What is lupus?
Systemic Lupus Erythematosus, often called lupus, is a disease that causes inflammation (swelling) in many different parts of your body, including your skin, joints, kidneys, lungs and brain.

It is an auto-immune disease caused that occurs when your immune system mistakenly attacks your own healthy tissues. Your immune system protects your body against infections by producing antibodies. With lupus, the immune system does not work properly and makes antibodies against your own tissues. It can range from a mild skin rash to a serious life-threatening disease.

What is lupus nephritis?
When lupus affects your kidneys, it is called 'lupus nephritis'.

Each kidney contains up to one million nephrons, the filtering units of the kidneys. Inside a nephron is a tiny set of looping blood vessels called the glomerulus.

Lupus nephritis means there is inflammation in your kidney. Kidney damage in lupus can be mild or severe. Your immune system attacks the filters of the kidneys causing swelling and scarring meaning your kidneys can not do their job so well. Lupus nephritis is seen in almost half of all people with lupus.

What causes lupus?
No one knows exactly what causes lupus. A number of factors, such as family history, infections, viruses, sunlight, stress and hormones acting together could be the cause. Researchers are looking at causes and treatments.

Who is at risk of lupus?
Lupus is more common in women than men. It can affect people at any age but it usually starts between the ages of 15 and 44. There is a genetic (family history) link, but even if you have a close relative (parent or sibling) with lupus, your risk of developing the disease is less than 10 per cent.
What are the symptoms of lupus?

Lupus can have a large range of symptoms that are also seen in other diseases, which can make the diagnosis difficult.

The symptoms of lupus include:
- skin rashes particularly in areas exposed to the sun, such as the face
- joint pains
- mouth ulcers
- hair loss
- recurrent chest pains
- fevers
- feeling generally unwell

Many people with lupus nephritis do not have specific symptoms, they just feel generally unwell.

Sometimes lupus nephritis can cause swelling of your ankles, legs, fingers or face, and occasionally fluid in your lungs causing some difficulties in breathing.

You may have headaches due to high blood pressure and may see blood in your urine (wee).

How is lupus nephritis diagnosed?

Your doctor will diagnose lupus by taking a history of your symptoms. No one single test can detect lupus. Tests include:

The symptoms of lupus include:
- A blood test to look for antibodies and test kidney function
- A urine test to look for blood and protein
- A kidney biopsy to collect a tissue sample to look at under a microscope

How is lupus nephritis treated?

Lupus cannot be cured, but usually responds well to treatment.

Treatment depends on the level of damage to your kidneys.

In more severe cases, you may take medications that block your immune system.

These include:
- corticosteroids
- mycophenolate
- mycophenolate sodium
- rituximab
- azathioprine
- mofetil
- cyclophosphamide

Blood pressure tablets might also be prescribed.

Speak to your doctor or pharmacist if you have any questions about your medications.
What is the long-term outlook for lupus nephritis?

Lupus nephritis can range from mild to life-threatening. Most people with lupus nephritis do respond well to treatment, and it is rare that dialysis or a kidney transplant is needed.

What can I do to look after myself?

If you have been diagnosed with lupus nephritis it is not unusual for you to feel scared, frustrated, sad or angry. Acknowledge your feelings and find support if you find your feelings are affecting your daily life. Your health care team will be able to talk to you about support that is available.

Support groups in Australia can also be found at [http://www.lupus-sle.org/lupus-support-in-australia.html](http://www.lupus-sle.org/lupus-support-in-australia.html)

- Work with your health care team to receive the right treatment and advice.
- Have an active role in your treatment. Find out as much as you can about your condition.
- Protect yourself from the sun.
- Make moderate physical activity a habit.
- Be a non-smoker.
- Eat a healthy diet.
- Reduce your stress levels.

THINGS TO REMEMBER

- Lupus is an autoimmune disease that can be mild or life-threatening.
- There is no cure, but lupus and its symptoms can be controlled with medication.
- Be aware of any triggers that may make symptoms worse.
What does that word mean?

**Antibodies** - a protein that fights infections including bacteria and viruses as well as foreign bodies eg donated kidney

**Biopsy** - a procedure to obtain a small piece of kidney tissue so it can be looked at under a microscope.

**Blood pressure** - the pressure of the blood in the arteries as it is pumped around the body by the heart.

**Dialysis** - a treatment for kidney failure, which removes wastes and extra fluid from the blood by filtering it through a special membrane.

**Nephron** - the tiny parts of the kidney that filter blood to make urine. There are over one million filters in each kidney.

**Transplant** - to transfer an organ or portion of tissue from one person to another.

For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363.

Or visit our website [kidney.org.au](http://kidney.org.au) to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or Health Professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.

Kidney Health Australia gratefully acknowledges the valuable contribution of Dr Fiona Brown in the development of this material.