

Memorandum

Subject: Health incidents in Cuba, China, and Russia; an explainer

Date: March 10, 2021

Questions? info@democracyinamericas.org

Summary: Questions abound more than four years after reports of mysterious health incidents and serious symptoms were made by U.S. and Canadian Embassy personnel in Cuba and, later, by U.S. personnel in China and Russia. Affected personnel complained of a lack of urgency in the U.S. government’s investigation and of [inconsistencies](#) in the State Department’s response to events in Cuba versus those in China. U.S. Embassy staff cuts in Cuba have had negative consequences ranging from the halt of refugee processing and visa issuance, to limited political and human rights monitoring.

Conclusions: Views on state of affairs.

- The U.S. Embassy in Cuba should be re-staffed in a responsible way.
- U.S. departments and agencies should continue investigating the cause of the health incidents and ensure all affected U.S. personnel receive the adequate medical care and resources.

Background: In 2017, 26 U.S. personnel from U.S. Embassy Havana were found to have suffered symptoms such as headaches, dizziness, cognitive impacts, and ringing in the ears as a result of what the State Department called at the time a “health attack” and which some refer to as “[Havana Syndrome](#).” Canadian diplomats in Cuba and their families were also affected; Canada’s government [reports](#) 14 affected individuals to date. U.S. personnel were first examined by medical professionals in Florida and then by the Center for Brain Injury and Repair at the University of Pennsylvania. In May 2018, then Secretary of State Mike Pompeo [said](#) that a U.S. Government employee from the U.S. consulate in Guangzhou presented symptoms in which “the medical indications are very similar and entirely consistent,” with those in Cuba. 15 additional U.S. personnel from China were evacuated for medical evaluation. In August 2020, the National Academy of Sciences presented a report examining potential causes of the episodes with the State Department. In October 2020, it was [reported](#) that a C.I.A. officer suffered extreme vertigo and lasting post-incident symptoms at a Moscow hotel in 2017. In December 2020, the National Academy of Sciences [report](#) was publicly [released](#) and shared with Congress. In February 2021, a [2018 report](#) from the State Department’s Accountability Review Board was published; the report criticized the Trump administration’s disorganized and informal response to the health incidents. That same month, the CIA [announced](#) it had created a task force at the end of 2020 to focus on the health incidents.

Timeline of Health Incidents:

November 2016-March 2017: In late 2016, U.S. personnel in Havana reported hearing a “high-pitched sound” and experiencing strange [health symptoms](#) including concussion-like symptoms of hearing loss, headaches, and nausea. After a U.S. diplomat was diagnosed with serious hearing loss in Miami, some U.S. personnel were evacuated from Havana.

May 2017: In May 2017, the Trump administration [expelled two Cuban diplomats](#) from the Cuban Embassy in Washington, D.C.

August 2017: News breaks that 24 U.S. personnel and at least 8 Canadian diplomats suffered similar symptoms in Havana while at private diplomatic residencies and two hotels. The affected personnel [experienced](#) hearing loss, severe headaches, balance disorders, memory problems, and nausea among other symptoms. Doctors treating the affected personnel [diagnosed](#) them with brain damage similar to what is caused by traumatic brain injuries. Doctors reportedly [found abnormalities](#) in the white matter of patients’ brains, the part of the brain responsible for transmitting information between cells. An initial theory was that the symptoms were the result of a “[sonic attack](#)” using microwaves. The U.S. State Department [stated](#) they did not know the source or cause of the incidents, but then Secretary of State Rex Tillerson repeatedly insinuated Cuba was responsible and [demanded](#) that Cuba immediately stop the “targeted attacks’ on U.S. diplomats in Havana. Cuba’s government responded by [stating](#) they would never allow actions against diplomats on their soil and that they were willing to cooperate fully with the U.S. to investigate the incident. Cuba launched an [independent investigation](#) and [invited the FBI](#) to visit as needed to conduct their own investigation. The FBI went on to visit Cuba four times.

September 2017: The U.S. State Department ordered the temporary departure of non-essential personnel from the U.S. Embassy in Havana, although most U.S. Foreign Service members preferred to remain in Cuba. The staff cuts resulted in the complete halt of consular services, leading to delays in the processing of visas for Cubans and Cuban Americans. The State Department also expelled 15 Cuban diplomats from the Cuban Embassy in Washington, D.C. That month, the State Department also issued a [Travel Warning](#) advising U.S. citizens to reconsider travel to Cuba. Shortly afterward, at a news conference in the White House Rose Garden, former President Trump [stated](#) “I do believe Cuba is responsible. I do believe that. And it’s a very unusual attack, as you know. But I do believe Cuba is responsible.”

January 2018: Then Secretary of State Rex Tillerson announced the State Department would be maintaining the ordered departure status of U.S. personnel in Havana. A private [interim FBI report](#) stated that, after multiple trips to Cuba and months of investigation, they found no evidence which confirmed a “sonic attack” had taken place and they did not uncover evidence of intentional harm.

On January 9, Senator Marco Rubio (FL) held a Senate Foreign Relations subcommittee [hearing](#) on the health incidents with three witnesses from the Department of State. Sen. Rubio accused Cuba’s government of hiding knowledge of the attacks and suggested that a third country, likely

Russia, was responsible for the attacks. At the hearing, the witnesses dismissed theories that the health symptoms were caused by mass psychogenic illness.

March 2018: The U.S. State Department permanently converted the U.S. Embassy in Havana into an “[unaccompanied post](#),” meaning family members cannot accompany U.S. personnel working there. Staffing remains restricted to “essential personnel.”

On March 20, the Journal of the American Medical Association (JAMA) [published a report](#) after evaluating 21 of the individuals affected in Havana. Using brain imaging, the study revealed that victims experienced physical brain trauma. The report did not conclude that the symptoms were caused by a sonic attack. While it did not completely rule out mass hysteria or a viral infection, it did not find evidence suggesting either occurred. Since the report was released, its thoroughness, accuracy, and dismissal of alternative theories have been [criticized](#) by some scientists.

The [Miami Herald](#) reported in March 2018 about computer scientists from the University of Michigan who reverse engineered the AP-reported audio and determined the sounds could have come from two listening devices placed too closely together.

May-June 2018: [Reports](#) stated that at least one U.S. individual working in the U.S. Consulate in Guangzhou, China suffered similar symptoms as those reported by U.S. personnel in Havana. Several U.S. employees in Guangzhou and Beijing were evacuated from their posts for medical evaluation in the U.S. The Administration’s response to the incident in China differed significantly from its response in Cuba. See the “China v. Cuba” section of the memo, below, for more information.

August 2018: The U.S. State Department [officially limited](#) the standard tour of duty in Cuba to one year, a shorter length than the typical diplomatic tour. One year tours are usually used for conflict zones. Shortly after, the U.S. State Department revised the Cuba Travel Advisory from Level 3 to Level 2, the same level as China’s.

September 2018: The lead author of the JAMA study [stated](#) he believed microwaves were an explanation for the victims’ brain injuries. A doctor at the University of California San Diego [wrote a paper](#) defending the theory. A team of doctors at the State Department [reportedly](#) did not believe the microwave theory, instead claiming a “[directed energy weapon](#)” may have been the cause. In an interview with Cuba’s [Granma](#) newspaper on September 4, Carlos Fernández de Cossío, Director for the U.S. at Cuba’s Foreign Ministry, insisted that “the microwave theory cannot explain the symptoms” suffered by the U.S. diplomats in Havana. Cuba’s government continued denying allegations that U.S. diplomats were attacked on Cuban soil and instead continued proposing mass psychogenic illness as an explanation for the ailments. Members of Cuba’s scientific team researching the health incidents traveled to Washington, D.C. and met with [Members](#) of [Congress](#) on September 13, 2018.

On September 6, the House Foreign Affairs Committee's Western Hemisphere Subcommittee held a [hearing](#) with witnesses from the State Department Bureaus of Western Hemisphere Affairs, Diplomatic Security, and Medical Services; the Health Incident Task Force; and the GAO.

On September 11, [NBC reported](#) that intelligence agencies considered Russia the leading suspect in the health incidents in Havana and China, based on intercepted communications amassed during a U.S. interagency investigation. Evidence was not conclusive enough to formally blame Russia.

January 2019: [The New York Times](#) reported on January 4, 2019 that two scientists from the U.S. and the UK, after analyzing a recording made by diplomats of the alleged sounds which was published by [The Associated Press](#), concluded that the sounds matched the chirp of a Caribbean cricket. However, they stated that the fact that the sound on the recording was produced by a Caribbean cricket does not rule out the possibility that embassy personnel were victims of another form of attack.

February 2019: In a February 2019 article, [Vanity Fair](#) asserted that “mass hysteria” led diplomatic personnel in Havana to feel sick. According to specialists, individuals affected by “conversion disorder,” or the conversion of stress and fear into actual physical illness, can develop symptoms that could appear to be caused by external sources.

Members of Cuba's scientific team researching the health incidents traveled to Washington, D.C. a second time.

September 2019: Results of a [study](#) by a group of Canadian researchers affiliated with the Brain Repair Centre at Dalhousie University and the Nova Scotia Health Authority were [released](#). The study identified [fumigation](#) as a possible cause of the illnesses, citing that from 2016-2018 when the illnesses began taking place, Cuban and Canadian authorities increased fumigation to combat the Zika epidemic on the island. One of the ingredients used in the pesticides may have inhibited the proper functioning of an enzyme required by the nervous system.

August 2020: The National Academy of Sciences submitted a report to the U.S. State Department examining potential causes of the episodes. The report was not shared with Congress or with the public until December. Dr. David A. Relman, a Stanford University professor who was the chairman of the committee studying the cases [stated](#) at the time that it was “disheartening and immensely frustrating” that the State Department had not shared the report with Congress or the public.

October 2020: The New York Times [reported](#) that a C.I.A. officer suffered symptoms similar to those experienced by U.S. personnel in Cuba and China while he was in Russia in December 2017.

December 2020: On December 5, the National Academy of Sciences [report](#) was [released](#) and shared with Congress. The report claimed that “directed, pulsed radio frequency energy” was the most likely cause of the neurological symptoms experienced by U.S. diplomats in Cuba, China, and Russia. It did not entirely rule out other possible causes. It also did not conclude that the directed energy was delivered intentionally but leaves that as a possibility. The report did not

conclusively identify Russia or any other actor as responsible. The Cuban Academy of Sciences [rejected](#) the report's findings, calling the radio frequency explanation an "[unlikely hypothesis](#)."

Senator Patrick Leahy (VT) [publicly reacted](#) to the report's release, pointing out that several Members of Congress and others who accused Cuba's government of being responsible did so without basis, and that no report has found any evidence suggesting they were responsible. He also stated that "The Trump Administration's handling of these incidents has been sluggish, superficial, disjointed, overly secretive, and infected by politics."

February 2021: On February 2, a [2019 report](#) from the Centers for Disease Control and Prevention (CDC) on the symptoms suffered by U.S. personnel was published in its unredacted form by the National Security Archive. The report stated that although the CDC conducted a two-year investigation, it could not determine the nature of the symptoms nor what caused them. The study reviewed the cases of 95 individuals.

Dr. Mitchell Valdés Sosa, Director of the Cuban Center for Neuroscience in Havana and the lead doctor of the Cuban Academy of Sciences committee to study the health incidents [remarked](#) that the radiofrequency theory put forward in the U.S. National Academy of Sciences report was "unsubstantiated" and "completely debunked by many scientists."

On February 10, a [2018 report](#) from the U.S. State Department's Accountability Review Board on the health incidents was [published](#) in a redacted form by the National Security Archive. The report indicated the Trump administration's slow, disorganized response to the incidents made it more likely that their cause would never be determined. The report also stated that the reduction in U.S. Embassy staff following the incidents did not follow standard procedures and did not involve any prior formal analysis, although Foreign Service rules require analysis of such a decision.

Also in February, Department of State spokesperson Ned Price [stated](#) that the State Department had elevated the coordinator role for the ongoing investigation into the incidents into a senior-level position that reports directly to the department's senior leadership. That same month, CNN [reported](#) that the CIA had created a task force at the end of 2020 to focus on the health incidents.

March 2021: In early March, the CIA [stated](#) that its agency task force focussing on the health incidents was expanding its efforts and would work with the State Department and other government agencies to continue investigating the incidents.

China v. Cuba

Shortly after reports of the health incidents in Havana, U.S. personnel in China began reporting similar ailments. A [New York Times investigation](#) found that senior C.I.A. officers reported the same symptoms in late 2017. While the Trump administration's Cuba policy goals coincided with the diplomatic security measures implemented after the health incidents, this was not the case in China or Russia. In fact, U.S. personnel in China and Russia [claim](#) they have not received the same level of medical attention as personnel based in Havana.

- Incidents vs. Attacks:
 - CHINA: U.S. government [statements](#) refer to events in China as "incidents."

- CUBA: U.S. government [statements](#) referred to events in Cuba as “attacks.”
- Travel Advisories/Medical Guidance: *Note travel advisories are higher now due to COVID-19.
 - CHINA: After reports of incidents, the U.S. Embassy issued a country-wide [health alert](#). The [Level 2 Travel Advisory](#) for China did not change as a result of the incidents. The health alert stated, “Do not attempt to locate the source of any unidentified auditory sensation. Instead, move to a different location.”
 - CUBA: A [Level 3 Travel Advisory](#) was [triggered](#) by the ordered departure of most U.S. staff from Havana in September 2017, and, though the ordered departure [ended](#), the Level 3 Advisory remained for several months, urging U.S. Citizens to “Reconsider Travel.” The Department changed the advisory to Level 2 on August 23, 2018 and urged citizens to “Exercise Increased Caution.” The U.S. Embassy also issued a February 2018 [health alert](#) that updated the previous “move to a different location” guidance with text that stated, “consult with a doctor if you are concerned about symptoms experienced either during or after your visit to Cuba.”
- Vienna Convention:
 - CHINA: [Secretary Pompeo](#) (5/23/2018): “[China has] honored their commitment under the Vienna Convention to take care of the diplomats that are serving in their country, and we truly appreciate this. They’ve offered to assist us in investigating...”
 - CUBA: Department of State [Press Release](#) (10/3/2017): “...the Department of State informed the Government of Cuba that it was ordering the departure of 15 of its officials from its embassy in Washington, D.C... due to Cuba’s failure to take appropriate steps to protect our diplomats in accordance with its obligations under the Vienna Convention.” FBI officials visited Cuba multiple times to investigate the matter, and Cuba’s government [offered](#) its assistance with the U.S. investigation and conducted an independent [investigation](#).
- Removal of Chinese/Cuban Diplomats from DC:
 - CHINA: No action taken to date.
 - CUBA: Following reductions in personnel from the U.S. Embassy in Havana, 15 Cuban diplomats were ordered to depart DC; [statements](#) suggest this was done in pursuit of staffing parity, or [equity](#).