

Expertise you can trust

By the Numbers: Third Quarter 2020

Special Report

From 2009 to September 30, 2020, **3,221 breaches** that affected 500 or more patients were reported to the Department of Health and Human Services (HHS), for a total of **250,392,046 patients** affected.

The percentage of patients affected by hacking has risen to **78%**, reflecting the increasing efforts by cyber criminals to obtain valuable healthcare data.

Hacking and **unauthorized access** continue to trend as highly significant figures in large reported cyber breaches this quarter. The “**unauthorized access**” category includes **ransomware**, social engineering/phishing attacks, and a variety of other exploits.

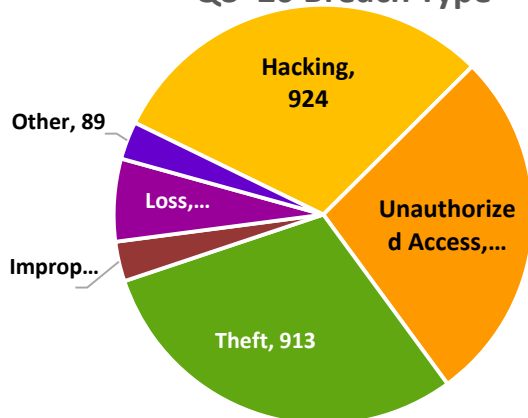
The FBI and others warn that **healthcare is being increasingly and imminently targeted by ransomware attacks**, in which cybercriminals use malicious software to encrypt vital data and then demand payment for a decryption key.

In the third quarter of 2020, **156 of the 171 reported breaches** were categorized as hacking and unauthorized access, representing approximately **91%** of all events reported and **84%** of all individuals whose data was compromised.

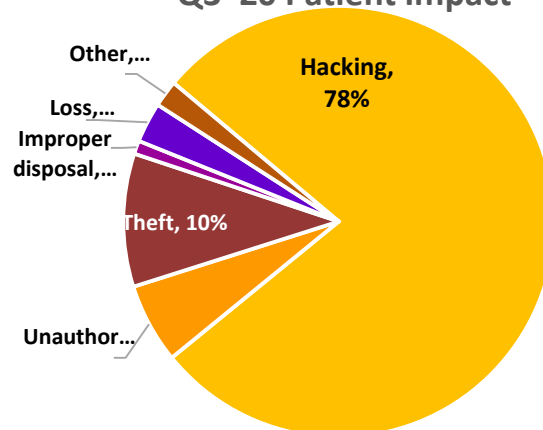
Q3 Breach Breakdown

Exploit Type	Number of Incidents	% of Total Incidents	Number of Patients	% of Patients
Hacking	1058	33%	194,855,648	78%
Unauthorized Access	858	27%	16,002,814	6%
Improper Disposal	95	3%	1,915,980	1%
Loss	198	6%	8,175,741	3%
Other	89	3%	3,163,499	2%
Theft	923	28%	26,278,364	10%

Q3 '20 Breach Type



Q3 '20 Patient Impact



Business Associates/Business Partners

Since reporting began, business associates and business partners have reported **787 incidents**, or **23% of all breaches**. **81,740,039 patients**, or **33% of the total** have been impacted.

This past quarter, business associates/business partners were the target of **47% of all breaches reported**, impacting **71% of the total**.

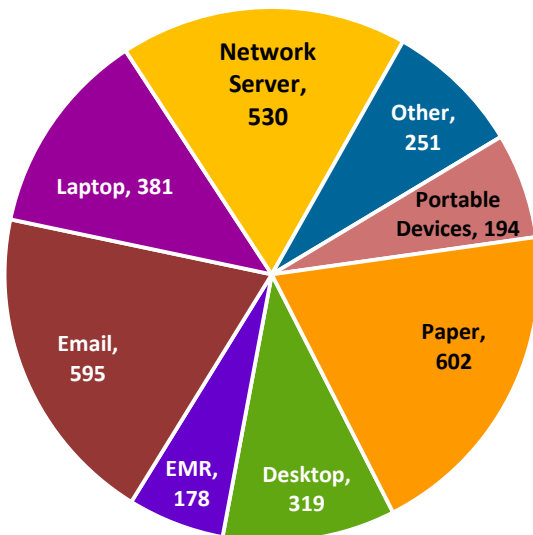
High-Value Target

Network servers continue to be the most attractive hacking targets, offering the greatest concentration of valuable data. Attacks on networks had the highest impact on patients this quarter (**189 million, or 76% of the total**).

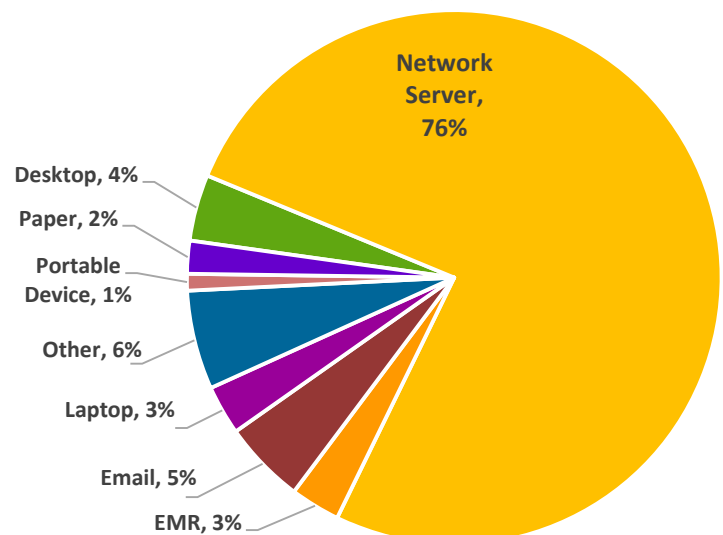
Data Location Breakdown

Data Location	Number of Incidents	% of Total Incidents	Number of Patients	% of Patients
Network Server	614	19%	189,963,043	76%
Desktop	323	10%	11,442,126	4%
EMR	185	6%	7,957,694	3%
Email	6,419,911	20%	12,232,843	5%
Laptop	382	12%	7,153,397	3%
Other	261	8%	14,197,841	6%
Portable Device	191	6%	2,512,203	1%
Paper	616	19%	4,932,899	2%

Q3 '20 Breaches - Data Location



Q3 '20 Patient Impact - Data Location

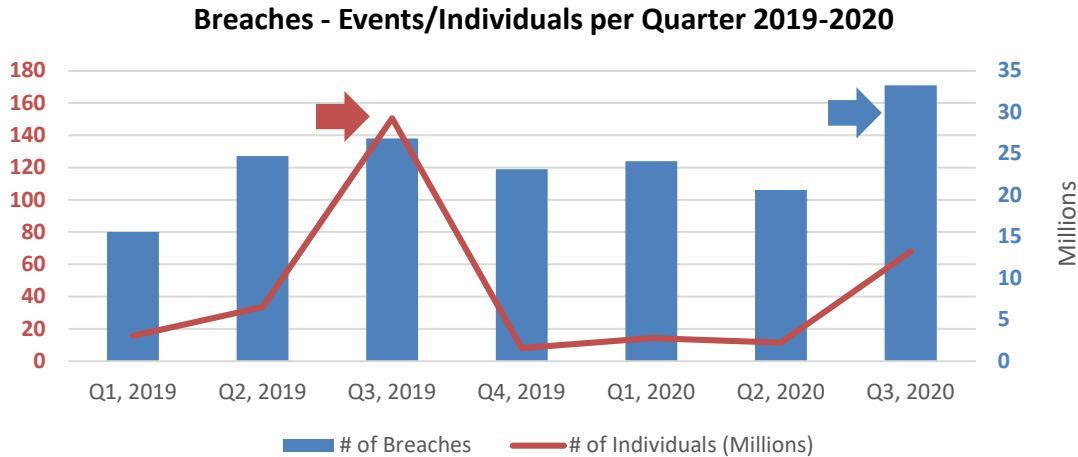


Source: https://ocrportal.hhs.gov/ocr/breach/breach_report.jsf

Special Report Highlights

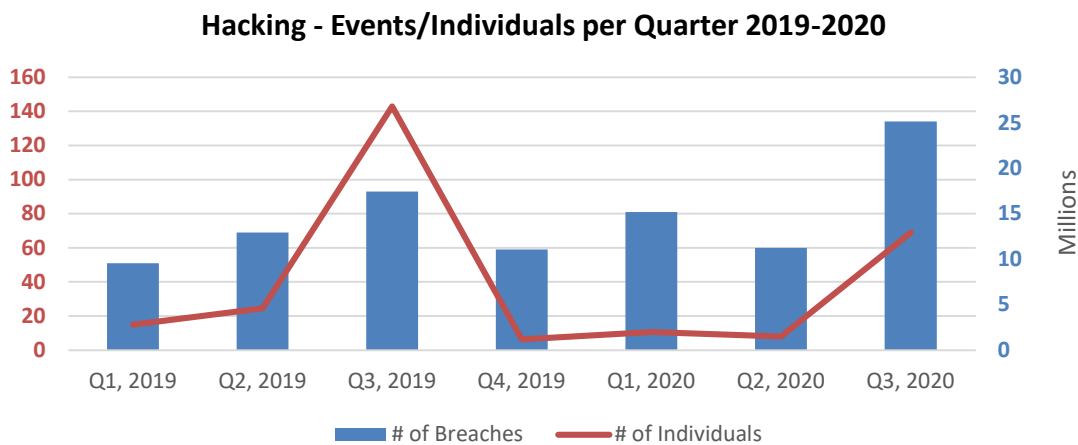
Because tw-Security has closely followed the HHS reports for many years, we are uniquely positioned to alert our clients to new trends. There are some interesting developments emerging in 2019 – 2020.

In the chart below, note the spike in “individuals affected” in Q3 2019, and the large increase in “number of breaches” in Q3 2020.



The spike in individuals affected (red arrow) at Q3 2019 is attributable to data breaches at two very large business associates, accounting for **nearly 76% of the 29 million total individuals** affected that quarter. Meanwhile, the **171 breaches** (blue arrow) shown in Q3 2020 represents the **highest number of breaches ever recorded** in a single fiscal quarter.

These record-breaking incidents serve as a sobering reminder that **business associates must be fully vetted and audited** to ensure that they maintain security standards as high as those in your own organization.



This graph illustrates the magnitude of the threat posed by hackers. Hacking has emerged as the primary source of individual user data compromise (red line), peaking in Q3 2019 and surpassing all other causes.

In fact, there have been **more breaches by hackers (275) in the first 9 months of 2020 than in all of 2019 (272)**.

Remind your teams to **stay alert and vigilant** to avoid being victimized.

Be Prepared <https://www.tw-security.com/services/incident-response-preparedness/>