ealth literacy is a person's ability to get, process, and understand basic health information and services needed to make good health decisions.¹ It includes a person's:

• Knowledge of health and healthcare;

Department of

Health

- Ability to organize and use that knowledge in a variety of ways; and
- Ability to maintain their health through self-management and working together with doctors.²

Low health literacy has been linked to less frequent use of healthcare services and an **increased chance** of poor health or chronic disease in a person.²

In 2022, Tennessee ranked 44th for overall health in the U.S. and a large number of Tennessee adults had multiple chronic diseases.³ Poor health and chronic disease are responsible for **\$4 trillion annual healthcare costs** in the U.S.⁴ Health literacy has been noted as one of the cheapest, most effective ways to address disease in a population and, consequently, its costs.²

For this factsheet, data from the Tennessee Behavioral Risk Factor Surveillance System (**BRFSS**) was used to explore Tennessee residents' health literacy and its connection to chronic disease and behaviors that affect health like exercise, smoking, and regular checkups with a doctor.

BRFSS asks 3 questions about health literacy:

How easy is it for you to . . .

1.Get advice or information about health/medical topics if you need it?

- 2.Understand information told to you by doctors or nurses?
- 3. Understand written health information?

Few Tennessee adults found it difficult to get or understand health information.

Nearly **6%** of adults reported finding it difficult to **get health information** and to **understand information told to them** by a health care provider (*figure 1*).

Over **7%** of Tennessee adults reported finding it **difficult to understand written** health information in 2020 (*figure 1*).

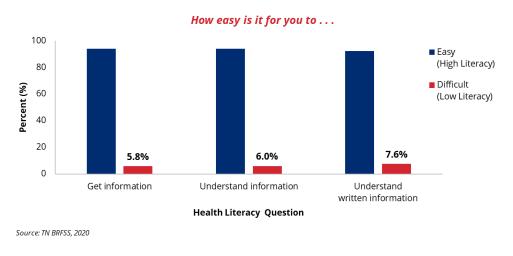


Figure 1: Response to Health Literacy Questions among Tennessee Adults, 2020

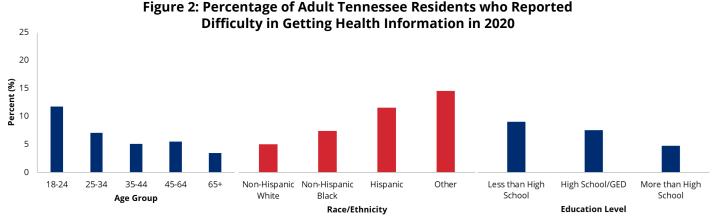
Health literacy was linked with social and demographic characteristics.



Difficulty in **getting health information** (*figure 2*) was highest among those:

- Aged 18-24 (11.8%, *p-value 0.001*);
- Those with less than a high school education (8.6%, *p-value 0.02*).

It's important to note that BRFSS doesn't ask about general internet access or access that might affect the ability to find health information.



Source: TN BRFSS,2020

Difficulty in **understanding written information** (*figure 3*) was highest among those:

- Aged 18-24 (9.5%) and aged 65+ (11%);
- Males (9%);
- And those with less than a high school education (22%).

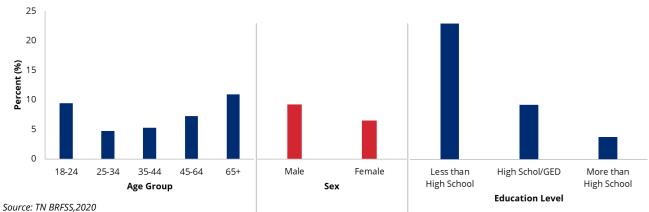


Figure 3: Percentage of Adult Tennessee Residents who Reported Difficulty in Understanding Written Information in 2020

Difficulty in **understanding information told to them** was only related to education level and was highest among those with less than a high school education (**15.6%**).

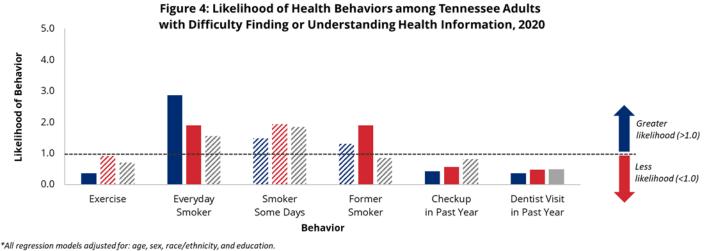
Health Behaviors . . .

Tennessee adults with **difficulty finding information** were **half as likely to have exercised** regularly in the previous 30 days and **3 times more likely to smoke everyday**, compared to those with little or no difficulty (*figure 4*).

Compared to those with little or no **difficulty in understanding information told to them**, those with difficulty were **2 times more likely to smoke everyday or be a former smoker** (*figure 4*).

Health behaviors didn't differ between those with difficulty in understanding *written* information and those without this difficulty.

For both getting information and understanding spoken information, Tennessee adults with difficulty (*figure 4*) were generally around **half as likely to have had routine medical and dental visits** within the past year, compared to those with little or no difficulty.

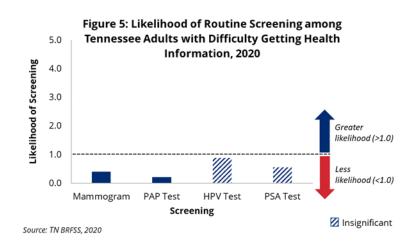


Get

Understand

"All regression models adjusted for: age, sex, race/ethnicity, and educati Source: TN BRFSS, 2020

Routine Screening...



Compared to those without difficulty, Tennessee adults with difficulty in **getting health information** (*figure 5*) were **less likely to report having routine screenings within the recommended time frame**; women were 60% less likely to report having received a mammogram

Written

💋 Insignificant

to report having received a mammogram and 80% less likely to report having received a PAP test.

While similar to those shown in *figure 5*, there wasn't a difference in routine screenings for those with difficulty in understanding *written* information or information *told* to them.

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Chronic Disease . . .

Tennessee adults with difficulty **getting information** (*figure 6*) were **3 times more likely to report** having cardiovascular disease (CVD) and **5 times more likely to have chronic obstructive** pulmonary disease (COPD), compared to those without difficulty.

Tennessee adults with difficulty **understanding information** (*figure 6*) were **3 times more likely to report having cardiovascular disease (CVD)**, compared to those without difficulty. Those with difficulty **understanding written information** (*figure 6*) were around **2 times more likely to have CVD or COPD**.

These findings did not account for general access to health care, however, and should be interpreted with that in mind. Also, while the ability to get health information was associated with having a primary care doctor, having a primary care doctor didn't impact the chance of having a chronic disease when other sociodemographic factors were accounted for.

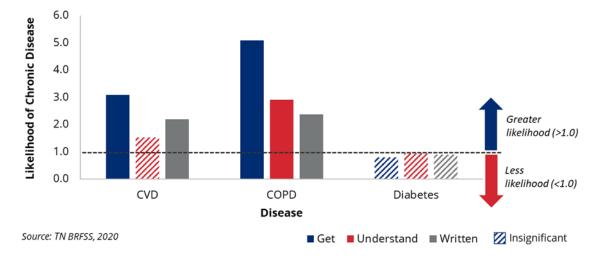


Figure 6: Likelihood of Chronic Disease among Tennessee Adults with Difficulty Getting or Understanding Health Information, 2020

Summary

Most Tennessee adults reported *not* having any difficulty in getting or understanding health information, but **those who did have difficulties were often more likely to report not having medical checkups or screenings** and **more likely to report having chronic diseases** compared to those who didn't have any difficulty.

Health literacy has been suggested as a "social determinant of health", something socially-related that affects a person's health.^{6,7} The CDC defines social determinants of health as "conditions in which people are born, grow, work, live, and age" and can include policies, social norms, and economic or political systems.⁷

Because of its **effect on population health**, **wellbeing**, **and economy**, differences in outcomes among those with difficulty in getting or understanding health information can be addressed by improving the communication and support skills of healthcare providers; helping enable development of skills that help in accessing, understanding, and applying health information; and policy development that accounts for those groups who are more affected by health literacy challenges.⁶

What Resources are Available?

- **Health Literacy Counseling**, by Helen Osborne, provides access to a variety of trainings, discussions, and tips for communicating health information clearly. To explore more, visit: <u>https://healthliteracy.com/</u>
- **Plain Language Materials & Resources**, published by the Centers for Disease Control and Prevention (CDC), defines "plain language" as well as guidelines, examples, and a checklist to help develop plainlanguage-friendly communications. To explore more, visit: <u>https://www.cdc.gov /healthliteracy/</u><u>developmaterials/plainlanguage.html</u>
- The CDC Clear Communication Index, created by the CDC for users to design, develop, and assess clarity/understandability of communication materials. To explore more, visit: <u>https://www.cdc.gov/ccindex/</u>

How can I communicate clearly?

- Consider your audience
- Check the reading level using Microsoft Word or online tools (<u>https://www.classace.io/tools/reading-level-checker</u>)
- Use short sentences and plain language (https://tools.cdc.gov/ewapi/termsearch.html)
- Use white space to break up page elements
- Provide your audience with a welcoming and supportive tone

What is the Behavioral Risk Factor Surveillance System?

The Behavioral Risk Factor System (**BRFSS**) is an annual household telephone survey that collects information on various chronic health conditions, health behaviors, and use of preventative health services among civilian, non-institutionalized adults aged 18-years and older. For questions related to Tennessee BRFSS, contact the **TN BRFSS Coordinator**.

E-mail: tnbrfss.health@tn.gov



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