

 **HotDoc** | CPD WEBINAR

# Cybersecurity in General Practice: Explanations & Mitigation Strategies




HOSTED BY  
**Henry McLaughlin**



**WED 4 MAY**

**12:30pm AEST**



**In the spirit of reconciliation, HotDoc acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.**

**We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.**



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**Healthcare ICT Specialists**

[www.greenumbrella.com.au](http://www.greenumbrella.com.au)

# IMPROVING TECHNOLOGY IN GENERAL PRACTICE

2022 CYBERSECURITY EDUCATION



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Cyber  
Security

Business  
Continuity  
Disaster  
Recovery

- Cyber security hardens against cyber attacks
- Business continuity and disaster recovery maximises capacity to recover from cyber attacks.



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# CYBER SECURITY, IN GENERAL PRACTICE

Cyber  
Security



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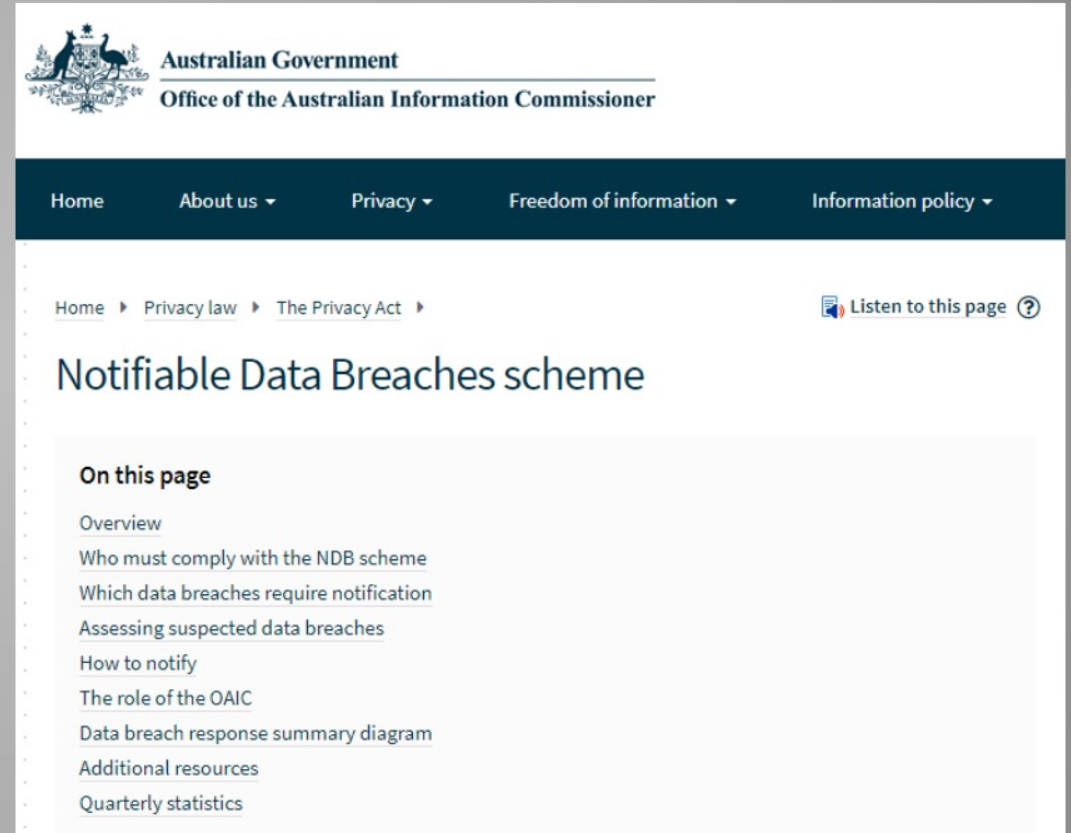
# CYBER SECURITY EXPLAINED

- Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks. These cyberattacks are usually aimed at accessing, changing, or destroying sensitive information; extorting money from users; or interrupting normal business processes.
- Implementing effective cybersecurity measures is particularly challenging today because there are more devices than people, and attackers are becoming more innovative.



# LEGISLATION: NOTIFIABLE DATA BREACHES

Feb 2018 - Privacy  
Amendment (Notifiable  
Data Breaches) Act  
2017



The screenshot shows the official website of the Australian Government Office of the Australian Information Commissioner. The page is titled "Notifiable Data Breaches scheme" and features a navigation menu with options like Home, About us, Privacy, Freedom of information, and Information policy. A breadcrumb trail indicates the path: Home > Privacy law > The Privacy Act. A "Listen to this page" button is visible in the top right. A table of contents titled "On this page" lists various sections: Overview, Who must comply with the NDB scheme, Which data breaches require notification, Assessing suspected data breaches, How to notify, The role of the OAIC, Data breach response summary diagram, Additional resources, and Quarterly statistics.

Australian Government  
Office of the Australian Information Commissioner

Home About us Privacy Freedom of information Information policy

Home > Privacy law > The Privacy Act > Listen to this page ?

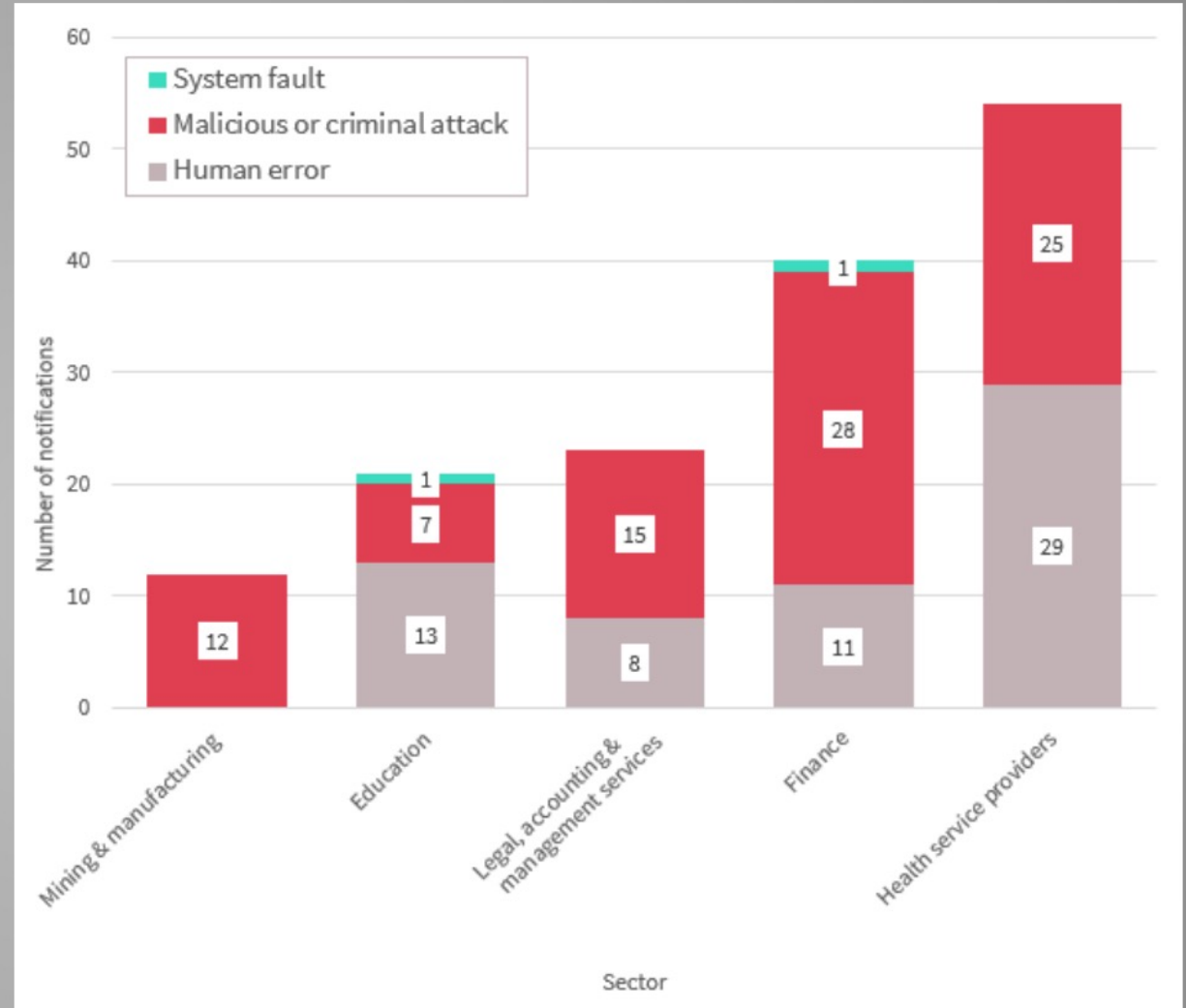
## Notifiable Data Breaches scheme

**On this page**

- [Overview](#)
- [Who must comply with the NDB scheme](#)
- [Which data breaches require notification](#)
- [Assessing suspected data breaches](#)
- [How to notify](#)
- [The role of the OAIC](#)
- [Data breach response summary diagram](#)
- [Additional resources](#)
- [Quarterly statistics](#)

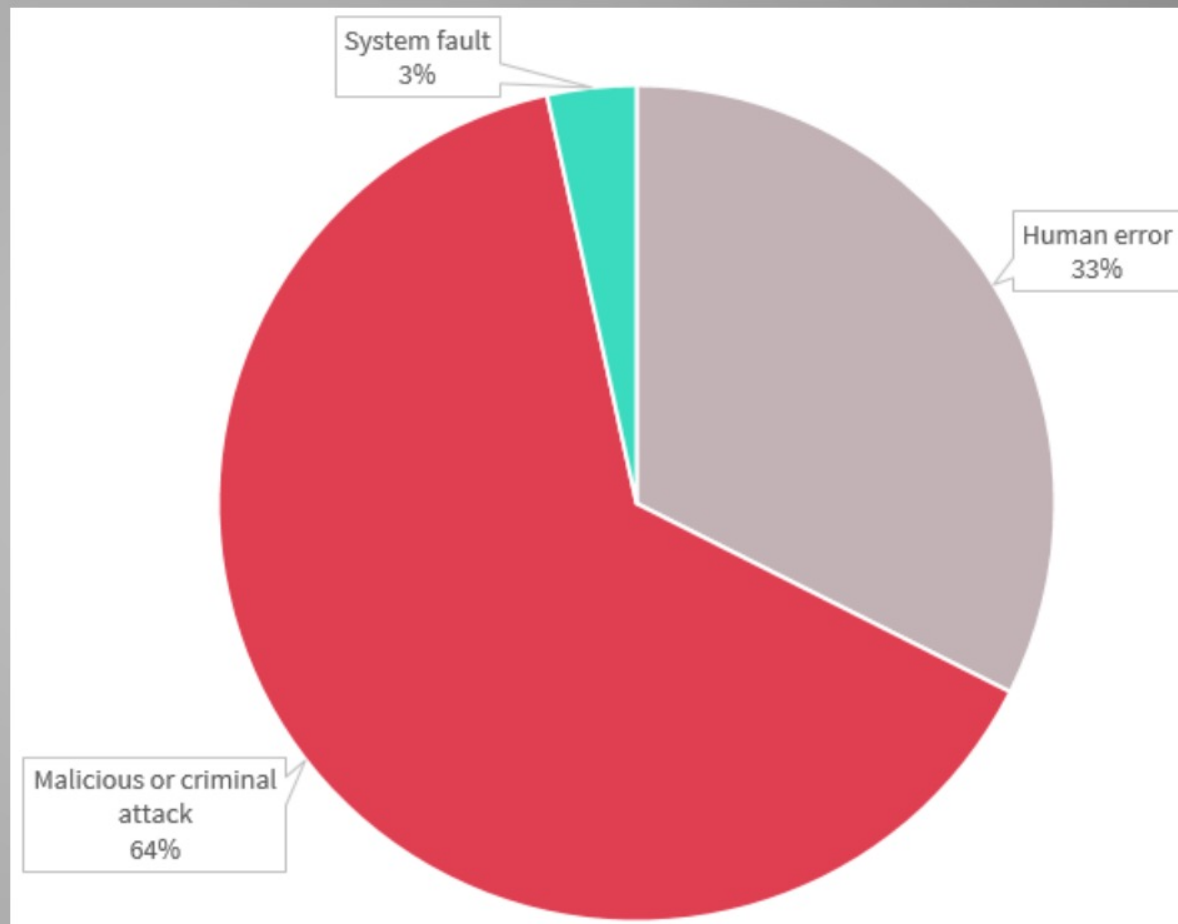


# SOURCE OF BREACHES -TOP FIVE SECTORS

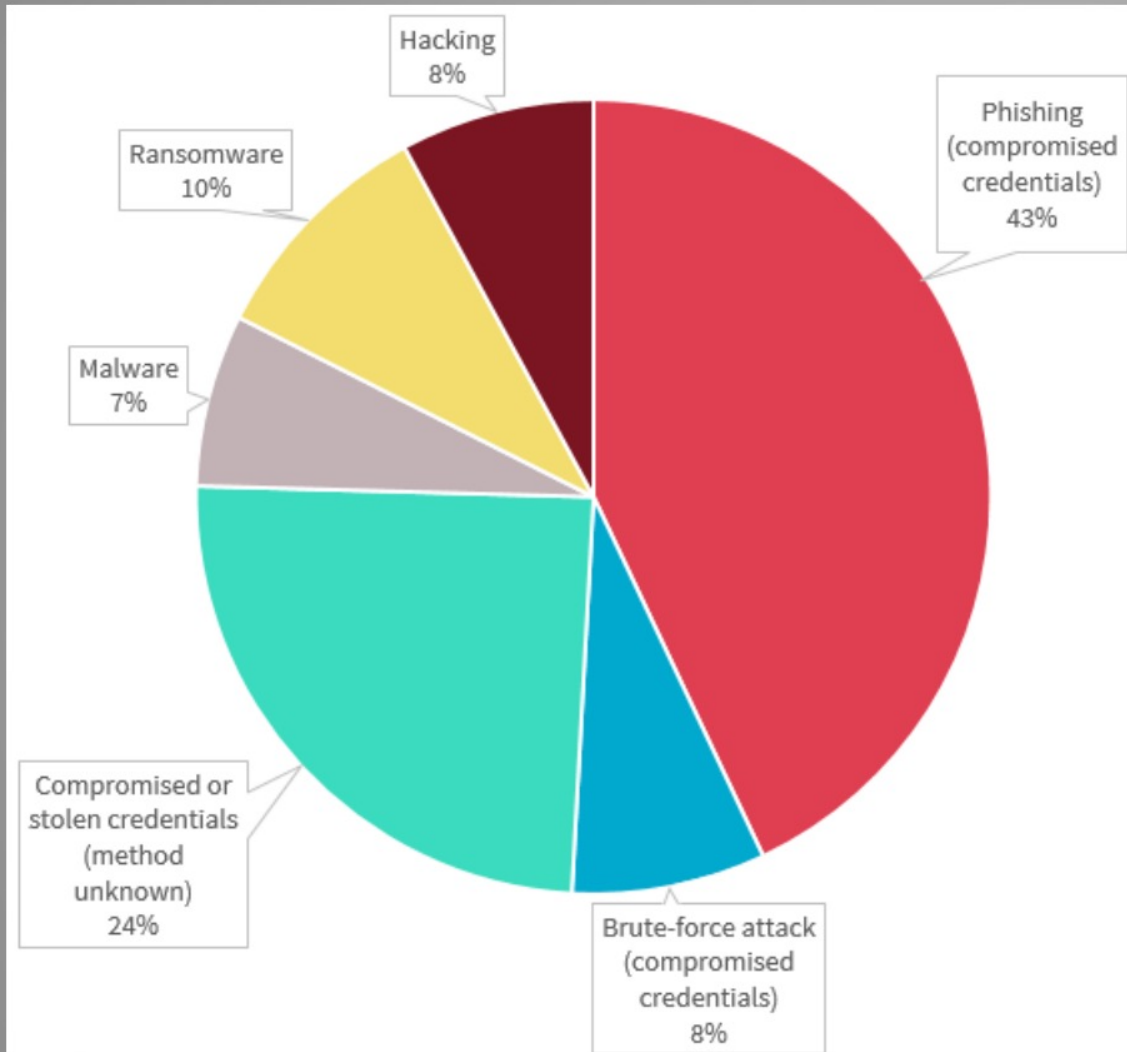


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# SOURCE OF THE BREACHES -ALL SECTORS



# CYBER INCIDENT BREACHES - ALL SECTORS

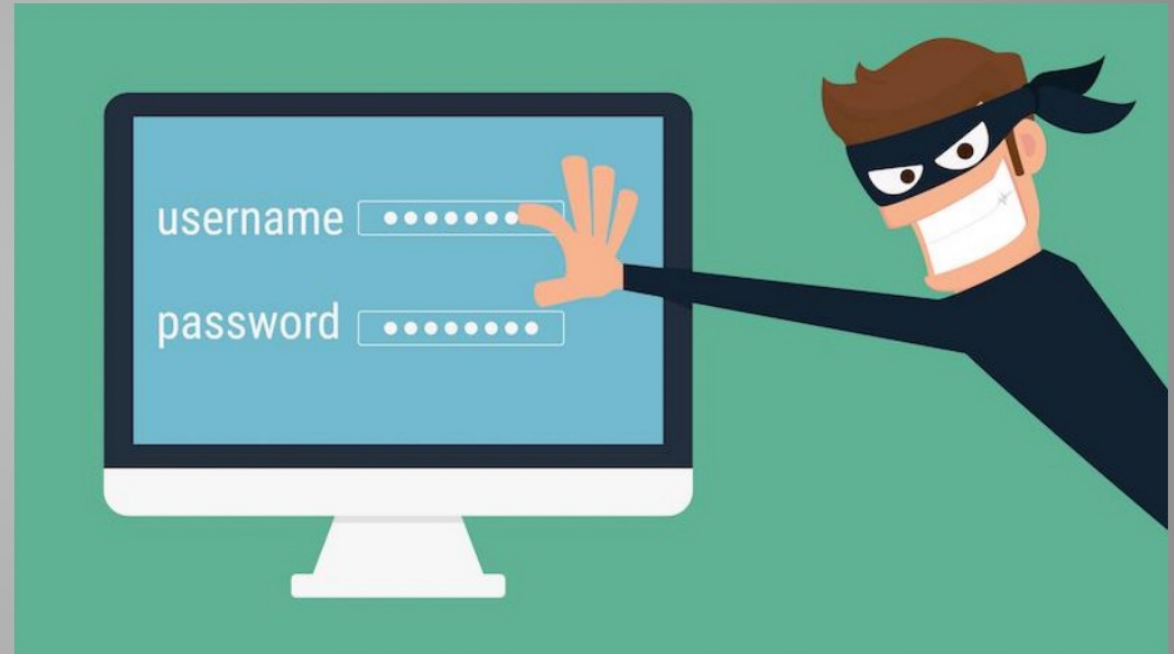


# #1 CYBER INCIDENT COMPROMISED CREDENTIALS

- Collectively equate to 75%
  - Phishing attacks @ 43%
  - Brute force attacks @ 8%
  - Compromised or stolen @ 24%

## Mitigated via

- Web filtering
- Email filtering
- Strong password policies
- Two factor authentication



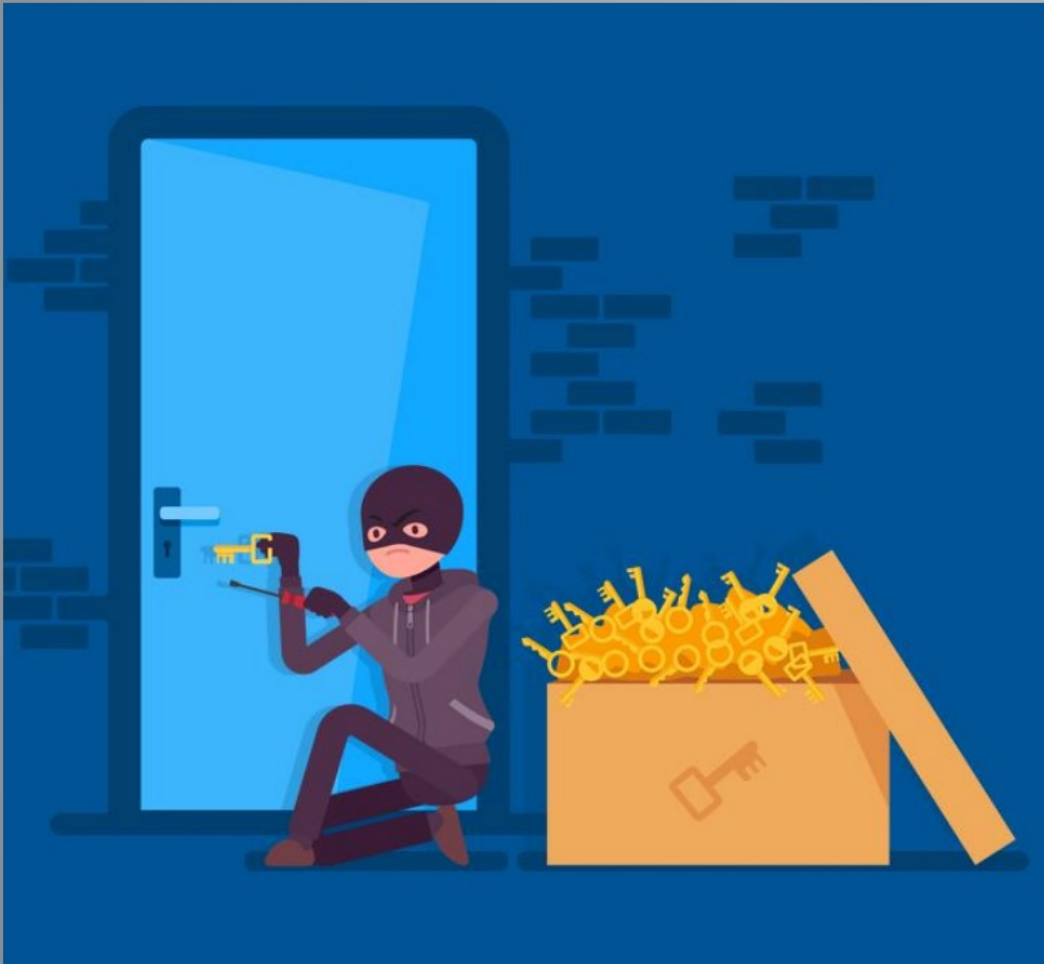
# PHISHING EXPLAINED



Phishing is the fraudulent attempt to obtain sensitive information such as usernames, passwords and credit card details by disguising as a trustworthy entity in an electronic communication.

- [Phishing site](#)
- [Real site](#)

# BRUTE FORCE EXPLAINED



In cryptography, a brute-force attack consists of an attacker submitting many passwords or passphrases with the hope of eventually guessing correctly. The attacker systematically checks all possible passwords and passphrases until the correct one is found.

# 2018 25 MOST COMMON PASSWORDS

- 123456
- password
- 123456789
- 12345678
- 12345
- 11111
- 1234567
- sunshine
- qwerty
- iloveyou
- princess
- admin
- welcome
- 666666
- abc123
- football
- 123123
- monkey
- 654321
- !@#\$%^&\*
- charlie
- aa123456
- donald
- password1
- qwerty123



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# PASSWORD MANAGEMENT

- Users required to juggle multiple passwords for multiple systems
- Never use the same password for multiple systems
- Passwords need to be complex yet manageable
- Passwords should expire and be changed periodically (limited life)
- Develop & adopt a company password policy [Link](#)
- Use a password manager



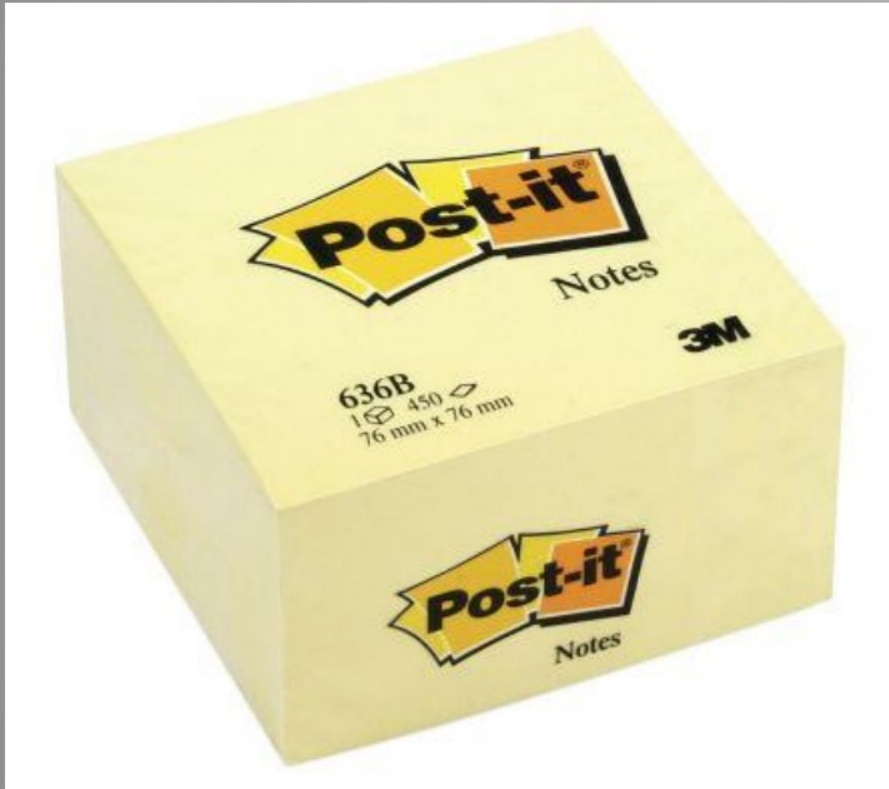


# PASSWORD COMPLEXITY

- Uppercase
- Lower case
- Punctuation
- Numeric digits

**h=RqdWudxUN2FnF]**



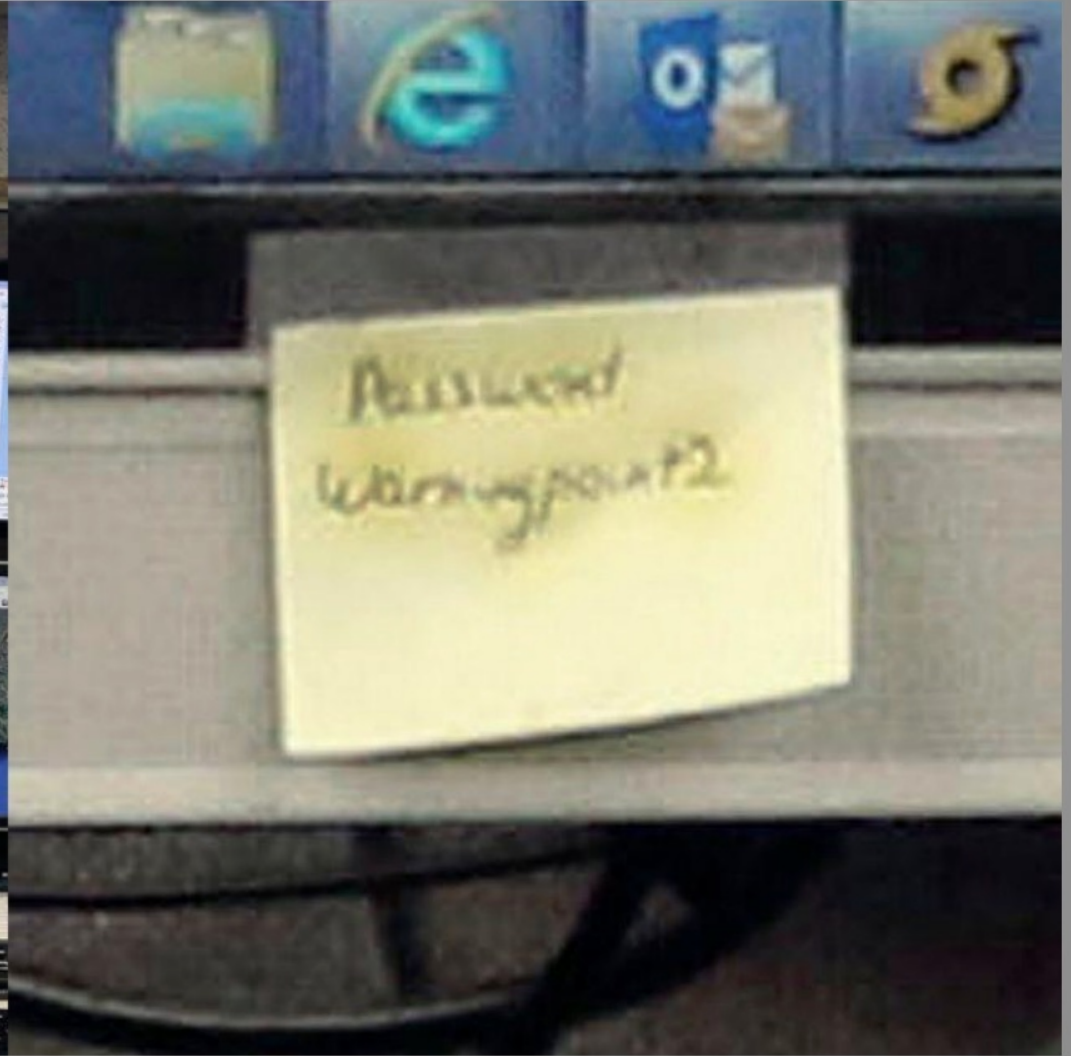


# #1 CYBER SECURITY RISK

# 2018 HAWAII FALSE MISSILE ALERT







# HAVE YOU BEEN BREACHED?

“How far prepared are you? It’s no longer a case of if a threat happens but when. It may have happened already, you may have not found it yet.”

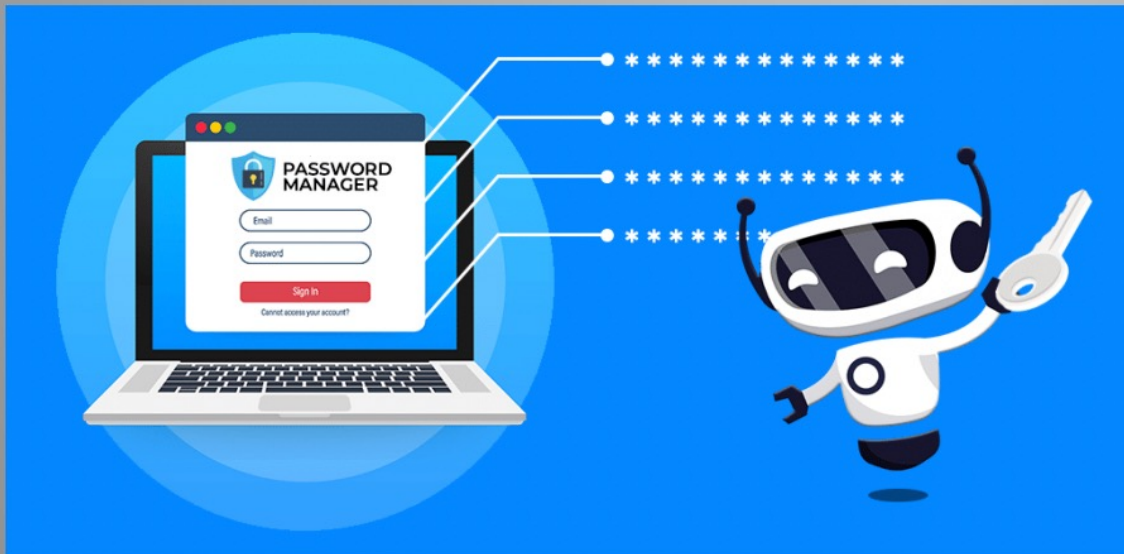
- IBM Australia Industry Security Leader Stephen Burmester

<https://haveibeenpwned.com/>



# PASSWORD MANAGERS

- Password management is easy with the right tools
- Multiple password managers available:
- Green Umbrella Technology uses *MyGlue* internally.



|                |
|----------------|
| Last Pass      |
| Keeper         |
| 1 Password     |
| StickyPassword |
| DashLane       |
| Password Boss  |
| RoboForm       |
| Nord Pass      |

## #2 CYBER INCIDENT RANSOMWARE

- Across Australia & New Zealand , an estimated 6% of small-medium businesses fell victim to ransomware in 2016-2017
- The total amount of ransom paid from these attacks...

**\$12.6 million**





# RANSOMWARE EXPLAINED



Ransomware is a type of malicious software from cryptovirology that threatens to publish the victim's data or perpetually block access to it unless a ransom is paid

- Mitigated via
- Web filtering
  - Email filtering
  - Application whitelisting
  - BCDR



# BLACKLISTING VS WHITELISTING

“There are applications we know are safe. There are applications we know are not safe. But there are also applications we don’t know are not safe”

- Henry McLaughlin

|                         | Blacklisting | Whitelisting |
|-------------------------|--------------|--------------|
| Know are safe           | Permitted    | Permitted    |
| Know are not safe       | Blocked      | Blocked      |
| Don't know are not safe | Permitted    | Blocked      |



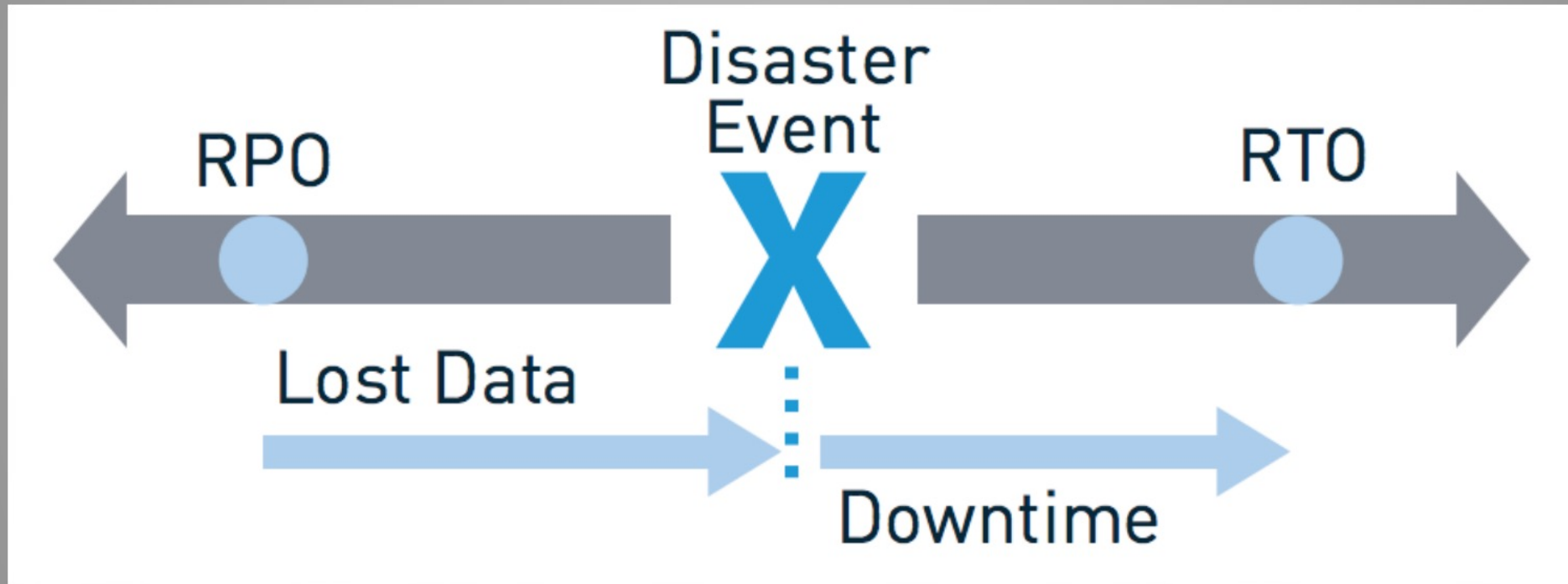
# BUSINESS CONTINUITY AND DISASTER RECOVERY IN GENERAL PRACTICE

Business  
Continuity  
Disaster  
Recovery



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# CONTINUITY TERMINOLOGY



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# Five Drivers of a Profitable General Practice



HOSTED BY  
**Dr Sachin Patel**



**aapm**

Australian Association of  
Practice Management

AAPM Approved  
2022

5 Points

**TUES 17 MAY**

**12:30pm AEST**

# Thank You



## Resources

- Free! Password manager
- Slides
- Contact us



[www.greenumbrella.com.au/webinar-resources-request](http://www.greenumbrella.com.au/webinar-resources-request)