

# Cyber security attitudes and motivations

INTEGRATED INSIGHTS



TRA

# Our approach

## Integrated insights from multiple sources

### CULTURAL AUDIT

TRA conducted desk research (over 30+ websites) across a vast number of sources where New Zealanders might encounter cyber security topics. TRA covered the following sources:

- NZ media sites
- International news and magazine sites
- Social media sites
- Government websites
- NZ and overseas e-commerce websites
- Internal research documents and existing literature on cyber security awareness

### QUANTITATIVE

The survey interviewed a nationally representative sample of New Zealanders aged 18 years and over.

- Total sample n=1,217
- Margin of error at the 95% confidence interval is  $\pm 2.8\%$
- Fieldwork ran from 8th March to 17th March 2022
- The data was post-weighted to be representative of the New Zealand population in terms of age, gender, region and ethnicity.

### QUALITATIVE

A two-phase approach was taken to gain depth of insight overall, and nuance into our segments.

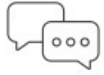
#### 1 Focus group discussions

- Five focus groups, one for each segment
- Five per group, total of 25 participants
- One and a half hours per session

#### 2 Four-day online board engagement

- Recruiting the same participants from the discussion groups.
- Opportunity to go into further detail to understand participants' behaviours and perceptions of online security.

# The broader context



# The world is changing, creating an ever-increasing need for strong online security

People are doing more online, but online security behaviours have not kept up with the increasing risk.

There is already a shift towards people increasingly living their lives online

- Mobile phones and an ability to communicate through online platforms becoming an extension of the self.
- Businesses pushing towards online self-service.
- People increasingly forming and maintaining relationships online.





# In a fast-evolving context, people are increasingly exposed to cyber security issues

MICRO LEVEL

## People experience and hear of many attacks in their own lives

- New Zealanders have high *prompted* awareness of cyber threats, attacks and crime:
- Almost everyone is aware of at least one form of cyber threat.
- On average, New Zealanders are aware of 10–14 key cyber security threats.

## And they hear of cyber security challenges at a societal level

People are seeing and hearing more about large-scale attacks upon businesses and organisations.

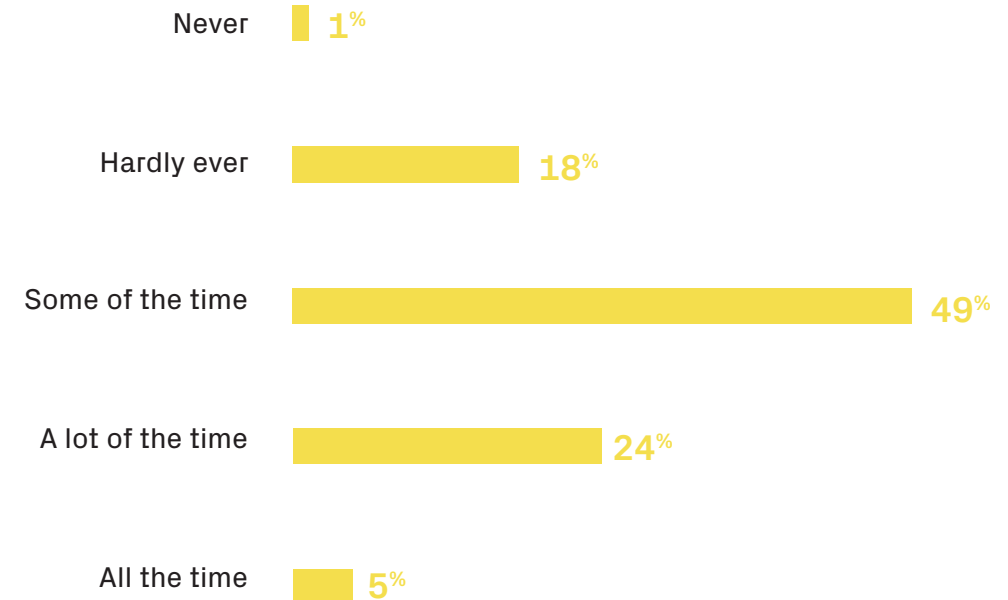
- Fear of Russia further mobilising cyber warfare.
- High-profile attacks – e.g. Waikato DHB, ANZ, NZX.

MACRO LEVEL

# A large proportion of New Zealanders are being regularly exposed to cyber security incidents



## HOW OFTEN NEW ZEALANDERS ARE SEEING OR HEARING ABOUT CYBER SECURITY ISSUES



CERT NZ Cyber Security Research Apr 22  
Q: How much are you seeing or hearing about cyber security issues in day-to-day life?  
Q: How much are you seeing or hearing about cyber security issues in the context of businesses and workplaces being affected?  
Base: Total sample n=1,217,

# There is a high awareness of cyber threats, with many New Zealanders personally experiencing an incident recently

CYBER THREAT, ATTACK, CRIME	Awareness	Heard of happening to someone you know L3M	Personally experienced L3M
Emails re: fake lottery, prize, grant, investment or job opportunity	80%	30%	34%
SMS or email from an unknown person asking to click on a link/open a doc	79%	35%	34%
Tech scam calls	75%	23%	20%
Credit cards being used without people's knowledge	75%	9%	6%
Online identify theft	75%	6%	3%
Personal and/or financial data being stolen	73%	5%	2%
Accidentally downloading ransomware or malware software	70%	9%	4%
Online shopping scams	69%	13%	5%
Social media accounts accessed without account holder's knowledge	69%	20%	5%
Bank accounts being used without people's knowledge	67%	7%	3%
Email accounts being used or accessed without account holder's knowledge	64%	9%	4%
<b>None of the above</b>	<b>2%</b>	<b>43%</b>	<b>38%</b>

L3M = Last three months

Top cyber security incidents

CERT NZ Cyber Security Research Apr 22

Q: From this list of cyber threats, attacks and crime, can you please tell us which (if any) you are aware of?

Q: And again, from this same list of cyber threats, attacks and crimes can you please tell us which (if any) have happened to someone you know, including your workplace or university in the past three months.

Q: From this same list of cyber threats, attacks and crimes, can you please tell us which (if any) you have personally experienced in the past three months.

Base: NZ'ers total sample n=1,217, Aware of any cyber attack/threat/crime n=1,198



# But despite increasing exposure, online security is still not front of mind

Only one in five New Zealanders say that cyber threats, cyber attacks and cyber crime is a current concern in their life.

**Ranked 9<sup>th</sup>** out of 13 'life concerns', falling behind life's big concerns of finances, health and climate change.

LIFE CONCERNS	%	
Finances	53%	
Health	53%	
Climate change	41%	
Housing	38%	
Politics	30%	
Career or workplace	27%	
Racism	26%	
Relationships with family	25%	
Cyber threats, cyber attacks or cyber crime	21%	<b>#9</b>

CERT NZ Cyber Security Research Apr 22

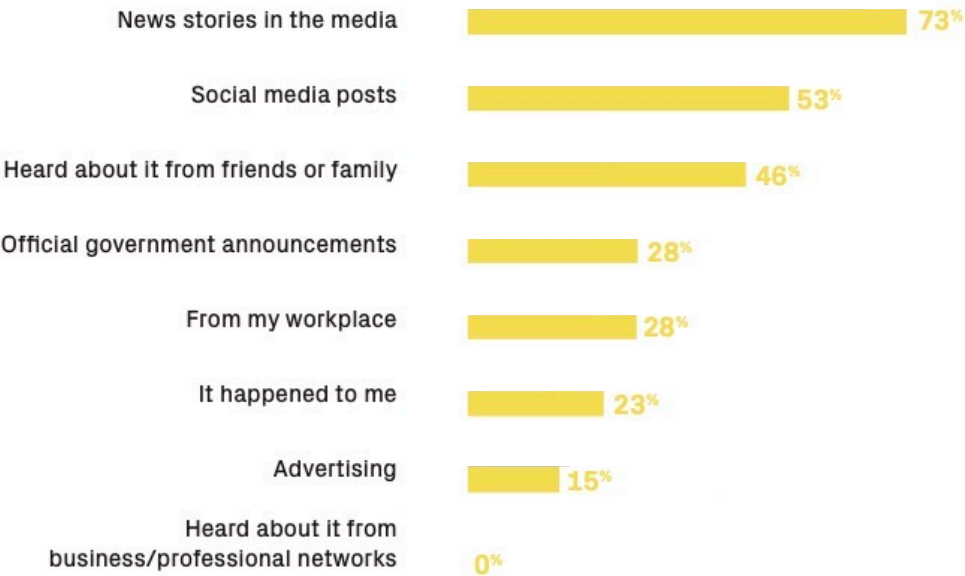
Q: From this list of topics below, can you please tell us which (if any) are currently a concern in your life?

Base: NZ'ers total sample n=1,217



# Exposure to cyber security is largely driven by news stories and social media

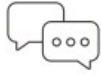
## WHERE KIWIS ARE HEARING ABOUT CYBER ISSUES



## INFO & ADVICE USED – TOP 5 & GOVT

INDIVIDUALS		%
#1	Banks and other financial institutions	37%
#2	Internet service providers	35%
#3	Searching for information online	33%
#4	Friends	29%
#5	Websites / applications / forums that I use	28%
#8	Government agencies	21%

CERT NZ Cyber Security Research Apr 22  
Q: And where are you hearing about these cyber security issues?  
Base: Those who hear about cyber security issues some of the time, a lot of the time, or all of the time, NZ'ers n=960.  
Q Where do you currently get cyber security information and / or advice from?  
Base: NZ'ers total sample, n=1217



# When people do think of online security, it is perceived as complex, shadowy, not for everyday people

**73%** of New Zealanders who said they regularly hear about cyber security are hearing about issues via “news stories in the media”.

The stories that the media highlights are large-scale, dramatic, scary, and emotive.

These attacks make cyber security feel intangible, complex, inaccessible and evoke the feeling that nothing regular Kiwis can do will protect them against these kind of hackers.

CERT NZ Cyber Security Research Apr 22

Q: And where are you hearing about these cyber security issues?

Base: NZ'ers who are seeing/hearing about cyber security some/a lot/all the time n=960

Fears grow data hacked from Reserve Bank may be leaked by ransomware group



Waikato DHB warned a cyberattack 'catastrophic for patient safety'

9:21 am on 12 November 2021

Natalie Maslin, LDR Editor  
@natmaslinnz @waikatoresponseroom

Waikato District Health Board was warned its IT security was inadequate and severely compromised just months before a massive ransomware attack that brought Waikato Hospital to its knees.



New Zealand reserve bank governor apologises over 'serious' cyberattack



Cyber threats continue to increase in New Zealand, new report finds

6:48 pm on 10 November 2021

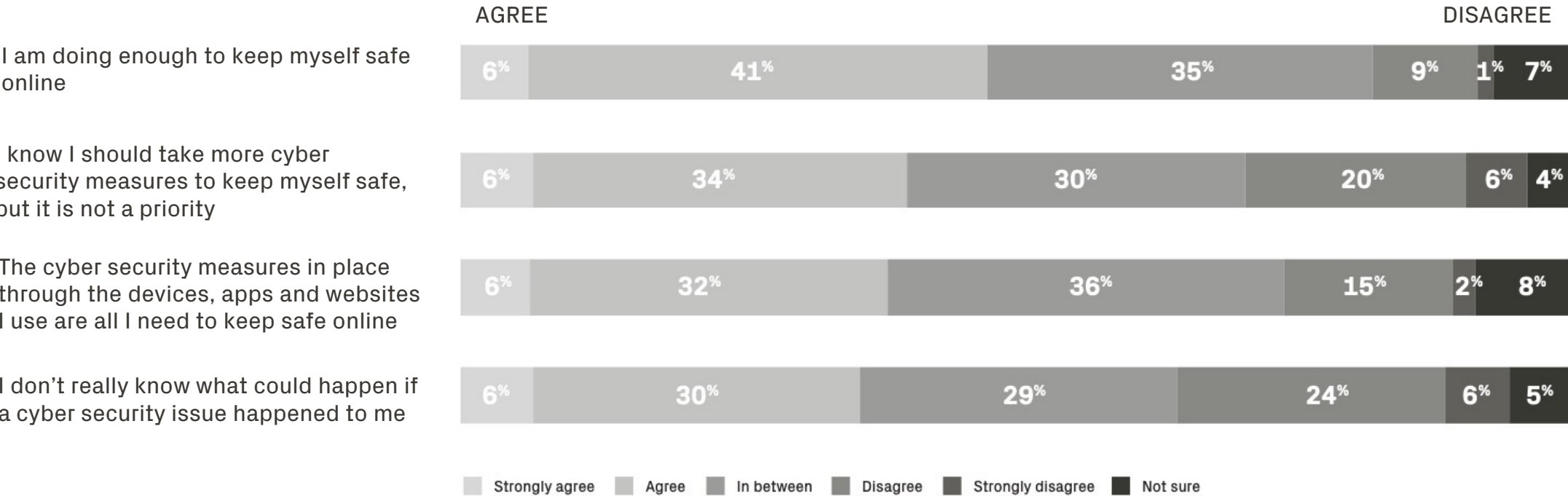
Share this

A new report has found cyber threats are continuing to grow in New Zealand, as attacks become more sophisticated.



# Many believe they are doing enough and are not actively prioritising cyber security action

## ATTITUDES TOWARD CYBER SECURITY



CERT NZ Cyber Security Research Apr 22  
Q: Here are some statements regarding cyber security. To what extent do you agree or disagree?  
Base: NZ'ers total sample n=1,217



# And people are not always motivated to act

- The consequences of not acting do not always feel tangible.
- There is currently a focus on the 'what' and not the 'why'.
- People can become desensitised.
- The capable can be overconfident.



*I didn't really take it seriously, but a few weeks ago someone managed to get money off my mum's card... I think a lot of people think that 'it won't happen to me'."*

# New Zealanders feel relatively confident when it comes to cyber security and technology; there is a link between age, income and confidence

**70%**

of Kiwis feel confident with **CYBER SECURITY**

**84%**

of Kiwis feel confident with **TECHNOLOGY**

AGE BY CYBER AND TECH CONFIDENCE

	18 - 34 years	35 - 54 years	55+ years
Proportion of Kiwis that feel confident in <b>cyber security</b>	79%	70%	60%
Proportion of Kiwis that feel confident using <b>technology</b>	95%	87%	72%

ANNUAL HOUSEHOLD INCOME BY CYBER AND TECH CONFIDENCE

	Less than \$50,000	\$50,000 - \$74,999	\$75,000 - \$99,999	\$100,000 - \$149,999	\$150,000 - \$199,999	\$200,000 and above
Proportion of Kiwis that feel confident in <b>cyber security</b>	60%	77%	69%	71%	80%	85%
Proportion of Kiwis that feel confident using <b>technology</b>	73%	90%	88%	87%	94%	93%

Significantly higher than NZ Population at 95% CI

Significantly lower than NZ Population at 95% CI

CERT NZ Cyber Security Research Apr 22

Q: Which of the following best describes your personal confidence with technology in everyday life?

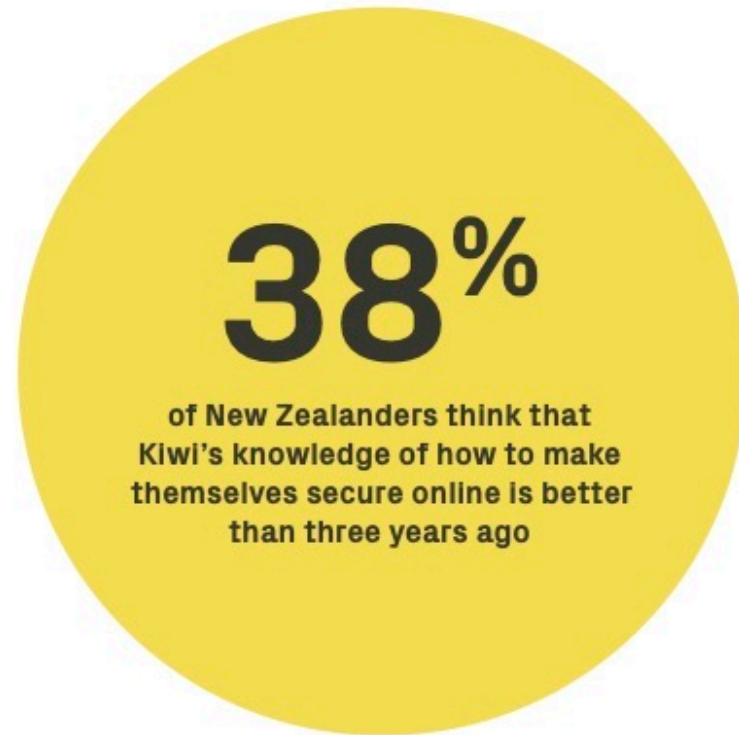
Q: Which of the following best describes your personal confidence with cyber security in everyday life?

Confident = 'very confident' or 'quite confident'

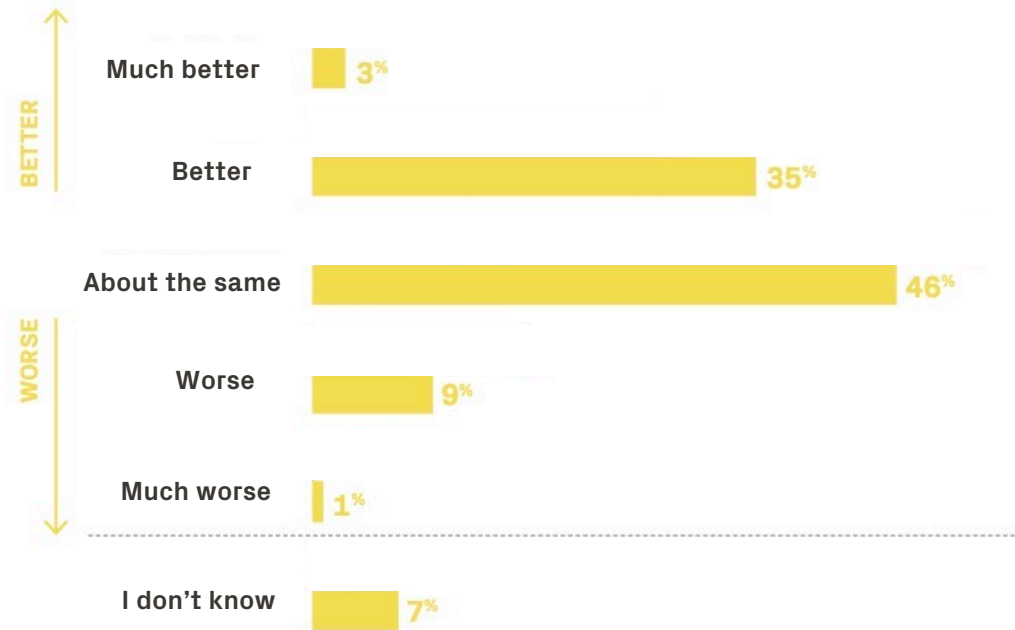
Base: NZ'ers total sample n=1217, 18-34 n=358, 35-54 n=413, 55+ n=446, <\$50k n=306, \$50k-\$74.9k n=191, \$75k-\$99.9k n=189, \$100k-\$149.9k n=237, \$150k-\$199.9k n=76, >\$200k n=70



# Fortunately, there is a perception that cyber security knowledge of the public is increasing



## HOW NEW ZEALANDERS SEE KNOWLEDGE IMPROVEMENT VS 3 YEARS AGO



CERT NZ Cyber Security Research Apr 22

Q: In the context of cyber security, do you think New Zealanders' knowledge of how to make themselves secure online is better or worse than three years ago?

Base: NZ'ers total sample, n=1217

**IMPLICATION**

**We know New Zealanders are aware of cyber security, but is this translating into action?**

# Cyber security behaviours



# Most Kiwis are implementing basic cyber security behaviours, but CERT NZ's most frequently recommended behaviours are yet to become mainstream

On average, New Zealanders are implementing **seven** cyber security measures each to keep themselves secure online.

CYBER SECURITY BEHAVIOURS	Personally implement
<b>Not sharing personal information online with people I don't know</b>	<b>70%</b>
Only making purchases from websites that use trusted and secure payment systems	66%
<b>Use strong passwords (longer than 10 characters with no personal information in them)</b>	<b>57%</b>
<b>Updating software, browsers and apps to the latest version</b>	<b>56%</b>
<b>Using two-factor authentication</b>	<b>51%</b>
Verifying links in text messages and emails that are not from trusted and familiar sources before responding or clicking	48%
<b>Setting social media accounts to private</b>	<b>46%</b>
<b>Using different passwords for each online accounts</b>	<b>45%</b>
Reading customer reviews and feedback online to check if a website is legitimate	44%
Installing and running cyber security software or apps on my devices	39%
Checking website security details like the https: and padlock	36%
Using a password manager	29%
Staying up-to-date with online security advice from official sources	24%
<b>None of the above</b>	<b>3%</b>

CERT NZ's most frequently recommended actions

CERT NZ Cyber Security Research Apr 22  
 Q: From this list of cyber security measures, can you please tell us which (if any) you currently implement yourself?  
 Base: NZ'ers total sample n=1,217



# Most people are doing something to protect themselves online

**97%**

of sampled adults are doing at least one thing to keep themselves secure.

**6-7**

actions are being taken on average by New Zealanders.

## TOP CYBER SECURITY BEHAVIOURS

	%
Not sharing personal information online with people I don't know	70%
Only making purchases from websites that use trusted and secure payment systems	66%
Use strong passwords (longer than ten characters with no personal information in them)	57%
Updating software, browsers and apps to the latest version	56%
Using two-factor authentication	51%
Verifying links in text messages and emails that are not from trusted and familiar sources before responding or clicking	48%
Setting social media accounts to private	46%

CERT NZ Cyber Security Research Apr 22

Q: There are a number of cyber security measures that people can put in place to keep themselves secure when online.

From this list of cyber security measures, can you please tell us which (if any) you currently implement yourself?

Base: NZ'ers total sample n=1,134



# Most people are doing something to protect themselves online

**97%**

of sampled adults are doing at least one thing to keep themselves secure.

**6-7**

actions are being taken on average by New Zealanders.



But current behaviour is anchored in the *basics*, and is *inconsistent*

Not everyone has the same understanding of what is important – two people are likely to have completely different rules of thumb. ‘Reactive’ behaviours are more prevalent – for example, general online ‘wariness’ and deleting texts that seem suspicious.



*I sort of rely on gut instinct, and I think it's something you pick up over time.”*

CERT NZ Cyber Security Research Apr 22  
Q: There are a number of cyber security measures that people can put in place to keep themselves secure when online. From this list of cyber security measures, can you please tell us which (if any) you currently implement yourself?  
Base: NZ'ers total sample n=1,134



# There are established baseline behaviours, but a more active approach to cyber security is needed

1

## Established baseline behaviours

### Often reactive rules of thumb

- Generally being cautious online – using gut instinct to judge if something is 'off' or suspicious.
- Not sharing information online with people they don't know.
- Only making purchases from websites that use trusted and secure payment systems.
- Using strong passwords at least some of the time.

2

## Proactive efforts to remain secure

People are not consistently taking proactive action.

- Putting in place password managers
- Resetting default passwords
- Two-factor authentication in personal life (not a work setting)





# Perceived effort also limits people from engaging in online security behaviours

Many of CERT NZ's recommended behaviours feel familiar and common-sense for people – but this doesn't mean that people find it easy to follow through on. In particular, password guidelines can feel difficult.

CERT NZ ADVICE	PERCEIVED DIFFICULTY
Using different passwords for each online accounts	<b>HARD</b> – don't know how to keep track of or remember so many different passwords.
Use strong passwords (longer than ten characters with no personal information in them)	<b>MEDIUM</b> – coming up with new passwords and remembering them is seen as extra unnecessary effort. This is particularly a challenge if using different passwords each time, as people feel they become even more difficult to remember.
Using two-factor authentication	<b>MEDIUM</b> – perceived to make it harder to log in, worry about what happens if you lose your phone or access to your second verification method.
Setting social media accounts to private	<b>MEDIUM</b> – perceived as extra admin. Some people don't know how to do this.
Not sharing personal information online with people I don't know	<b>EASY in theory</b> , but often not happening in practice – people let their guard down.
Update software, browsers and apps to the latest version	<b>EASY in theory</b> , but it is seen as extra admin that is easily put off. People don't want to deal with the change that comes with updates and don't understand why this is important for online security.

## Taking a look at demographic differences

Elderly and young, low-income groups are the most likely to be exposed to a cyber security incident, with unknown texts, prize emails and scam calls the most prevalent ac

18 – 44-year-olds, annual income >\$100K	18 – 44-year-olds, annual income <\$100K	45 – 64-year-olds, children at home	45 – 64-year-olds, no children at home	+65-year-olds
Receiving a text message or email from an unknown person asking you to click on a link or open a document 30%	Receiving a text message or email from an unknown person asking you to click on a link or open a document 33%	Receiving a text message or email from an unknown person asking you to click on a link or open a document 35%	Receiving a text message or email from an unknown person asking you to click on a link or open a document 40%	Receiving a text message or email from an unknown person asking you to click on a link or open a document 35%
Receiving emails about a fake lottery, prize, grant, investment or job opportunity 27%	Receiving emails about a fake lottery, prize, grant, investment or job opportunity 32%	Receiving emails about a fake lottery, prize, grant, investment or job opportunity 33%	Receiving emails about a fake lottery, prize, grant, investment or job opportunity 36%	Receiving emails about a fake lottery, prize, grant, investment or job opportunity 39%
Tech scam calls 14%	Tech scam calls 14%	Tech scam calls 19%	Tech scam calls 23%	Tech scam calls 35%

### EXPERIENCED ANY CYBER ATTACK IN THE LAST 3 MONTHS



CERT NZ Cyber Security Research Apr 22  
 PERSONAL\_EXPERIENCE. From this same list of cyber threats, attacks and crimes, can you please tell us which (if any) you have personally experienced in the past three months.  
 Base: Aware of any cyber attacks: High Earning Kiwis n=205, At Risk Young Kiwis n=287, Family Units n=151, Empty Nesters n=234, Golden Oldies n=243



## Workplaces are helping to instigate new (and more proactive) behaviours

**28%** of people are hearing about cyber security issues from their workplace.

People are learning to implement cyber security behaviours at work that they might not have engaged in otherwise, particularly those in office-based roles.

CERT NZ Cyber Security Research Apr 22  
Q: And where are you hearing about these cyber security issues?  
Base: NZ'ers who are seeing/hearing about cyber security some/a lot/all the time n=960

## But these learnings do not always transfer to home behaviour

**43%** of people are likely to implement cyber security measures when their workplace recommends or enforces it.

*"My work also requires us to have a passphrase and passwords can't be less than 13 characters. This has influenced my personal passwords."*

CERT NZ Cyber Security Research Apr 22  
Q: We would like to understand the moments in which you typically implement cyber security measures.  
From the list below, please select which apply.  
Base: NZ'ers total sample n=1,217

# Typically, the greater the level of impact on an individual, the more likely they are to report an incident

INCIDENT	Personally experienced L3M	Perceived impact (big & very big)	Reported Incident
Credit cards being used without people's knowledge	6%	54%	98%
Online shopping scam	5%	43%	86%
Social media accounts being used or accessed without account holder's knowledge	5%	39%	60%
Tech scam calls	20%	15%	27%
SMS or email from an unknown person asking to click on a link/open a doc	34%	11%	39%
Emails re: fake lottery, prize, grant, investment or job opportunity	34%	7%	42%

L3M = Last three months

Only incidents with robust enough sample sizes have been reported on

CERT Cyber Security Research Apr 22

Q: From this same list of cyber threats, attacks and crimes, can you please tell us which (if any) you have personally experienced in the past three months.

Base: Aware of any cyber attack/threat/crime n=1,198,

Q: For each, can you please rank much of an impact the cyber threat, attack or crime had on you? (A very big impact / a big impact)

Q: From this list of cyber threats, attacks and crimes that have happened to you, can you please tell us which actions you took as a direct result?

Base: Experienced cyber incident: credit cards n=73, shopping scam n=60, social media n=65, tech scam n=239, SMS/email n=412 and emails re: fake lottery n=397

\*Top reporting method & CERT NZ only

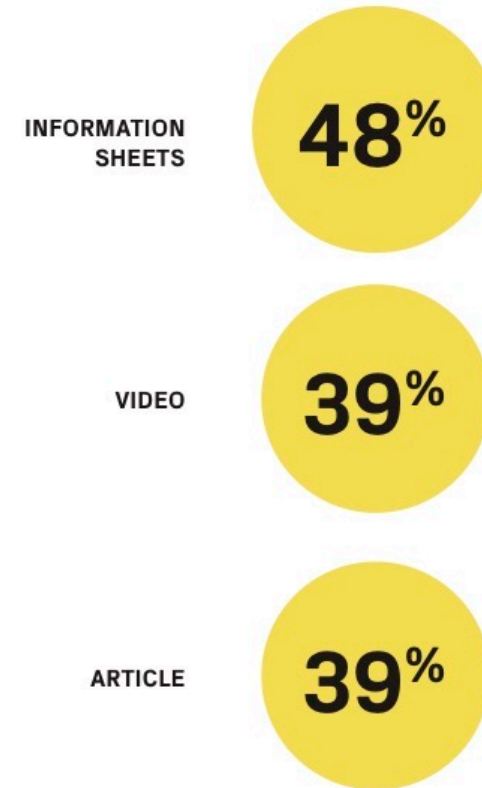


# There is heavy demand for practical information on what to do in the event of an attack and measures/advice

## INFORMATION REQUIRED EXPECTED AFTER REPORTING

	Individuals
Steps to take if I experience a cyber threat or attack	49%
Personal measures I can undertake to keep myself secure online	45%
Advice on general practices to ensure my devices are always secure	41%
Common threats and current trends	40%
Typical 'watch-outs' to look for when online	37%
How to stay secure when purchasing products on the internet	36%
Measures the business can take to ensure cyber security	
Where to go to get trusted advice on the topic	34%
How to stay secure when using social media	31%
How to keep children secure online	22%

## PREFERRED INFORMATION FORMATS



CERT NZ Cyber Security Research Apr 22  
 Q: What type of support services would you expect after reporting a cyber incident to an agency?  
 Base: NZ'ers total sample n=1,217 individuals

## SUMMARY

**New Zealanders have high awareness of cyber incidents, but this does not always translate into strong, consistent and proactive cyber security behaviours.**

**Converting awareness into action is increasingly important as we see people's online activity and cyber incidents continuing to rise.**

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