

Health Promotion Division

Chronic Disease *in Puerto Rico*

2021

Presented by

Noncommunicable Chronic Disease Surveillance System

Dic | 2022

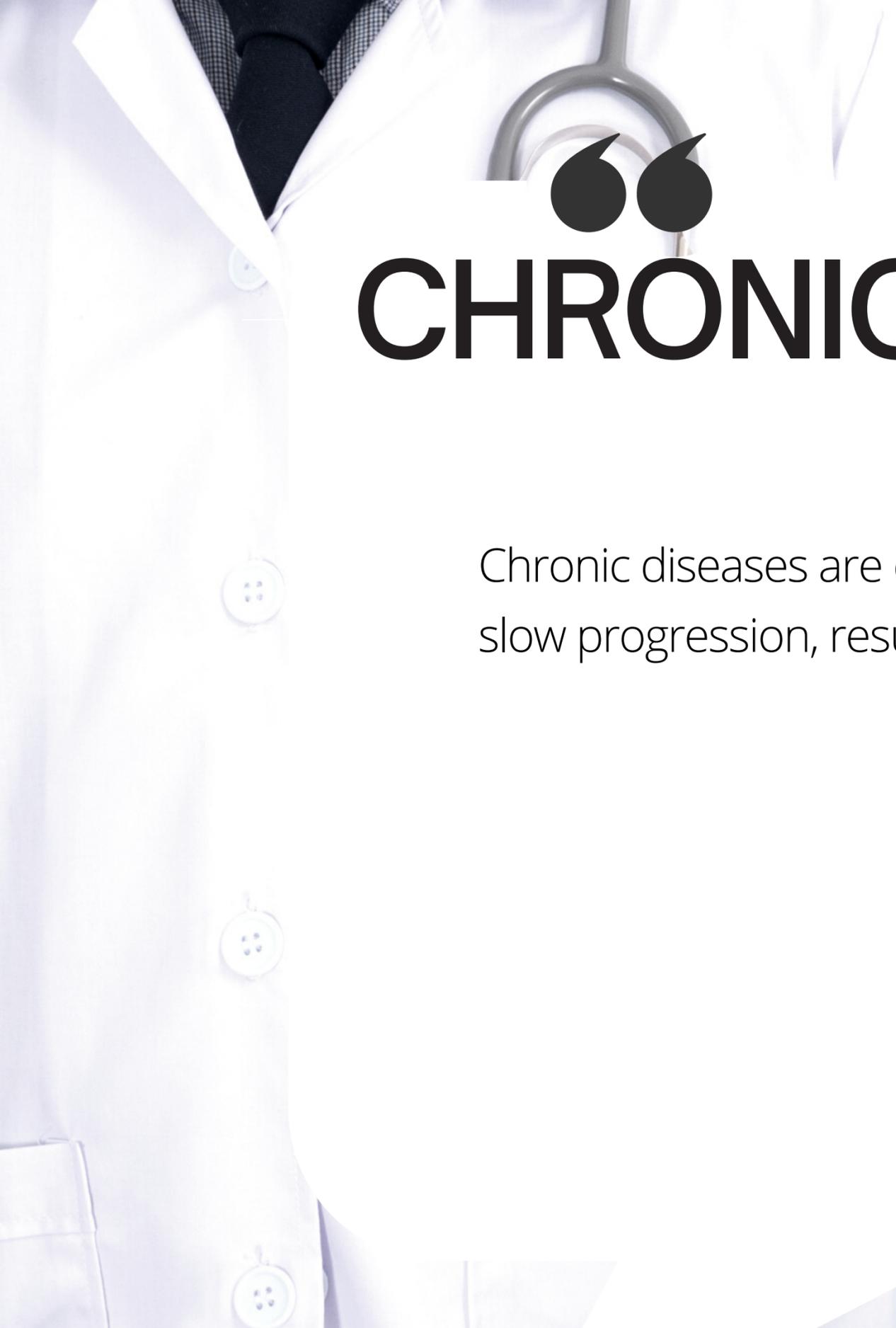
DEPARTAMENTO DE
SALUD



Objectives

- 01** • Discuss the top seven causes of death in Puerto Rico
- 02** • Describe the epidemiological profile of hypertension, high cholesterol, arthritis, diabetes, depression, asthma and heart disease in Puerto Rico.
- 03** • Describe the modifiable risk factors in Puerto Rico.





“ CHRONIC DISEASE

Chronic diseases are defined as conditions of **long duration** and usually slow progression, resulting from a combination of **risk factors**.



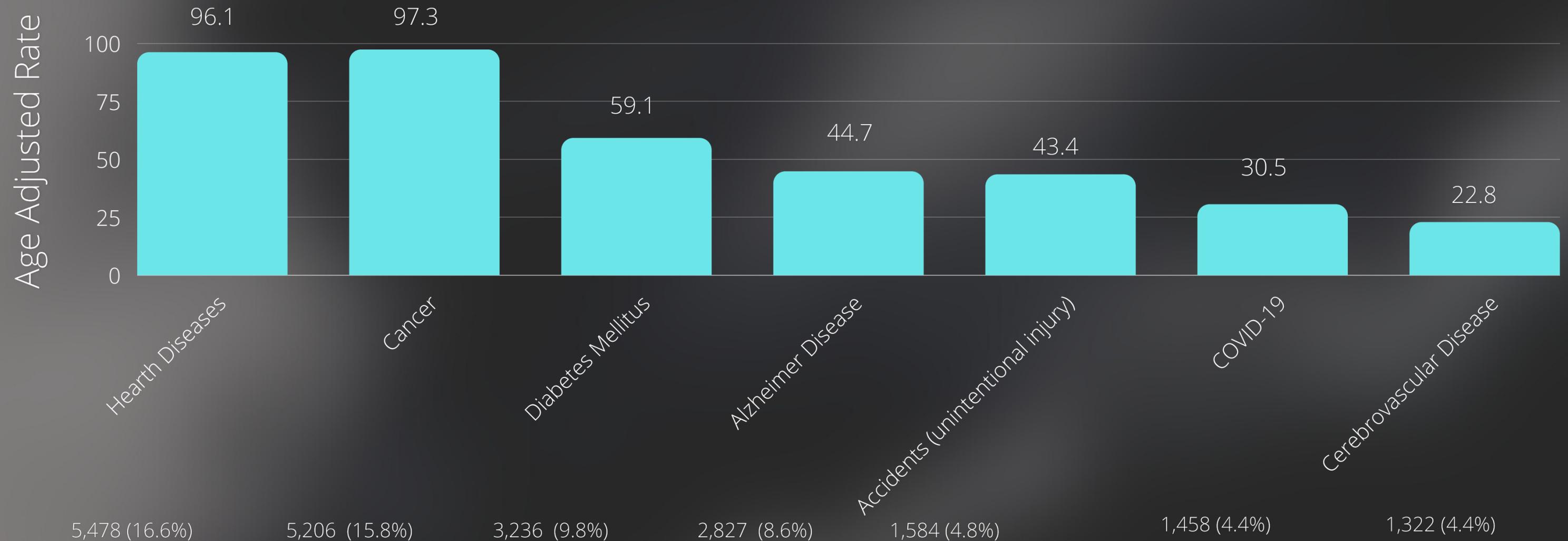
MORTALITY



**CHRONIC
DISEASES**



First causes of total deaths in Puerto Rico, 2021



Age-adjusted mortality rates (per 100,000)

Source - Department of Health, Puerto Rico Demographic Registry

Analisis: Secretaria Auxiliar de Planificación y Desarrollo, División de Análisis Estadísticos, 2022

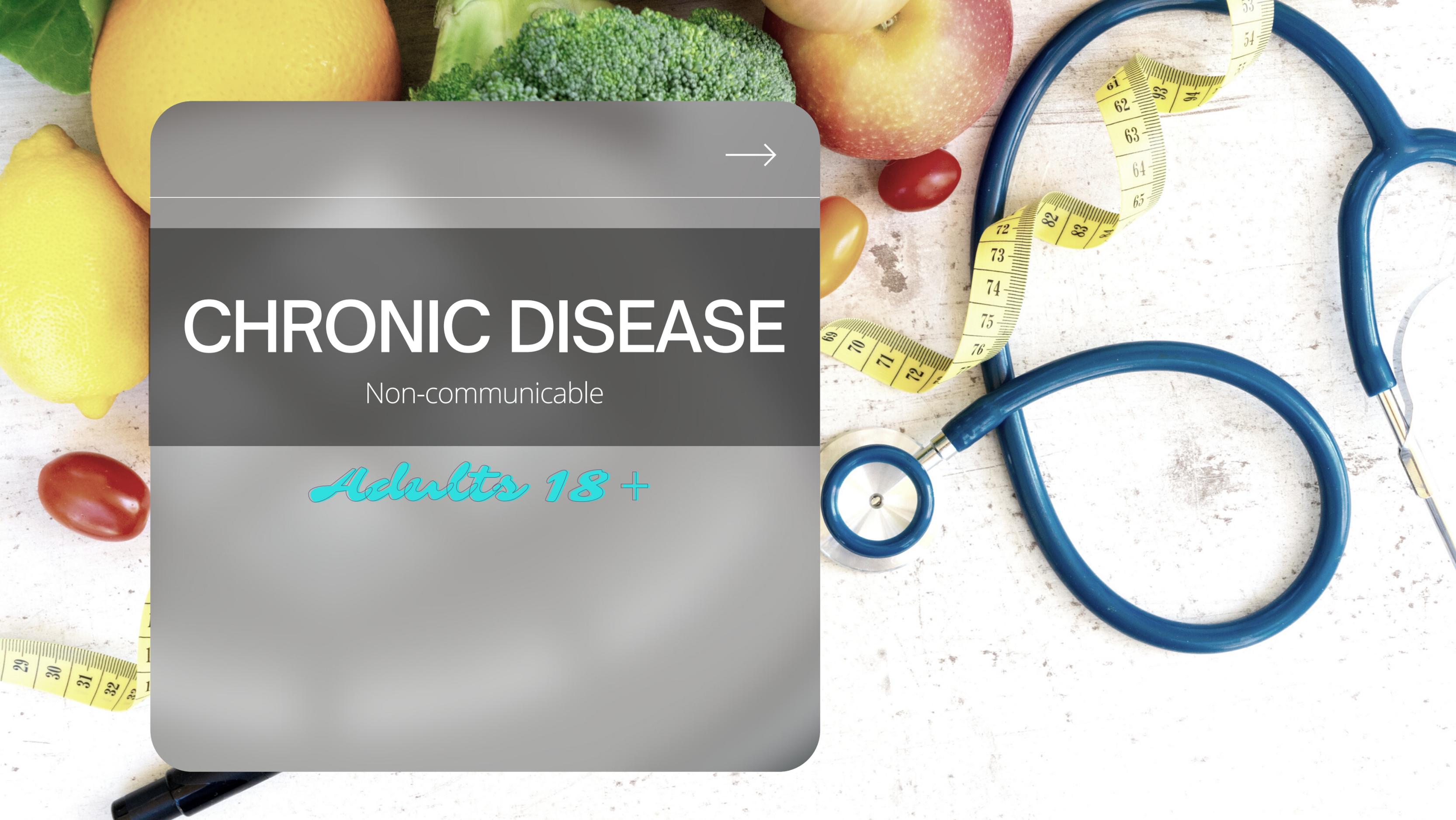




CHRONIC DISEASE

Non-communicable

Adults 18+



In Puerto Rico,

68%

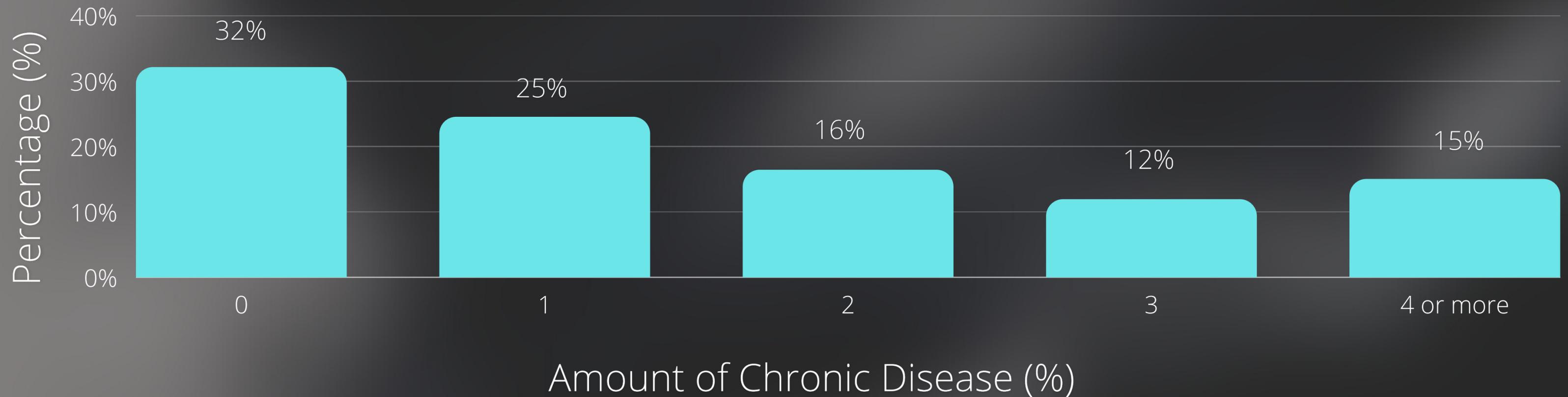
of adultos living with at least one chronic disease (1,857,960).



*DIABETES, ASMA, HIPERTENSIÓN, COLESTEROL ELEVADO, COPD, ARTRITIS, DEPRESIÓN, CEREBROVASCULAR, ENFERMEDADES CORONARIAS, ATAQUE CARDIACO & ENFERMEDAD RENAL.

Chronic Disease Comorbidities

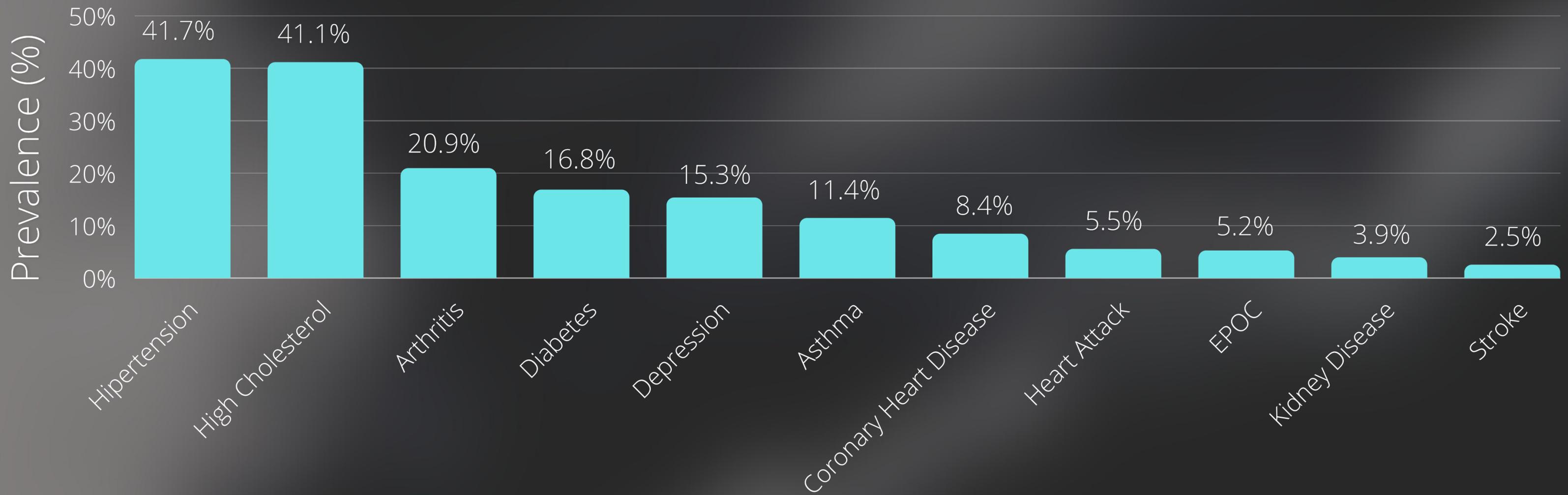
in adults of Puerto Rico, 2021



*DIABETES, ASMA, HIPERTENSIÓN, COLESTEROL ELEVADO, COPD, ARTRITIS, DEPRESIÓN, CEREBROVASCULAR, ENFERMEDADES CORONARIAS, ATAQUE CARDIACO & ENFERMEDAD RENAL.

Prevalence of Non Transmissible Chronic Disease

in adult of Puerto Rico, 2021



HIPERTENSION

Adults 18+



2 of 5

Adults in PR living with hypertension (41.7%)

~1,142,379



Elderly (65+)
73.3%



Less Education (<=12mo)
50.2%



Less Income (<\$15,000)
53.9%



Arecibo & Caguas Region
44.3%



Widowed
77.9%



Retired/
Disabled
70.5%



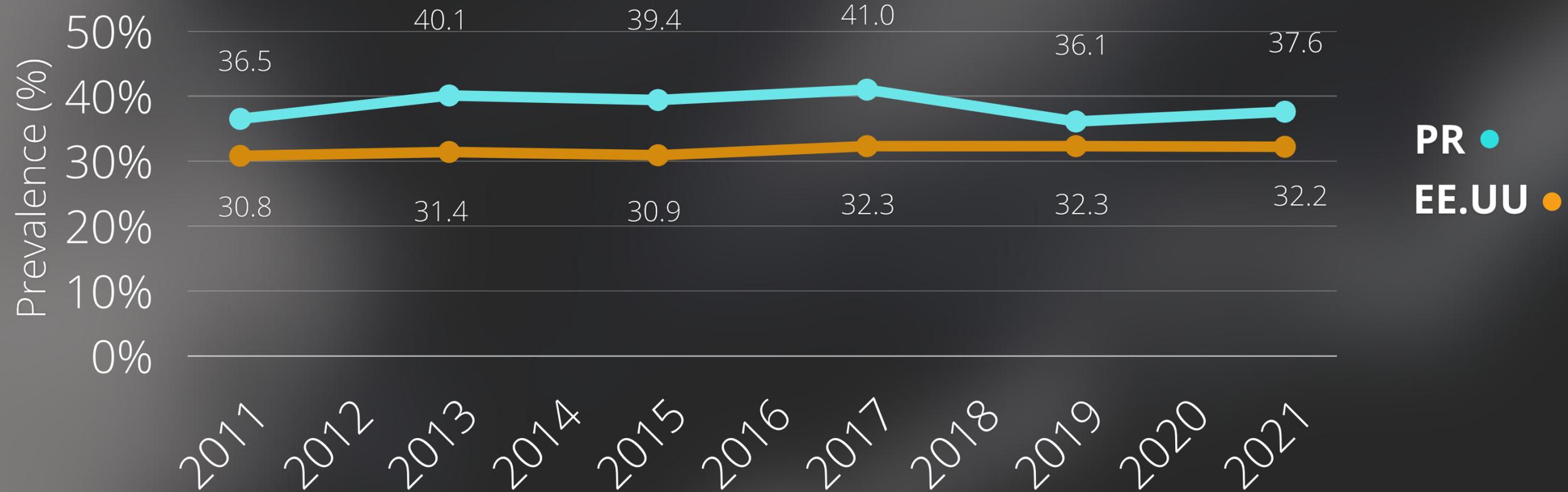
Physically Inactive
52.3%



Overweight &
Obesity
82.1%

Common characteristics:

Trend in Prevalence of Hypertension in Puerto Rico vs. United States in adults (18+), 2011-2021



Data collected in odd years.
*EE.UU= median
PR= Age Adjusted



HIGH CHOLESTEROL

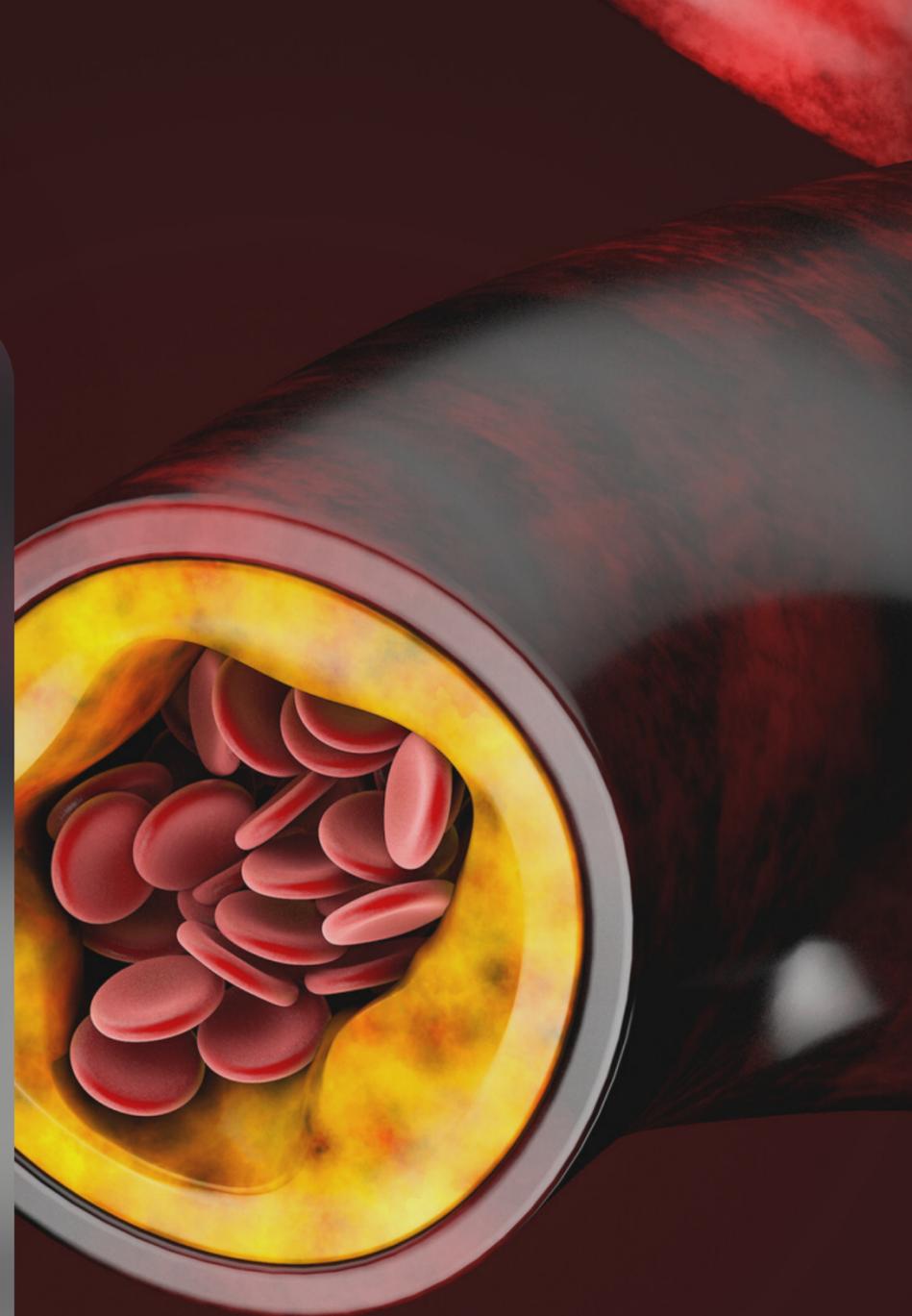
Adults 18+



2 of 5

Adults in PR living with high cholesterol (41.1%)

~1,040,302



Adults (55-64)
56.4%



Less Education (<=12mo)
41.1%



Less Income (<\$15,000)
42.1%



Ponce Region
44.8%



Widowed
52.5%



Retired/Disabled
54.1%



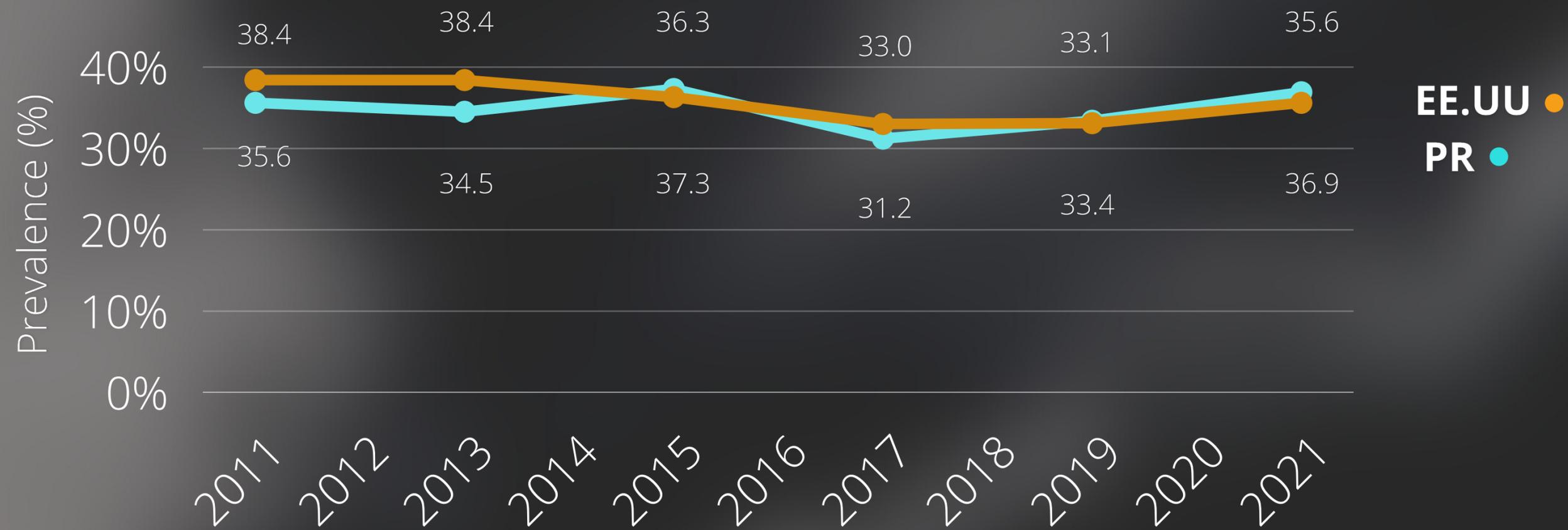
Physically Inactive
55.1%



Overweight & Obesity
76.8%

Common characteristics:

Trend in Prevalence of High Cholesterol in Puerto Rico vs. United States in adults (18+), 2011-2021



Data collected in odd years.

*EE.UU= median

PR= Age Adjusted



PR-BRFSS, 2011-2021



ARTHRITIS
Adults 18+



Common characteristics:



Women
26.6%



Elderly (65+)
38.7%



Less Education (<=12mo)
27.5%



Less Income (<\$15,000)
30.6%

Arecibo Region
28.4%



Widowed
44.2%



Retired/
Disabled
42.5%



Physically
Inactive
53.3%



Overweight &
Obesity
79.3%



1 of 5

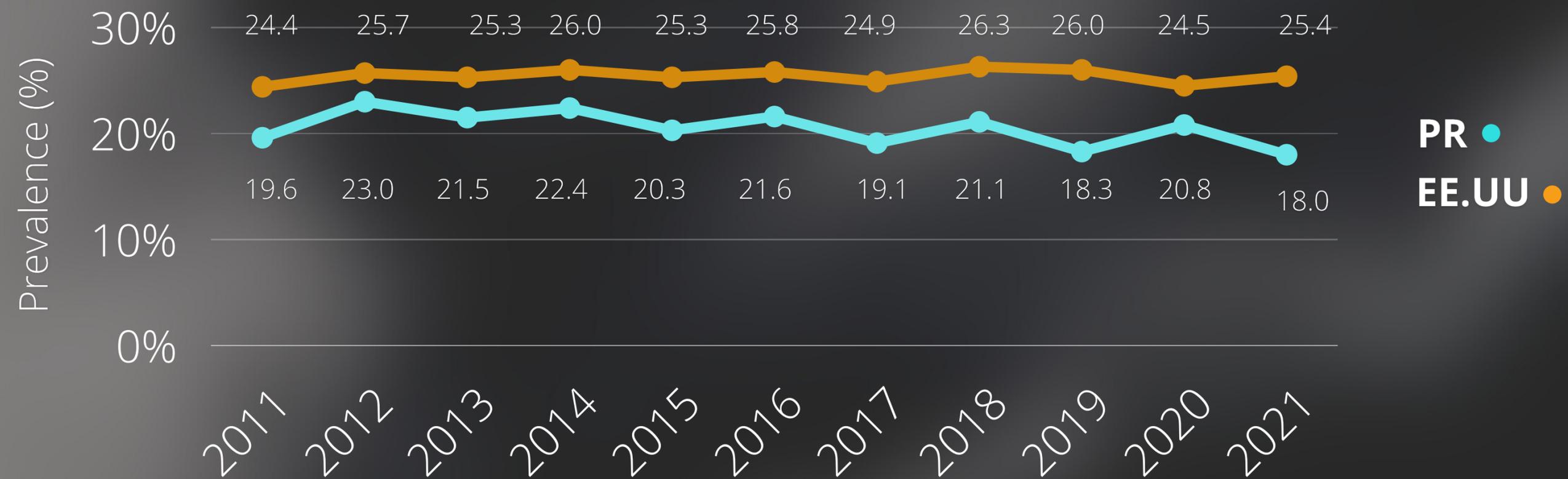
Adults in PR living with
arthritis (20.9%)

~567,175

*No ajustado por edad

Trend in Prevalence of Arthritis

in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= mediana
PR= Ajustada por edad

DIABETES

Adults 18+



Common characteristics:



Elderly (65+)
35.0%



Less Education (<=12mo)
22.3%



Less Income (<\$15,000)
23.7%



Ponce Region
20.2%



Widowed
34.7%



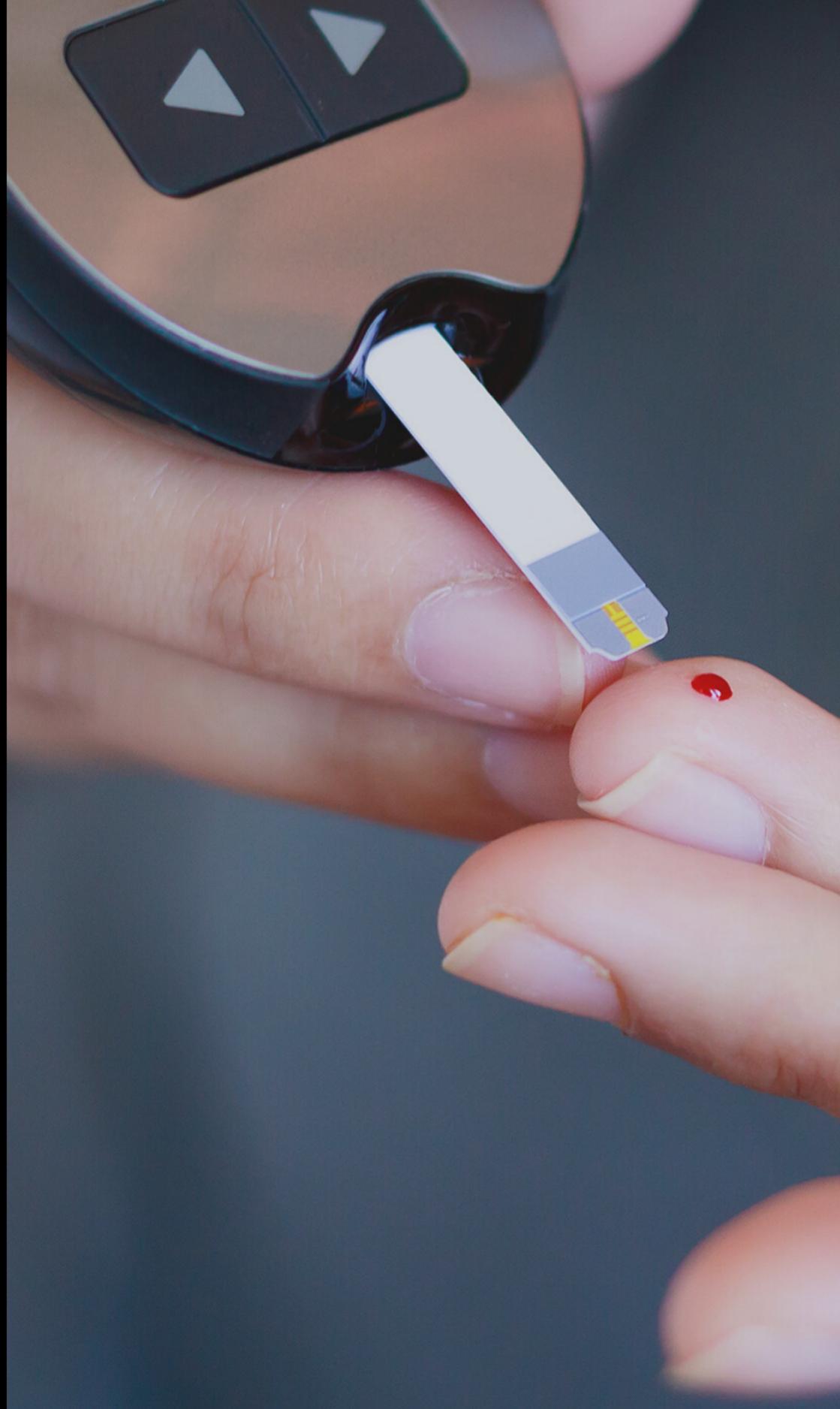
Retired/Disabled
34.4%



Physically Inactive
56.9%



Overweight & Obesity
82.9%



11 of 66

Adults in PR living with diabetes (16.8%)

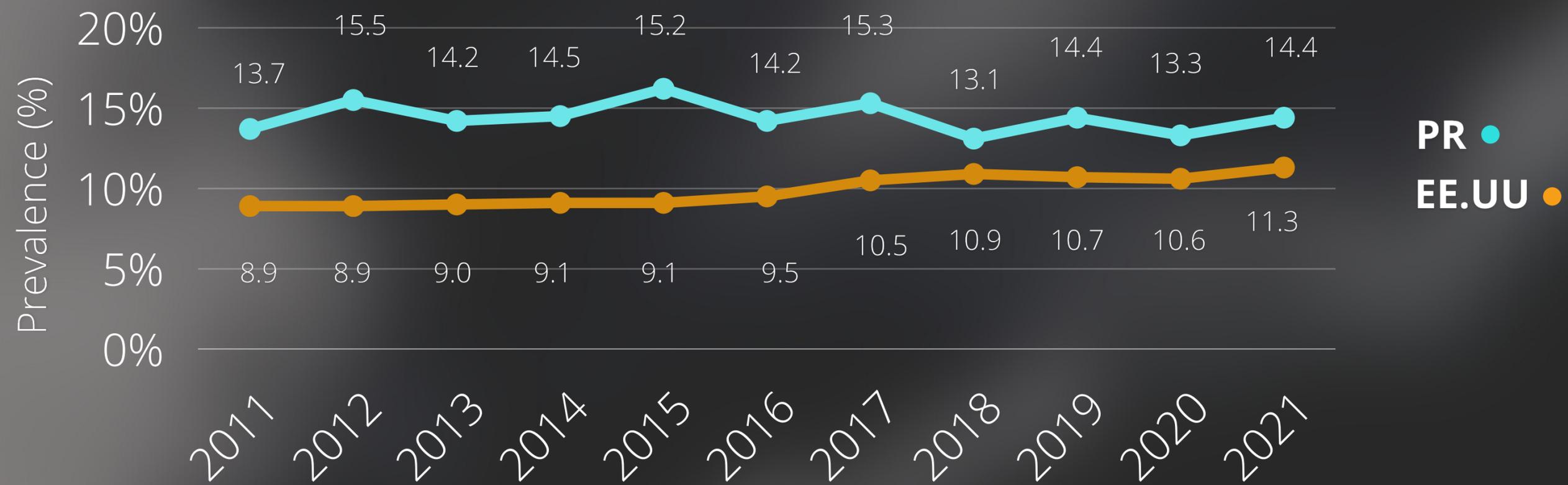
~456,640

*No ajustado por edad



Trend in Prevalence of Diabetes

in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= mediana
PR= Ajustada por edad



PR-BRFSS, 2011-2021



DEPRESSION

Adults 18+



3 of 20

Adults in PR living with depression (15.3%)

~418,464



Common characteristics:



Women
17.7%



55-64 years
26.1%



Less Education (<=12mo)
16.9%



Less Income (<\$15,000)
21.7%

Arecibo Region
19.3%



Divorced / Separated
20.0%

Widowed
20.2%



Retired/ Disabled
24.8%



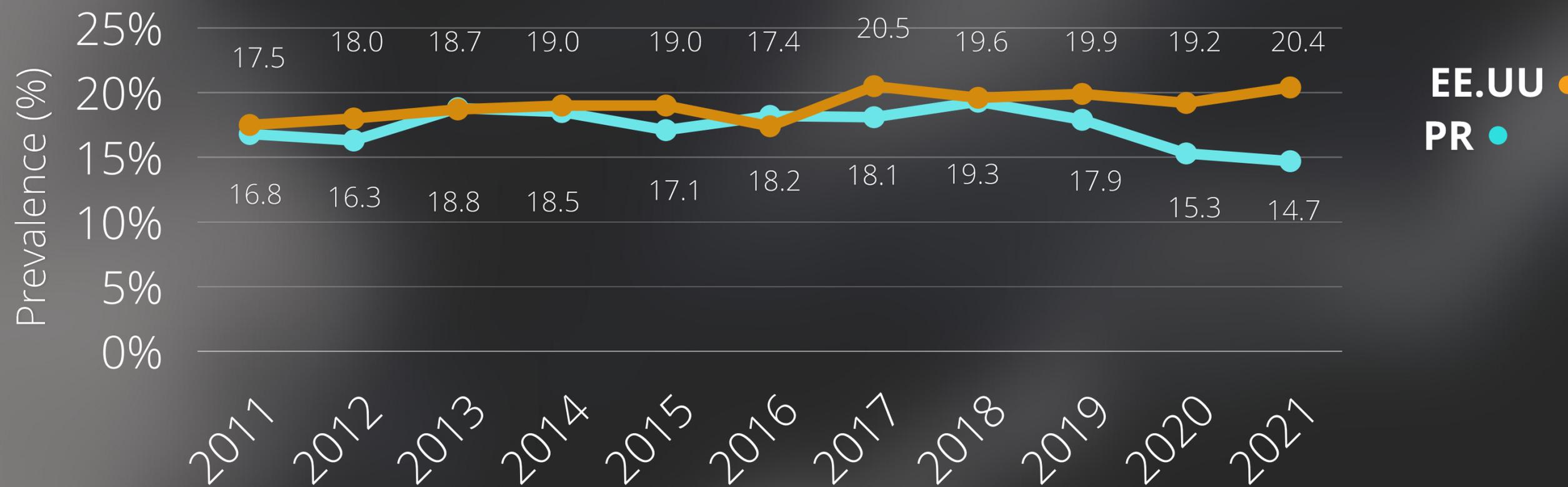
Physically Inactive
52.9%



Overweight & Obesity
75.2%

Trend in Prevalence of Depression

in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= median
PR= Age adjusted



PR-BRFSS, 2011-2021



CURRENT ASTHMA

Adults 18+



11 of 100

Adults in PR living with current asthma (11.4%)

~312,101



Common characteristics:

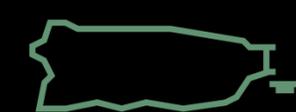


Women
14.3%

55-64 years
14.2%



Less Income (<\$15,000)
15.2%



Arecibo & Caguas Region
12%



Widowed
15.5%



Retired/
Disable
13.6%

Housekeeper
13.3%



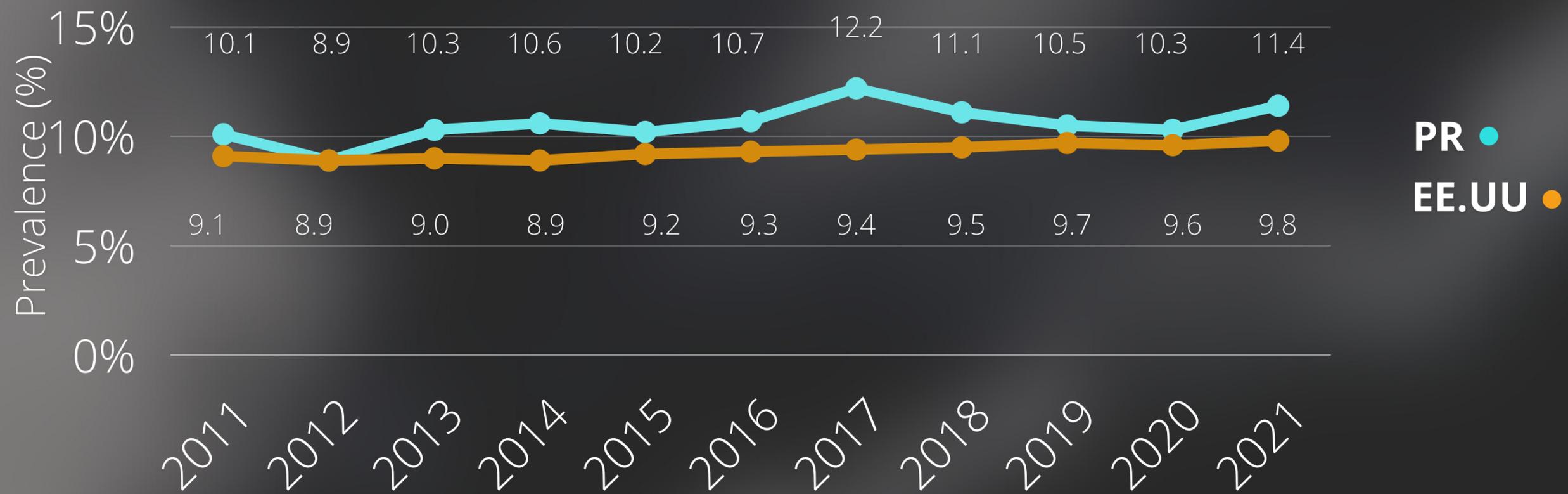
Physically Inactive
57.4%



Overweight & Obesity
83.1%

Trend in Prevalence of Current Asthma

in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= median
PR= Age Adjusted



HEART DISEASE

Adults 18+

Include Heart Attack &
Coronary Heart Disease

84%

Adults in PR living with heart disease

~230,381



Elderly (65+)
17.0%



Less Education (<=12mo)
11.2%



Less Income (<\$15,000)
12.5%



Caguas Region
9.9%



Widowed
12.9%



Retired/ Disable
17.5%



Physically Inactive
53.1%

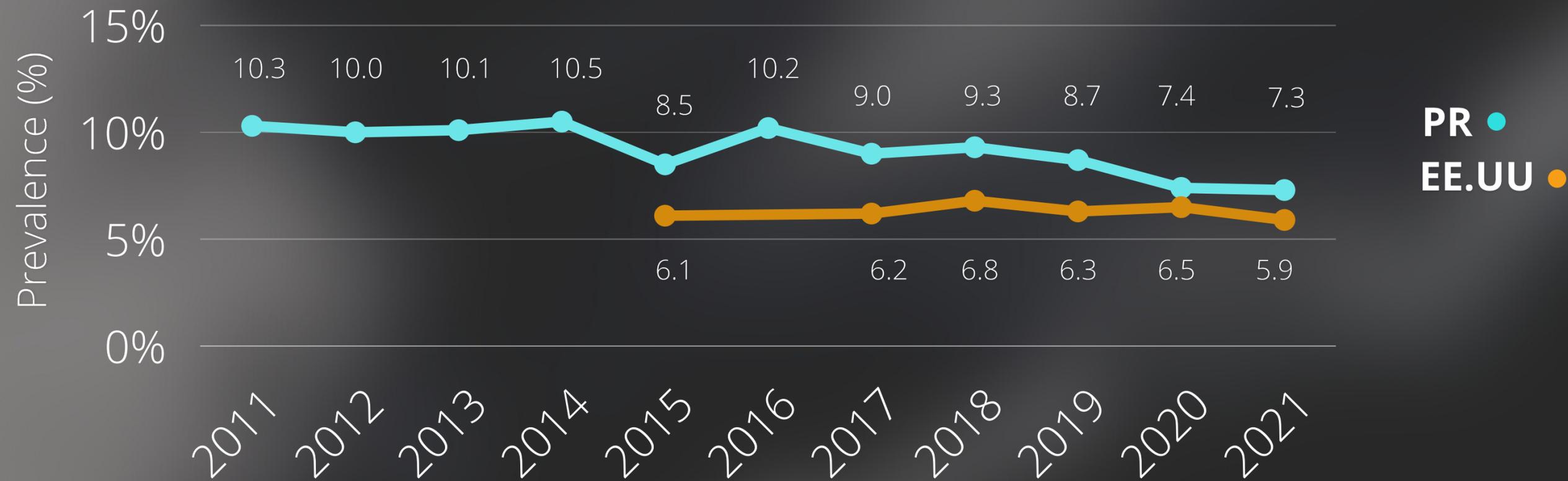


Overweight & Obesity
81.5%

Common characteristics:

Trend in Prevalence of Heart Disease

in Puerto Rico vs. United States in adults (18+), 2011-2021





CANCER

Adults 18+

Incidence and mortality by cancer in Puerto Rico, 2014-2018

Figure 2. Top ten cancer sites (incidence) by sex: Puerto Rico, 2014-2018

♂ Male (N = 38,224)	%	APC ²⁰⁰⁰⁻²⁰¹⁸	♀ Female (N = 34,911)	%	APC ²⁰⁰⁰⁻²⁰¹⁸
Prostate	37.3	-0.2	Breast	28.9	↑ 1.6*
Colon and rectum	12.0	0.1	Colon and rectum	11.2	-0.1
Lung and bronchus	5.6	↓ -0.9*	Thyroid	11.0	↑ 10.1*
Urinary bladder	4.1	0.1	Corpus and uterus, NOS	9.0	↑ 4.7*
Non-Hodgkin Lymphoma	4.1	↑ 2.5*	Lung and bronchus	4.0	0.5
Oral cavity and pharynx	3.8	↓ -0.7*	Non-Hodgkin Lymphoma	3.9	↑ 2.5*
Liver and bile duct	3.3	↑ 1.9*	Cervix uteri	3.1	↑ 1.8*
Kidney and renal pelvis	3.0	↑ 4.2*	Leukemia	2.5	↑ 2.9*
Leukemia	2.9	↑ 2.3*	Ovary	2.4	↑ 1.0*
Thyroid	2.5	↑ 10.3*	Pancreas	2.3	↑ 3.0*
Other sites	21.4		Other sites	21.9	

Statistics were generated for malignant tumors only; includes urinary bladder cancer *in situ*. Data Source: Incidence Case File from the Puerto Rico Central Cancer Registry, March 23, 2021.

Figure 3. Top ten cancer sites (mortality) by sex: Puerto Rico, 2014-2018

♂ Male (N = 14,497)	%	APC ²⁰⁰⁰⁻²⁰¹⁸	♀ Female (N = 11,544)	%	APC ²⁰⁰⁰⁻²⁰¹⁸
Prostate	16.7	↓ -3.1*	Breast	18.9	-0.4
Colon and rectum	13.6	-0.5	Colon and rectum	13.3	↓ -1.2*
Lung and bronchus	12.3	↓ -2.3*	Lung and bronchus	9.2	↓ -1.5*
Liver and bile duct	7.4	0.0	Pancreas	6.0	0.9
Pancreas	5.9	↑ 1.6*	Corpus and uterus, NOS	5.3	0.7
Stomach	3.8	↓ -5.0*	Liver and bile duct	4.7	↓ -1.5*
Leukemia	3.5	↓ -1.3*	Ovary	4.5	-0.2
Oral cavity and pharynx	3.4	↓ -2.9*	Leukemia	3.7	↓ -1.3*
Non-Hodgkin Lymphoma	3.1	↓ -1.3*	Stomach	3.4	↓ -4.3*
Esophagus	3.0	↓ -4.3*	Myeloma	2.8	-0.5
Other sites	27.2		Other sites	28.2	

Data Source: Mortality Case File provided by the Demographic Registry of Puerto Rico, October, 2019.



RISK FACTORS

Modifiable

Adults 18+



Overweight and Obese

adults (18+) in PR, 2021

2 of 3

Adults in PR living with
overweight or obese (69.5%)

~1,902,152



According to WHO:

Obesity and overweight:
defined as the excessive or
abnormal accumulation of fat
in the body, which may result
in impairment of health.



- Overweight: BMI 25.0 a 29.9
- Obesity: BMI at least 30.0



Trend in Prevalence of Overweight and Obese in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= mediana
PR= Ajustada por edad

Physical inactivity

adults (18+) in PR, 2021

Physical inactivity is the term used to identify people who do not perform the recommended level of physical activity.



Adults in PR are physically inactive (46.0%)

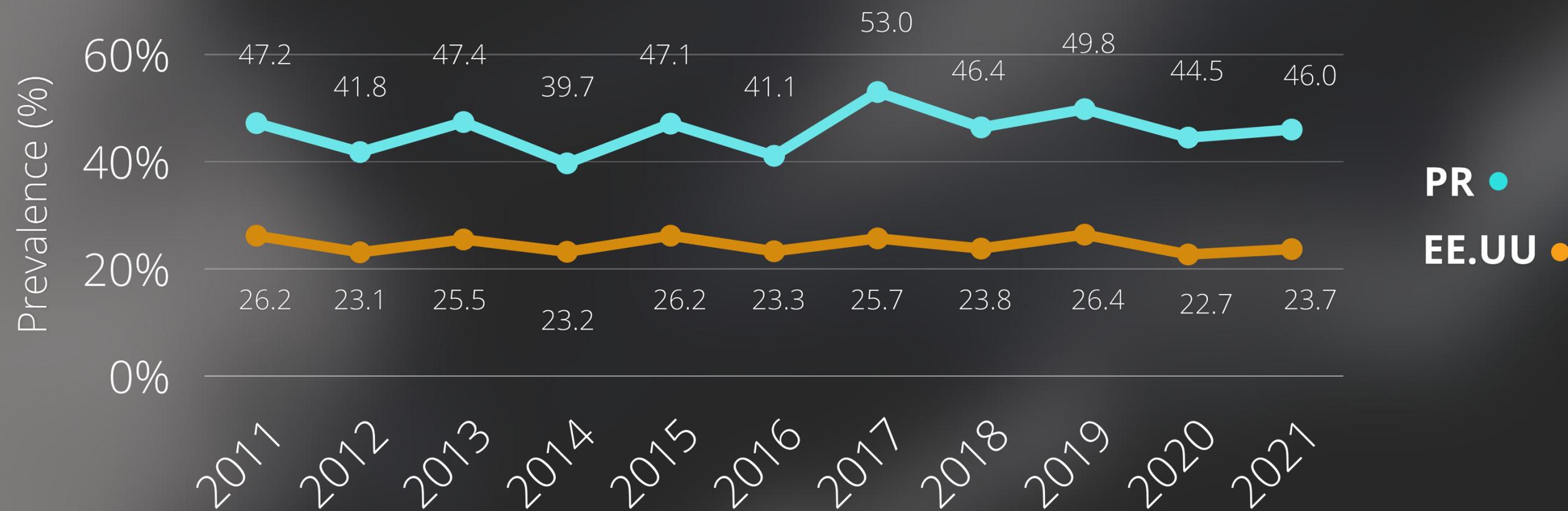
~1,260,150

Physical activity: if during the past 30 days, the person has not participated in any physical activity or exercise such as running, calisthenics, golf, mowing the lawn, walking or other exercise activity.



Trend in Prevalence of Physical Inactivity

in Puerto Rico vs. United States in adults (18+), 2011-2021



*EE.UU= median
PR= Age Adjusted

1 of 2

Adults in PR eat less than one fruit per day (48.9%)

~1,267,645



Common characteristics:



18-24 years (59.1%)



Men (52.7%)



High School or more (51.0%)



\$15,000- 24,999 (51.9%)



Never Married (55.3%)



Unemployed (52.5%)



1 of 2

Adults in PR eat less than one vegetable per day (46.6%)

~1,197,753



18-24 years
(53.9%)

Women (47.8%)



Low education
(52.7%)



Low income
(51.3%)



Widowed (54.7%)



Homemaker/student
(54.2%)

Common characteristics:

Tobacco Use

adults (18+) in PR, 2021

1 of 10

Adults smoke in PR (9.1%)

~245,545

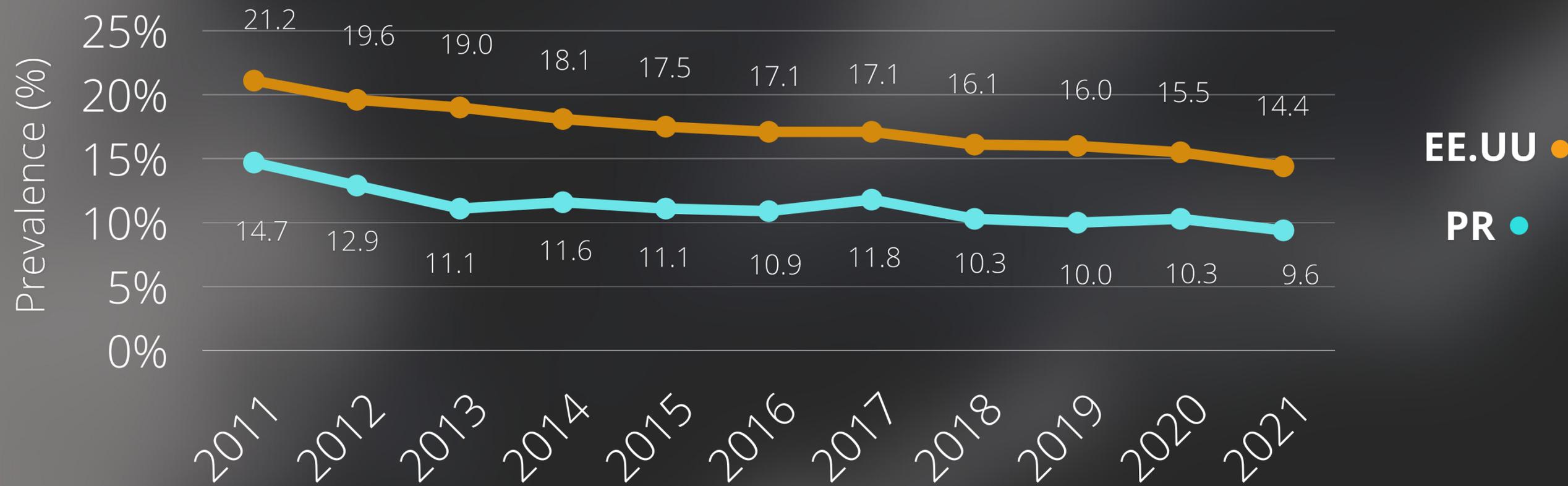
Main preventable risk factor associated with mortality and disease.



•Reported use of 100 cigarettes during their lifetime and currently smoked

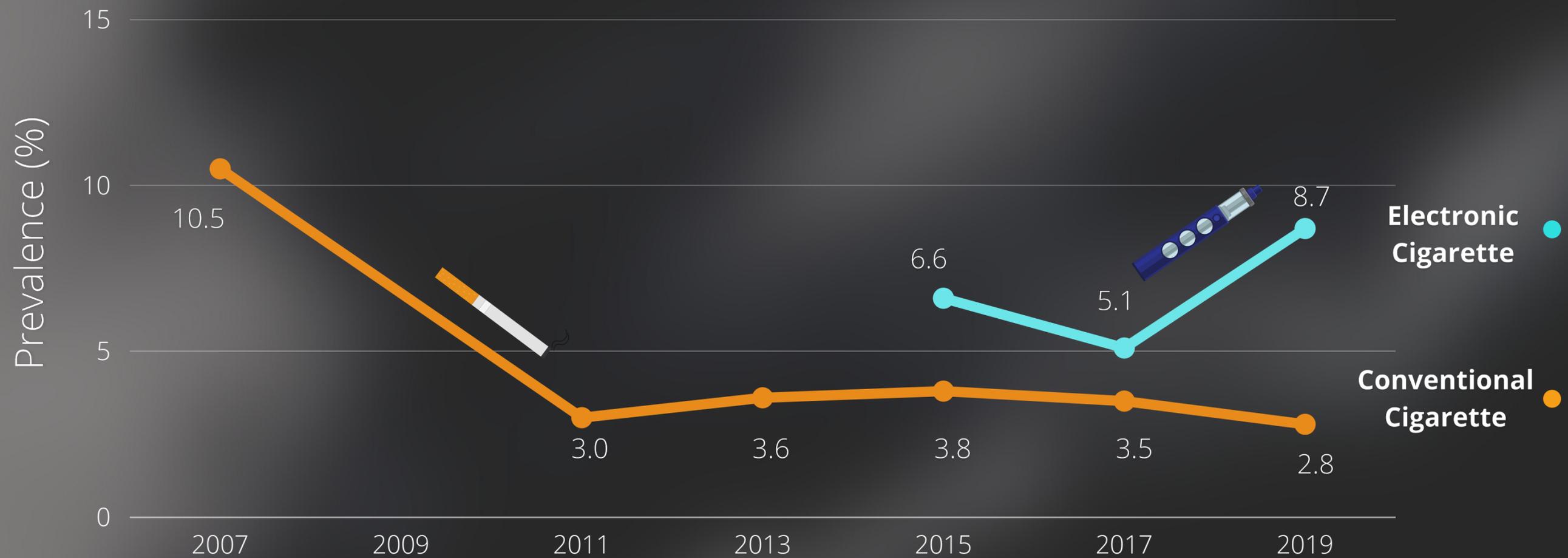
Trend in Prevalence of Tobacco Use

adults (18+) in Puerto Rico vs. United States, 2011-2021



*EE.UU= median
PR= Age Adjusted

Prevalence trend of Regular and Electronic cigarette in Youth (9th-12th) in Puerto Rico, 2007-2019



Conclusion



- For more than three decades, chronic diseases have been the leading causes of death in PR.

- More than half (58%) of adults in PR live with at least one chronic disease.

- A large part of the population of Puerto Rico is inactive and overweight or obese. They are at risk of developing chronic diseases and/or limiting the management and control of these diseases.

- Importance of addressing new public health challenges (increase in electronic cigarettes, COVID-19) and social determinants of health (lower income, lower education, etc.).

- Due to the significant burden of chronic noncommunicable diseases in Puerto Rico, it is necessary to implement evidence-based strategies that promote and facilitate the adoption of healthy lifestyles.

Department of Health Initiative



Diabetes Self-Management Program

Chronic Disease Self-Management Program

Prevent T2 Program

Asthma Home Visiting Program (Vias)

Open Airways for School

School Base Sealant Program

PR Quitline - ¡Déjalo Ya!

Public Policies (Ej. Act 63, ordenanzas, Act 40, Arbitrios)

Stress Busting Program

Tobacco Brief Interventions

Educational Campaigns

Quality Improvement Projects

Alliance & Coalitions

Surveillance Products

INFORME DE ENFERMEDADES CRÓNICAS

PUERTO RICO 2016-2017

Departamento de Salud
Secretaría Auxiliar para la Promoción de la Salud

DPCCD

2019-2020

INFORME DE RECLAMACIONES DE SERVICIOS DE DIABETES EN BENEFICIARIOS DEL PLAN DE SALUD DEL GOBIERNO DE PUERTO RICO

Diabetes

Programa para la Prevención y Control de Diabetes
División de Promoción de la Salud
Secretaría Auxiliar de Salud Familiar,
Servicios Integrados y Promoción de la Salud

PREPARADO POR:
Sistema de Vigilancia de Enfermedades Crónicas

SALUD

DIABETES

PROYECTO MEJORA DE CALIDAD

DEPARTAMENTO DE SALUD

ABRIL 2022

USO DE TABACO

PUERTO RICO, 2020

58% han intentado dejar de fumar

1 de cada 10 adultos fuman en Puerto Rico. Esta prevalencia (9.3%) ha ido disminuyendo con los años.

≈ 268,515 adultos

Características más comunes de las personas que fuman son:

- Hombres
- Divorcado (s) / Separado (s)
- Menor Nivel Educativo
- 35-44 años
- Menor Ingreso Económico
- Región de Salud de Aguadilla/Hoyogues/Desempeñados (s)

Enfermedades Crónicas y factores de riesgo más comunes en las personas que fuman son:

- Hipertensión
- Colesterol elevado
- Arteritis
- Depresión
- Sobrepeso y obesidad
- Inactividad física

¡DÉJALO YA! 1-877-335-2567

Fuente: BPHS 2018 & 2020, CENSA 2019, Censo 2020, Departamento de Salud, Programa del Sistema de Vigilancia de Enfermedades Crónicas, Programa de Control de Tabaco

SALUD

CONOCE TU POBLACIÓN DE ADULTO MAYOR

PUERTO RICO, 2020

81% de los adultos mayores viven con al menos una **Enfermedad Crónica**

31% de la población en Puerto Rico son adultos mayores de 60 años o más.

≈ 880,683

Características más comunes de la población de adultos mayores son:

- Mujeres
- Casado(s)
- Menor nivel educativo
- Menores ingresos propios
- Retirado
- Seguro social
- Menor ingreso económico
- Medicare
- Hipertensión
- Colesterol elevado
- Arteritis
- Diabetes
- Depresión
- Demencia
- Sobrepeso y obesidad
- Inactividad física

7 LAS PRIMERAS CAUSAS DE MUERTE EN LA POBLACIÓN DE ADULTOS MAYORES EN PUERTO RICO EN EL PRIMER SEMESTRE DE 2020

¡POR UN ENVEJECIMIENTO SALUDABLE!

Fuente: BPHS 2018 & 2020, CENSA 2019, Censo 2020, Departamento de Salud, Programa del Sistema de Vigilancia de Enfermedades Crónicas, Programa de Envejecimiento Saludable

SALUD

LO QUE TODOS DEBEN SABER SOBRE EL TABAQUISMO EN PUERTO RICO

2021

PPCEC

SALUD

Alzheimer

Y OTRAS DEMENCIAS EN PUERTO RICO

El Alzheimer es la forma más común de demencia y su incidencia aumenta con la edad.

Aumento.

En Puerto Rico, las personas diagnosticadas y las muertes por la Enfermedad de Alzheimer han ido en aumento.

4 es la causa de muerte en Puerto Rico para el 2019, mientras que para el 2009 era la 14ta causa. Esto representa cerca de 2,500 muertes en el 2019.

12.5% de la población de 65 años o más en Puerto Rico vive con Alzheimer.

3 personas afectadas por cada persona con la enfermedad.

83% de la fuerza de trabajo de familiares, amigos u otros cuidadores no remunerados.

\$355 millones costará el Alzheimer y otras demencias a los Estados Unidos en el 2021.

\$373,527 el costo total estimado de por vida de la atención de una persona con demencia en los Estados Unidos.

¡Visita tu médico!

Un diagnóstico temprano permite un mejor acceso a tratamientos, planificación de cuidados y mejor manejo de la enfermedad.

DEPARTAMENTO DE SALUD

Diabetes

PUERTO RICO, 2020

DIABETES MUNDIAL

En el 2020, aproximadamente 537 millones adultos (20-79 años) viven con diabetes en el mundo. Se espera que para el 2030 este número aumente a 645 millones. Sin embargo, 1 de cada 2 adultos con diabetes no están diagnosticados (232 millones); la mayoría de diabetes tipo 2. Más del 50% de los casos de diabetes tipo 2 pueden prevenirse. Por otro lado, dependiendo de la región, hasta el 90% de las personas diagnosticadas con COVID-19 viven con diabetes. (Federación Internacional de Diabetes & IDF Diabetes Atlas)

DIABETES PUERTO RICO

En el 2020, se estimó que el 15.8% (429,720) de los adultos de la población de Puerto Rico (PR) viven con diabetes. En otras palabras, aproximadamente 2 de cada 13 adultos tiene diabetes en PR. Al compararlo con los Estados Unidos (EE.UU.) para el 2020, PR tiene una prevalencia (ajustada por edad) de 15.3%, mientras que EE.UU. fue de 10.6% (basada en la prevalencia) (PR 2015-2020)

MORTALIDAD

A nivel mundial, la diabetes es responsable de aproximadamente 6.7 millones de muertes en el 2020. Las principales causas de muerte en PR son enfermedades crónicas. En el 2019, la diabetes ocupó la tercera causa de muerte en la isla, lo que representa que aproximadamente 41 adultos por cada 100,000 habitantes murieron por esta enfermedad. (Registro Demográfico 2019)

MUNDO 537 millones

PUERTO RICO 15.8% de los adultos

CAUSA MUERTE 3^{ra} causa de muerte en el 2019

429,720 adultos en Puerto Rico viven con diabetes (2020)

2 de cada 13 adultos en Puerto Rico viven con Diabetes (2020)

DEPARTAMENTO DE SALUD

ORAL HEALTH CLAIMS

IN PUERTO RICO 2016-2019

OPCEC

ORAL HEALTH PROGRAM

ABRIL 2021

DEPARTAMENTO DE SALUD

Evaluación de la implementación de la Ley Núm. 63 del 2017 y el impacto en las reclamaciones de servicios de salud oral en la población de 1 a 16 años del Plan de Salud de Gobierno de Puerto Rico.

EXTRACTO

INTRODUCCIÓN

METODOLOGÍA

CONCLUSIÓN

REFERENCIA

DEPARTAMENTO DE SALUD



Chronic Disease Surveillance System



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