

# Intro to Digital Health Literacy

Course Handout:  
Module 1 | Foundations



At the end of this [online course](#), learners will be able to:

1. Discuss the importance of digital health literacy in the context of virtual health
2. Apply digital literacy skills to create, communicate, and find information
3. Navigate online resources safely and effectively

## What is digital health literacy?

According to the World Health Organization, digital health literacy is the ability to seek, find, understand and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.

Essentially, digital health literacy is the application of both health and digital literacy skills in order to *confidently* and *accurately* use tools and information to manage health related questions or care.

## Why is digital health important?

People living in Canada have a growing demand for digital health services, and support the use of virtual health. Many have difficulty using digital health services with confidence, and that contributes to overall health inequity.

Digital health literacy is fundamental to equitable health care.

## Terminology

You may already have heard the terms ‘**digital health**’ or ‘**virtual health**’, particularly since the start of the COVID-19 pandemic. Other related terms include virtual care, telehealth, telemedicine, and more. While the terms ‘telehealth’ and ‘telemedicine’ are transitioning to virtual care and virtual health to include the expanded use of technology, there is still a lack of literature and international consensus on terminology.

For the purposes of this course, we will be using the terms ‘**digital health**’ and ‘**virtual health**’ as they are defined by PHSA:



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## Digital health:

Digital health includes virtual health, but also uses information technology and secure communications tools, services and processes. It supports a connected health care system for the benefit and well-being of everyone, including health care providers. Examples can include electronic health records, electronic prescribing, and artificial intelligence.

## Virtual health:

Virtual health is a care model focused on connecting patients, families and clinicians using technology to optimize wellness, specialty care and outcomes. Examples include virtual health visits, remote patient monitoring, clinical digital messaging, and even providing clinical care over the telephone.

Ideally, a future digital health system uses evidence, technology, and live data together to support and strengthen the health and wellness of people and populations.

# Tools and technologies in digital and virtual health

## Examples of digital health

- **Wearables and monitoring devices** actively monitor patients' health and notify them when they need to act to maintain their health or prevent further illness.
  - Examples can include anything from smart bracelets to bathroom scales, to Bluetooth-enabled pulse oximeters.
  - These connected health objects collect data that are transferred to an application available on a smartphone, tablet, or computer.
- Adults living in Canada are using health and well-being **mobile apps** more often to monitor their health. They are used mainly to learn more about personal conditions and monitor changes that are considered important to health and well-being. Examples of mobile apps created by PHSA include:
  - ShiftWell (B.C. Emergency Health Services) – developed to support the mental health of paramedic and dispatch employees
  - Foundry BC app - developed to support the mental health of at-risk youths in B.C
- The goal of **electronic prescribing** is to facilitate safer and more efficient medication management by connecting clinicians through their existing electronic medical records (EMR) to pharmacies, to enable the secure electronic transmission of prescriptions. Prescriptions arrive as data in a pharmacy management system.
  - Electronic prescriptions should also allow clinicians more time with patients by reducing their volume of paperwork, while making their communication with pharmacists more accurate and effective.



- **Clinical Information Systems (CIS)**, such as CST Cerner, are operational information systems that support the acquisition, storage, manipulation and distribution of clinical information, typically in an acute care or community care setting.
  - They contain individual patient information related to registration, assessment, care planning and individual interventions and health services. They may also provide management information informed by the clinical data.
- **Electronic *medical* records (EMR)** are computer applications that a doctor or other provider uses for gathering patient information like social/family history, lab results, and medication lists. This information is also integrated with management functions like scheduling and billing, and stays in the provider's computer system.
  - EMRs can't usually be sent to or shared with other providers outside of that system, such as other labs or hospitals.
- **Electronic *health* records (EHR)** will provide each individual in BC with a secure and private lifetime record of their key health history and care within the health system, which can be shared electronically to authorized healthcare providers and the individual anywhere, anytime in support of high-quality care.
  - The EHR is not a single data repository or application, but rather a capacity to improve the coordination of patient care by giving providers accurate, up-to-date information in their care setting.
- **Artificial intelligence (AI)** is a computer technology with applications that include advanced web search engines (e.g. Google), recommendation systems (eg. YouTube, Amazon and Netflix), understanding human speech (e.g. Siri and Alexa) and even automated decision-making.
  - Within healthcare, an example of an AI application could be a chatbot – where the computer simulates a human conversation with a patient through written or spoken interactions.
- **Online patient portals** provide access to personal health information to empower patients as active participants in their healthcare journey.
  - Examples of use cases can include access for patients to view their personalized care plan and health information; contribute to their own record; schedule a virtual consultation with their care team; and find relevant education materials.

## Examples of virtual health

- **Patient education** includes online facilitation of patient education related to the patients' health and care services.
- **Online treatment applications** are highly personalized methods of treatment that enables the person to access key online resources and develop skills to help them manage health issues. Examples include Breaking Free Online and Bounce Back.



- With **clinical digital messaging** patients and their care teams can communicate using secure text messaging for administrative information exchange, appointment reminders and general check-ins.
- **Virtual health visit** is a technology-enabled remote interaction between providers, provider(s) and patient(s), and patients and families to address the patient's health.
- **Remote patient monitoring** uses technology to monitor a patient's health (usually from their home), and share the information electronically with health care teams.

## Impact of virtual health

If appropriate, virtual health can help prevent the spread of infections, save time and money, reduce carbon emissions, engage in more timely medical interventions and enjoy more flexibility with receiving and delivering health care. During the COVID-19 pandemic, virtual health enabled patients to continue receiving the care they needed while keeping themselves and their families safe.

Virtual health can benefit a variety of patients, such as people with mobility issues, residents living in remote areas and busy parents and workers who want the convenience and flexibility of connecting through their device.

## Components of digital health literacy

### Literacy

**Literacy** is a foundational concept that affects all of us. It is "*the ability to identify, understand, interpret, create, communicate and compute...enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society.*"

Most people think of the ability to read and write, but it's actually so much more. Literacy is a means of communication and expression through a variety of media, practiced in different contexts, and for different purposes - such as digital and health literacy.



**Did you know** that 48 per cent of adult Canadians have low literacy skills that fall below high school equivalency, and affect their ability to function at work and in their personal lives?

There are several types of literacy:

- **Reading and writing literacy** is what most people refer to when thinking of the term **literacy**. In addition to knowing how to read and write basic letters and sentences, this literacy means that you can understand and communicate what you have read and that you can express yourself through writing.



- **Digital literacy** means being able to critically use technology to navigate through various online forums and devices, understanding how technology works, and being able to creatively manipulate technology to solve problems.
- **Health literacy** allows one to understand the health care system, such as medications, communicating with health care providers, and getting the necessary help. Having poor health literacy skills is dangerous and can result in taking incorrect medications and trouble following instructions from health care providers.
- **Financial literacy** is “*having the knowledge, skills and confidence to make responsible financial decisions*”. (Government of Canada, 2011). It includes understanding how finances work and applying them to your life.
- **Numerical literacy** is the ability to use basic math skills in everyday life and the ability to use numbers to solve problems or manage finances. It includes understanding charts, diagrams and data.
- **Cultural literacy** is the ability to understand all of the subtle nuances that come along with living or working in a particular society. It consists of understanding the language, methods, assumptions, and unstated ideas that make up a way to behave and communicate.



**Did you know** that 17% of adult Canadians function at the lowest literacy level and might have trouble reading the dosage instructions on a medicine bottle?

## Digital literacy

**Digital literacy** means having the skills you need to live, learn, and work in a society where communication and access to information is increasingly through digital technologies like internet platforms, social media, mobile devices and more. It also includes more than just technology know-how. We need to know how to comprehend, contextualize, and critically evaluate digital media so that we can make informed decisions about what we do and encounter online.

As increasing numbers of businesses and services move online, people who lack digital literacy skills risk being disadvantaged when it comes to accessing healthcare, government services and opportunities for employment, education and civic participation.



**Did you know** that 84% of jobs in Canada require the use of basic technical skills? Even low-skilled jobs increasingly require a basic level of digital literacy. Many working-age Canadians struggle with problem solving in technology rich environments.

**In addition**, 9% of Canadians report that they do not subscribe to or have access to the Internet at home.



## Health literacy

**Health literacy** is defined by the Canadian Public Health Association as the ability to access, understand, evaluate and communicate information as a way to promote, maintain, and improve health in a variety of settings across the life course.

In practice, it could include knowing how to describe symptoms, where to find help for health issues, how to understand medical information and how to safely manage the use of medication.

The previous definition also speaks to the idea that increasing health literacy is essential to empowering people to manage their health and advocate for their family's and their own wellbeing, as well as reducing the burden on Canada's health care system.



### Did you know that...

- 23% of Canadians find it difficult to find out where to get professional help when ill;
- 60% are unable to obtain, understand and act upon health information to make appropriate decisions on their own;
- 54% of Canadians find it difficult to judge when to seek a 2nd opinion from another doctor; and
- People with low health literacy skills are more likely to 1) require hospitalizations, 2) need to repeat doctor's visits, and 3) misunderstand how to take their medications, including potential side effects.

## Importance of digital health literacy

Several factors influence digital health literacy for Canadians:

- Canadians living in remote communities scored significantly lower than those living in cities, large or small urban centers.
- Canadians with less education tend to score lower on digital health literacy.
- Older adults (65+) surveyed scored significantly lower than all other age groups.
- Canadians with annual household income of less than \$50k scored significantly lower than higher income categories.
- Canadians with access to their personal health information online and those with a family doctor scored significantly higher.
- Canadians with experience of using virtual care services tends to score higher on digital health literacy.



## What is our role, as health care staff and providers?

We've seen factors that influence the digital health literacy of Canadians as a whole.

While each of us plays a different role for supporting patients' health literacy and navigation of digital health solutions, research suggests some of us may also *lack the digital literacy skills* needed to effectively guide patients. This is no surprise given the rapid evolution of the digital health landscape.

However, it is therefore *essential* that we ensure digital health services, tools and processes remain *equitable* and *beneficial* before the gap continues to widen.

## In Summary

In Canada, as of December 2021, 33 percent of all patient reported visits with family physicians were virtual. Roughly 575 million results are returned by Google when you search for “cancer”, and 250 million when you search for “diabetes” – given this overwhelming amount of information, it is essential that we have the digital health literacy skills to navigate, understand, and apply it.

To recap, **digital health literacy** is the ability to *seek, find, understand* and *appraise* online health information and *apply* the knowledge gained to addressing or solving a health problem.

In today's increasingly digital landscape, it is critical that we continue to learn the skills necessary to confidently navigate digital and virtual health solutions in order to ultimately *support our patients* to do the same.

## End of Module 1

# Intro to Digital Health Literacy

Course Handout:  
Module 2 | Pathways



At the end of this [online course](#), learners will be able to:

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Module 2 focuses on building digital skills through 3 learning pathways based on PHSA employee experiences. While you may already be well versed in digital health literacy skills, feel free to explore the concepts covered in this module - you may pick up some additional tips or tricks.

The 3 learning pathways are:



[Terry](#) is a seasoned care aide that is new to PHSA. They used to work at a small clinic that used mainly paper charting, and don't have a computer of their own at home. Terry is currently doing their orientation and becoming familiar with their new workstation.



[Jane](#) is a clinician that is responsible for leading group patient education sessions that are now being delivered virtually. She is preparing for her next session by doing some online research on the topic.



[Amira](#) is a research coordinator. She used to work on-site but will now be working mainly from home. She is setting up her work environment from home for the first time.



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## Terry's Pathway: Part 1



After completing Terry's pathway, learners will be able to:

1. Show awareness of technology as a communication tool.
2. Define commonly used technical terminology and tools.
3. Perform various communication technology features.
4. Carry out various application functions.
5. Differentiate internet and intranet.

### Commonly used technical terms and tools

The physical parts of technology are referred to as **hardware**.

- **Monitor:** A monitor is an output device that shows video images and text. A monitor is made up of circuits, a screen, a power supply, buttons to adjust screen settings, and casing that holds all of these parts. Newer laptops, smartphones, and tablets have touch screens, which let the user interact with the computer using their finger. If the monitor has a touch screen, it is considered an input/output device.
- **Webcam:** A web camera – or webcam – is a type of input device that can record videos and take pictures. It can also share video over the internet in real time, which allows for video chat or video conferencing with others. Many webcams also include a built-in microphone. Just like other input devices (e.g. a mouse, keyboard, or printer), webcams can usually connect through a wired connection to the computer's USB port, or wirelessly through a WIFI network.
- **Desktop computer:** A desktop computer is a computer that fits on or under a desk. A desktop uses other devices for interaction, like a keyboard and mouse for input, and display devices like a monitor or projector. Unlike a laptop, which is portable, desktop computers are generally made to stay at one location. It is important to note that the term 'desktop' can also refer to the organization of icons on a screen – such as the Microsoft Windows desktop.
- **Mouse:** A computer mouse is a handheld hardware input device that controls a cursor on a screen for pointing, moving and selecting text, icons, files, and folders on your computer. In addition to these functions, a mouse can also be used to drag-and-drop objects and give you access to the right-click menu. Like other input devices





(e.g. keyboard, webcam) a mouse is usually connected to the computer through a USB cable, but can also connect wirelessly through a Wi-Fi network.

- **Keyboard:** The most basic input device used to enter data in the computer system is a keyboard. The keyboard is connected to the computer either wirelessly through WiFi or wired by a USB cable. The layout of the keyboard is like a traditional typewriter, although there are some additional keys for specific functions. Keyboards may all be slightly different in the types and placement of keys. Shown below is one example of a keyboard.



- **Laptop:** A laptop is a portable computer that is more efficient and nearly as powerful as a desktop computer. Portable computers use AC power or batteries.
- **Headset:** A computer headset connects to a computer for communication and media. It has headphones and an attached microphone that lets you participate in video conferencing or video calls. It may connect wirelessly to a computer, or may be wired through a USB port or a standard headphone jack.
- **Cables:** Cables for connecting hardware devices to your laptop or desktop will be different depending on the device being connected. The most common connections need USB ports and microphone/headphone jacks.



- **Printer:** Today's all-in-one printers can do more than just print – with these units, we can also copy, fax, and scan. 3D printers can even print 3 dimensional objects. Printers can usually be connected directly to your computer through a wired connection (e.g. a USB cable), or wirelessly through a WiFi network. For help with connecting to the wireless network, please contact your system administrator.



## Mouse functions

Using a computer mouse is instrumental in navigating software applications.

The primary function of a mouse is to move the mouse pointer (or cursor) on the screen.

The cursor changes from a pointer arrow to another shape depending on where you move the mouse and its intended use.



- **Hovering over objects**

- Software programs use tool tips to provide users with more information about each icon.



- **Clicking in text fields**

- When you want to type text into a text entry field, simply move your mouse to that field and click. Then start typing.



- **Clicking buttons and links**

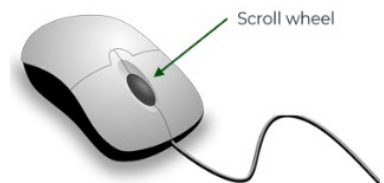
- Buttons and links are activated with a single click of your mouse.

- **Double-clicking**

- Double clicking is used to perform a variety of actions, such as opening a program, opening a folder, or selecting a word of text. In order to double click an object, just move the cursor over the item and press the left mouse button quickly two times.

- **Scrolling**

- When working with a long document or viewing a long web page, you may need to use the mouse scroll wheel to scroll up or down.



- **Drag and drop**

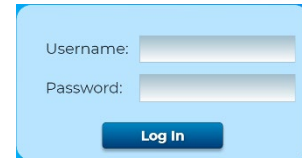
- Drag and drop can be used for multiple purposes. For example, you can drag and drop an icon on the desktop to move it to a folder.
- You can drag and drop an object by clicking the mouse button to select an object, then moving the mouse while keeping the mouse button pushed down. This is called “dragging” the object. Once you have moved the object where you want to place it, you can lift up the mouse button to “drop” the object in the new location.



## Terry's Pathway: Part 2

### Logging in and your desktop

When you first turn on your computer, you are presented with a log in screen. The log in screen requires a user ID and password.



**Did you know?** In order to keep your files secure, it is important that you do not share your password with others and that you avoid storing password information in a place that is easy for others to locate.

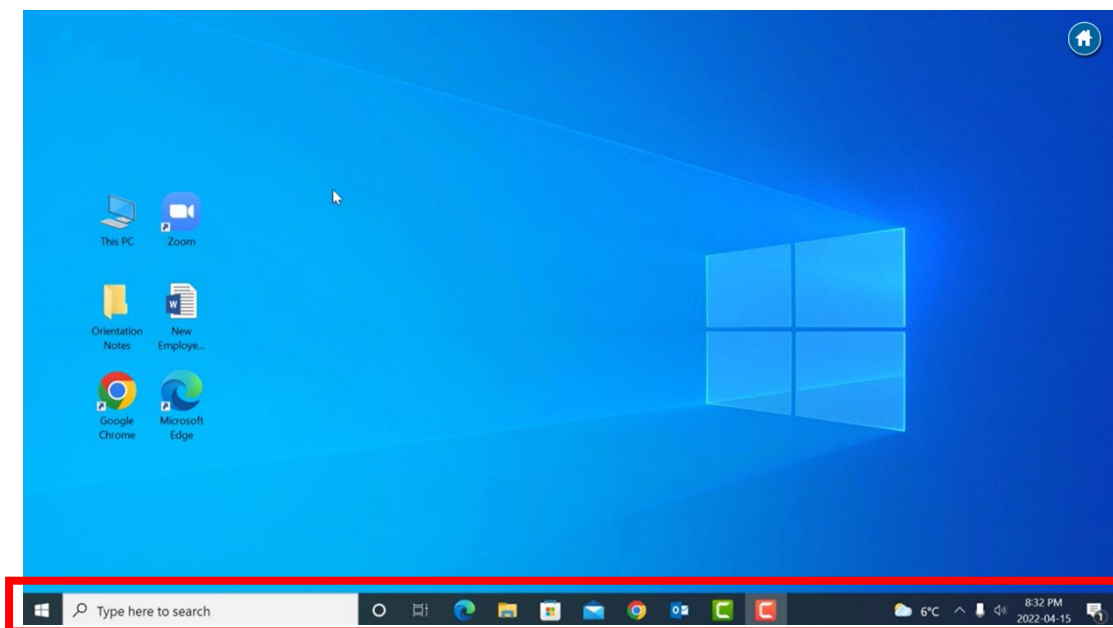
Now that you have logged in, you have access to the computer's **desktop**.

- The **desktop** is the main workspace where you can access and work with the files, folders and software applications on your computer.

Navigating your desktop:





- One way to open a file or application is to double click on its unique **shortcut icon**.
- You can also click the **Start menu**, scroll through the list, and click any of the applications to open.
- If you don't see the software application that you are looking for, type the name in the **search bar**.
- The **taskbar** is another important feature of the desktop. This is where you will find quick links to those applications currently in use or applications that have been pinned to the taskbar for easy access.
- To the right of the taskbar is the **notification area**. This is where you can find information regarding audio features, network settings, date and time options and more.
- The **Power** options are found in the **Start Menu**.
  - Use **Sleep** when stepping away from your computer for a short period of time.
  - Use **Shut Down** to properly turn off and secure your computer at the end of the workday.






## Managing windows

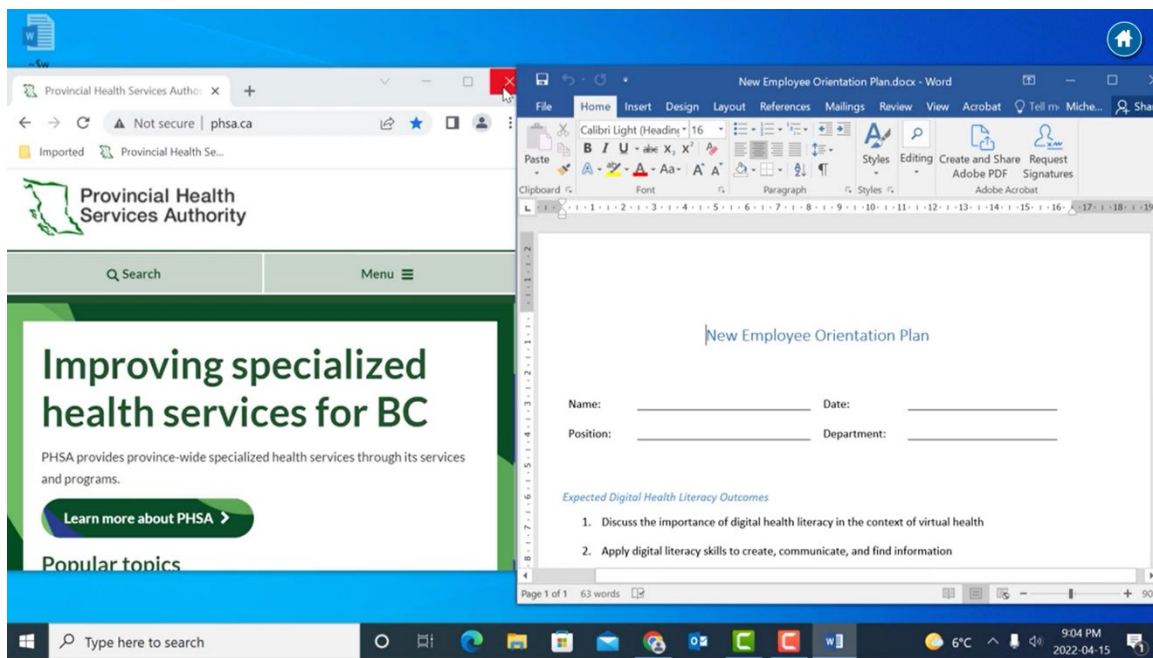
Each time you open a file or an application by double clicking it, it will open in a **window**. You can **resize a window** by clicking and dragging the sides and corners of the window. This works anytime you see the mouse cursor appear as a double arrow. The window can also be made to fill the screen simply by clicking the **maximize** icon. 

You might need to **minimize** the window to work on another application. You do this by clicking on the small horizontal line (minimize icon).  You haven't closed the file - it has just been moved from view so that you can access the other applications. It will now appear in the taskbar. To open the file again, simply click on the icon in the taskbar.



When an application is fully maximized, you might want to restore it to its original size by clicking the **Restore** icon. 

The great thing about windows is that you can have more than one application open on your screen at the same time by **resizing and moving** their windows. Click and drag on the **title bar** of a window to move the window over to make room to see both applications at the same time.






When finished, **save** your work and click on the **X** to close the applications. 

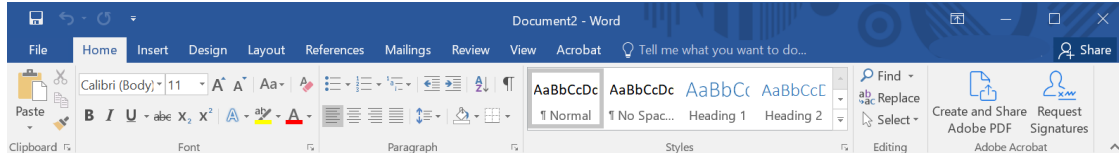


## Terry's Pathway: Part 3

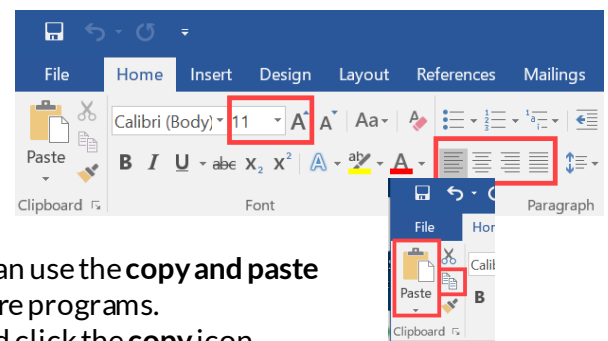
### Using software applications

In the course, we show an example using the application Microsoft Word to create a document. Most software applications will use the same basic functions and tools showcased in this example, such as the toolbar, copy and paste, print, and more.

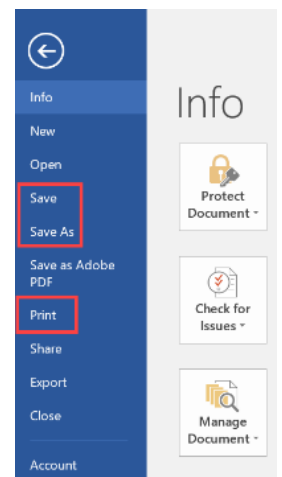
1. Click the **Start Menu** , and launch Microsoft Word by clicking on the pinned icon. 
2. If you already have a file started, you can click **Open** to access it, or create a new **blank document**.
3. Once the page is open, you can begin typing text. 
4. As with most software applications, we can modify our work using the features in the **toolbar**.



5. In this case, let's make the text larger. Anytime you wish to make changes to text, you first have to **select it** by clicking and dragging your mouse over the text.
  - a. Once the **text is selected**, you can make those changes by using the features in the toolbar. Let's make the **font size** larger.
  - b. And, let's center the font by clicking the appropriate **alignment icon**.



6. To repeat text on the same page without retyping it, we can use the **copy and paste** function. This time saving feature is found in most software programs.
  - a. Simply **highlight** the text that you wish to copy and click the **copy** icon.
  - b. Next, move your cursor to where you want the copied text to appear, and click **paste**.
7. When you are ready to print the sign, simply click the **File** menu and click **Print**.
8. To **save** the file so that you can access it again later, click **File** and **Save**.
  - a. Determine where you wish to store this file, give the document a name, and click **Save**.
9. Now that the document has been saved, you can exit the application by clicking on the **X** to close.



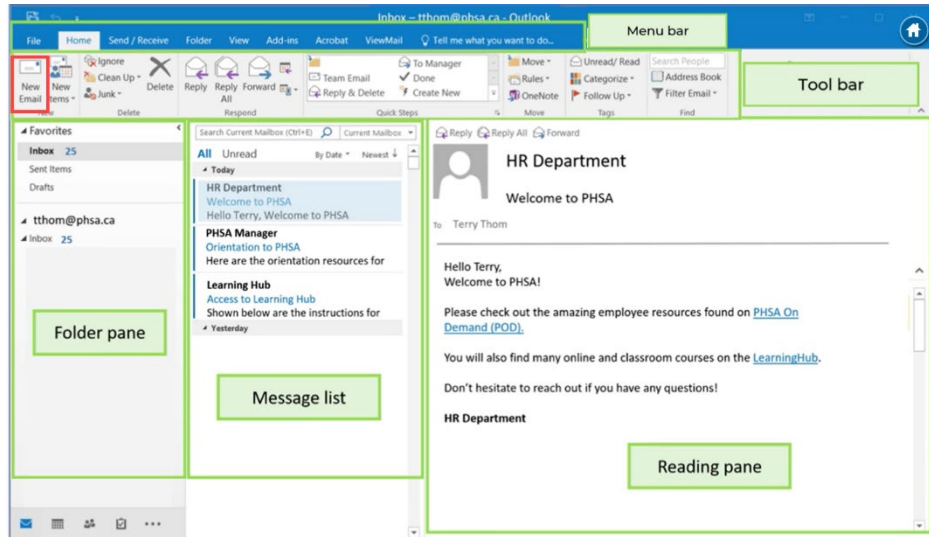
# Terry's Pathway: Part 4



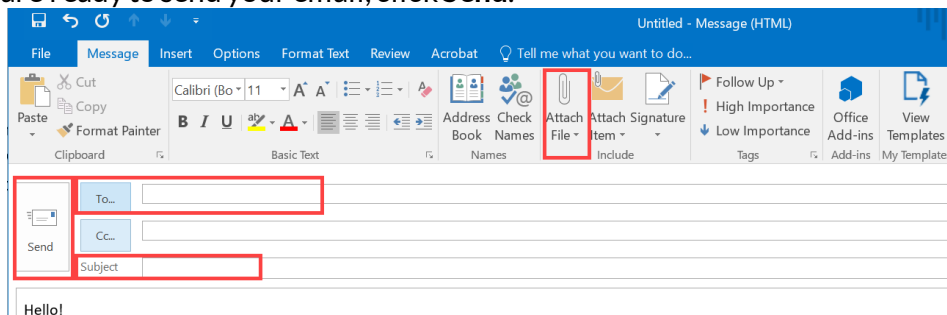
## Using email

In the course, we show an example using the application Microsoft Outlook to reply to, and send an email. Most email applications will have similar functionalities.

1. When you open Outlook, you are presented with a screen that defaults to the **Inbox** view.
  - a. Starting at the top you have the **menu bar** and the **tool bar**. This is where you will find many of the commands that you need to create, edit, reply to and send messages.
  - b. On the left is the **folder pane** listing the built-in folders and the ones that you have created.
  - c. The centre pane is the **listing of messages** stored in particular folder - in this case the inbox messages.
  - d. And, the pane on the right is the **reading pane**.
  - e. Notice that the **highlighted message** in the list is the message that appears in the reading pane.
  - f. To read the next message in this list, simply click on that message.



2. **Double-clicking** on the message listing will pop open the message for a larger view. After reading the message, click to **reply** to the message or click the **X** to close it.
3. To create a message, click **New Email**.
  - a. If you don't know the exact address, and if the recipient is a PHSA employee, you can click **To** and select it from list provided.
  - b. Otherwise, type the address directly in the **To** field.
  - c. Enter the **Subject** of the message.
  - d. Then click in the **body** of the email and type your message.
  - e. To attach the file, click **Attach File** in the toolbar.
  - f. Select the file or files that you wish to attach.
  - g. When you are ready to send your email, click **Send**.



## Terry's Pathway: Part 5



### Internet vs. intranet

The **internet** is a global network of interconnected computers designed to connect people from around the world.

Whereas the **intranet** is a restricted network designed to connect people within an organization. In our case, PHSA's intranet... known as PHSA On Demand, or POD for short ...is restricted to PHSA employees or authorized users only.

Both the internet and intranet require a web browser for access.

### POD (intranet) access

After opening a web browser, type the url for POD and press enter.

Once you have entered your login information, you are presented with the POD website.

You can easily navigate to the various pages within POD by clicking the menu options and hyperlinks found throughout the site. POD makes it easy to find what you are looking for by including things like business services, program policies, employee content and more.





## Jane's Pathway: Part 1

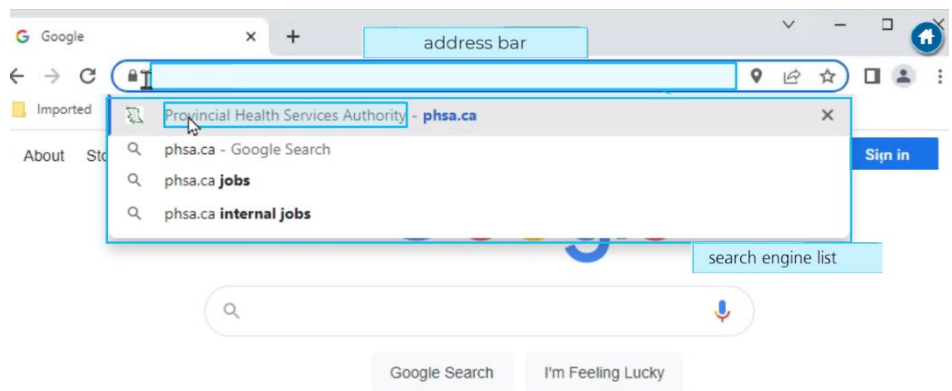


After completing Jane's pathway, learners will be able to:

1. Perform internet searches to access and locate information
2. Recognize the need for internet safety.
3. Identify internet safety best practices.
4. Distinguish between fact and opinion in information found online.

### Web browsers vs. search engines

There are many different **web browsers** including Chrome, Edge, Safari, and Firefox. A **web browser** is used to retrieve and display information from a website. Web browsers use **search engines** like Google, Bing and Yahoo to scan the Internet and produce a list of results based on keywords or phrases.



In the course, we demonstrate using Chrome as our web browser – which uses Google as the search engine.

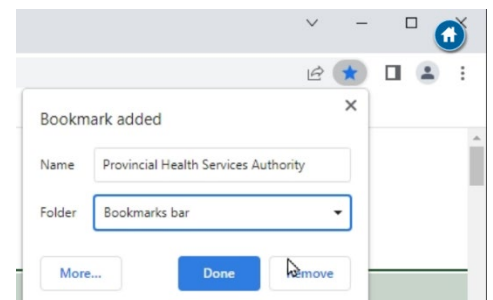
1. Jane wants to locate resources from PHSA's website for her client.
2. Since she knows the website address or URL, it can be typed directly in the **address bar**.
3. As the address is being entered, you'll notice that the **search engine** lists suggestions matching what is being typed. This saves time as you don't have to memorize a website's address.
4. **Click** the option from the list provided or press **enter** once you have finished typing the address.
5. The website now appears.

### Bookmarks

If you visit this site frequently, you can **bookmark** it for easy access next time you want to visit the site.

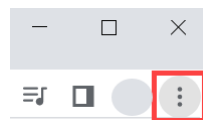
1. With Chrome, click the **star icon** and click **Done**.

Now the website has been bookmarked and a link has been added to the **bookmark bar** for easy access next time you wish to visit this site. Your browser will also keep a historical log of every site you visit.



To access your bookmarks or history:

1. Click the **browser settings icon**.
2. Highlight bookmarks or history.
3. Click the website that you wish to access.



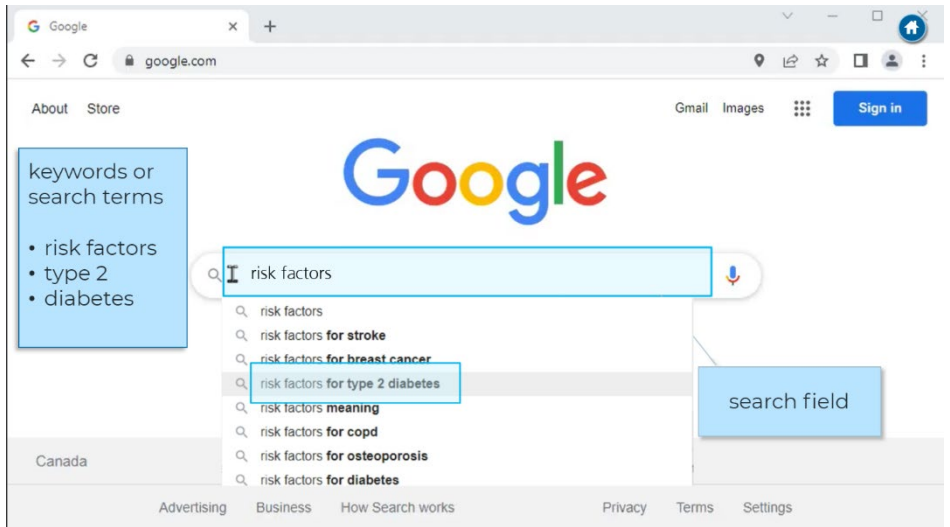


## Jane's Pathway: Part 2

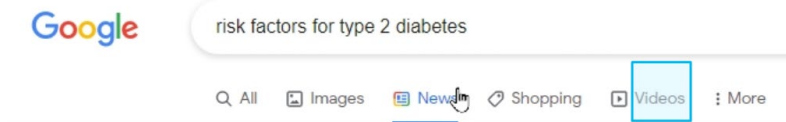
### Web searches

Jane wants to locate risk factors associated with type 2 diabetes for her client.

1. To perform this search, type one or more keywords – also known as **search terms** – into the **search field**.
2. Continue typing to refine your search or click one of the suggested options for a list of search results.
3. Scroll through the list to view the search results, **clicking** the one that may best meet your needs.
4. And now that website appears.



Search results are not only limited to websites. You can also access other items such as images, news articles, and videos that are related to your search criteria.

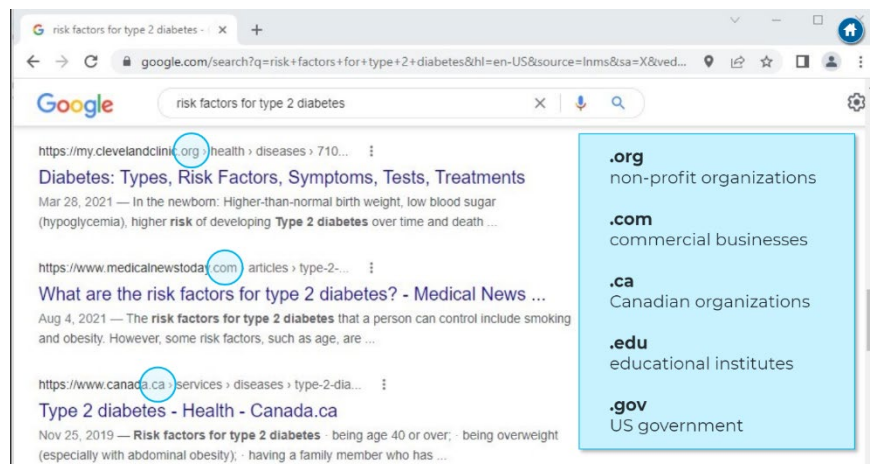


### Trustworthy websites - domain names, extensions, or suffixes

When deciding on a website, you might want to look at the **suffix** or **extension** of a **domain name**. This can sometimes inform you of the type of organization behind the website.

When you open a website, you can evaluate whether or not the information is reliable and from a trusted source.

1. You can do this by checking the “**about us**” section of a website. Is it a trusted organization?
2. Review the content for unbiased research.
3. Be aware of brand names or products being credited as they might be trying to sell you something.
4. If the site lists that the content is reviewed by medical experts, you will want to find out who those experts are.
5. You can also check the bottom of the webpage for dates, sponsors and other reliable information.





## Jane's Pathway: Part 3

### Phishing, scams, ransomware

**Viruses, phishing, and ransomware** are all examples of **cyber-attacks**. **Cyber-attacks** against the health sector are growing in sophistication, frequency and scale as personal health information is becoming very valuable on the black market.

Having anti-virus software loaded on your computer is *one* way to keep safe. And, PHSa's security team is doing its part to anticipate and block such cyber-attacks, but, as employees, there are things that we can do to practice **good cyber-hygiene**, especially when it comes to the internet. The good news is that some browsers have some security features built in:

1. Notice the websites in the search results have the letter 's' added to the 'http' of the **url**. That letter 's' stands for '**secure**' which works by encrypting data transferred over the Internet.

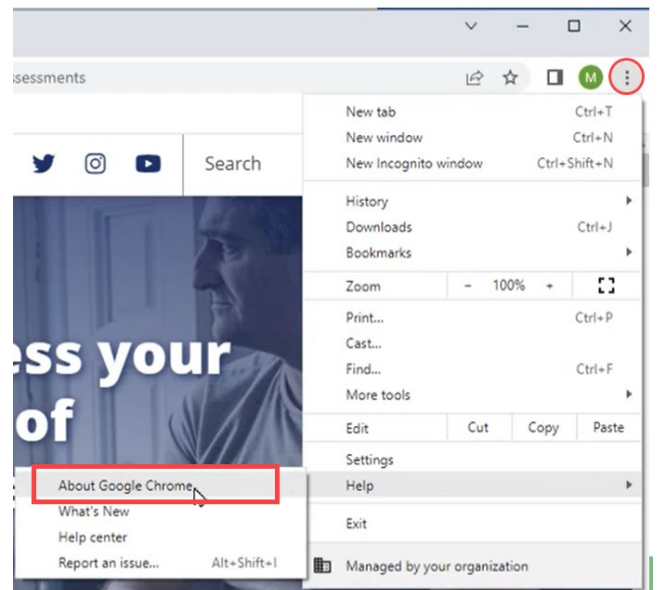
2. Another security measure to look for is the **padlock** symbol in the address bar.
  - a. You won't see this on all websites so avoid entering personal information on sites without this additional security.
  - b. Keep in mind that the padlock doesn't *necessarily* mean that the site you are viewing is safe to use, it does mean that the *connection* to the site is secure and it uses **digital certificates** to encrypt the data.



3. Unfortunately, cybercriminals are also starting to use digital certificates so we need to look very closely at links before clicking them. Often, one letter in a web address will be changed just to trick us. Browsers help us by **bolding** the letters of a domain name, which enables us to clearly read the web address so we can determine if the site is fictitious or legitimate.



4. New viruses and malware are being created frequently so it is important to **update your browser** regularly.
  - a. In Chrome, you can check to see if a browser is up-to-date by clicking the **Settings** icon, highlighting **Help**, and clicking **About Google Chrome**.





One of the biggest cybersecurity risks to PHSA are **phishing emails**.

A **phishing email** is created to trick us into opening an attachment, or clicking on a link, leading to the unintentional release of personal or financial data, such as a password or user name.

We can lower our risks of threats when using email by:

1. **Avoiding** opening emails from people we don't know or trust
2. **Looking closely** at emails. They can look official, but:
  - a. the email address may be slightly off,
  - b. the subject line may not match the content, and
  - c. there might be spelling mistakes or grammatical errors.
3. Be wary of any email asking for **personal information**.
4. **Avoid clicking on** suspicious links, attachments and websites.
5. Be wary of an **implied sense of urgency** for you to do something specific.

What do I do with a suspicious email? If you aren't sure, contact PHSA's helpdesk.

## Jane's Pathway: Part 4

### Strong passwords

Tips for creating strong passwords:

1. Never use **personal information**
2. Use at least **14 characters**
3. Don't use the **same password** for all of your accounts
4. Include **numbers, letters, and special characters**
5. Avoid **patterns** and words found in the **dictionary**
6. **Random** passwords are the strongest

hikez !#A!#b!#C!#d!#E  
BenA!SueB2RezC3  
7A%C



F10%Nv2X!#k3z5



## Amira's Pathway: Part 1



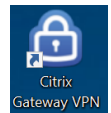
After completing Amira's pathway, learners will be able to:

1. Identify security and privacy requirements when working from home.
2. Perform advanced internet searches to access and locate information.
3. Navigate to PHSA resources including POD and LearningHub.
4. Carry out various application functions.

### Connecting to health organization network

In the course, we walk through a demonstration of Amira logging on to her health organization network while she's working from home.

If you have a HA (health authority) provided work laptop, you have the option of logging in by the **Citrix Virtual Private Network (VPN)**. This icon should appear on your desktop.



You will also need the **Microsoft Authenticator App** installed on your smartphone or tablet. You can download it using the [registration instructions](#).

- This information, and more, can be found from the [IMITS infocentre](#).

If you ever needed to use a personal laptop instead, you *can* still log in to your work network following a different process called **Citrix Remote Access**; but this process is not covered for the purposes of this course.

### Privacy and security considerations when working remotely

Whether working remotely or in the office, as PHSA employees we are all responsible for the personal data and information of our patients and staff.

1. **Be wary** of your surroundings, specifically of people nearby when entering sensitive information.
2. This includes **concealing confidential information** including paper or digital documents.
3. It is best to **refrain from using public WiFi**, as your information can be intercepted by cyber criminals.
  - a. In situations where it is necessary to connect to a public WiFi, consider using a **Virtual Private Network (VPN)** as added security.
4. Save files on **health organization-provided resources** such as company-issued devices and PHSA networks.
5. Avoid leaving devices, documents and other media **unattended** when you need to step away - even if it is just for a couple of minutes.
6. While friends are usually people we can trust, we still need to **be mindful** of the information that we share.



## Amira's Pathway: Part 2

### Advanced web searches

In the course, we walk through an example of Amira working with her research partner to refine her Google web search on breast cancer, which could return over 2 billion results in the search engine.

1. After entering your initial search criteria, click the **settings icon** then click **Advanced Search**.
2. Now you can enter specific criteria such as words that the search results must include, or those words that we *don't want* as part of our search results.

The screenshot shows a Google search for "breast cancer". The search bar contains "breast cancer" and the settings icon (gear) is highlighted with a red box. Below the search bar, the "Advanced Search" panel is open, also highlighted with a red box. It contains various filters for refining the search, such as "Find pages with...", "Then narrow your results by...", and "SafeSearch". To the right, the "Quick Settings" panel is visible, with the "Advanced search" option highlighted by a red box and an arrow pointing to the Advanced Search panel.

3. Notice that we don't have to open the advanced search window to refine our search. We can use **special characters** when typing our search criteria in the normal search field.
  - a. Simply use **quotation marks** around those words that must appear in the search, and
  - b. a **minus sign** for words that you don't want as part of your search.

The screenshot shows a Google search for "breast cancer inflammatory 'invasive'". The search bar contains the search criteria. Below the search bar, the "Images" panel is open, also highlighted with a red box. It contains various filters for refining the image search, such as "Size", "Color", "Line Drawing", "Time", "Usage Rights", and "Clear". The "Tools" panel is also visible, highlighted with a red box.

This works the same way for **images** and **videos**. You can also take it one step further by using the **Tools** feature in Google. Once you have your search results, you can click **Images** then click **Tools**. You can now select the size, colour, type, usage rights and more. In the above example, we selected **Line Drawings** under **Type**.



## Amira's Pathway: Part 3

### Employee Resources on the POD

In the course, we walk through a demonstration of Amira working with her research partner to find relevant employee resources on the PHSA intranet, [POD](#). Examples of resources include:

- [PHSA letterhead templates](#)
- Employee resources, like [benefits](#) and [leave](#) forms
- Workplace resources, like [infection prevention and control](#) or [safety information](#)
- And much more.

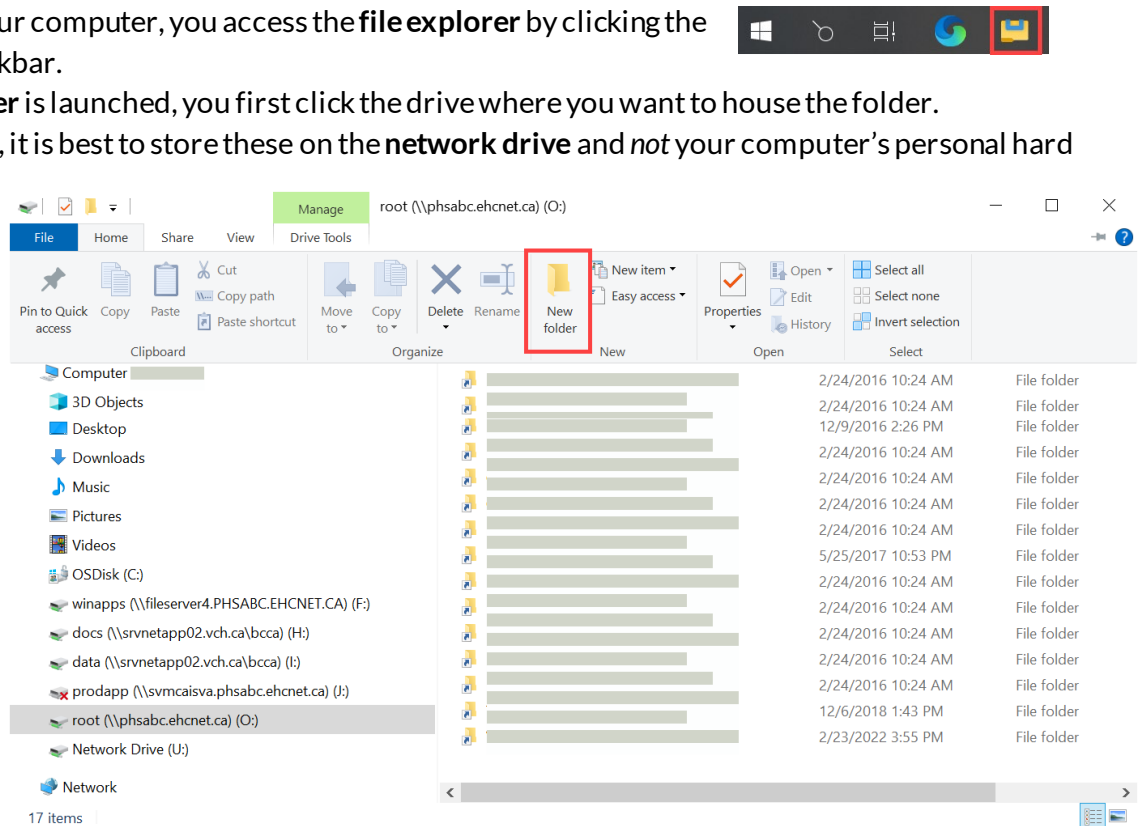
For access to employee online courses like this one, you need to access the [LearningHub](#). As a PHSA employee, you can login to the [LearningHub](#) and search through 100's of classroom and e-learning course offerings. You can also find help and support navigating the LearningHub through their [help site](#).

## Amira's Pathway: Part 4

### File folders and storage

In the course, we walk through a demonstration of Amira and her research partner to structure their research documents to ensure they are well organized and secure. Just as with our paper documents, we need **folders** to keep our digital files organized and secure by saving them to the **network drive**.

1. Once you log into your computer, you access the **file explorer** by clicking the **folder icon** in the taskbar.
2. Once the **file manager** is launched, you first click the drive where you want to house the folder.
3. For security reasons, it is best to store these on the **network drive** and *not* your computer's personal hard drive.
4. Now that the drive is selected, you can create a **new folder** or subfolder.
5. Simply navigate to where you want the new folder to appear, click **Home** and then **New Folder** in the toolbar.
6. Then type in the new folder name and press **Enter**.






## Types of entry fields on fillable forms.

In the course, Amira and her research partner need to create a survey for their project. As PHSA employees, they may also need to fill out forms. In the course, we look at the various types of entry fields that can be found in forms.

There are **three main types** of entry fields on most forms:

A screenshot of a survey form titled 'Research Participant Survey DRAFT' with a sub-heading 'Demographic Information'. The form contains two questions. Question 1, 'What is your age?', has radio button options for age ranges: 18 - 24, 25 - 34, 35 - 44, 45 - 54 (selected), 55 - 64, 65 - 74, 75 or older, and I prefer not to answer. Question 2, 'What languages are spoken in your household?', has checkbox options for English (checked), French, Cantonese, Mandarin, Persian (Farsi), Panjabi (Punjabi), Hindi, Spanish (checked), German, and Tagalog. Below the checkboxes is an open text field containing the word 'Dakelh'.

- The circles are known as **radio buttons**. When you see these, it typically indicates that only 1 selection is allowed.
- The squares are referred to as **checkboxes**. These allow us to check more than one box.
- The other entry field that you will come across are **open text fields**. When your mouse cursor changes to what looks like a capital letter I  you can enter text by clicking in that field and typing.

These types of fields provide a visual cue as to what is expected when entering information.

## End of Module 2