



MINISTRY
of
HEALTH

NCDS and the COVID 19 Pandemic

Twentieth Meeting of the Monitoring Committee of the Caribbean Development and Cooperation Committee of ECLAC” Development and Cooperation Committee of the Economic Commission for Latin America and the Caribbean

November 4, 2021 -Francis Morey MD.MPH
Belize



Office of the Director of Health Services





Content

- Country context and NCD health profile by regions
- Describe the current context of the pandemic and status of NCDs
- NCDs and death due to COVID 19
- Introduction of the Delta
- Gaps in NCDs Care

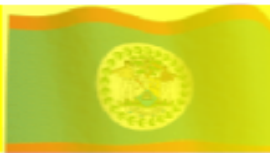
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Country Profile



- ❖ Area: 22,965 sq. km (8,867 sq. miles)
- ❖ 6 districts; 4 health regions
- ❖ Only English Speaking country in Central America
- ❖ Multi-ethnic population (Creole, Mestizo, Garifuna, Maya, East Indian, Mennonites, Chinese, Taiwanese)



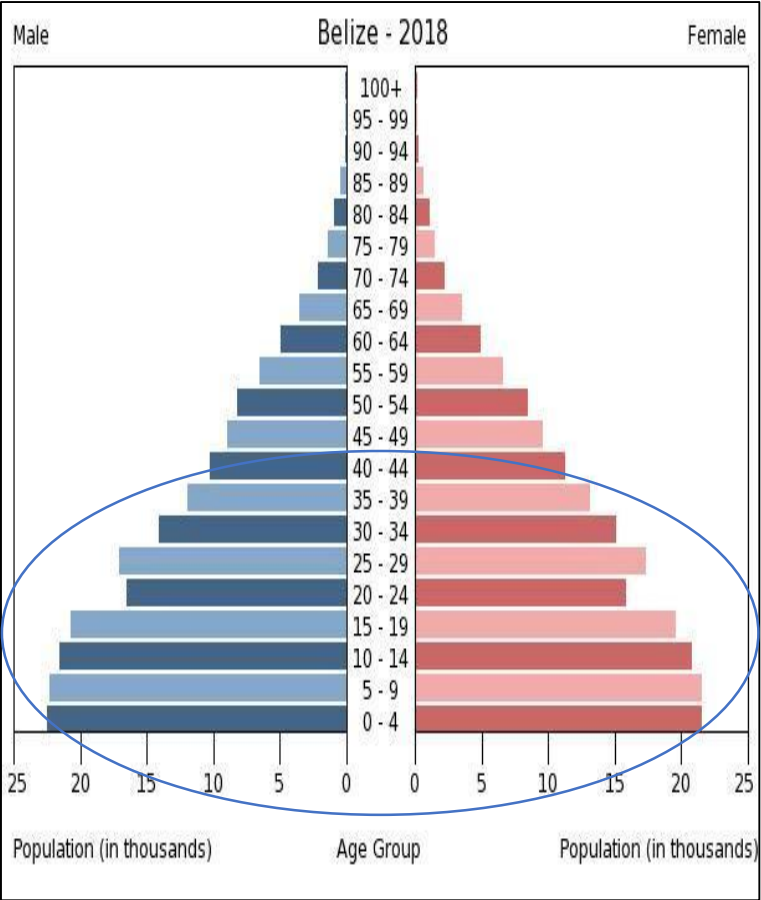
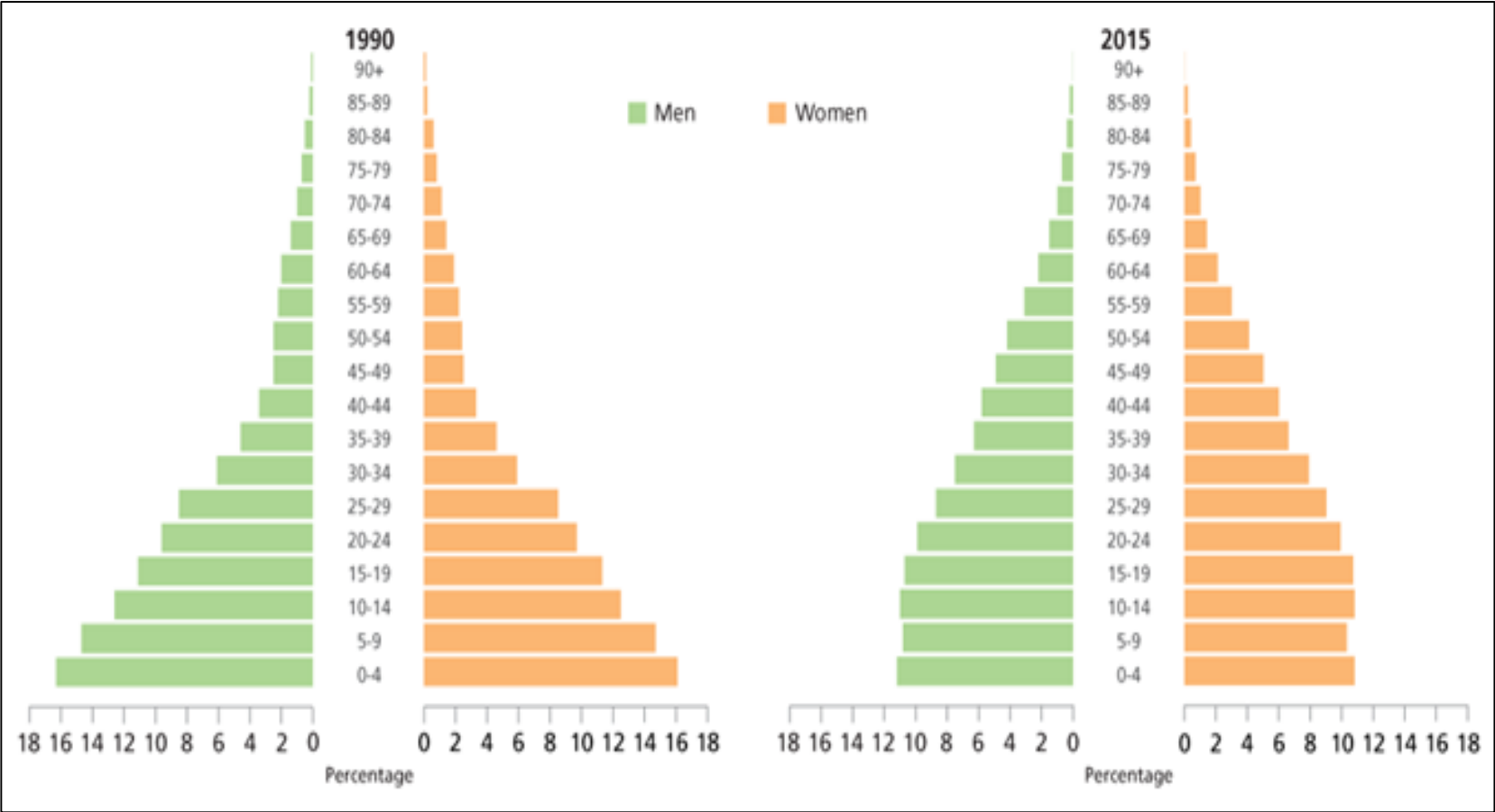
- **Health Regions**
 - Northern Region
 - Corozal
 - Orange Walk
 - Central Region
 - Belize
 - Western region
 - Cayo District – Belmopan, San Ignacio
 - Southern Region
 - Stann Creek
 - Toledo
- **42 health facilities**
 - 1 National Referral Hospital
 - 3 Regional Hospital
 - 3 Community Hospital
 - 8 NHI clinics
 - 5 Major Private Hospitals



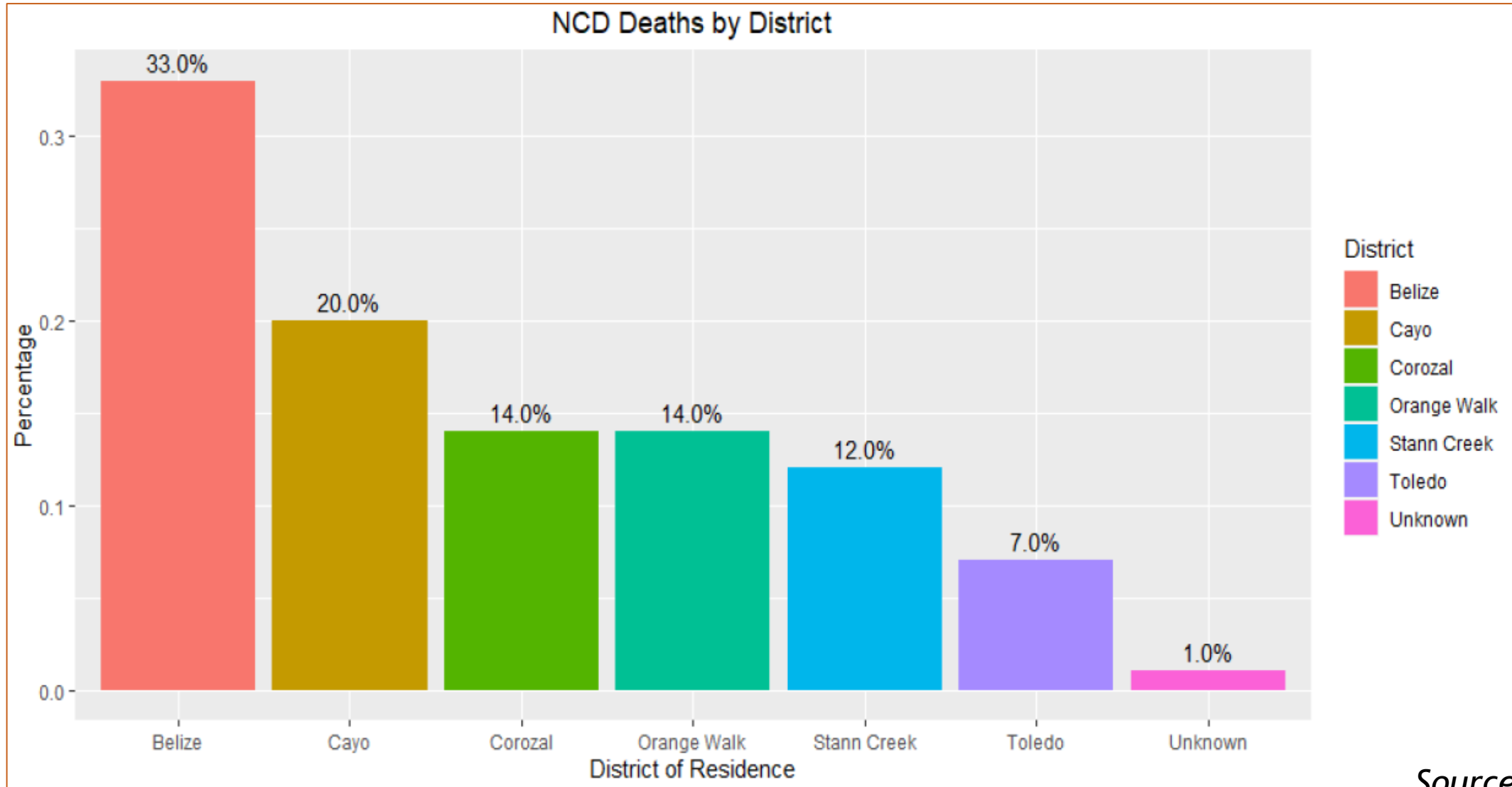
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Belize Population Pyramid:



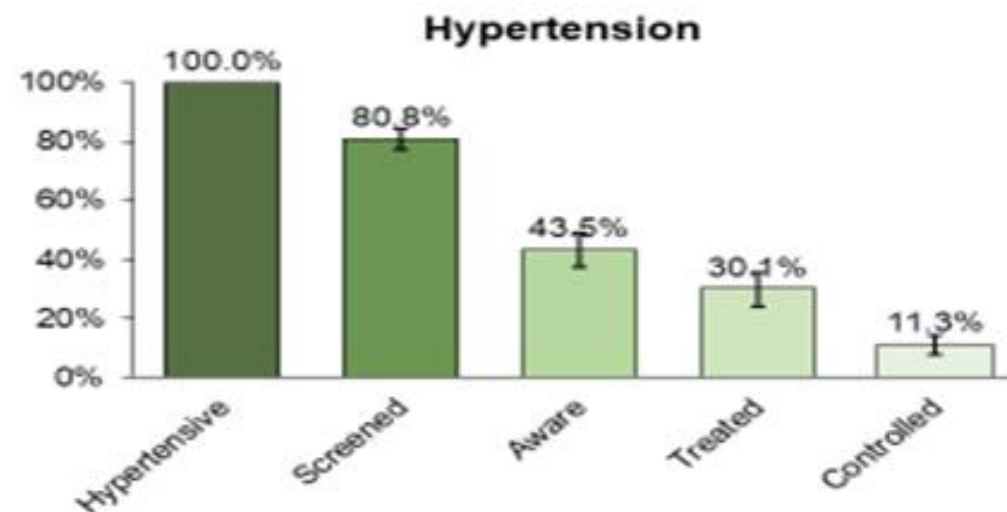
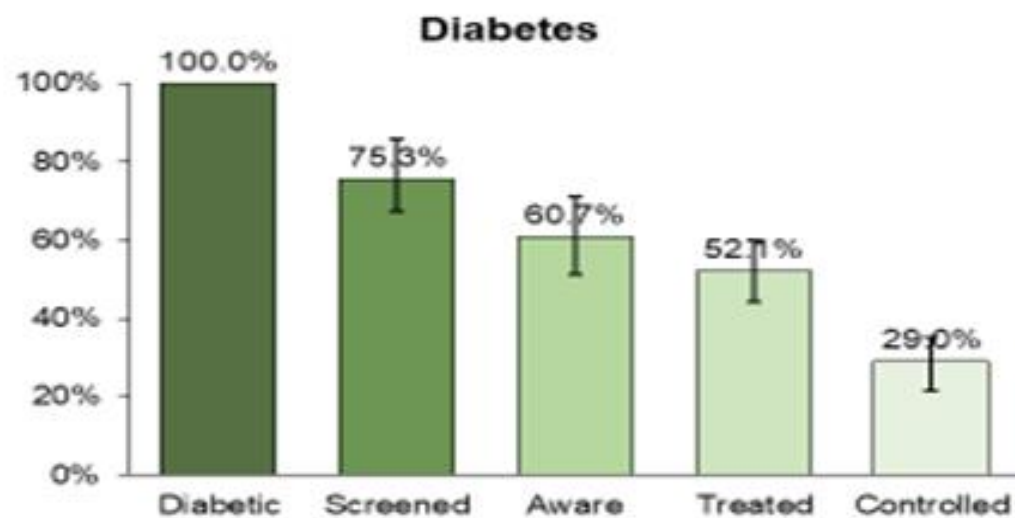
NCDS PRE-COVID



Source: Epi Unit
MOHW

Diabetes /HTN Cascade

Belize



Key Findings CKD Survey

- ▶ The prevalence of CKD among citizens aged 20-55 years was 13.9% (Weighted).
- ▶ Female (15.0%) has higher prevalence of CKD than male (12.5%).
- ▶ Older age is associated with higher prevalence of CKD: The highest prevalence of CKD is among age group 50-55 years old.
- ▶ The major ethnicity group, Mestizo/Hispanic, shows higher prevalence of CKD (15.5%).
- ▶ Residents in Orange Walk and Corozal shows higher prevalence of CKD (19.3% and 17.0%, respectively).
- ▶ Potential risk factors associated with CKD in Belizean citizens aged 20-55 years include:
 - ▶ Age, Ethnicity (Mestizo/Hispanic), Diabetes, Hypertension, Hyperlipidemia, Obesity.
- ▶ Lifestyle behaviors and medication use do not show association between CKD in this survey.
- ▶ Female sex and obesity are highly correlated in this survey:
 - ▶ Obesity might be the reason why female participants show higher prevalence of CKD.

Cancer Types 2020:



Cancer Type	Female	Male	Total	%
Cancer of the Breast	56	1	57	16.8
Cancer of an Unspecified Nature	18	17	35	10.1
Cancer of the Cervix	34	0	34	10
Cancer of the Prostate	0	20	20	5.9
Cancer of the Head and Neck	9	11	20	5.8
Cancer of the Stomach	4	15	19	5.6
Cancer of the Bronchus and Lungs	3	13	16	4.7
Cancer of the Colon	9	7	16	4.7
Leukaemia	6	10	16	4.7
Cancer of the Uterus	10	0	10	2.9
Cancer of the Brain and Nervous System	4	5	9	2.7
Non-Hodgkin's Lymphoma	2	7	9	2.7
Secondary Malignancies	7	2	9	2.7
Cancer of the Kidney and Renal Pelvis	3	4	7	2.1
Cancer of the Rectum and Anus	1	5	6	1.8
Other Female Genital Organ	0	6	6	1.8
18 other Cancers	31	20	51	15
Total	197	143	340	100.0

Source: Epi Unit

Female		
Leading Causes of Death: 2020		
	Total	%
Total	868	100.0
Diseases of heart	142	16.4
Malignant neoplasms	122	14.1
Diabetes mellitus	100	11.5
COVID-19	85	9.8
Cerebrovascular diseases	53	6.1
Human immunodeficiency virus (HIV) disease	38	4.4
Essential hypertension and hypertensive renal disease	38	4.4
Influenza and pneumonia	27	3.1
Certain conditions originating in the perinatal period	22	2.5
Chronic liver disease and cirrhosis	20	2.3
Top 10 Total	647	74.5
Signs, symptoms, and ill-defined causes	9	1.0
All other diseases (residual)	97	11.2
Total Other Causes	115	13.2

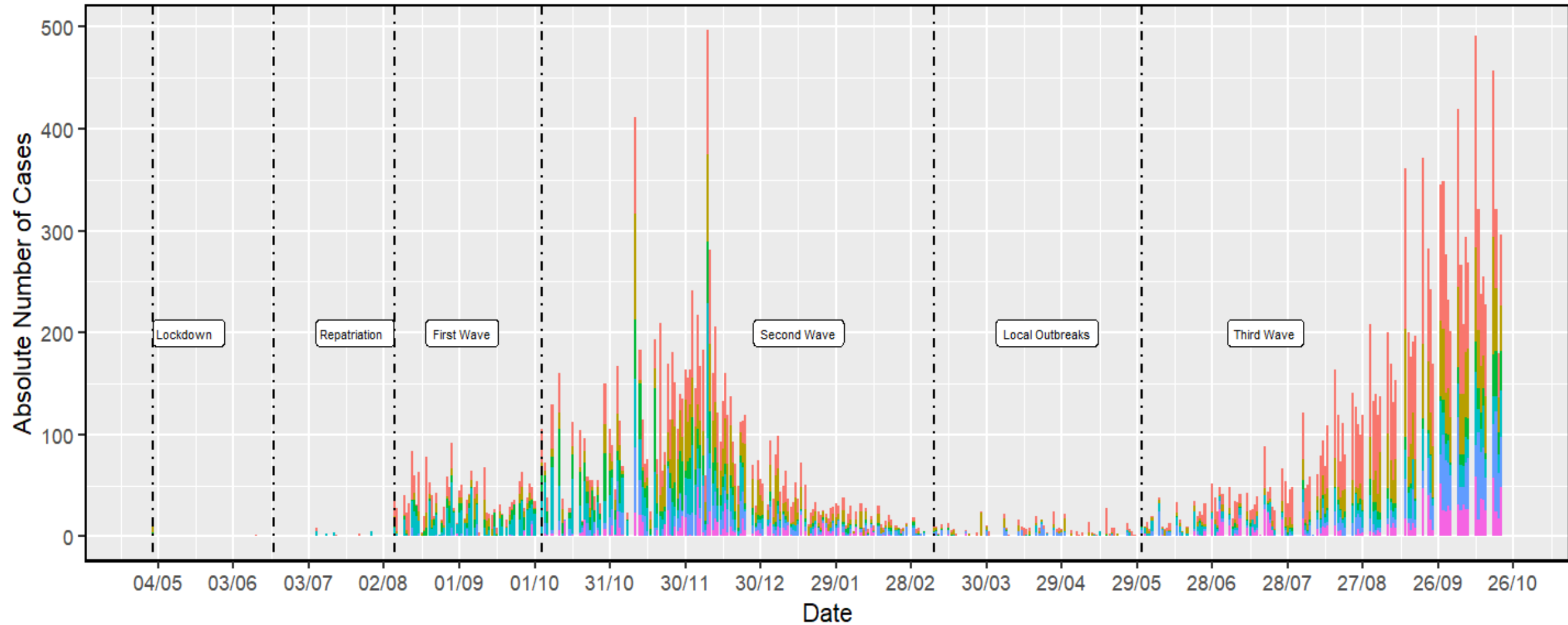
Male		
Leading Causes of Death: 2020		
	Total	%
Total	1,295	100.0
COVID-19	178	13.7
Diseases of heart	173	13.4
Malignant neoplasms	138	10.7
Assault (homicide)	100	7.7
Unintentional injuries	87	6.7
Diabetes mellitus	66	5.1
Human immunodeficiency virus (HIV) disease	56	4.3
Influenza and pneumonia	48	3.7
Chronic liver disease and cirrhosis	39	3.0
Certain conditions originating in the perinatal period	38	2.9
Top 10 Total	923	71.3
Signs, symptoms, and ill-defined causes	29	2.2
All other diseases (residual)	134	10.3
Total Other Causes	209	16.1

Total		
Leading Causes of Death: 2020		
	Total	%
Total	2,163	100.0
Diseases of heart	315	14.6
COVID-19	263	12.2
Malignant neoplasms	260	12.0
Diabetes mellitus	166	7.7
Assault (homicide)	110	5.1
Cerebrovascular diseases	98	4.5
Unintentional injuries	98	4.5
Human immunodeficiency virus (HIV) disease	94	4.3
Influenza and pneumonia	75	3.5
Essential hypertension and hypertensive renal disease	69	3.2
Top 10 Total	1,548	71.6
Signs, symptoms, and ill-defined causes	38	1.8
All other diseases (residual)	231	10.7
Total Other Causes	346	16.0

Introduction of COVID-current status

Covid-19 Cases in Belize by District

From 1st March 2020 - 21st Oct. 2021





COVID-19 CUMULATIVE REPORT

**312,994**

TOTAL TESTS

**2,325**

ACTIVE CASES

**273,634**TOTAL
NEGATIVE TESTS**9.07**POSITIVITY
RATE**300,939**TOTAL
PERSONS TESTED**220**UNDER
INVESTIGATION**499**

TOTAL DEATHS

**1.83**

FATALITY RATE

**27,305**TOTAL
CONFIRMED CASES**24,447**TOTAL
RECOVERIES**89.5**PERCENTAGE
RECOVERED

TOTAL

13,671

ACTIVE

1,183

RECOVERIES

12,284

DEATH

193

TOTAL

13,634

ACTIVE

1,142

RECOVERIES

12,163

DEATH

306#GETVACCINATEDBZE
0-800-664-2273



COVID-19 DAILY REPORT

**1,469**

NEW TESTS

**1,298**NEGATIVE
TESTS**220**UNDER
INVESTIGATION**10.9**POSITIVITY
RATE**1,457**

PERSONS TESTED

**32**

HOSPITALIZATIONS

**17**ICU
ADMISSIONS**227**NEW
RECOVERIES**159**CONFIRMED
CASES**4**

NEW DEATHS

**1.83**

FATALITY RATE



FEMALE

NEW

71

RECOVERIES

123

DEATH

1

MALE

NEW

88

RECOVERIES

104

DEATH

3

#GETVACCINATEDBZE
0-800-664-2273



COVID-19 DAILY REPORT



CUMULATIVE DEATHS

(SINCE SEPTEMBER 1, 2021 - NOVEMBER 2, 2021)

AGE

0-19

0

20-29



4

30-39



12

40-49



26

50-59



28

60-69



26

70-79



17

80+



25

*DATA AS OF 1:00 PM TODAY

UNVACCINATED

PARTIALLY VACCINATED

FULLY VACCINATED



#GETVACCINATEDBZE

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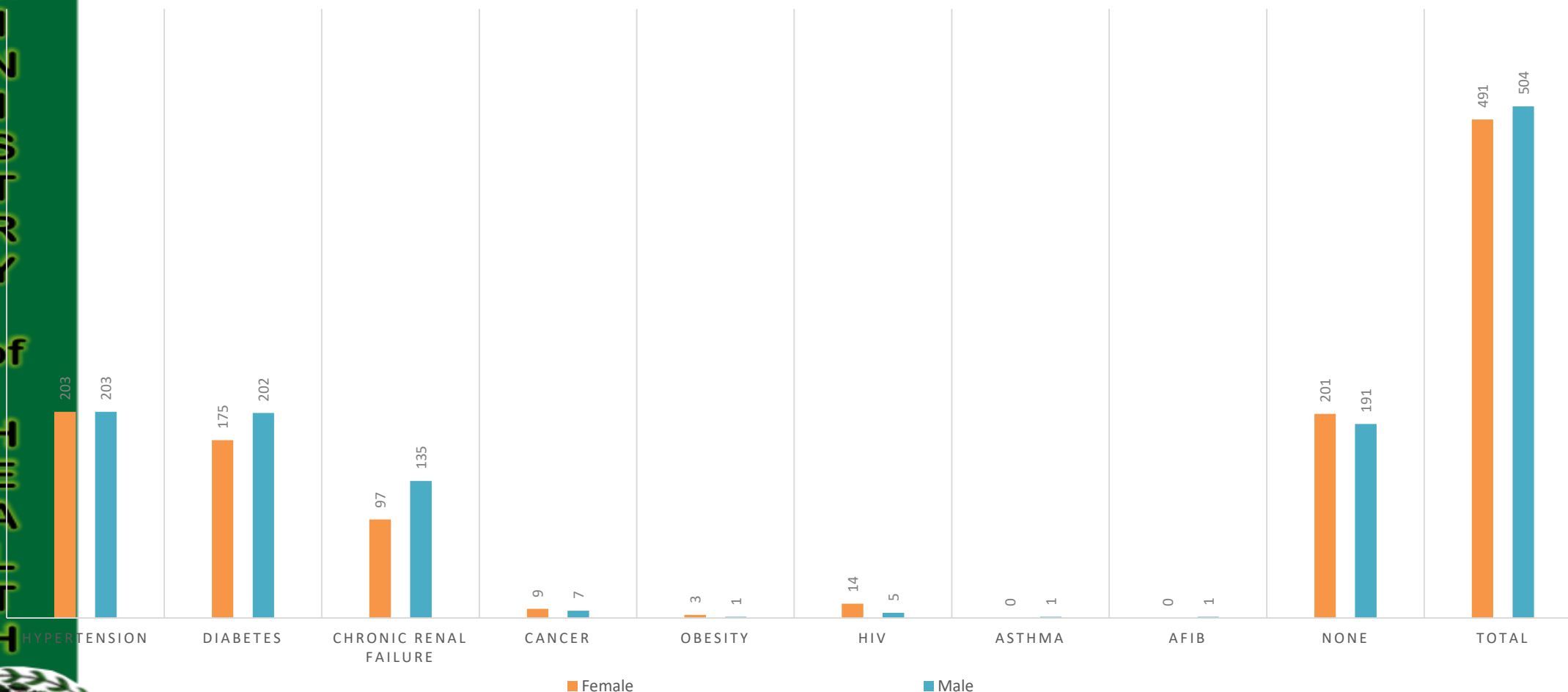
- COVID HOSPITALIZATIONS





TOTAL HOSPITALIZATIONS BY SEX AND CO-MORBIDITY, MARCH 2020 TO OCTOBER 25, 2021

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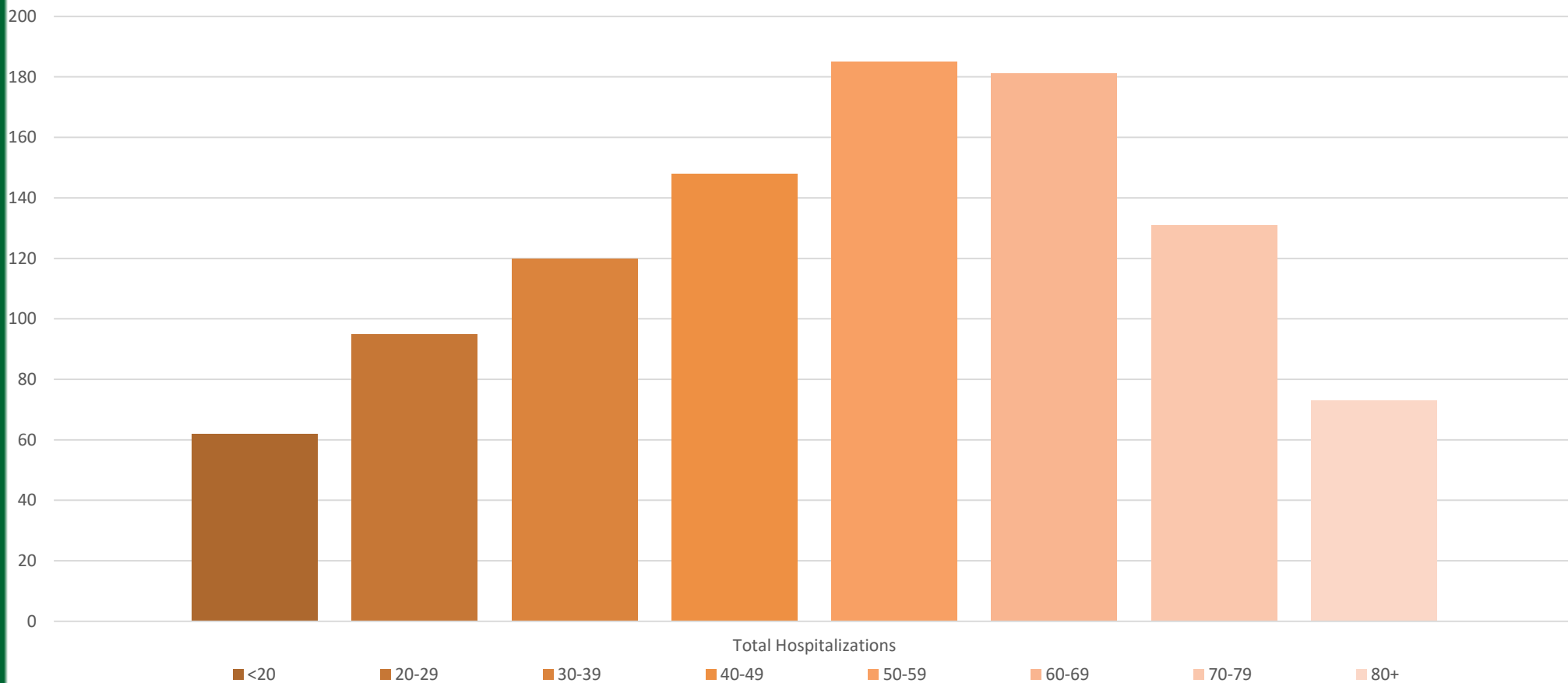
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COVID-19 Hospitalizations by Age Group, March 2020 - October 25, 2021

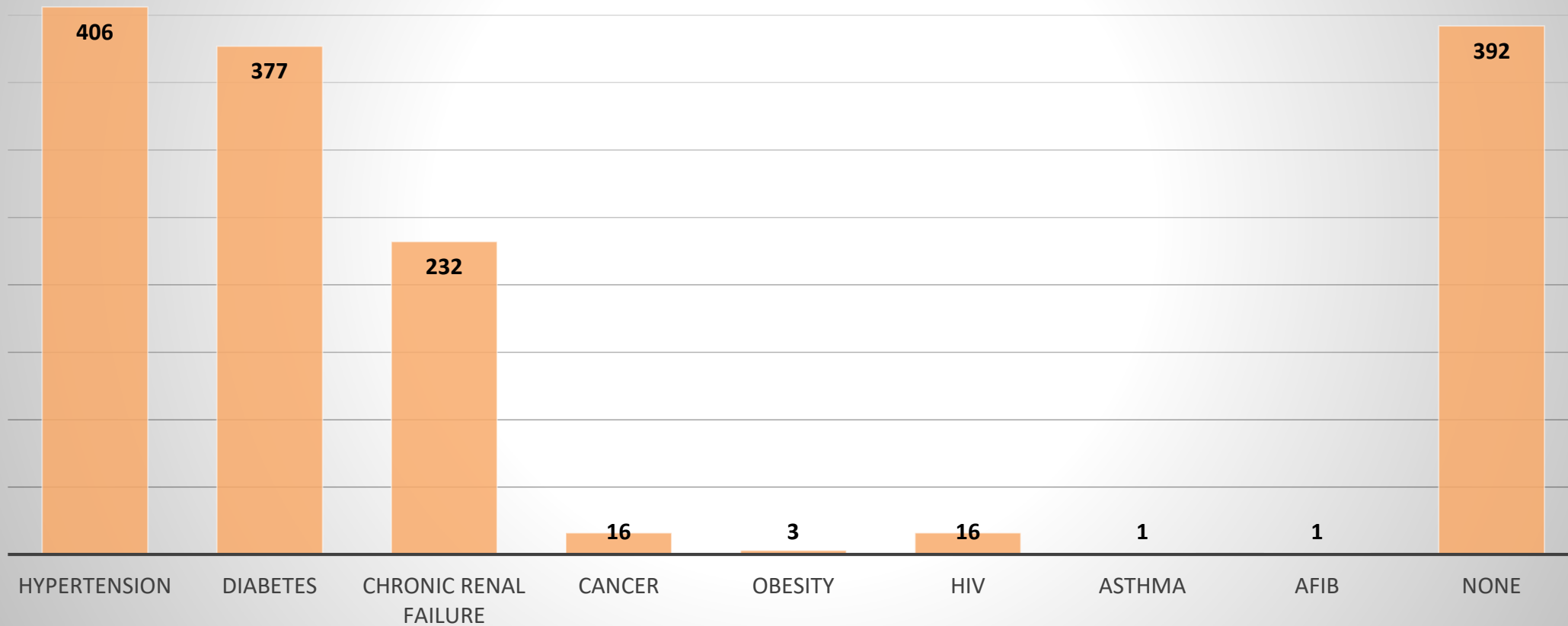


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COVID-19 Hospitalizations by Age Group and Co-morbidity, March 2020 - October 25, 2021



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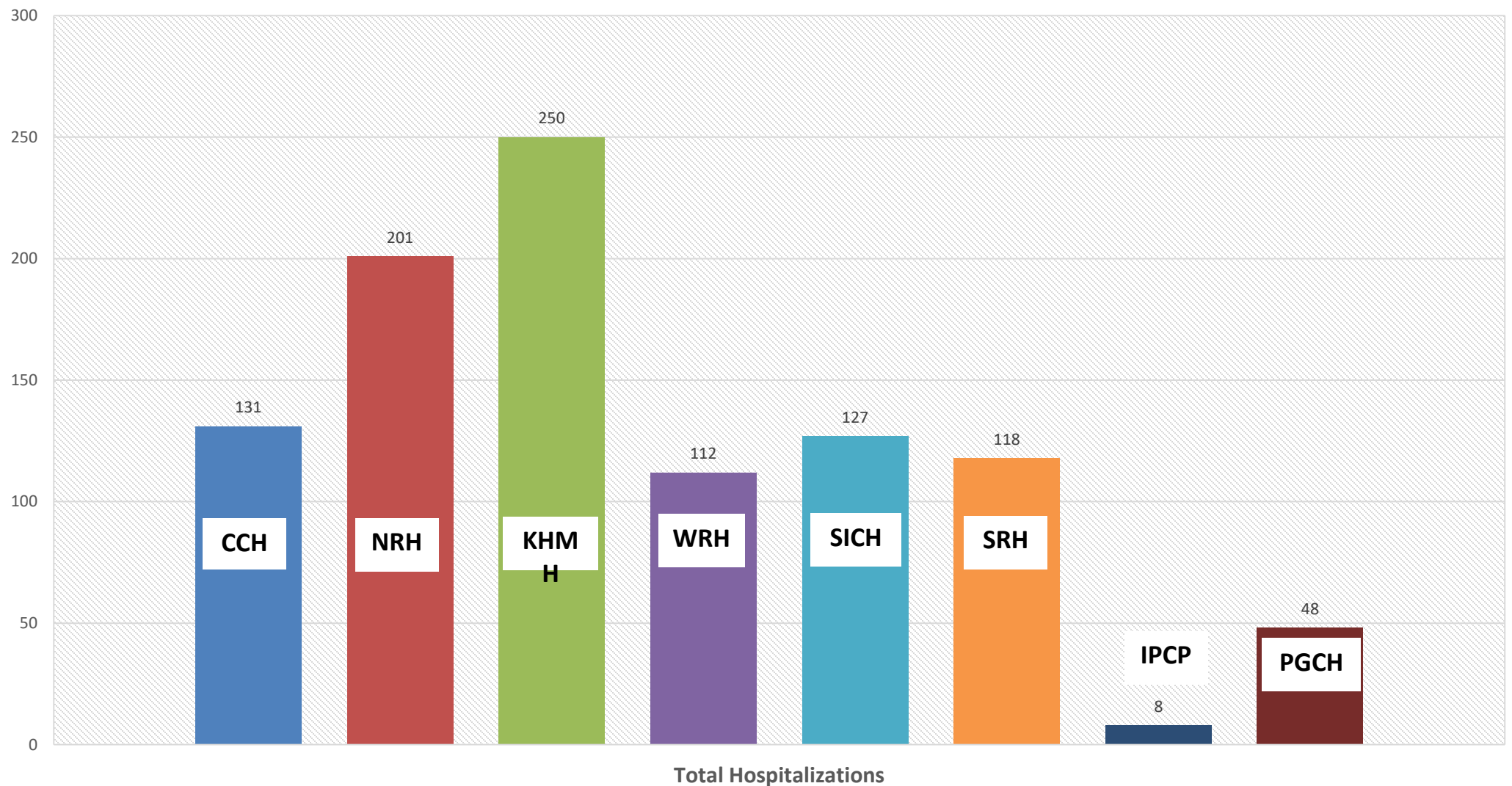




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COVID-19 Hospitalizations by Facility, March 2020 - October 25, 2021



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COVID Related Deaths

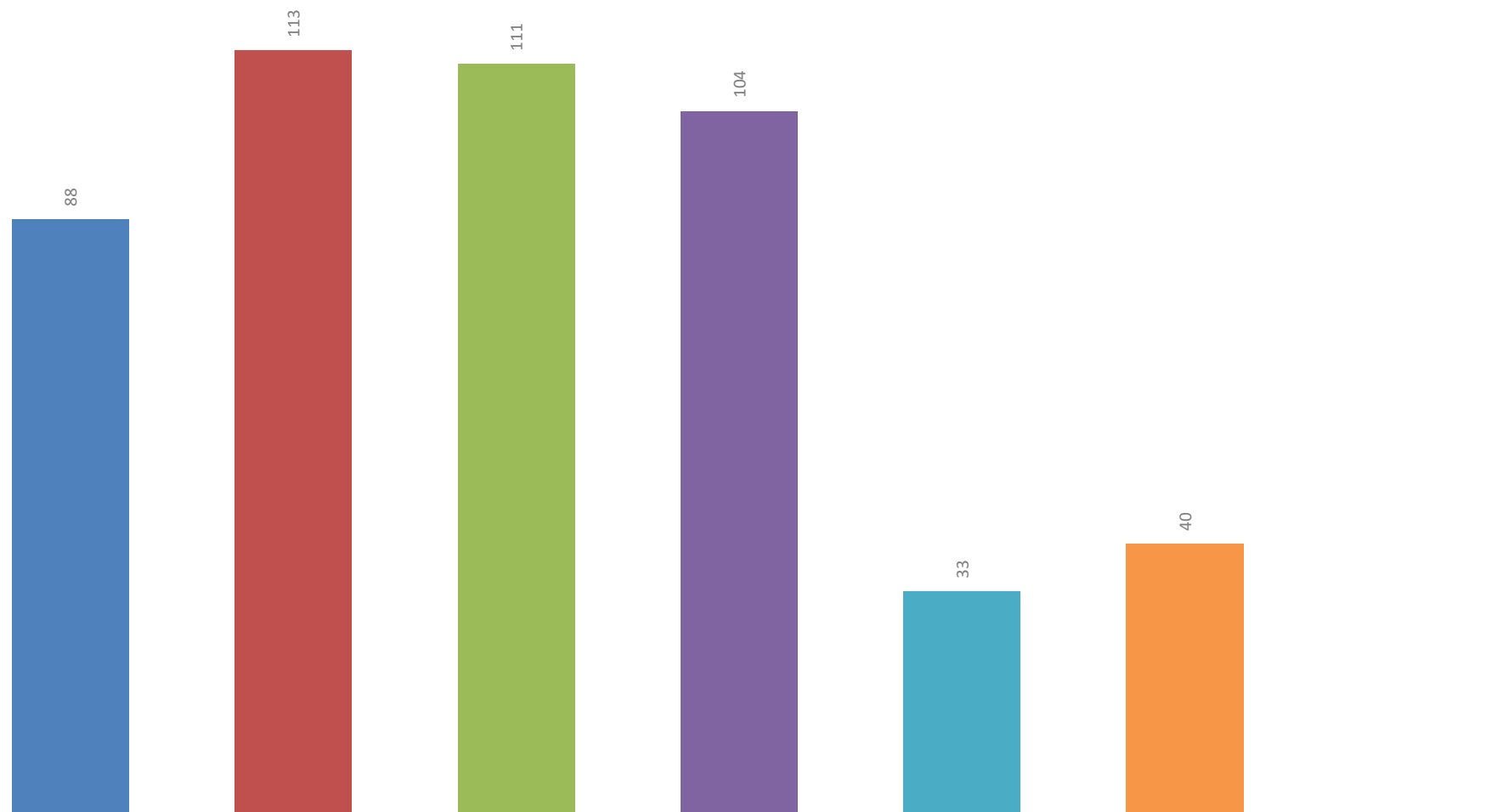
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TOTAL COVID DEATHS BY DISTRICT OF RESIDENCE, MARCH 2020 TO OCTOBER 25,

2021



TOTAL DEATHS

■ Corozal

■ Orange Walk

■ Belize

■ Cayo

■ Stann Creek

■ Toledo

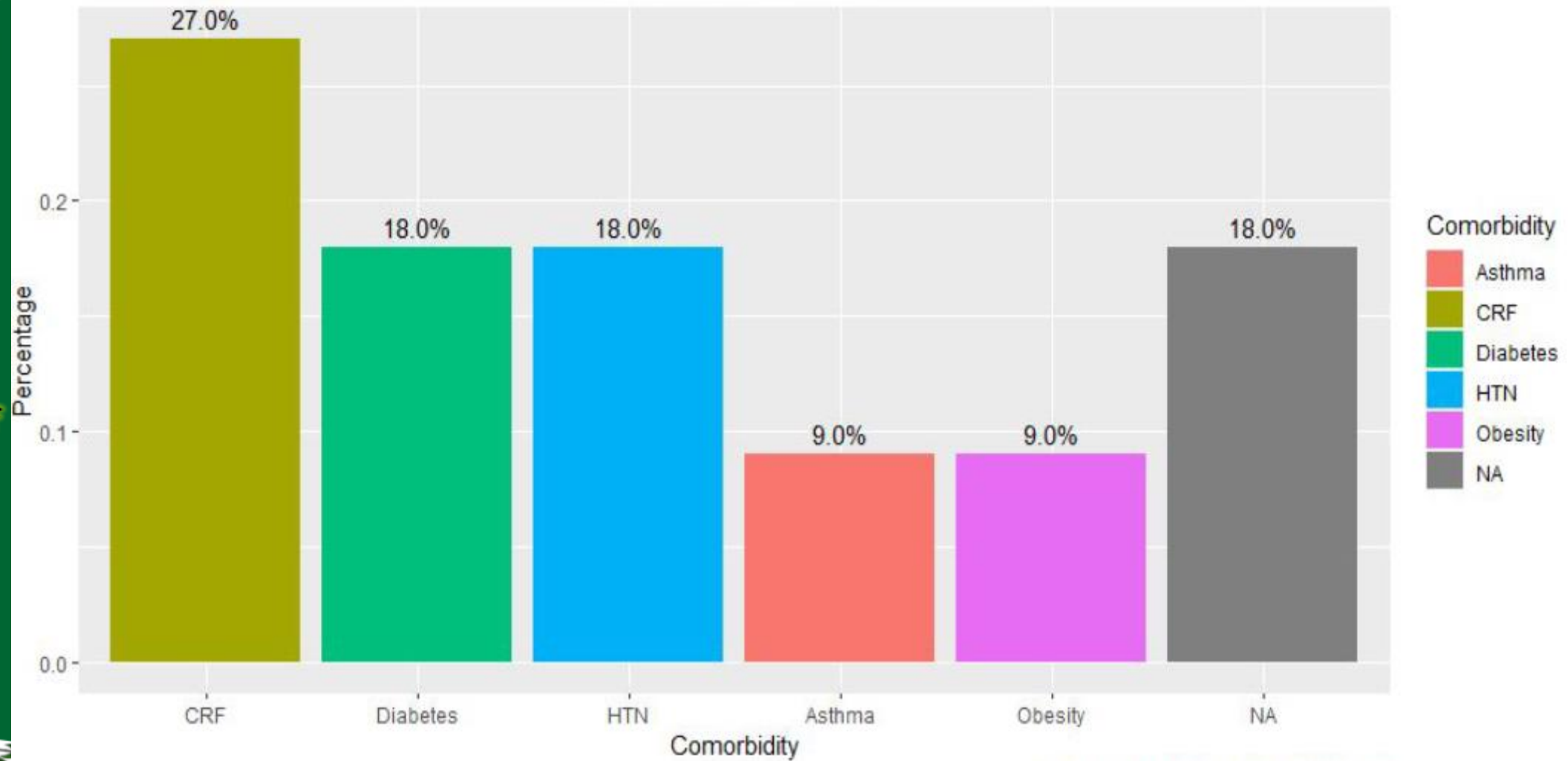
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Covid-19 Deaths Among the Partially Vaccinated

March - October 2021



Data from BHIS, Epi Unit, Belize MoHW



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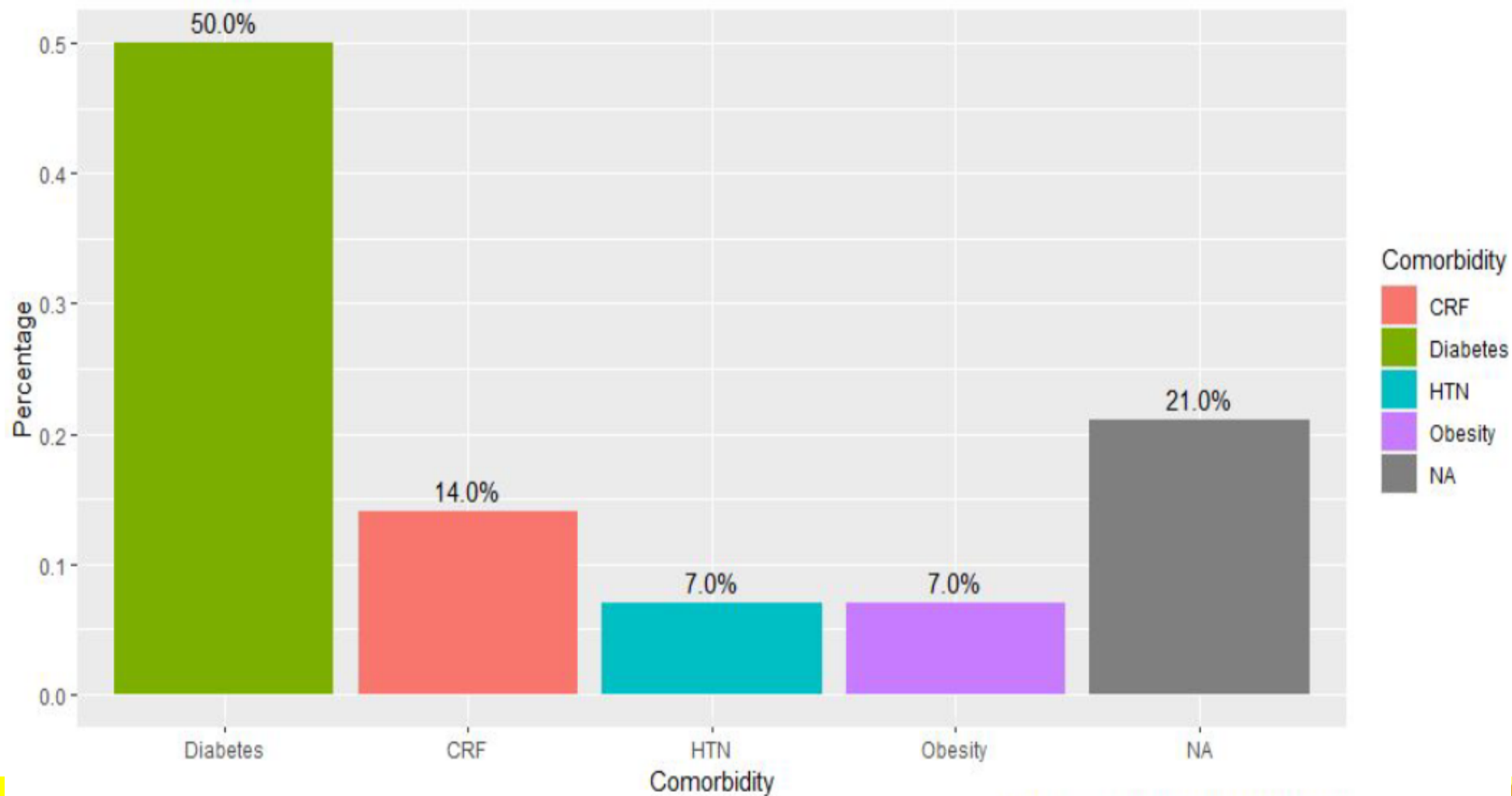




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Covid-19 Deaths Among the Fully Vaccinated

March - October 2021



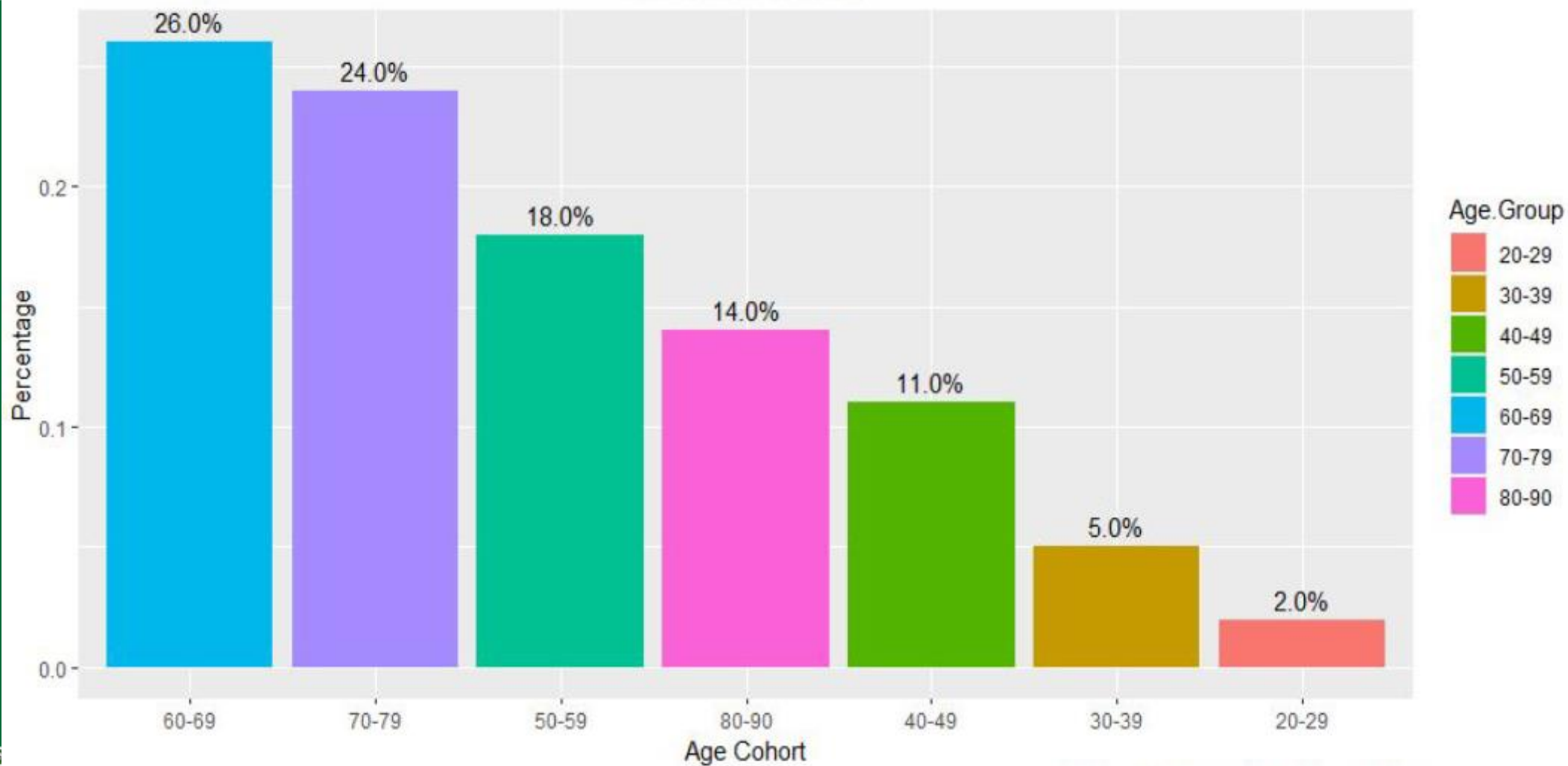
Data from BHIS, Epi Unit, Belize MoHW





Covid-19 Deaths by Age Cohort

March - October 2021



Data from BHIS, Epi Unit, Belize MoHW



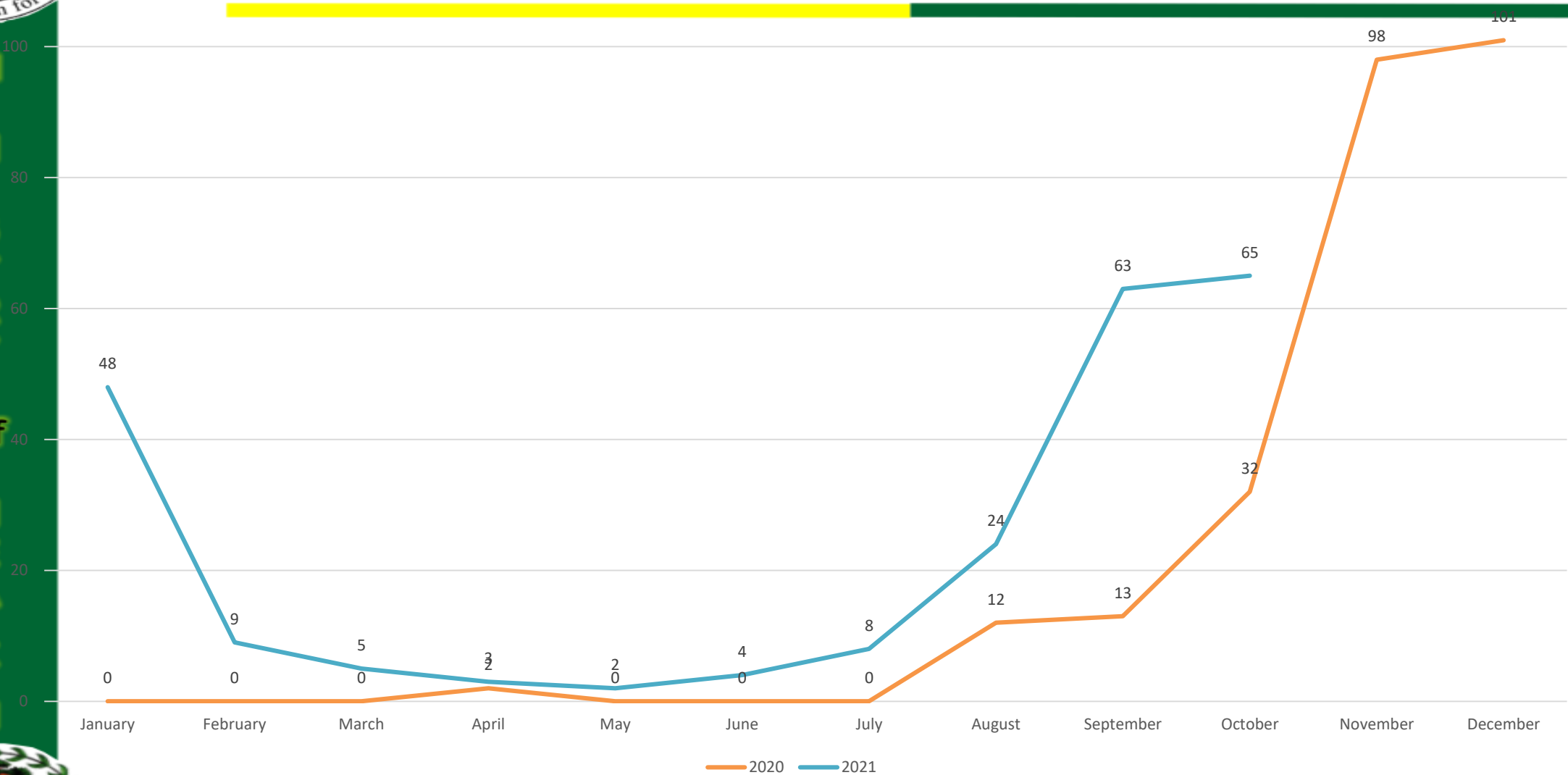
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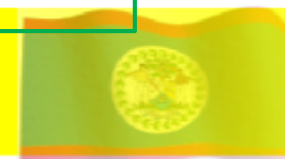
COVID-19 Deaths by District of Residence and Comorbidity (March 23 - present)											
Facility	Hypertension	Diabetes	Chronic Renal Failure	Cancer	Obesity	HIV	Asthma	AFIB	None	Total Deaths	Percentage
Corozal Hospital	18	14	7	1	0	0	0	0	7	31	6.43%
Northern Regional Hospital	30	31	17	2	1	0	0	0	29	74	15.35%
Karl Heusner Memorial Hospital	95	84	73	2	6	0	1	0	44	175	36.31%
Belize Health Care Partners	2	3	1	1	0	0	0	0	7	11	2.28%
Belize Medical Associates	0	0	0	0	0	0	0	0	1	1	0.21%
Buttonwood Bay Medical Center	0	0	0	0	0	0	0	0	1	1	0.21%
San Pedro Polyclinic	1	0	2	0	0	0	0	0	3	5	1.04%
Western Regional Hospital	14	19	10	0	0	1	0	1	9	32	6.64%
San Ignacio Hospital	4	4	4	0	0	0	0	0	4	10	2.07%
Southern Regional Hospital	7	7	3	0	0	1	0	0	1	10	2.07%
Independence Polyclinic	0	0	0	0	0	0	0	0	3	3	0.62%
Independence Health Center	0	0	0	0	0	0	0	0	1	1	0.21%
Punta Gorda Hospital	1	1	0	0	0	0	0	0	1	2	0.41%
None	49	38	28	3	0	3	1	0	59	126	26.14%
Total	221	201	145	9	7	5	2	1	170	482	100.00%



Covid 19 Deaths per month, March 2020 to October 25, 2021



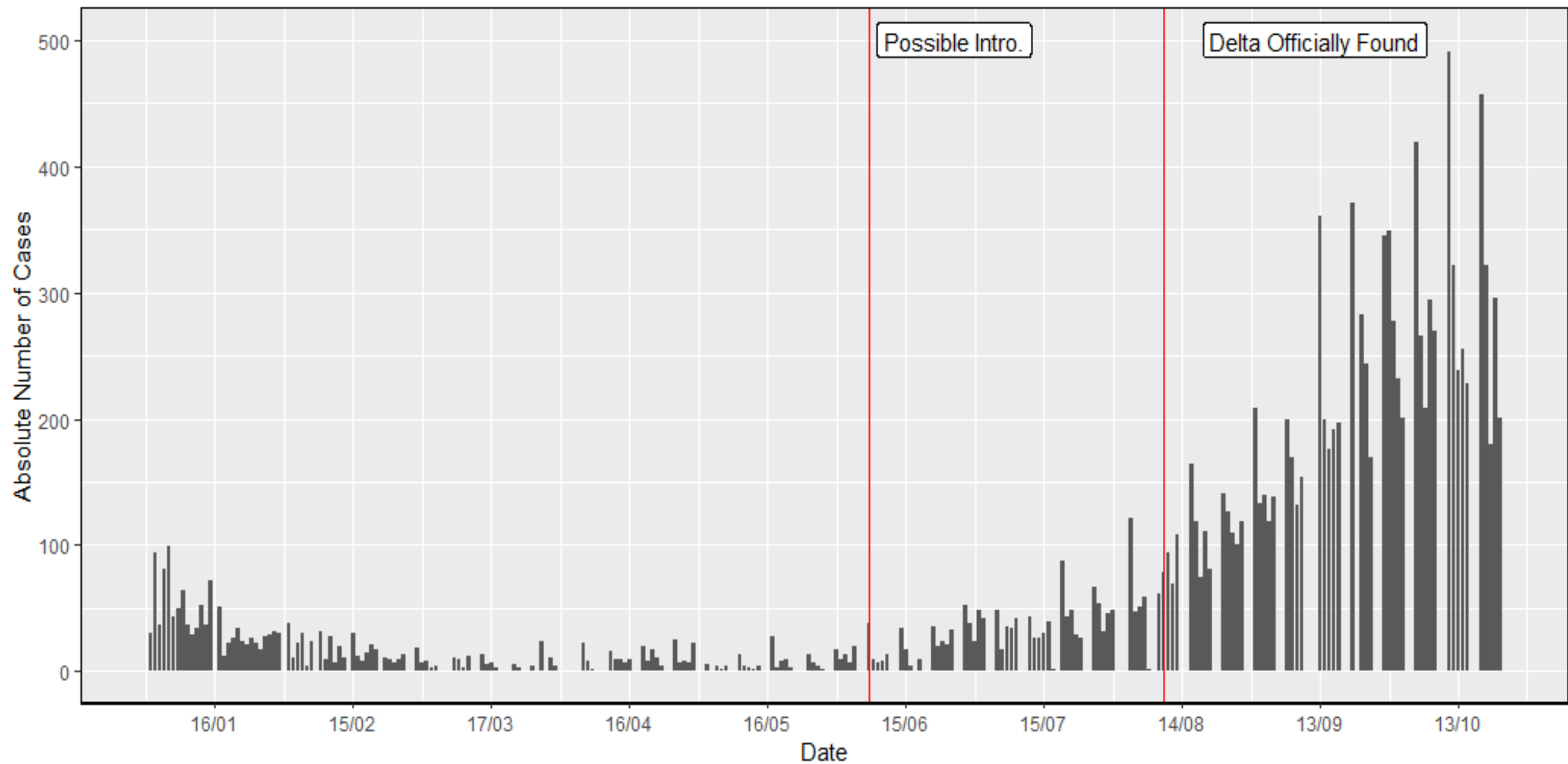
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Effect- Delta Variant

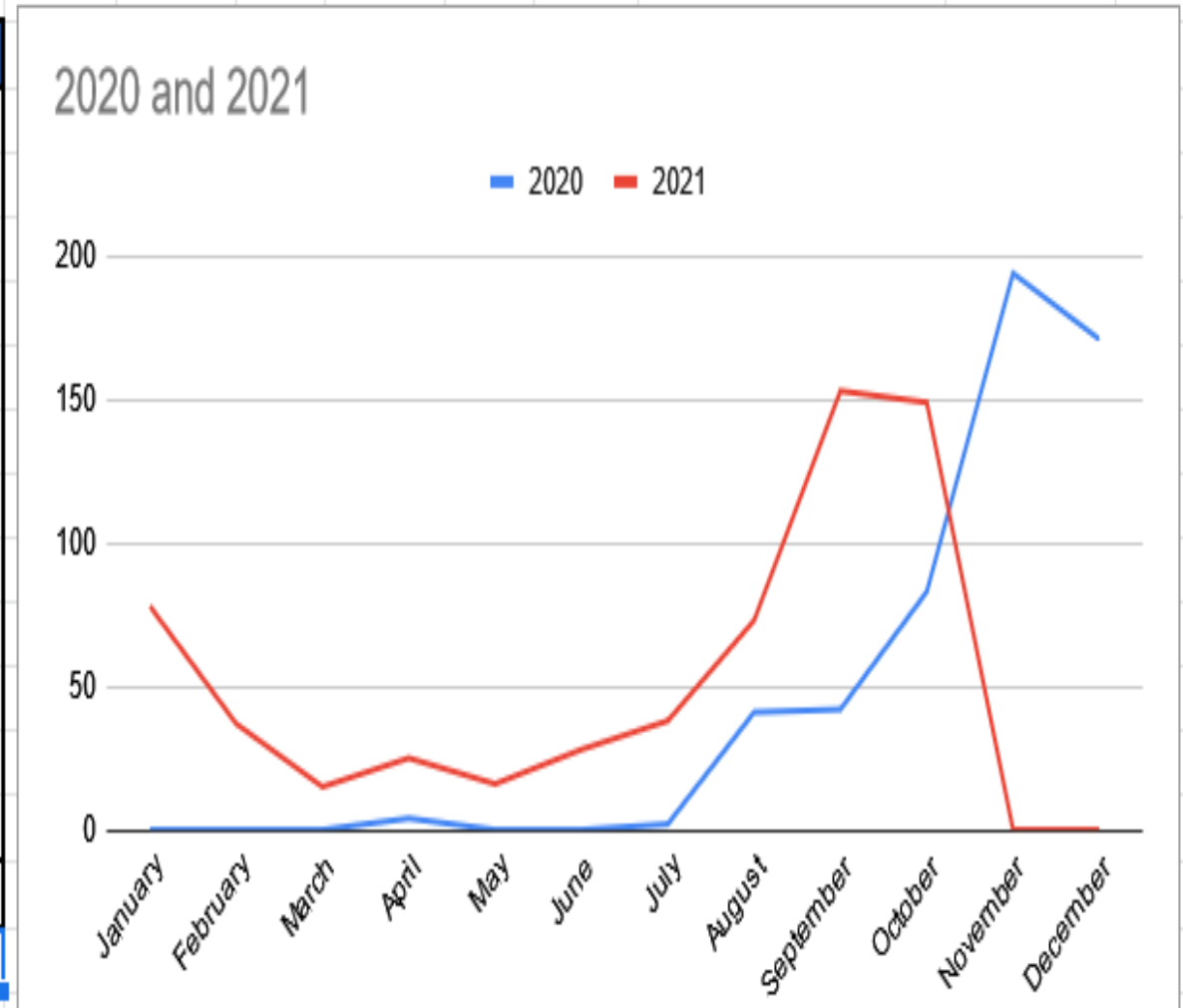
Introduction of the Delta Variant into Belize

1st January - 22nd October 2021



Comparative timeline

Month	2020	2021	2022
January	0	78	0
February	0	37	0
March	0	15	0
April	4	25	0
May	0	16	0
June	0	28	0
July	2	38	0
August	41	73	0
September	42	153	0
October	83	149	0
November	194	0	0
December	171	0	0
Total	537	612	0





NCDs and Gaps

1. restructuring and task shifting of essential staff according to national scenario
2. increased prices on essential medicines and reagents including controls- not able to do routine screening HBA1c others..
3. continued follow up of accessing health services due to stigma and discrimination
4. handing out of multiple month prescription and stocks
5. Laboratory technicians being sick and on prolonged leave due to COVID illness and shortage of Human resources
6. Budget allocation as per national epidemic of NCDs as per reviewed national plan and strategies

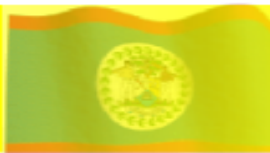
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Thank You!!