18(16), (2021). <u>https://doi.org/10.3390/ijerph18168638</u>

World Health Organization. "WHO Director-General's Statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV), January 30, 2020." <u>https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-nov-el-coronavirus-(2019-ncov)</u>

World Health Organization. "WHO Coronavirus (COVID-19) Dashboard." https://covid19.who.int/

World Health Organization. "WHO Launches New Early Warning System in a Box to Help 500 000 People for only \$USD 15 000. *WHO News*, (December, 14 2015). <u>https://www.afro.who.int/news/who-launches-new-early-warning-system-box-help-500-000-people-only-</u>

<u>usd-15-000</u>

World Health Organization. "WHO and World Bank Bolstered Disease Surveillance and Response in South Sudan." *WHO News*, August 30, 2022. <u>https://www.afro.who.int/countries/south-sudan/news/who-and-world-bank-bolstered-disease-surveillance-and-response-south-sudan</u>



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