# Prostate Cancer Manual

## *Raising Awareness on Prevention of Prostate Cancer in Latino Men*


Hispanic population adaptation of information, and cultural relevancy by:

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# Module 1: Introduction

### How is this manual organized?

This handbook has been developed for audiences interested in raising awareness about prostate cancer prevention among minority groups. This may include health and prevention advocates who work within the community of interest.

Our goal is to provide advice, strategies, data and talking points from our campaign team to raise awareness on prostate cancer and encourage Latino men to be screened with a blood test called prostate-specific antigen (PSA ) and a digital rectal exam (DRE), to determine if your prostate is inflamed or not.

*Be informed on prostate cancer.*

## What is the prostate?

The prostate is part of the male reproductive system. Its main function is to produce a liquid that helps nourish and protect the sperm in the female reproductive tract. The urethra, which carries urine from the bladder, passes through the prostate. This is why changes in the health of your prostate often translate into urinary tract symptoms.

## Location of the prostate

The prostate gland is located below the urinary bladder and in front of the rectum.

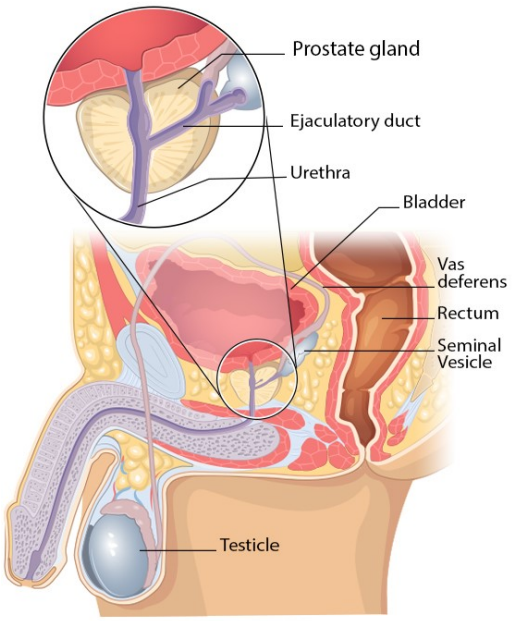



*Figure 1.* The Prostate Gland. Adapted from "Prostate Cancer," 2018, retrieved from https://www.cdc.gov/cancer/prostate/basic_info/what-is-prostate-cancer.htm .

## What is prostate cancer?

Prostate cancer occurs when the normal cells of the prostate divide too quickly or die very slowly. This is usually the result of alterations or changes in the genes or in the structure of the prostate cells.

## How common is prostate cancer?

Prostate cancer is the most common cancer diagnosed in US Hispanic/Latino men after skin cancer. By 2023 it is estimated that there will be 288,300 new cases, which represents 14.7% of new cancer diagnoses in men (National Cancer Institute, 2023). 1 in every 8 men will be diagnosed with prostate cancer at some point in their life (American Cancer Society, 2023).

## How mortal is prostate cancer ?

Prostate cancer is one of the most lethal cancers in men in the United States. In 2023, it is estimated that there will be 34,700 deaths from prostate cancer, representing 5.7% of cancer deaths (National Cancer Institute, 2023). Approximately 1,800 Hispanic/Latino men die each year from this disease, which is ranked as the fourth leading cause of cancer deaths in Latinos (ACS, 2019).

# Prostate Cancer Statistics

Prostate cancer is the most commonly diagnosed cancer among Hispanic/Latino men, besides skin cancer.

Hispanic/Latino men have intermediate prostate cancer incidence rates that are slightly lower than those of non-Hispanic white men. (92 vs 102 per 100,000).

***Data from the American Cancer Society:***

- Most common cancer in American men, other than skin cancer.
- There are approximately 288,300 new prostate cancer cases per year in the U.S., including all men.

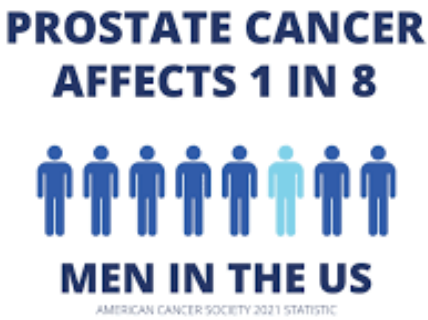



*Figure 3.* Prostate Cancer Infographic. Adapted from "Facts and Statistics" 2021, retrieved from American Cancer Society Statistics.

*Figure 4.* Prostate Cancer Awareness Ribbon. Adapted from "What is Prostate Cancer?," 2018, retrieved from http://www.pinehurstsurgical.com/september-is-prostate-cancer-awareness-month/ . Copyright 2018 PINEHURST SURGICAL

## What are the risk factors for developing prostate cancer?

The main risk factors that have been identified for prostate cancer are:

- **Age**
- **Family history of prostate cancer**
- **Belonging to the African American Race**
- The presence of some **genetic markers** that have been identified in non-Latino White people and non-Latino Black people (Benafif & Eeles, 2016; Conti et al., 2017).

- Almost two thirds of men are over 65 at the time of diagnosis. It is less common to develop prostate cancer before age 50.

**Up to 1 in 3 men with a family history of prostate cancer will be diagnosed with prostate cancer.**

*Figure 6.* Family Tree. Adapted from "Complete Questionnaire for a Genealogy Interview" 2018, retrieved from https://www.familytree.com/blog/complete-questionnaire/. Copyright

The risk is greater among closest relatives. For example, having a first-degree relative (father/brother) with prostate cancer increases your risk more than having a second-degree relative (uncle/grandfather) with prostate cancer. The risk also increases the younger the relative was at the age of diagnosis (especially if he was under 65).

**Prostate cancer is the most common type of cancer diagnosed among Hispanic/Latino men.** Among the major racial/ethnic groups in the United States, Hispanic/Latino men have prostate cancer less frequently compared to men who do not belong to this racial group (Cancer Facts & Figures, 2018). It is considered that the cause for this type of cancer is probably multifactorial.

There are **several risk factors** that have not been confirmed as a cause for prostate cancer but should be taken into account. These include **excess body fat, excessive consumption of red meat, excessive calcium intake, and vitamin D deficiency** (Bouvard et al., 2015; Lin, Aronson, & Freedland, 2017).

*Figure 7.* African American Family. Adapted from "African American Men & Prostate Cancer," 2018, retrieved fromhttps://prostatecancer.net/living/african-american-men/ . Copyright 2019 Health Union

# Module 2: Detecting and Preventing Prostate Cancer

- Unfortunately, there has not been a proven strategy to prevent prostate cancer.
- Smoking within 10 years after the diagnosis of prostate cancer seems to increase the risk of worse results, however, it is not clear if the cessation of smoking reduces the risk of developing prostate cancer (Kenfield, Stampfer, Chan & Giovannucci, 2011).
- A variety of supplements including vitamin E, vitamin C, selenium, lycopene, soy and multivitamins have been studied and do not appear to prevent prostate cancer.
- Initially, it was shown that 5-alpha-reductase inhibitors (a class of drugs used to help shrink the prostate and relieve urinary symptoms due to enlarged prostate) decrease the risk of developing prostate cancer by 25%. However, a more detailed analysis showed that they only decreased the risk of developing low-risk prostate cancers and slightly increased the risk of developing higher-risk prostate cancers (Thompson et al., 2003).
- Multiple diets have been studied and what is known so far is that the World Health Organization concluded that high diets in red meat could be a probable cause of prostate cancer. Other recommendations include a diet low in animal fat and high in fruits and vegetables, and maintain an ideal weight, avoiding obesity.

*Figure 8.* Fruits & Vegetables. Adapted from "Eating a Heart Healthy Diet" 2018, retrieved from https://vitamedica.com/wellness-blog/eating-a-heart-healthy-diet/ . Copyright 2019 Vitamedica Corp.

## How is prostate cancer detected?

Prostate cancer is common and can be fatal, however, it often does not cause signs or symptoms until it reaches an advanced stage that makes it more difficult to achieve a cure. Therefore, it is important to check for prostate cancer using screening tests to be able to diagnose it before it spreads out of the prostate. More than 90% of prostate cancers detected by these screening methods are limited to the prostate and have a good prognosis. The American Association of Urology and the Working Group on Preventive Services of the U.S. recommends discussing the risks and benefits of prostate cancer screening for all men aged 55 to 69 years. People with a family history should talk about early detection (ages 40-54) Carter et al., 2013).

The evaluation must be done every 1-2 years until a man reaches 70 years old or until the life expectancy is less than 10-15 years.

# *Keep good healthy habits.*

## What does the prostate screening test involve?

**The evaluation for prostate cancer involves a blood test and a physical examination.** The blood test measures the amount of prostate-specific antigen (PSA) in your blood. PSA is a protein produced by the prostate that liquefies semen.

The blood values of PSA **can not tell you definitively whether you have prostate cancer or not**, they simply give an estimate of your risk of having prostate cancer.

The higher the PSA value, the higher the risk of having prostate cancer. But PSA can be elevated for other reasons besides prostate cancer, such as increased age, enlargement of the prostate, infection and recent ejaculation. For these reasons, a test that comes out abnormal after a time is usually repeated to confirm the results.


*Figure 11.* PSA Test. Adapted from "What Does Elevated PSA Actually Show," 2019, retrieved from https://canadianhealthcaremallrx.com/what-does-elevated-prostate-specific-antigen-actually-show.html . Copyright 2019 Canadian Health & Care Company Mall

## What does the prostate screening test involve?

- The **second part of the evaluation is the physical examination** that consists of a digital rectal examination (DRE). For the DRE, a physician puts on a lubricated glove and inserts an index finger in the rectum and examines the area of the prostate where tumors often grow. This test provides important information about the clinical stage of prostate cancer.

- The benefits of screening include (1) reassuring your mind if everything is normal, (2) detecting the cancer before it spreads, and (3) allowing earlier and less aggressive treatment, which can help decrease the spread of the disease and generally increase the chance of survival.

- The risks of detection include (1) "false negatives" where the PSA gives "normal" values even though there may be cancer, (2) a high PSA does not always mean there is cancer and can lead to unnecessary additional tests, and (3) excessive treatment, since many times the prostate cancer that is detected is not very aggressive and will never affect you.

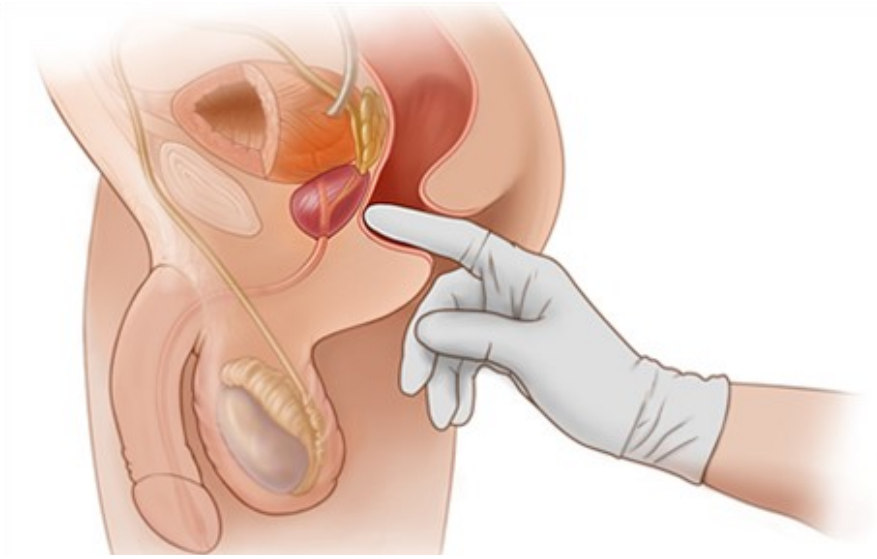


*Figure 12.* Digital Rectal Exam. Adapted from "Digital Rectal Examination," 2019, retrieved from https://myhealth.alberta.ca/Health/pages/conditions.aspx?hwid=tp10654 . Copyright 2019 Government of Alberta

## Module 3: Diagnosing Prostate Cancer

If the PSA or DRE test is abnormal, you may be recommended to have a prostate biopsy. This is a small procedure that is often performed by a urologist, where several samples of the prostate are taken and sent to a pathologist to look for prostate cancer cells with a microscope.

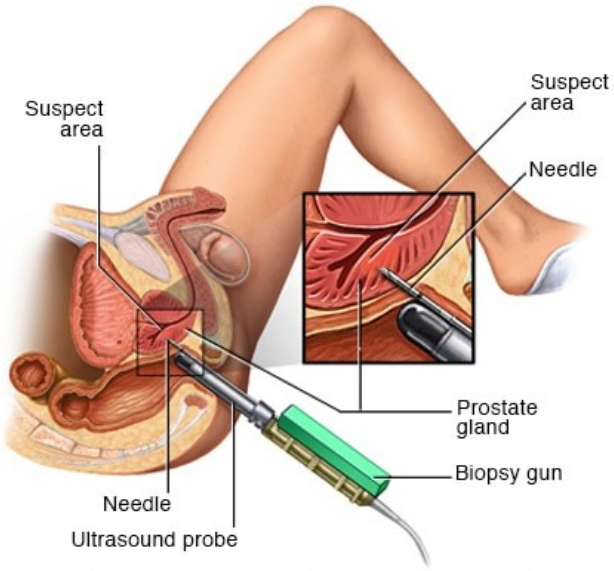



*Figure 13.* Transrectal Biopsy of the Prostate. Adapted from "Prostate Biopsy," 2019, retrieved from https://www.mayoclinic.org/tests-procedures/prostate-biopsy/about/pac-20384734 . Copyright 2019 (MFMER)

**This is how the prostate cells look under a microscope**

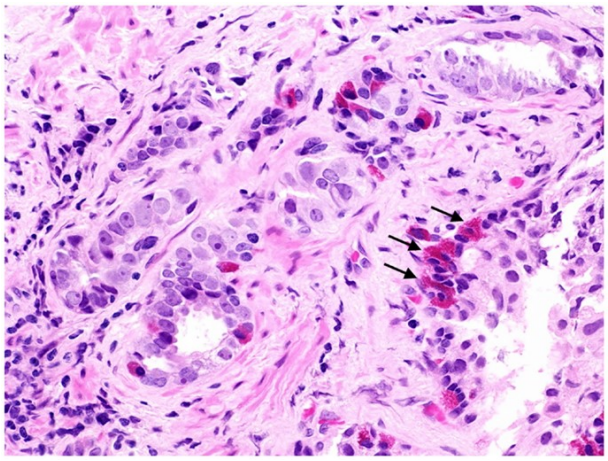


*Figure 14.* Prostate Cancer Cells. Adapted from "Neuroendocrine Differentiation," 2015, retrieved from https://www.researchgate.net/figure/Prostate-cancer-displaying-focal-neuroendocrine-differentiation-Focal-NED-typically_fig4_273124430 . Copyright 2019 ResearchGate

*How prostate cancer is diagnosed.*

# Module 4: Treatments for Prostate Cancer

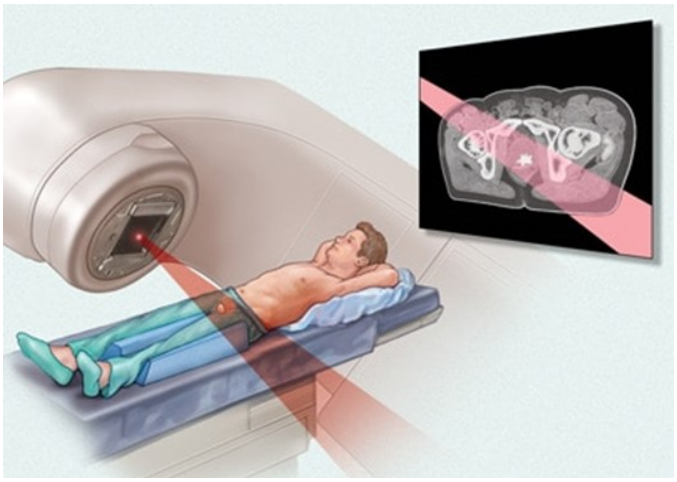
The life expectancy, the risk group for prostate cancer, and their personal preferences are evaluated to decide the treatment. For localized prostate cancer, treatment options include active surveillance, radiation therapy, or surgery to remove the prostate (radical prostatectomy). Each treatment has its own risks and benefits and it is recommended that you discuss with your clinical doctor to explore all available options before deciding which one is best for you.

## Treatment Options for Prostate Cancer

**Active surveillance** is becoming the treatment of choice for most patients with very low-risk prostate cancer and for many men with low-risk prostate cancer. This involves regularly scheduled PSA exams, digital rectal exams, and periodic prostate biopsies to make sure your prostate does not develop or contain a higher-risk prostate cancer.

**Radiotherapy** is a definitive treatment option for low, intermediate and high risk prostate cancer. For men with intermediate and high risk prostate cancer, radiation is often combined with a period of androgen deprivation therapy to improve its effectiveness. This involves the transfer of energy from an external source through the body and into the prostate, without removing it. It is less invasive than surgery. It can cause irritation of the bladder and bowel, as well as erectile dysfunction.

**Radical prostatectomy** is a definitive surgical treatment option for low, intermediate and high risk prostate cancer. It can be performed minimally invasively using a robotic surgery platform. The prostate is completely removed from the body. Most patients go home the day after the surgery. For men with intermediate and high risk prostate cancer, radiation may be needed to improve its effectiveness. It can cause stress, urinary incontinence and erectile dysfunction.



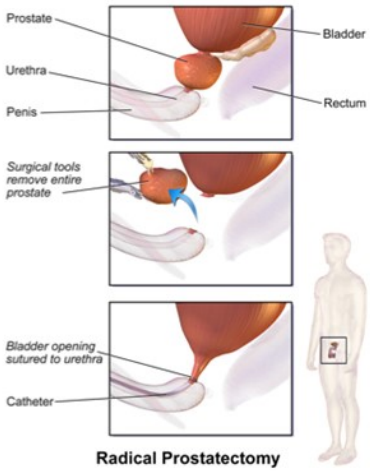
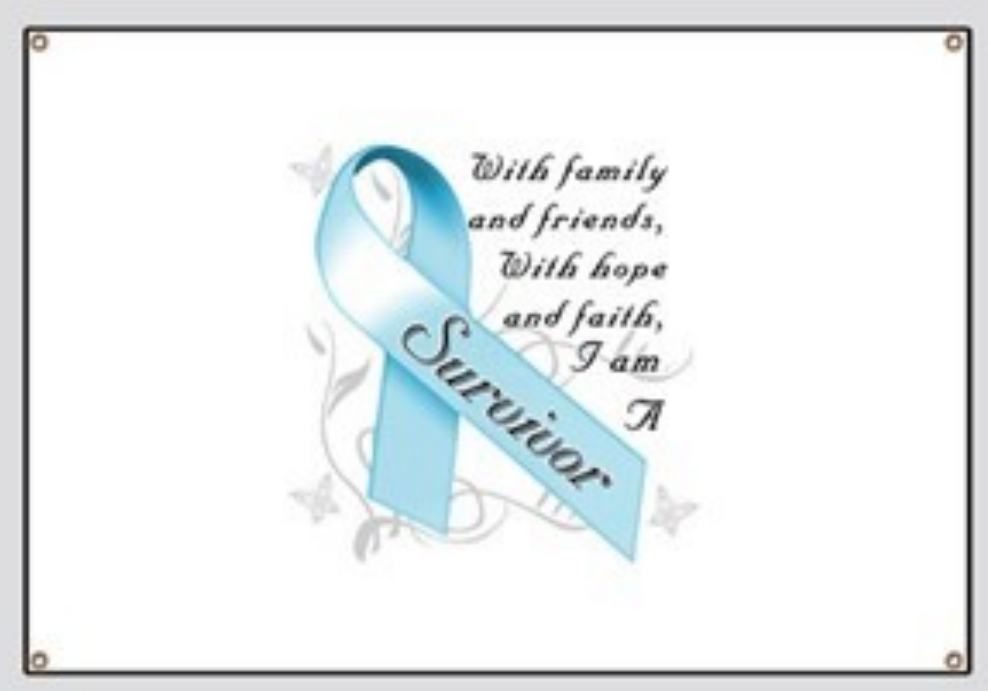



*Figure 17.* Radiotherapy. Adapted from "External Beam Radiation for Prostate Cancer," 2019, retrieved from https://myhealth.alberta.ca/Health/pages/conditions.aspx?hwid=tp10654 . Copyright 2019 (MFMER)

## Module 5: Life After Prostate Cancer

- Survivors of prostate cancer represent 2 out of 10 cancer survivors in the United States (Skolarus et al., 2014). The needs of this group are increasingly being recognized in terms of monitoring cancer recurrence and managing the effects of treatment.
- Regardless of which treatment strategy you choose, including active surveillance, you should continue to check your PSA periodically to check for possible recurrence of your prostate cancer. If you find that the PSA is increasing, you may need more tests and/or additional treatments.



- Both surgery and radiation can cause erectile dysfunction and urinary dysfunction. There are multiple treatment strategies available to counteract these effects. For erectile dysfunction, there are oral medications injection therapies and penile prosthesis surgery. For urinary dysfunction, there are medications that can help with urinary symptoms, such as urgency and frequency, as well as surgical therapies that can help with urinary incontinence.

## *Take measures to take care of your prostate.*

*Figure 21.* Radiotherapy. Adapted from "Higher Doses of Radiation Don't Improve Survival in Prostate Cancer," 2018, retrieved from https://www.niddk.nih.gov/health-information/digestive-diseases/digestive-system-how-it-works. Copyright 2019 Washington University in St. Louis

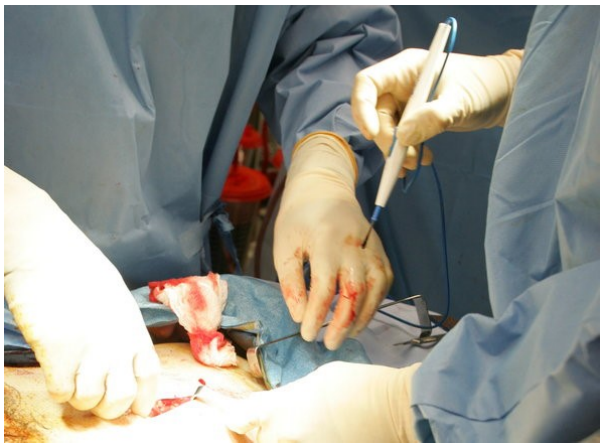


*Figure 22.* Prostate Cancer Surgery. Adapted from "Questioning Surgery for Early Prostate Cancer," 2018, retrieved from https://well.blogs.nytimes.com/2012/07/18/questioning-surgery-for-early-prostate-cancer/ . Copyright 2017 New York Times

## Prostate Cancer in U.S. Hispanic/Latino Men

- Prostate cancer affects men from all around the world as the second most common cancer and the fourth leading cause of death in men (American Cancer Society, 2023).

- Cancer is the leading cause of death among Hispanics/Latinos, who represent the largest racial/ethnic minority group in the United States, accounting for 18.9% (62.6 million) of the total population in the United States in 2023 (U.S. Department of Health and Human Services, 2023).

- Every 3 years, the American Cancer Society reports on the occurrence of cancer, risk factors and screening tests performed on Hispanics/Latinos in the United States, according to data from the National Cancer Institute, the North American Association of Central Cancer Registries, and the Centers for Disease Control and Prevention (Miller et al., 2018).

- In the United States, prostate cancer is the most common cancer among men and the second leading cause of cancer death in men in the United States (American Cancer Society, 2023).

- Although mortality and morbidity from prostate cancer have declined, prostate cancer remains one of the most common types of cancer diagnosed in Hispanic/Latino men in the United States. New cases of prostate cancer in Hispanic/Latino men in the U.S. present approximately 12% less than in non-Latino White men: however, new cases of prostate cancer that are observed in Hispanic/Latino men are greater than in most Latin American countries (American Cancer Society, 2023).

## *Resources*

***https://www.cancer.org/cancer/types/prostate-cancer/about/key-statistics.html***

***https://www.cdc.gov/cancer/prostate/index.htm***

Web page - ***Center for Disease Control and Prevention***

- Visit the website regularly to stay up to date with PSA information and guidelines and up-to-date information on prostate cancer.

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***This material was adapted from Handbook for Prostate Cancer Advocacy—Principles and Best Practices and other resources mentioned in this tool kit.***

***Este material fue adaptado del Handbook for Prostate Cancer Advocacy—Principles and Best Practices y otros recursos mencionados en este manual.***

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