



COVID19 Related Nation-State and Cyber Criminal Targeting of the Healthcare Sector 5/14/2020

Report #: 202005141030

Agenda



- Recent Activity
- Sophisticated Cyber Campaigns
- Disinformation
- Mitigation Techniques
- Questions

Slides Key:



Non-Technical: managerial, strategic and high-level (general audience)



Technical: Tactical / IOCs; requiring in-depth knowledge (sysadmins, IRT)



Recent Activity

Cybersecurity and Infrastructure Security Agency (CISA) Alert (AA20-099A) COVID-19 Exploited by

Malicious Cyber Actors (April 8, 2020)

APT groups are using the COVID-19 pandemic as part of their cyber operations:

- Masquerade as trusted entities
- Use coronavirus-themed phishing messages
 or malicious applications
- Their goals and targets are consistent with long-standing priorities such as espionage and "hack-and-leak" operations.

Cybercriminals are using the pandemic for commercial gain, deploying a variety of ransomware and other malware.



Recent Activity Continued



CISA Alert (AA20-099A) APT Groups Target Healthcare and Essential Services (May 5, 2020)

APT actors are targeting organizations involved in national and international COVID-19 responses.

Targeting organizations in order to collect bulk:

- personal information
- intellectual property
- intelligence that aligns with national priorities

Actors view supply chains as a weak link that they can exploit to obtain access to betterprotected targets.









Sophisticated Cyber Campaigns



Early February, Unknown Cyber Actors Target Companies' Logistics

AZORult phishing campaign targeting Japanese-speakers originating from Russia or Eastern Europe.

The attackers were not an APT but, "clearly understand the economic concerns surrounding the Coronavirus."

The campaign exploited a two-and-a-half-year-old vulnerability and targeted industries "particularly susceptible to shipping disruptions".

Those industries in order of most targeted are:

- 1. Manufacturing
- 2. Industrial
- 3. Finance
- 4. Transportation
- 5. Pharmaceutical
- 6. Cosmetic Companies

	is - Brief note for the shipping industry
	Monday, February 3, 2020 at 1:59 AM Show Details
	Caution On Coronav
	Download All
Hi, I thought	that this brief note in doc format on the Coronavirus and its impact on the Shipping industry could be of interest for you.
Hi, I thought	that this brief note in doc format on the Coronavirus and its impact on the Shipping industry could be of interest for you.

Sophisticated Cyber Campaigns (cont.)



Mid-February Russian APT 28 (Fancy Bear) linked, Hades group Targets Ukraine

- 1. Emails containing malicious attachments appearing to be Coronavirus information from the Center for Public Health of the Ministry of Health of Ukraine to targets in Ukraine.
- 2. Mass Coronavirus-themed spam email campaign targeted Ukrainian citizens
- 3. Social media accounts spread "scaremongering" messages that the virus had reached the country.

In March, Russian Linked Cyber Criminals Target Biotech Firm

Evil Corp infected the U.S.-based biotech firm, 10x Genomics with the Sodinokibi aka REvil ransomware.

10x Genomics is "part of an international alliance sequencing cells from patients who've recovered from the Coronavirus, in an effort to fuel the discovery of potential treatments."

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Disinformation

<u>Intent</u>

- Create a lack of trust by U.S. citizens in their government
- Russian disinformation campaigns are used over the longterm to create a larger political impact
- "Russia's intent is to sow discord and undermine US institutions and alliances from within, including through covert and coercive malign influence campaigns,"

<u>Historical</u>

- Blamed the United States Government (USG) for the creation of the AIDs, SARs, and Ebola epidemics
- Disinformation referenced as fact today
- Victim Beliefs:
 - Targeted by the USG because of their race
 - Used as "guinea pigs" for the USG's furtherance of developing vaccines for the ailment they were infected with

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Chinese Embassy in South Africa @ChineseEmbSA

More evidence suggests that the virus was not originated at the seafood market in Wuhan at all, not to mention the so called "made in China". twitter.com/zlj517/status/...

Lijian Zhao 赵立坚 🤣 @zlj517

This article is very much important to each and every one of us. Please read and retweet it. COVID-19: Further Evidence that the Virus Originated in the US. globalresearch.ca/covid-19-furth...

♡ 1,991 3:27 AM - Mar 16, 2020

 \bigcirc 4,067 people are talking about this

>

<u>Current</u>

- Effort to identify COVID19 disinformation
- Suspect news sources and legitimate Russian owned news running stories that place the blame for the Coronavirus on the USG
- Stories "amplified" in social media by Russian-based accounts reposting and commenting on the disinformation
- Russian COVID19 Message: Portraying "American officials as downplaying the health alarms and thus posing serious threats to public safety."









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Operation INFEKTION

The opening salvo of the AIDS disinformation campaign was fired on 17 July 1983, when an obscure newspaper in India, the Patriot, printed an anonymous letter headlined "AIDS may invade India: Mystery disease caused by US experiments." The letter, allegedly written by a "well-known American scientist and anthropologist" in New York, claimed that "AIDS...is believed to be the result of the Pentagon's experiments to develop new and dangerous biological weapons." It went on to state that the United States was about to transfer these experiments to sites in Pakistan, where they would pose a grave threat to neighboring India.



CGTN 1.61M subscribers

Russia is again accusing the United States of running a clandestine biological weapons lab in Georgia. Moscow says Washington is flouting international conventions and posing a direct threat to Russia. During a press conference in Beijing, a question was raised on the claim to China's Foreign Ministry.



[Russian Social Media] Posts reportedly included claims that the virus was a bid to "wage economic war on China," that it was a bioweapon engineered by the CIA, and that it was fostered "to push anti-China messages."



Disinformation (cont.)

Chinese Propaganda News Amplifies U.S.

Conspiracy Theorist



US urged to release military athlete info

TruthLeaks - Investigative Journalist George Webb @GeorgWebb

March 23rd, 2020. Origins of CoronaVirus - Metadata Says Ft. Detrick youtu.be/PIF8HBFWMyU via @YouTube

9:26 PM · Mar 23, 2020 · Twitter Web Client

124 Retweets 149 Likes



TruthLeaks - Investigative Journalist George Webb @GeorgWebb

Replying to @abask_cat

Yes, I am trying to get to what killed people in the CoronaVirus-like deaths in the US for vaping deaths in Sept 2019. Ft Detrick also was closed for sloppy Bioweapon handling in Aug 2019. Maatje Benassi may have contracted Corona at Ft Belvoir Comm. Hospital where she works.

6:17 AM · Mar 28, 2020 · Twitter for iPhone

An American journalist claimed one US military athlete in the delegation could be patient zero of the deadly new disease.

George Webb, an investigative journalist in Washington, DC claimed in recent videos and tweets that he believes Maatje Benassi, an armed diplomatic driver and cyclist who was in Wuhan in October for the cycling competition in the Military World Games, could be patient zero of COVID-19 in Wuhan.

In a report by the US Department of Defense official website on October 25, Maatje Benassi has participated 50-mile cycling road race in Wuhan.

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Mitigation Techniques

The following actions could mitigate the risk posed by APTs and cybercriminals:

- 1. An understanding of APT and associated cybercriminals tactics, techniques, and procedures (TTPs) to include, historical attacks and targeted vulnerabilities.
- 2. Keep systems updated with the most recent patches and prioritize patching for the most at risk systems based on the TTPs identified in bullet "1".
- Increase the identification and ingestion of 3. APT and associated cybercriminal unit IOCs.
- 4. Have and practice an incident response plan.

General understanding of historical disinformation campaigns:

- Simplistic scapegoating
- **Endless** repetition
- Mixing of lies and half-truths with undeniable facts

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AIDS may invade India

Mystery disease caused by US experiments

NEW YORK:

AIDS, the deadly mysterious disease which has caused havoc in the US, is believed to be the result of the Pentagon's experiments to develop new and dan-gerous biological weapons.

Now that these menacing experiments seem to have gone out of control, plans are being hatched to hastily transfer them from the US to other countries, primarily developing nations where governments are pliable to Washington's pressures and persuasion.

Some American experts believe that Pakistan may become the next proving ground for these experiments. If this happens, there will be a real danger that ATDS may rapidly spread to India with the grave consoquences to the people of the country.

WHO representatives point out that AIDS may soon become problem number one, since an far there are no effective cures to fight it

The British mass media has pointed to the blood plasm im-ported from the US as the cause of AIDS, which is spreading in the British Isles where more than 15 patients have been hos-

pitalized, with half of them new dead. As a result, France and Hol-

land, which use large quantities of American blood donations, have stopped importing such blood. Britain, the Federal Republic of Germany and Denmark are now considering simi-

lar measures. In recent months, there has been a marked increase in the incidence of this hitherto unknown disease, the so-called Acquired immune Deficiency Syn-drome (AIDS). It is caused, or so scientists suspect, by a new highly pathogenic virus which ravages the immune system of a human being, making him practically defenceless against any infection. Once the AIDS virus penetrates the human organism. does not become the "killer" but rather acts like a time bomb. The immune system destroyed by it can no longer resist diseases even such as the virus flu. As

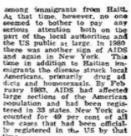
۸ well-known American scientist and anthropologist, in a letter to Editor, Patriot, analyses the history and back-ground of the deadly AIDS which started in the US and spread to Europe. has now The writer, who wants to remain anonymous, has expressed the fear that India may face a danger from this discase in the near future.

forms and in most cases leads to death.

AIDS has recently been registered inasmany as 16 coun-tries, primarily in those which import American blood donations. For some of the countries the disease has already become extremely dangerous, The first signs of AIDS ap-

peared in 1978 with an outburst

of this disease in New York



Concerned American citizens and organisations began to won-der why does AIDS, just like der why does AIDS, just like some other previously unknown diseases such as bizarre pnet-monia or the so-called Legioncontinued on page 7 col. 2



SUNDAY, JULY 17

Guerillas And Gorillas

Understanding the reasons why even after a century of political independence the Latin American countries have both their politics deformed and their economy distorted will help to have a better idea of the problems which any post-colonial society faces, writes M. P. Kavalam.

Ramdan In Dubai

Perhaps at no time of the year does Dubai come to the fore as a Muslim city than at Ramdan. For the Arabs, the months of fasting apart from being a deeply religious occasion assumes almost a festive air, writes. Rashmi Taneja.

OTHER FEATURES : Public View, Nostalgia, Encounters. Thinking One-dimensionally, Short Story by Bandana Majumdar, Education, Mirros/Windows, Filmfocus Culture Watch, Sports ...



References

- Alert (AA20-099A) COVID-19 Exploited by Malicious Cyber Actors
 - https://www.us-cert.gov/ncas/alerts/aa20-099a
- Alert (AA20-126A) APT Groups Target Healthcare and Essential Services
 - https://www.us-cert.gov/ncas/alerts/AA20126A
- Another COVID-19 Research Firm Targeted by Ransomware Attack
 - https://healthitsecurity.com/news/another-covid-19-research-firm-targeted-by-ransomware-attack
- State-sponsored hackers are now using coronavirus lures to infect their targets
 - https://www.zdnet.com/article/state-sponsored-hackers-are-now-using-coronavirus-lures-to-infecttheir-targets/
- Putin's Long War Against American Science
 - https://www.nytimes.com/2020/04/13/science/putin-russia-disinformation-health-coronavirus.html
- US Pushes Back Against Russian, Chinese, Iranian Coronavirus Disinformation
 - https://www.voanews.com/covid-19-pandemic/us-pushes-back-against-russian-chinese-iraniancoronavirus-disinformation
- US accuses Russia of spreading conspiracies about the Wuhan coronavirus, including that it's a CIA biological weapon
 - https://www.businessinsider.com/us-officials-claim-russian-coronavirus-disinformation-campaign-2020-2?r=US&IR=T



References (cont.)



- Russia accuses U.S. of running weapons lab in Georgia
 - https://www.youtube.com/watch?v=tHfTe4P7FQY
- Soviet Bloc Intelligence and Its AIDS Disinformation Campaign
 - https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csistudies/studies/vol53no4/pdf/U-%20Boghardt-AIDS-Made%20in%20the%20USA-17Dec.pdf
- How coronavirus disinformation caused chaos in a small Ukrainian town
 - https://www.nbcnews.com/news/world/how-coronavirus-disinformation-caused-chaos-small-ukrainiantown-n1146936
- Locals oppose quarantine of Ukrainians evacuated from China amid coronavirus concerns
 - https://www.nbcnews.com/video/locals-oppose-quarantine-of-ukrainians-evacuated-from-china-amidcoronavirus-concerns-79139909949
- China's Global Times plays a peculiar role
 - https://www.economist.com/china/2018/09/20/chinas-global-times-plays-a-peculiar-role
- TruthLeaks Investigative Journalist George Webb (@GeorgWebb)
 - https://twitter.com/GeorgWebb/status/1242261391416774656
 - https://twitter.com/GeorgWebb/status/1243844539397353477



Questions



Upcoming Briefs

- Web Shell Malware Threats and Mitigations
- Maze Ransomware



Product Evaluations

Recipients of this and other Healthcare Sector Cybersecurity Coordination Center (HC3) Threat Intelligence products are highly encouraged to provide feedback to <u>HC3@HHS.GOV</u>.

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HC3 works with private and public sector partners to improve cybersecurity throughout the Healthcare and Public Health (HPH) Sector



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