



# Phishing-resistant MFA for Pharmaceuticals

## Secure data, technology, and people with YubiKey



The pharmaceutical industry faces a more complicated threat landscape than ever before. In 2022, the average cost of a data breach in the pharmaceutical industry was \$5.01 million, just behind healthcare and financial services industries.<sup>1</sup> Cyber espionage attacks have long targeted pharma's valuable IP and research assets, but COVID-19 pandemic exacerbated the vulnerability of this data. Digital transformation accelerated almost overnight as enterprises were forced to switch to a remote work model in order to keep critical business operations and research on track. Since then, digital innovation and data availability have rapidly outpaced data security, resulting in a threat gap that is being actively exploited by nation states and cyber criminals in the form of ransomware attacks, spear phishing attacks and more, where users are tricked into revealing their corporate credentials, giving attackers a doorway to critical applications and data. The ideal end state is to eliminate passwords altogether and move to passwordless, but a first step on that journey is to deploy phishing-resistant multi-factor authentication (MFA).

### Legacy authentication leaves you vulnerable

While any form of MFA is better than no MFA, not all forms of MFA are created equal. Legacy authentication such as

usernames and passwords can be easily hacked, and mobile-based authentication such as SMS, OTP codes, and push notifications are highly susceptible to modern phishing attacks, malware, SIM swaps, and man-in-the-middle attacks.

In addition to security, it's also important to consider usability, portability, and scalability, as key requirements across OT environments. Poor user experiences, low portability, and lack of scalability can result in MFA gaps, low user adoption, and an increased risk of a breach.

### YubiKey: Maximize security with phishing-resistant MFA, and bridge to passwordless

The YubiKey is a hardware security key that provides phishing-resistant, two-factor, multi-factor, and passwordless authentication. The YubiKey is FIPS 140-2 validated and impersonation resistant, making it highly suitable for regulated environments such as the pharmaceutical industry.

With the YubiKey, pharmaceutical companies can deploy highest-assurance security for their data, technology, and people.

## The 2021 ransomware risk pulse: pharmaceutical manufacturing<sup>2</sup>



Pharmaceutical companies' annual cyber attack risk averages \$31.1 million



Nearly 10% of pharmaceutical manufacturers are highly susceptible to ransomware



Almost half of all pharmaceutical companies have over 1,000 leaked employee credentials on the deep web



Data management vendors pose the most significant annual financial risk in the supply chain

<sup>1</sup> IBM, Cost of a Data Breach Report 2022

<sup>2</sup> Black Kite, The 2021 Ransomware Risk Pulse: Pharmaceutical Manufacturing

## YubiKeys offer proven security

In addition to being affordable and easy to use, YubiKeys are the only solution proven to eliminate account takeovers in independent research.<sup>3</sup> This enables pharmaceutical companies to confidently move toward a future that is far less vulnerable to phishing attacks and credential theft.

With the YubiKey, pharmaceutical companies can deploy highest-assurance security for their data, technology, and people.



Research by Google, NYU, and UCSD based on 350,000 real-world hijacking attempts. Results displayed are for targeted attacks.

## YubiKeys unite security and digital transformation

YubiKeys help close the threat gap across growing pharmaceutical organizations, uniting security and digital transformation. A single YubiKey can be used across a variety of modern and legacy applications, services and devices, with multi-protocol support for SmartCard, OTP, OpenPGP, FIDO U2F and FIDO2/WebAuthn. Not only are YubiKeys easy to deploy, they are incredibly easy to use as well. To authenticate, users simply tap or touch the YubiKey. And, because the YubiKey offers USB, NFC, and Lightning form factors, authenticating to modern devices such as mobile and tablets is simple. Additionally, YubiKeys with NFC capability can be combined with wearables for fast and easy authentication that meets clean room safety standards.

<sup>3</sup> Google, [How effective is basic account hygiene at preventing account takeovers](#)

## Easily procure and distribute YubiKeys at scale

Yubico offers flexible and cost-effective enterprise plans that help organizations with 500 users or more move away from legacy and broken MFA and accelerate towards phishing-resistant authentication at scale.

With [YubiEnterprise Subscription](#), organizations can benefit from a predictable OPEX model, the flexibility to meet user preferences with choice of any YubiKey, upgrades to the latest YubiKeys, and faster rollouts with easy access to Deployment Services, Priority Support and a dedicated Customer Success Manager.

Subscription customers are also eligible to purchase additional services and product offerings, such as [YubiEnterprise Delivery](#), a global turnkey hardware key distribution service to residential and office locations across 49 countries. This allows pharmaceutical organizations to worry less about security management and focus more on researching and getting new drugs to market.

## Choose the trusted authentication leader

Yubico is the principal inventor of the WebAuthn/FIDO2 and U2F authentication standards adopted by the FIDO alliance. Yubico is also the first company to produce the U2F security key and a multiprotocol FIDO2 authenticator.

YubiKeys are produced in the USA and Sweden, which ensures a high level of security and quality control over the entire manufacturing process.



### The YubiKey 5 FIPS Series

From left to right: YubiKey 5 NFC FIPS, YubiKey 5C NFC FIPS, YubiKey 5Ci FIPS, YubiKey 5C FIPS, YubiKey 5 Nano FIPS and YubiKey 5C Nano FIPS



### The YubiKey 5 Series

From left to right: YubiKey 5 NFC, YubiKey 5C NFC, YubiKey 5Ci, YubiKey 5C, YubiKey 5 Nano and YubiKey 5C Nano

**About Yubico** As the inventor of the YubiKey, Yubico makes secure login easy. As a leader in setting global standards for secure access to computers, mobile devices, and more, Yubico is also a creator and core contributor to the FIDO2, WebAuthn, and FIDO Universal 2nd Factor (U2F), and open authentication standards. For more information, please visit: [www.yubico.com](http://www.yubico.com).

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