

Parliamentary Joint Committee on Law Enforcement
PO Box 6100
Parliament House
Canberra ACT 2600

Attention Committee Secretary
Email: le.committee@aph.gov.au

Re: Parliamentary Joint Committee on Law Enforcement:
Inquiry into COVID-vaccine related fraud and security risks

Dear Parliamentary Joint Committee,

Thank you for the opportunity to briefly update the committee on our monitoring of black-market Covid-19 products available on the 'dark' web. We previously reported to the committee in August 2020 and January 2021 as well as responding to a data request in March 2021 from the Australian Department of Health (Regulatory Compliance Branch).

This note updates these assessments in respect to your current terms of reference, specifically: a) Telecommunications and internet fraud relating to COVID vaccinations; and b) Criminal activity around the supply of fake vaccines, black market vaccines and/or fake vaccine certifications and the acquisition of certificates.

Crime groups and actors continue to exploit supply shortages and widespread fear of COVID-19 as a general template for fraud and other deceptions. This includes scamming on-line government relief measures and payments. Many countries have seized and taken down dozens of websites fraudulently claiming to sell vaccines or an affiliation with vaccine makers such as Moderna and Pfizer. These fake company cloned websites were effective phishing and ID theft related scams.¹

Update

Further to our earlier update (cf. no 14 - Jan 29, 2021) we note as follows:

In December Interpol issued a global warning in respect to "unprecedented opportunistic and predatory criminal behaviour" in relation to the falsification, theft and illegal advertising of COVID-19 and flu vaccines, and that "criminal organizations are planning to infiltrate or disrupt supply chains" of COVID-19 vaccines². In March 2021 Interpol reported Chinese and South African authorities had dismantled fake vaccine manufacturing and distribution operations³.

Sales of purported COVID-19 vaccines *continue* to be made available on online darknet markets routinely monitored by the ANU Cybercrime Observatory⁴. An apparent decline in PPE and treatments such as anti-malarial chloroquine and hydroxychloroquine has been observed, however other re-purposed medicines such

1. Jared S. Hopkins & José de Córdoba (April 21, 2021), Pfizer Identifies Fake Covid-19 Shots Abroad as Criminals Exploit Vaccine Demand, see <https://www.wsj.com/articles/pfizer-identifies-fake-covid-19-shots-abroad-as-criminals-exploit-vaccine-demand-11619006403>

2. Interpol Orange Notice (Dec 2, 2020), INTERPOL warns of organized crime threat to COVID-19 vaccines; <https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-warns-of-organized-crime-threat-to-COVID-19-vaccines>; Interpol, (March 3, 2021), Fake COVID vaccine distribution network dismantled after INTERPOL alert; <https://www.interpol.int/How-we-work/COVID-19/COVID-19-Stay-Safe>

3. Interpol, (March 3, 2021), Fake COVID vaccine distribution network dismantled after INTERPOL alert; <https://www.interpol.int/How-we-work/COVID-19/COVID-19-Stay-Safe>

4. Broadhurst R., Ball M. & Jiang C. 2020. Availability of COVID-19 related products on Tor darknet markets. *Statistical Bulletin* No. 24. Canberra: Australian Institute of Criminology: <https://www.aic.gov.au/publications/sb/sb24> - see screenshot November 13, 2020 appendix 2 revised submission 14.

as Remdesvir and Dexamethasone are commonly available and in short supply in some countries. Purported vaccines have also been offered for sale on Facebook, and WeChat⁵.

Bracci, Nadini, Aliapoulios et al. (2021) confirmed the presence of COVID-19 products through 2020 (January 1-November 6, 2020). They observed 30 darknet markets of which 10 sold such products. Two markets DBay (425/788) and Empire (94/788) sold two thirds of all 788 products found. Two hundred and fifty-two vendors sold products such as PPE (45%), medicines (29%), scamming guides (12.6%), web-domains (6.3%), tests (2.2%), medical frauds (cf. 'vaccines' - 4.3%), ventilators (n=2; 0.2%) and fake medical records (0.4%). The study showed the close link between media attention and the demand for COVID-19 products including scam and fraud tools, and "...how the online shadow economy has evolved during the COVID-19 pandemic and highlight the importance of a continuous monitoring...especially now that real vaccines are available and in short supply"⁶.

Current

The *Wall Street Journal* reported in April 2021 that Pfizer Inc. had identified the presence of counterfeit vaccines in Poland and Mexico. The fake vaccine dose used by about 80 people cost about \$US1000 in Mexico. The fake Pfizer-BioNTech vials uncovered in Poland had not yet been sold. South African and Chinese authorities also "...seized thousands of doses of counterfeit Covid-19 vaccines in warehouses and manufacturing plants, arresting dozens of people"⁷. Ukrainian Police also investigate the likely use of Pfizer vaccines sold to wealthy Ukrainians paying up to \$US3,683 per dose⁸. A Reuters report noted the vaccines appear to have been diverted possibly via Israeli organised crime and sold to the wealthy in Kyiv⁹.

Systematic monitoring on the availability of Covid-19 products on online black markets has not been undertaken. We have, however, periodically checked our current databases for the presence of COVID-19 related products. We monitor about a dozen large dark markets and several others on Tor (i.e., the encrypted dark web) but we have not undertaken a comprehensive update on black-market sales of COVID-19 related products since April 2020¹⁰.

Nevertheless, it appears most markets do not sell COVID-19 vaccines although a few continue to do so and many (e.g., White House; Monopoly) explicitly ban the sale of COVID-19 products especially 'vaccines'. *Agartha* was one of the most active of the markets we observed engaged in sales of 'vaccines' but also has a reputation for selling many fake products. It recently become inactive due to an alleged "hack" that created fake orders and automated refunds to the tune of 13BTC (US\$725K) from its escrow wallet (cf. March 23, 2021). *Agartha's* restoration as an active market is yet to occur but its associated forum carried some vendor advertising at the time of writing.

5. On WeChat during stage 3 trials of the Sinovac SARS-VoV-2 vaccine – see Bang Xio (21 August 2020). Authorities warn against illegal COVID-19 vaccines and medication sold

online: https://amp.abc.net.au/article/12581996?__twitter_impression=true

6. Bracci, Nadini, Aliapoulios et al. 2021. Dark web Marketplaces and CoCOVID-19: before the vaccine. *EJP Data Science*, Vol. 10:6; <https://doi.org/10.1140/epjds/s13688-021-00259-w>

7. Interpol Press Release (May 2021) INTERPOL and Homeland Security: Public is warned against online vaccine scams after recent operation in China and South Africa; <https://www.interpol.int/News-and-Events/News/2021/Online-vaccine-scams-INTERPOL-and-Homeland-Security-Investigations-issue-public-warning>; A shipment of some 6,000 doses of purported Sputnik vaccine from Russia was also seized by Mexican authorities from a private plane headed to Honduras in March; see Jared S. Hopkins & José de Córdoba (April 21, 2021), Pfizer Identifies Fake Covid-19 Shots Abroad as Criminals Exploit Vaccine Demand, <https://www.wsj.com/articles/pfizer-identifies-fake-covid-19-shots-abroad-as-criminals-exploit-vaccine-demand-11619006403>

8. Williams, C. (22 Feb, 2021) Covid-19 Vaccines hit the black market, *The Strategist*: <https://www.aspistrategist.org.au/?s=COVID&x=26&y=16>

9. Reuters Staff (7, Jan 2021) Ukraine investigating illegal vaccinations against COVID; <https://www.reuters.com/article/us-health-coronavirus-ukraine-vaccinatio-idUSKBN29B283>

10. Broadhurst R. et al. (2020) Availability of COVID-19 related products on Tor darknet markets

Agartha, although not named in Israeli private cybersecurity company *CheckPoint's* March 2021 report on the availability of vaccines on illicit cryptomarkets¹¹, it was likely one of the most prolific purveyor of these products. Their report did not identify the markets surveyed but also (update 30/3/2021) noted the most active market monitored by them was “down” due to a hack. Thus, Agartha appeared, as noted above, also to be a prime source of ‘vaccine’ supply identified by CheckPoint. CheckPoint noted significant numbers of all types of vaccines (plus re-purposed medicine, and vaccine certificates) were available. Checkpoint also attempted to purchase from a supplier claiming to offer Chinese COVID-19 vaccines. The CheckPoint report found:

- Fake ‘vaccine passport’ certificates on sale for \$250 – users simply send their details and the money, and the seller emails back the fake documents;
- Fake negative COVID-19 test results on sale from various sellers from \$25;
- Darknet advertisements¹² for COVID-19 vaccines have increased by over 300% in past three months; and
- Multiple vaccine variants for sale: AstraZeneca, Sputnik, SINOPHARM and Johnson & Johnson, with prices ranging between \$500 and \$1000 per dose.

Note two dominant markets (Dbay and Empire) reported active by Bracci et al (2021) are also no longer active. Dbay allegedly operated by an Australian national was seized in January 2021 by German authorities and Empire had ceased operations (exit scam) in 2020.

Desperate shortages of medicines, vaccines and oxygen now reported in India have quickly stimulated black-markets. For example, Remisdiver is now only available through these informal markets at five times its usual Indian retail price¹³. These price surges may push buyers to darkweb markets where Remisdiver (and other antiretrovirals), Tocilizumab, Azithromycin, and Dexamethasone amongst others are found at inflated prices. However desperate buyers/suppliers also risk purchasing fake, and/or substandard products from these online (and offline) black-markets.

The scale of shortages of relevant medicines and vaccines in the foreseeable future provide criminal opportunities in abundance. Curbing the exploitation of the pandemic by criminal actors and groups requires a coordinated international and national approach. Policing agencies – national and international have attempted to address the escalating risks but face challenges in personnel and expertise while demands for public order and pandemic related policing have risen. The key to minimising harm will be assistance to less capable jurisdictions where shortages of material and expertise will be exposed by the pandemics potential for rapid community spread.

Professor Emeritus Roderic Broadhurst
ANU, School of Regulation & Global Governance

30 April 2021

11. See CheckPoint (30.3.2021). A passport to freedom? Fake COVID-19 test results and vaccination certificates offered on Darknet and hacking forums, <https://blog.checkpoint.com/2021/03/22/a-passport-to-freedom-fake-covid-19-test-results-and-vaccination-certificates-offered-on-darknet-and-hacking-forums/>

12. Note: CheckPoint appears to count advertisements or availability and a significant proportion will be duplicated sites.

13. Vikas Pandey (16 April 2021), India coronavirus: Desperate Covid-19 patients turn to black market for drugs, BBC: <https://www.bbc.com/news/world-asia-india-56757405>