



### National Kidney Month 2016



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# **Learning Objectives**

- To understand chronic kidney disease and kidney functions
- To discuss high risk population groups and relation to health disparities
- To identify prevention and treatment options

## Your Kidneys and You



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Condition where a person has reduced kidney function or kidney damage for more than 3 months

- Can develop at any age
  - Chances increase as you get older
- There are few signs or symptoms
- End-Stage Renal Disease
  - The final stage of Chronic Kidney Disease



## Who is at risk?

Family history

- Individuals with high blood pressure or diabetes
- Senior citizens (65 and over)
- African Americans

Hispanics

- American Indians and Alaska Natives
- Asian and Pacific Islanders

# **Family History**

- Higher risk of kidney disease
- Health history of family members
  - Parents, grandparents, aunts, uncles, and cousins
- Genetics play a role in family history



## Individuals with...

#### HIGH BLOOD PRESSURE

- The blood in the body has to be pushed through at a higher pressure than what is normally required.
- No symptoms
  - Known as the "Silent Killer"
- Can also lead to heart attacks and strokes.
- I in 5 people with high blood pressure has kidney disease.

#### DIABETES

- The body is unable to produce enough insulin or is unable to properly use insulin.
- Can cause damage to other organs throughout the body.
- I in 3 people with diabetes has kidney disease.

# High Blood Pressure and Diabetes are the most common causes of kidney failure.



## **Senior Citizens**

\* Increased risk of chronic kidney disease.

\* Kidney function can decrease with age.

\* Estimated 50% are believed to have kidney disease.





## **African Americans**

- \* High rates of diabetes and high blood pressure
  - Most common: Type 2 diabetes
- \* 3 times more likely to have kidney failure when compared to White Americans
  - > 32% of those with kidney failure in 2014





## **Hispanics**

\* High rates of diabetes and high blood pressure

- I.5 times more likely to have kidney failure when compared to White Americans
  - More than 14.7% of new kidney failure patients in 2013





## American Indians and Alaska Natives

#### \* 2 times more likely to have diabetes than White Americans

- \* Rates of diabetes caused by kidney failure has risen 30%
- \* Less access to health care
  - Cultural differences and communication barriers





## **Asian and Pacific Islanders**

- \* Risk of diabetes is **18% higher** than White Americans
- \* Western diet may be part of the issue
  - High in calories and fat
- \* Less access to health care
  - Cultural differences and communication barriers

![](_page_11_Picture_6.jpeg)

![](_page_11_Picture_7.jpeg)

## **Kidney Disease Indicator, Tarrant County, 2012**

![](_page_12_Figure_1.jpeg)

![](_page_12_Picture_2.jpeg)

Measurement Period: 2012

![](_page_13_Picture_0.jpeg)

## **Chronic Kidney Disease Indicator, 2012**

#### Chronic Kidney Disease: Medicare Population

County View

Location	Status	Percent	Source	Measurement Period
Comparison: U.S. Counties Period: 2012				
County: Collin		15.0	Centers for Medicare & Medicaid Services	2012
County: Dallas		17.9	Centers for Medicare & Medicaid Services	2012
County: Denton		16.2	Centers for Medicare & Medicaid Services	2012
County: Ellis		16.2	Centers for Medicare & Medicaid Services	2012
County: Erath		11.5	Centers for Medicare & Medicaid Services	2012
County: Hunt		15.1	Centers for Medicare & Medicaid Services	2012
County: Johnson		17.0	Centers for Medicare & Medicaid Services	2012
County: Kaufman		15.0	Centers for Medicare & Medicaid Services	2012
County: Parker		18.6	Centers for Medicare & Medicaid Services	2012
County: Rockwall		13.8	Centers for Medicare & Medicaid Services	2012
County: Tarrant		18.9	Centers for Medicare & Medicaid Services	2012
County: Wise		14.4	Centers for Medicare & Medicaid Services	2012

Return to Community Dashboard Home

# Health Indicators among adults 18 years and older by ZIP code, Tarrant County, 2009-2010

![](_page_14_Figure_1.jpeg)

## Treatment

- & Kidney transplant
- Medication
- Dialysis
  - Hemodialysis
  - Peritoneal Dialysis
    - Continuous Ambulatory Peritoneal Dialysis
    - Automated Peritoneal Dialysis

![](_page_15_Figure_8.jpeg)

![](_page_15_Picture_9.jpeg)

![](_page_15_Picture_10.jpeg)

![](_page_16_Picture_0.jpeg)

## Prevention

- Keep diseases like high blood pressure and diabetes under control through regulation
- Annual testing through Albumin-to-Creatinine Ratio (ACR) urine test and Glomerular Filtration Rate (GFR) blood test
- Exercise and make healthy lifestyle choices
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- Limit salt intake and drink plenty of water
- \* Take prescribed medication as directed

## **Glomerular Filtration Rate** (GFR) Table

				Albuminuria categories			
				Aı	A2	A3	
				Normal to mildly increased	Moderately increased	Severely increased	
				<30 mg/g <3 mg/mmol	30-299 mg/g 3-29 mg/mmol	≥300 mg/g ≥30 mg/mmol	
GFR Stages	G1	Normal or high	≥90				
	G2	Mildly decreased	60- 90				
	G3a	Mildly to moderately decreased	45- 59				
	G3b	Moderately to severely decreased	30- 44				
	G4	Severely decreased	15-29				
	G5	Kidney failure	<15				

#### Key to Figure:

**Colors:** Represents the risk for progression, morbidity and mortality by color from best to worst. Green: Low Risk (if no other markers of kidney disease, no CKD) Yellow: Moderately Increased Risk Orange: High Risk Red: Very High Risk

Deep Red: Highest Risk

![](_page_18_Picture_0.jpeg)

## Testimonial

![](_page_18_Picture_2.jpeg)

## **Veronica Sutton**

![](_page_19_Picture_0.jpeg)

![](_page_20_Picture_0.jpeg)

# National Kidney Foundation

![](_page_20_Picture_2.jpeg)

![](_page_20_Picture_3.jpeg)

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![](_page_20_Picture_5.jpeg)

Tarrant County Public Health

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