



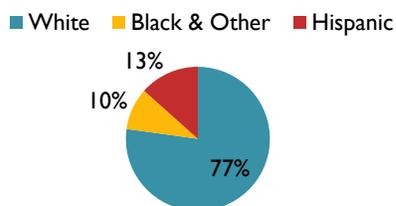
Mortality Data for Pasco County, 2015

Florida Department of Health in Pasco County
By Laike Abebe
10/19/2016

Background

- Population Data – Pasco County, 2015
 - Total population – 492,513
 - White – 380,108
 - Black & Other – 46,436
 - Hispanic – 65,969

Demographics



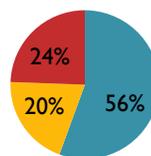
Background

- Population Data – State of Florida, 2015

- Total population – 19,860,805
 - White - 11,036,892
 - Black & Other – 3,969,530
 - Hispanic – 4,854,383

Demographics

■ White ■ Black & Other ■ Hispanic



Top 10 Causes of Death: Pasco v. State of Florida (2015)

- Pasco County fares better than state average in 4 out 10 leading causes of death:
 - Cancer
 - Heart Diseases
 - Stroke
 - Alzheimer's Disease
- Cancer & heart diseases mortality trending ↓ relative to state average
- Stroke mortality decreased significantly from previous year (5.8% to 5.0%)

Top 10 Causes of Death: Pasco v. State of Florida (2015) cont'd

- Pasco County fares worse than state average in 6 out 10 leading causes of death:
 - Chronic Lower Respiratory Disease (CLRD)
 - Unintentional Injury
 - Diabetes Mellitus
 - Kidney Disease
 - Chronic Liver Disease & Cirrhosis
 - Suicide
- CLRD mortality is significantly higher than state average and trending 
- Diabetes mortality also moderately higher than state average

Top 10 Causes of Death: Pasco v. State of Florida (2015) cont'd

	Overall Percentage and Number of Total Deaths in Pasco County	Overall Percentage and Number of Total Deaths in Florida
Malignant Neoplasm	22.7% (n = 1,338)	22.9% (n = 43,877)
Heart Diseases	21.7% (n = 1,278)	23.6% (n = 45,199)
CLRD	8.4% (n = 492)	6.1% (n = 11,685)
Unintentional Injury	5.5% (n = 326)	5.4% (n = 10,346)
Stroke	5.0% (n = 295)	6.0% (n = 11,410)
Alzheimer's Disease	3.4% (n = 199)	3.7% (n = 7,021)
Diabetes Mellitus	3.4% (n = 199)	2.8% (n = 5,394)
Kidney Disease	1.9% (n = 113)	1.7% (n = 3,194)
Chronic Liver Dis.	1.9% (n = 111)	1.6% (n = 3,075)
Suicide	1.7% (n = 103)	1.6% (n = 3,152)

Mortality Distribution: Age 0-4

- 28 total deaths in Pasco County (2015)
 - Leading cause of death – Perinatal period conditions
 - Deaths due to perinatal period conditions are comparable to state average
 - Small sample size leads to high variability when comparing to statewide levels of mortality

Top 9 Causes of Death: Pasco v. State of Florida (2015) – Age 0-4 Cohort

	Percentage and Number of Deaths Among age 0-4 cohort in Pasco County, FL	Percentage and Number of Deaths Among age 0-4 cohort in State of Florida
Perinatal Period Conditions	46.4% (n = 13)	45.6% (n = 759)
Unintentional Injuries	21.4% (n = 6)	12.0% (n = 199)
Congenital malformations	10.7% (n = 3)	17.1% (n = 286)
Heart diseases	3.6% (n = 1)	1.4% (n = 24)
Homicide	3.6% (n = 1)	2.0% (n = 33)
Influenza & pneumonia	3.6% (n = 1)	0.6% (n = 10)
Meningitis	3.6% (n = 1)	0.3% (n = 6)
Kidney disease	3.6% (n = 1)	0.4% (n = 8)
Septicemia	3.6% (n = 1)	1.0% (n = 18)

Mortality Distribution: Age 5-18

- 25 total deaths in Pasco County (2015)
 - Leading cause of death – Unintentional injuries
 - Deaths due to unintentional injuries in Pasco County are slightly better than state average
 - Similar issues with age 0-4 cohort regarding small sample size

Top 8 Causes of Death: Pasco v. State of Florida (2015) – Age 5-18 Cohort

	Percentage and Number of Deaths Among age 5-18 cohort in Pasco County, FL	Percentage and Number of Deaths Among age 5-18 cohort in State of Florida
Unintentional Injuries	32.0% (n = 8)	35.0% (n = 253)
Malignant Neoplasms	16.0% (n = 4)	10.9% (n = 79)
Homicide	12.0% (n = 3)	13.2% (n = 95)
Suicide	12.0% (n = 3)	11.2% (n = 81)
Heart Diseases	8.0% (n = 2)	3.0% (n = 22)
CLRD	4.0% (n = 1)	1.5% (n = 11)
Congenital Malformations	4.0% (n = 1)	3.6% (n = 26)
Other	12.0% (n = 3)	N/A

Mortality Distribution: Age 19-64

- 1,401 total deaths in Pasco County (2015)
 - Leading cause of death – Malignant neoplasm
 - Deaths due to malignant neoplasm in Pasco County for this cohort are slightly higher than state average
 - Deaths due to CLRD, diabetes mellitus, and chronic liver disease & cirrhosis in Pasco County are also higher than state average
 - Pasco County has higher than average rates of adult smoking, adult obesity, physical inactivity, and excessive drinking which may correlate between observed differences at the county & state level

Top 10 Causes of Death: Pasco v. State of Florida (2015) – Age 19-64 Cohort

	Percentage and Number of Deaths Among age 19-64 cohort in Pasco County, FL	Percentage and Number of Deaths Among age 19-64 cohort in State of Florida
Malignant Neoplasm	26.9% (n = 377)	26.6% (n = 11,871)
Heart Diseases	15.9% (n = 223)	16.9% (n = 7,548)
Unintentional Injury	13.8% (n = 194)	13.2% (n = 5,872)
CLRD	5.8% (n = 81)	3.5% (n = 1,573)
Chronic Liver Disease & Cirrhosis	5.0% (n = 70)	4.3% (n = 1,918)
Suicide	4.9% (n = 69)	5.1% (n = 2,264)
Diabetes Mellitus	4.6% (n = 64)	3.3% (n = 1,481)
Cerebrovascular Disease	2.0% (n = 28)	3.0% (n = 1,331)
Septicemia	1.8% (n = 25)	1.2% (n = 529)
Homicide	1.3% (n = 18)	2.2% (n = 973)

Mortality Distribution: Age 65+

- 4,487 total deaths in Pasco County (2015)
 - Leading cause of death – Heart diseases
 - Deaths due to heart diseases in Pasco County for this cohort are lower than state average
 - Health behavior rankings (relating to rates of smoking, obesity, physical inactivity) have been decreasing steadily for Pasco County over previous 5 years, from a high of 14th out of 67 counties in 2011 to 46th out of 67 in 2015 so increase in heart diseases mortality may be on the horizon
 - Deaths due to CLRD, diabetes mellitus, and kidney diseases are higher than state average

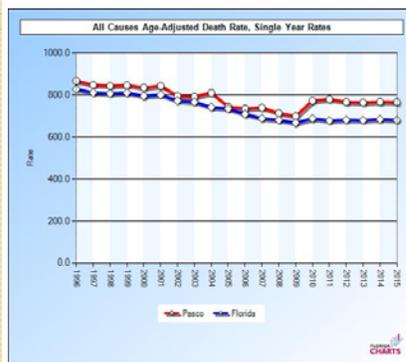
Top 10 Causes of Death: Pasco v. State of Florida (2015) – Age 65+ Cohort

	Percentage and Number of Deaths Among age 19-64 cohort in Pasco County, FL	Percentage and Number of Deaths Among age 19-64 cohort in State of Florida
Heart Diseases	23.7% (n = 1,052)	26.0% (n = 37,603)
Malignant Neoplasms	21.6% (n = 957)	22.1% (n = 31,899)
CLRD	9.2% (n = 410)	7.0% (n = 10,099)
Stroke	6.0% (n = 267)	7.0% (n = 10,063)
Alzheimer's Disease	4.5% (n = 198)	4.8% (n = 6,955)
Diabetes Mellitus	3.0% (n = 135)	2.7% (n = 3,905)
Unintentional Injuries	2.7% (n = 118)	2.8% (n = 4,020)
Kidney Disease	2.2% (n = 99)	1.8% (n = 2,597)
Essen. Hypertension/ Renal Disease	1.4% (n = 61)	1.2% (n = 1,772)
Influenza & Pneumonia	1.3% (n = 57)	1.6% (n = 2,263)

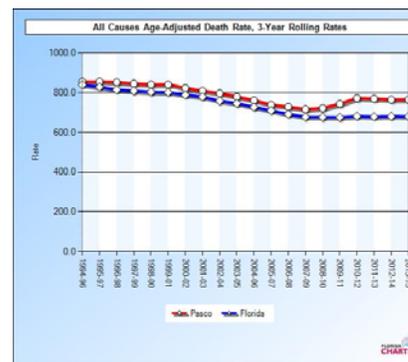
Age-Adjusted Death Rates

- All causes age-adjusted death rate (AADR) for Pasco County
 - 765.7 per 100,000 (2015)
 - 3-year rolling rate: 765.4 per 100,000 (2013-2015)
- All causes AADR for State of Florida in 2015:
 - 679.8 per 100,000 (2015)
 - 3-year rolling rate: 680.8 per 100,000 (2013-2015)

Age-Adjusted Death Rates



Single Year (2015)



Rolling 3-year (2013-2015)

Age-Adjusted Death Rates

- There are significant racial and gender differences in all-cause and cause-specific AADR
 - Gender
 - All causes AADR, Pasco County, men (2013-15):
 - 913.4 per 100,000 (Florida AADR for men – 811.5 per 100,000)
 - All causes AADR, Pasco County, women (2013-15):
 - 636.7 per 100,000 (Florida AADR for women – 567.8 per 100,000)

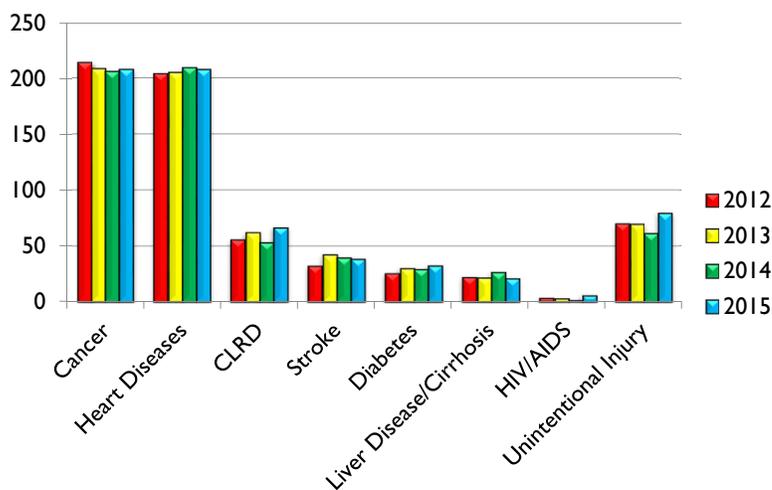
Age-Adjusted Death Rates - Gender



Age Adjusted Death Rates - Gender

- In Pasco County males:
 - AADR for CLRD, diabetes mellitus, and unintentional injury are trending slightly upward
 - AADR of cancer dropped from 214.3 per 100,000 to 208.6 in 2013, has remained relatively stable since then
 - AADR of heart diseases has also been relatively stable since 2012
 - Pasco County men have AADR above state average for every cause of death except HIV/AIDS (2012-2015)

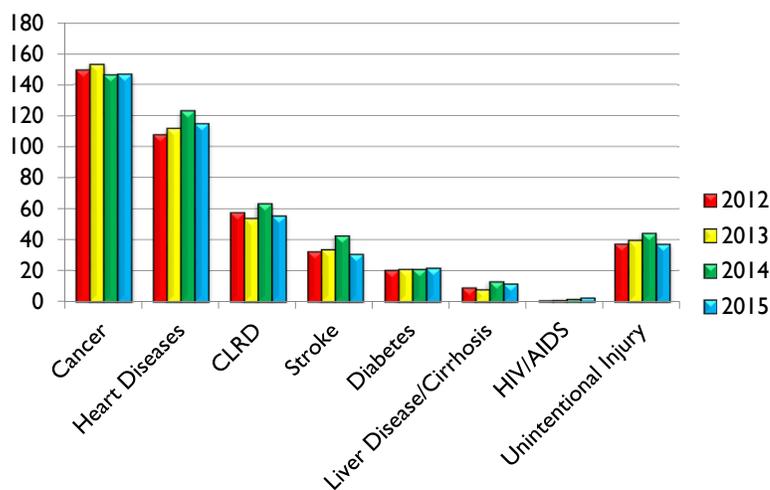
Age-Adjusted Death Rate: Causes of Interest (Males)



Age-Adjusted Death Rates - Gender

- In females:
 - AADR of cancer dropped from 153.0 per 100,000 to 146.3 per 100,000 in 2014, has remained stable in 2015
 - AADR of heart diseases has steadily increased from 2012 – 2014, dropped to 2013 levels last year
 - AADR of stroke increased consistently from 2012-2014, dropped below 2012 levels last year
 - Pasco County women have AADR above state average for every cause of death except heart disease (2012, 2013, 2015) and stroke (2015)

Age-Adjusted Death Rate: Causes of Interest (Females)



Age-Adjusted Death Rates - Race

- Race
 - All causes AADR, Pasco County, white (2013-15):
 - 775.1 per 100,000 (Florida AADR for whites – 674.1 per 100,000)
 - All causes AADR, Pasco County, black & other (2013-15):
 - 592.7 per 100,000 (Florida AADR for black & other – 682.9 per 100,000)

Age-Adjusted Death Rates - Race

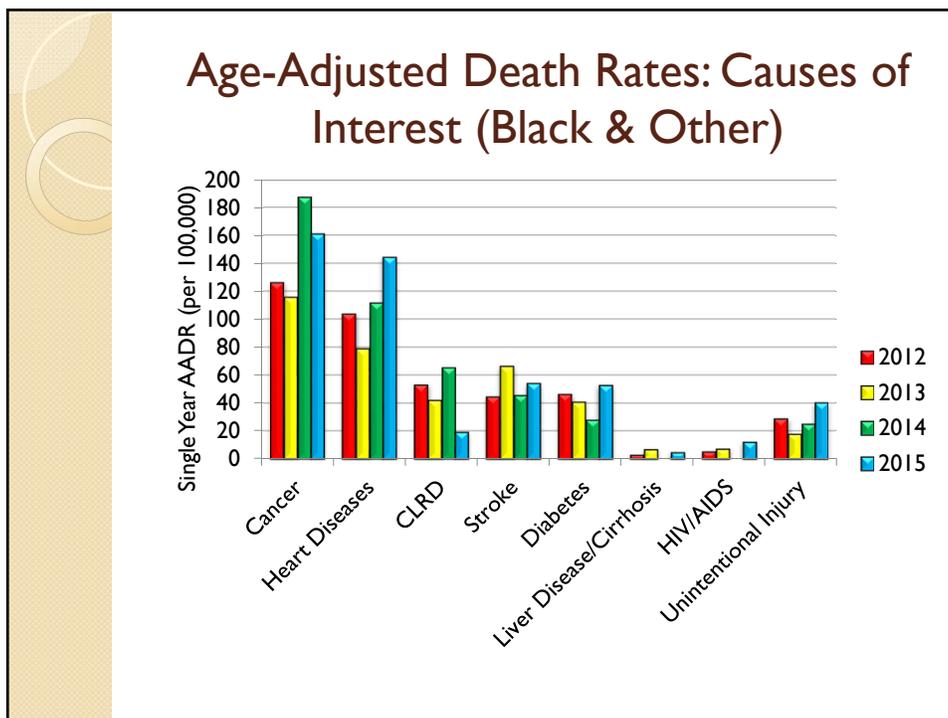
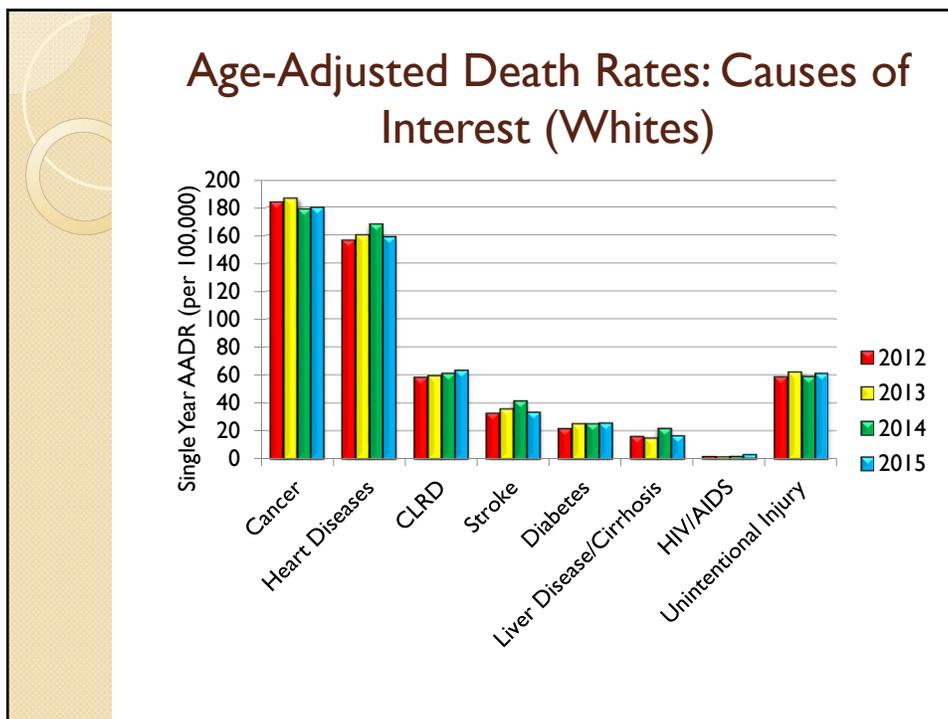


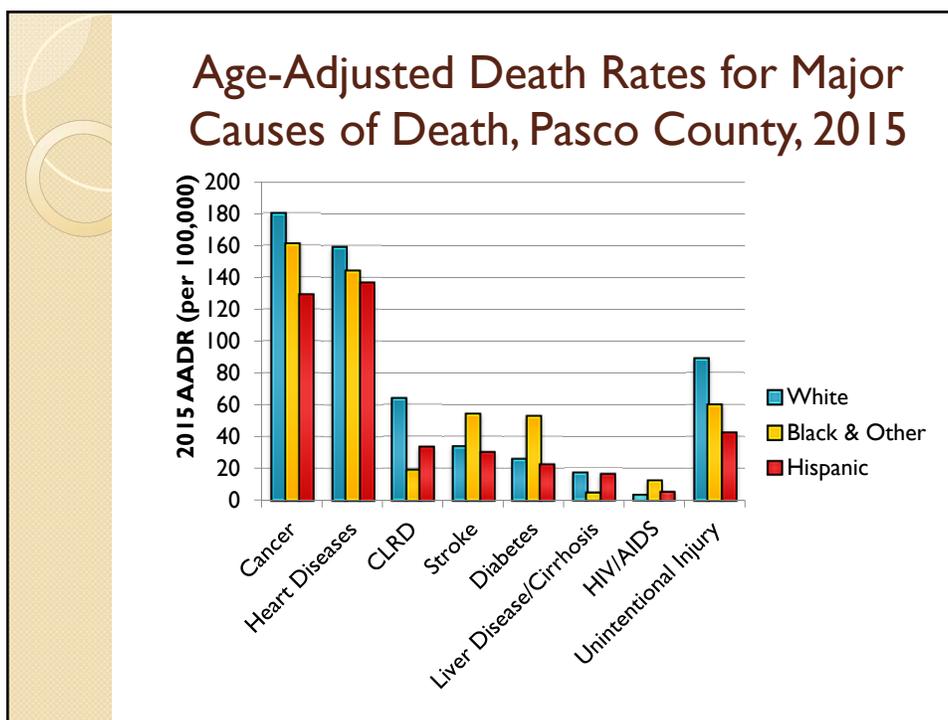
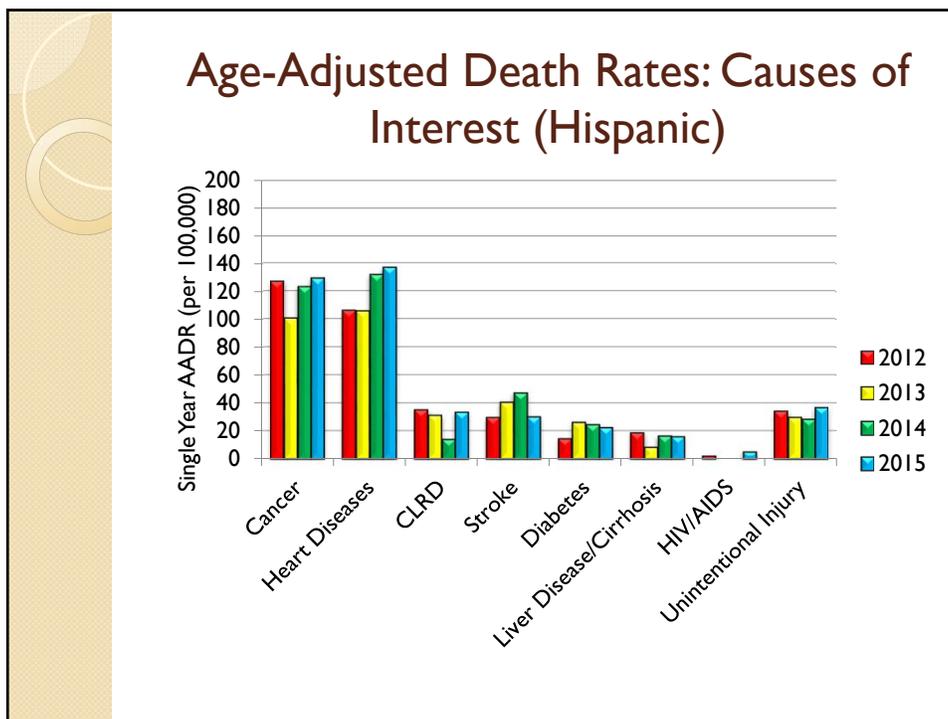
Age-Adjusted Death Rates - Race

- Over the previous four years, there has been an increase in mortality due to CLRD among whites (the effect is less visible in minority groups)
- Age-adjusted death rates for heart diseases and cancer have risen among the minority population over the previous four years, rates among whites remain stable but are still the highest among the three groups

Age-Adjusted Death Rates - Race

- CLRD is a growing problem within Pasco County, age-adjusted death rates are much higher than state average
 - Primarily among white population, Hispanics had below-average AADR in 2014, once again above-average in 2015.
 - Opposite was true for black & other population in 2014 and 2015 respectively
- Stroke, diabetes mellitus, and HIV/AIDS deaths continue to disproportionately affect black & other population



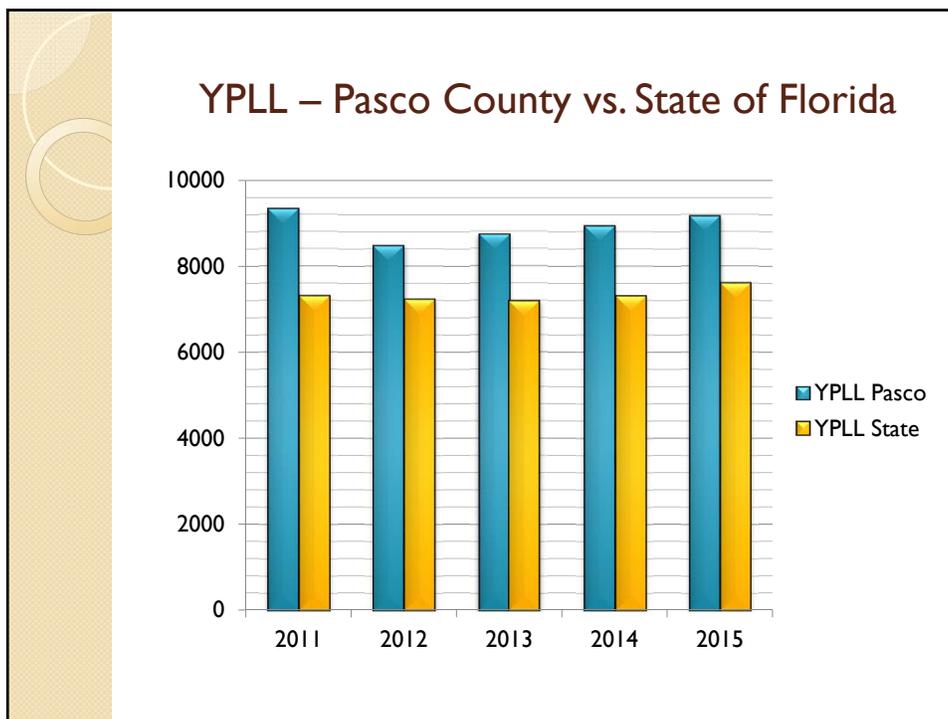


Years of Potential Life Lost (YPLL)

- Years of Potential Life Lost (YPLL) is a summary measure of premature mortality
- Increased emphasis on causes of mortality that are more common at an earlier age
- Calculated by subtracting age at death from 75 for all deaths which occur by a particular cause in a specific county (Pasco), then summing values and calculating a rate per 100,000 population under the age of 75

YPLL – Pasco County vs. State of Florida

- All causes YPLL-Under 75 (Pasco):
 - 2007-2009 – 9,728.4 per 100,000
 - 2010-2012 – 8,934.6 per 100,000
 - 2013-2015 – 8,950.0 per 100,000
- All causes YPLL-Under 75 (Florida)
 - 2007-2009 – 7,839.9 per 100,000
 - 2010-2012 – 7,320.0 per 100,000
 - 2013-2015 – 7,374.5 per 100,000



YPLL – Top 10 Causes of Death: Pasco County vs. State of Florida (2015)

	YPLL-75 per 100,000 for Pasco County	YPLL-75 per 100,000 for State of Florida
Malignant Neoplasms	2,142.0	1,652.5
Heart Diseases	1,324.5	1,070.6
CLRD	480.9	228.7
Unintentional Injury	1,536.6	1,251.4
Stroke	163.2	195.5
Alzheimer's Disease	10.4	13.4
Diabetes Mellitus	358.5	207.3
Kidney Disease	107.8	87.5
Chronic Liver Disease & Cirrhosis	345.4	239.1
Suicide	516.1	424.5

Conclusion

- In terms of overall mortality, Pasco County performs better than state average in the top 2 leading causes of death but worse in regards to YPLL
 - Proportionally, fewer are dying but they are dying at younger ages
 - Focusing on modifiable risk factors (tobacco use, diet, hypertension, physical activity) will likely decrease YPLL in Pasco County

Conclusion

- CLRD mortality will likely continue to be a problem for the county
 - Adult smoking rates compare unfavorably with state averages (24% vs. 16.8% statewide)
 - Decreasing smoking prevalence may improve CLRD mortality (along with other related diseases)

Conclusion

- Pasco County performs worse than state averages in regards to (2015 data):
 - People reporting poor or fair health - **19% to 16%**
 - Self-reported days of poor physical health in previous 30 days: **4.6 days vs. 3.7 days**
 - Self-reported days of poor mental health in previous 30 days: **4.9 days vs. 3.8 days**
 - Adult smoking: **24% vs. 16.8%** (2013 BRFSS data)
 - Adult obesity: **29% vs. 26%**
 - Physical inactivity: **28% vs. 23%**
 - Excessive drinking: **20% vs. 16%**

Conclusion

- There is opportunity through community partnership and program implementation/expansion to reduce mortality caused by the effects of modifiable risk factors



References

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Questions?

