

CHRONIC KIDNEY
DISEASE – WHY WOMEN
MAY BE AT RISK?

A decorative graphic consisting of several parallel white lines of varying thicknesses, slanted diagonally from the bottom left towards the top right, set against a blue gradient background.




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No financial disclosures



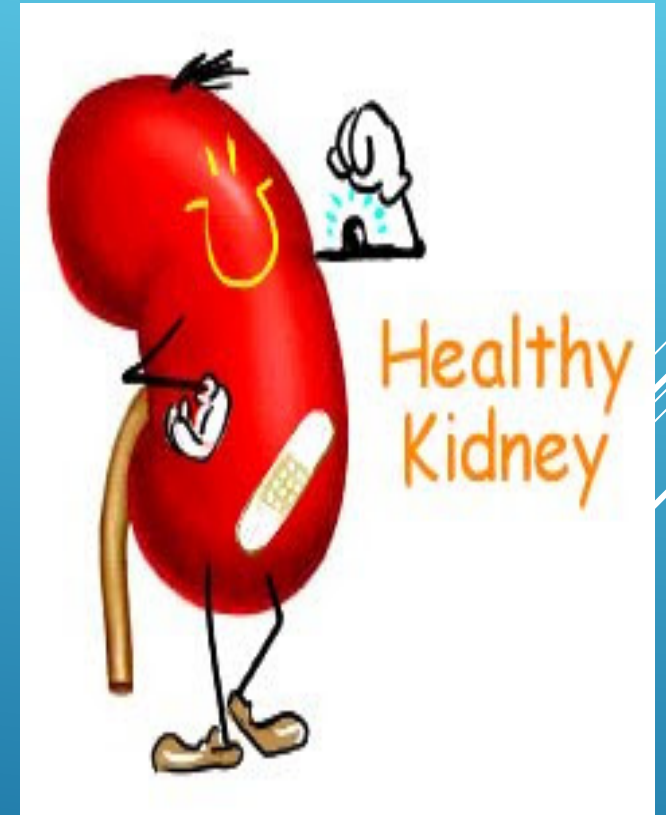
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No financial disclosures

OBJECTIVES

- ▶ Discuss the role of the kidneys
 - ▶ Why kidneys important for good health
 - ▶ Discuss common kidney failure prevention strategies
 - ▶ Labs
 - ▶ Discussion of over the counter medications- Supplements and pain medications
 - ▶ Discuss diagnostic procedures (tests) involving dye
 - ▶ Present risk factors
 - ▶ Discuss Diabetes and Hypertension control
 - ▶ Provide resources for patients
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WHY KIDNEYS ARE IMPORTANT

- Kidneys work 24 hours day 7 days a week
- Small organs but important
- Size of your fist



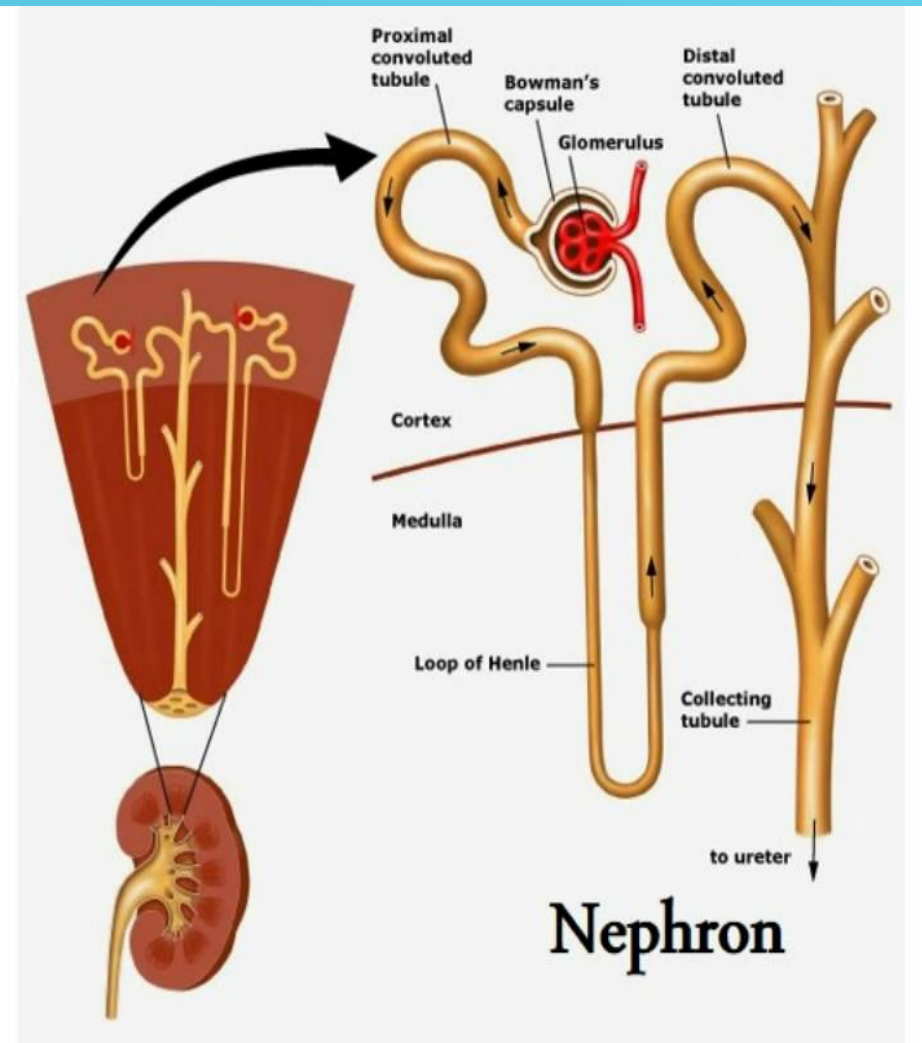
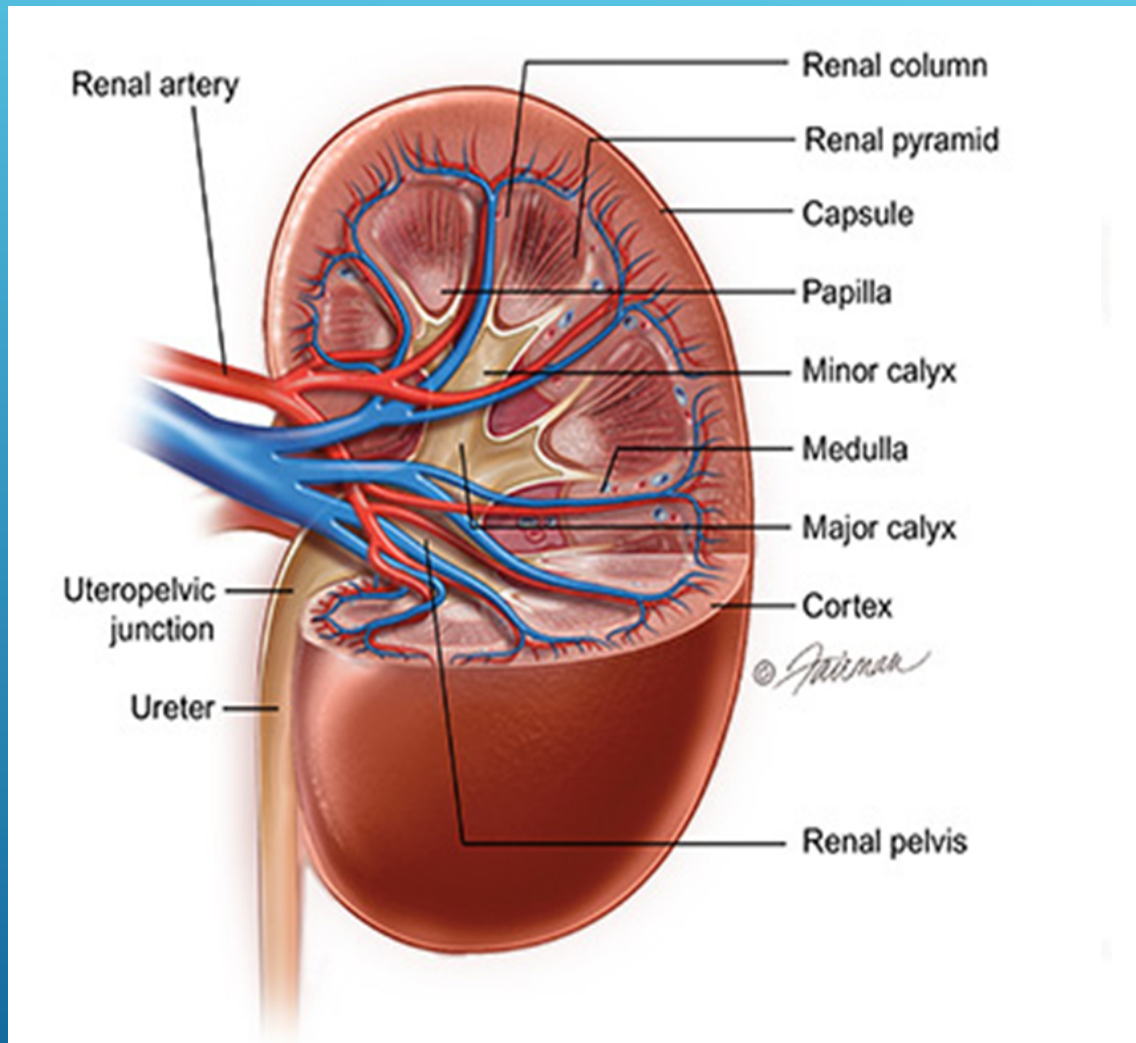
WHAT KIDNEYS DO

- Remove extra water (fluid)
 - kidneys clean between 120 to 150 quarts of blood
 - 1-2 quarts of urine
- Make hormones
 - Regulate blood pressure
 - Keep bones healthy
 - Make red blood cells
 - Erythropoietin

U.S. Department of Health and Human Services, (2014)

WHAT KIDNEYS DO

- Remove body waste (toxins)
- Regulate electrolytes
 - sodium, potassium, and phosphorous
 - Activate vitamin D



STAGES OF CHRONIC KIDNEY DISEASE (CKD)

GLOMERULAR FILTRATION RATE (GFR)
BASED ON:
AGE
WEIGHT
HEIGHT
MALE OR FEMALE
ETHNICITY (AFRICAN AMERICAN(AA OR
CAUCASIAN)
AA HAVE MORE MUSCLE MASS
CREATININE IN CALCULATION


NATIONAL KIDNEY FOUNDATION. (2002).

Table 10. Stages of Chronic Kidney Disease

Stage	Description	GFR (mL/min/1.73 m²)
1	Kidney damage with normal or ↑ GFR	≥90
2	Kidney damage with mild ↓ GFR	60–89
3	Moderate ↓ GFR	30–59
4	Severe ↓ GFR	15–29
5	Kidney failure	<15 (or dialysis)

Chronic kidney disease is defined as either kidney damage or GFR <60 mL/min/1.73 m² for ≥3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies.

COMMON KIDNEY FAILURE PREVENTION STRATEGIES

- Prevention
 - Drink plenty of water
 - Urine light yellow color
 - Control:
 - Glucose- blood sugar
 - Effects the capillaries in the glomerulus
 - Hypertension-blood pressure
 - Hardening of the arteries
 - Weight
 - In activity
 - lipids
- 


LABS

- Labs
 - Creatinine
 - Muscles
 - Yellow color in urine
 - BUN (Blood urea nitrogen)
 - From protein
 - Glomerular Filtration Rate (GFR)
 - Hemoglobin and Hematocrit (management)

LABS

- Urine
 - Screen for kidney disease
 - Good follow up
 - Ask question from your providers (experts)
 - Repeat labs if necessary
 - Urine is checked for:
 - Blood
 - Protein
 - Albumin

LABS

- Women
 - Urinalysis for blood or protein
 - Follow up with another test if questionable
 - Early detection of Kidney disease
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.

CONSIDERATION OF OVER THE COUNTER MEDICINES IN RELATION TO KIDNEY DISEASE

- Tylenol – safe as directed
 - Liver
 - 4 grams per day
- Aspirin as prescribed
- Tums
 - Calcium
 - If over used leads to:
 - Muscle issues
 - Kidney stones



CONSIDERATION OF OVER THE COUNTER MEDICINES IN RELATION TO KIDNEY DISEASE



➤ NSAIDs-

- Ibuprofen
- Naproxen
- Aleve
- Advil
- Causes issues with the nephrons in the kidneys
- Stay hydrated
- Limit amount and duration
- See provider
 - No more than 10 days

CONSIDERATION OF OVER THE COUNTER MEDICINES IN RELATION TO KIDNEY DISEASE



- Supplements
 - NO supplements proven beneficial for your kidney health
 - Not FDA approved
 - No clinical studies that shows and clinical benefits to the kidney
 - Natural diuretics
 - Vitamins- Contact physician

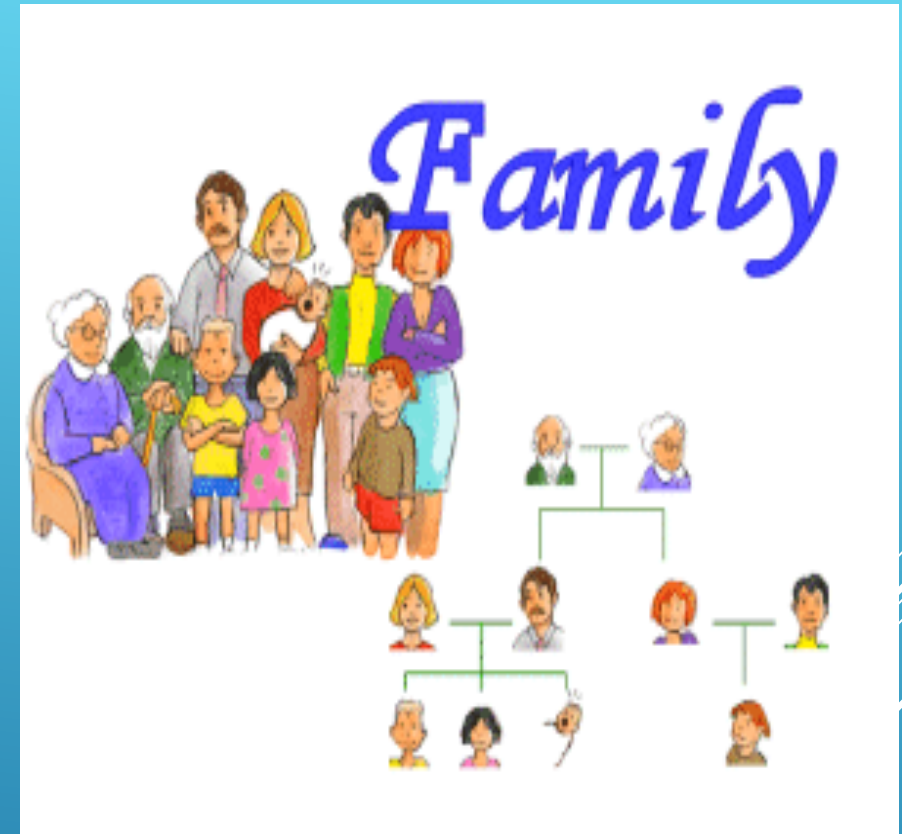
DIAGNOSTIC PROCEDURES INVOLVING CONTRAST DYE

- MRI
- Cardiac Cath
- CT Scan
- Talk to doctor about any scheduled tests and appropriate hydration
 - Ask about the test without contrast
- If you have kidney issue- Be careful with the dye

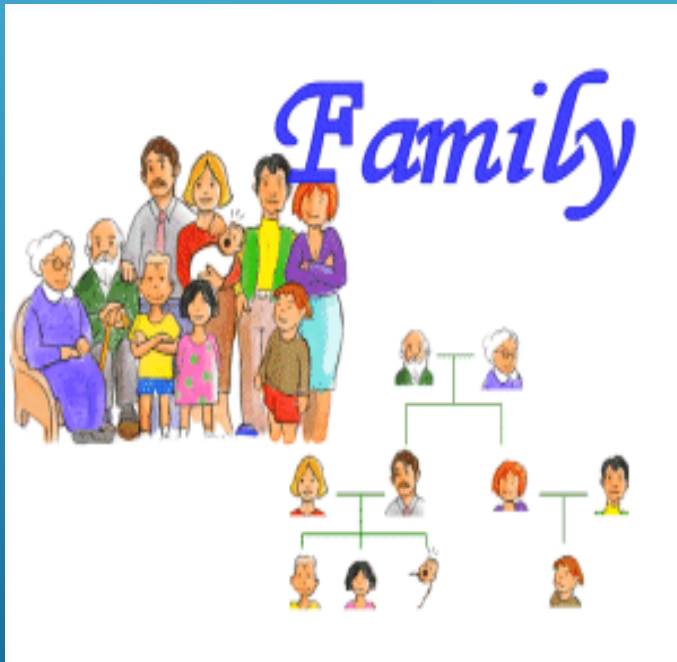


FAMILY HISTORY RISK FACTORS

- Diabetes
 - Monitor glucose
 - Kidney function
- Hypertension (high blood pressure)
 - Narrowing of arteries and small vessels(leaky)
 - Hardening
- Focal segmental glomerulosclerosis (FSGS)-scarring in the glomerulus



FAMILY HISTORY RISK FACTORS



- Recessive polycystic kidney-cysts
- Nephronophthisis- inflammation and scarring
- Congenital abnormalities of the kidney and urinary tract

Hildebrandt, F. (2010), U.S. Department of Health and Human Services (2017).

- Lupus- autoimmune disorder
- Pregnancy
 - Increases risk or increased blood pressure
 - Increases risk if diabetes
 - Preeclampsia
 - Eclampsia
- Urinary tract infections (women)
 - Moves up into the kidney structures
- Oral contraceptives (young women)
 - Increases risk or increased blood pressure
 - Increases risk of diabetes
 - Blood clots


RISK FACTORS- WOMEN



RISK FACTORS

- Obesity
 - Diabetes
 - High blood pressure
 - Metabolic syndrome
 - Diet
- Smoking
 - Kidney cancer
 - Tumor blood in urine
 - Remove health tissue with the tumor (entire kidney)
 - Hardening of the arteries

RISK FACTORS

- Toxic substances (medication and dye)- vaso- constriction
 - Illegal drugs- hypertension
 - Excessive alcohol –less efficient filtering
 - Other disease processes
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, located in the lower right quadrant of the slide.

RISK FACTORS

- Acute injury
 - Can happen to anyone
 - Can recover with different of stages of kidney function
 - Causes:
 - Dehydration
 - Shock
 - Acute arrest



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RISK FACTORS

- Medications
 - Diuretics
 - Keep hydrated
 - Ace inhibitors- first line for BP
 - Creatinine may increase
 - Metformin
 - Monitor Creatinine

RISK FACTORS

- Chemo Therapy
- Kidney stones
 - Obstruction
 - Pocket of fluid
 - Kidney damage

National Geographic (for picture)



DIABETES AND HYPERTENSION CONTROL FACTORS



- Managing or controlling your blood sugars and blood pressure slow the progression of kidney damage.
- Work with your health care providers
- Life style changes
 - Diet
 - No specific diet
 - Exercise
 - Walk



Gardiner, F.W.,Nwose, E.U.,Bwititi, P.T., Crockett,J., & Wong,L. (2017).

DIABETES AND HYPERTENSION CONTROL FACTORS

- Medications
 - Your blood pressure can be checked 1-2 hours after taking the medication
 - The medications that are taken long term can be an issue for the kidneys. Issue to no begin right away.
- Caffeine
 - Diuretic
 - Vaso-constriction



RESOURCES THERE ARE IF QUESTIONS

- Health Care professionals- Doctors, Advance Practice Nurse Prescribers, Registered Nurses
- Local National Kidney Foundation
 - [Kidney.org](https://www.kidney.org)
- National Institutes of Health (NIH)
 - <https://www.nih.gov/>
- U.S. Department of Health and Human Services
 - National Institute of Diabetes and Digestive and Kidney Diseases <https://www.niddk.nih.gov/>



GFR (Glomerular Filtration Rate)

A Key to Understanding How Well Your Kidneys Are Working



National
Kidney
Foundation®

www.kidney.org

ARE YOU AT INCREASED RISK FOR CHRONIC KIDNEY DISEASE?



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HIGH BLOOD PRESSURE AND YOUR KIDNEYS



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HIDDEN HEALTH RISKS
*Kidney Disease, Diabetes,
and High Blood Pressure*





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**NUTRITION AND
CHRONIC KIDNEY
DISEASE (STAGES 1-4)**
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**DIABETES AND CHRONIC
KIDNEY DISEASE**
Stages 1-4




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RELIABLE WEBSITES

Web sites endings:

Edu.

Gov.

HON is the most common accreditation site

www.ncbi.nlm.nih.gov/pubmed

www.medlineplus.gov



QUESTION TO ASK

“Five Quick Questions”

“**Who** runs or created the site or app? Can you trust them?”

“**What** is the site or app promising or offering? Do its claims seem too good to be true?”

“**When** was its information written or reviewed? Is it up-to-date?”

“**Where** does the information come from? Is it based on scientific research?”

“**Why** does the site or app exist? Is it selling something?”

NCCIH, January 2018, retrieved from:
<https://nccih.nih.gov/health/webresources>

U.S. Department of Health and Human Services

NIH National Institute of Diabetes and Digestive and Kidney Diseases

Search Entire Site... Search

Research & Funding Health Information About NIDDK News

Home \ Health Information \ Kidney Disease \ Chronic Kidney Disease (CKD) \ What Is Chronic Kidney Disease? English

Chronic Kidney Disease (CKD)

- What Is Chronic Kidney Disease?
- Causes of CKD
- Tests & Diagnosis +
- Managing CKD
- Eating Right +
- Preventing CKD
- What If My Kidneys Fail?
- Clinical Trials
- Anemia
- High Blood Pressure +

What Is Chronic Kidney Disease?

Chronic kidney disease (CKD) means your kidneys are damaged and can't filter blood the way they should. The disease is called "chronic" because the damage to your kidneys happens slowly over a long period of time. This damage can cause wastes to build up in your body. CKD can also cause other health problems.

Your kidneys are located in the middle of your back, just below your ribcage.

U.S. Department of Health and Human Services (2017).

U.S. Department of Health and Human Services

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NIH National Institute of Diabetes and Digestive and Kidney Diseases

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Home \ Health Information \ **Kidney Disease** \ Your Kidneys & How They Work

English

Kidney Disease

- Acquired Cystic Kidney Disease
- Amyloidosis & Kidney Disease
- Chronic Kidney Disease (CKD)** +
- Diabetes Insipidus
- Glomerular Diseases +
- Henoch-Schönlein Purpura
- IgA Nephropathy
- Kidney Disease in Children +
- Kidney Failure +

Your Kidneys and How They Work

On this page:

- [What are the kidneys and what do they do?](#)
- [Why are the kidneys important?](#)
- [How do the kidneys work?](#)
- [Points to Remember](#)
- [Clinical Trials](#)

What are the kidneys and what do they do?

The kidneys are two bean-shaped organs, each about the size of a fist. They are located just below the rib cage, one on each side of the spine. Every day, the two kidneys filter about 120 to 150 quarts of blood to produce about 1 to 2 quarts of urine, composed of wastes and extra fluid. The urine flows from the kidneys to the bladder through two thin tubes of muscle called ureters, one on each side of the bladder. The bladder stores urine. The muscles of the bladder wall remain relaxed while the bladder fills with urine. As the bladder fills to capacity, signals sent to the brain tell a person to find a toilet soon. When the bladder empties, urine flows out of the body through a tube called the urethra, located at the bottom of the bladder. In men the urethra is long, while in women it is short.

U.S. Department of Health and Human Services (2017).



QUESTIONS

REFERENCES

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kidneywi.org
facebook.com/nkfwl

linkedin.com/company/national-kidney-foundation-of-wisconsin

National Kidney Foundation of Wisconsin presents

Women and Kidney Health

Tuesday, September 25
6-7pm



Thanks for joining us!