

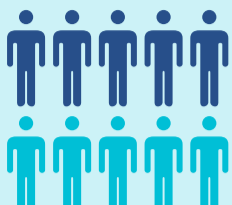
A Closer Look at LUPUS NEPHRITIS

What Is It?

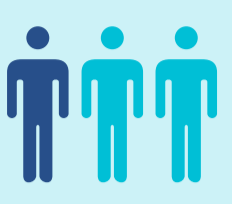
A disease involving inflammation of the kidneys caused by systemic lupus erythematosus (SLE). In **lupus nephritis**, the kidneys cannot function properly to remove waste from the blood and control the amount of fluids in the body.

Who Develops It?

In adults with SLE...



About **50%** of people with lupus will go on to develop lupus nephritis^{1,2,3,4}



About **ONE-THIRD** have lupus nephritis at **DIAGNOSIS**³

There is a **HIGHER PREVALENCE** of lupus nephritis among specific **RACIAL/ETHNIC** groups^{1,2,3,4}

Compared to Caucasians, the prevalence of lupus nephritis is roughly⁶:

4X HIGHER for African Americans and Asians

2X HIGHER for Hispanics and Native Americans

Signs and Symptoms

Possible signs and symptoms:



Fatigue



Weight gain



Foamy or frothy urine



High blood pressure



Swelling, usually in legs, feet, or ankles

Key Feature of Lupus Nephritis:

Higher than normal levels of **PROTEIN IN THE URINE** (a condition known as proteinuria)⁵

Diagnosis



Rheumatologist: Specialist who treats many diseases, including those of the joints and muscles, and may diagnose and treat lupus and lupus nephritis.



Nephrologist: Specialist who treats many diseases, including those of the kidney, and may diagnose and treat lupus nephritis. Often, the Nephrologist is the doctor who confirms the diagnosis of lupus nephritis through a kidney biopsy.

Tests used to diagnose lupus nephritis:

Urine Test



Blood Test



Kidney Biopsy



Always speak to your physician if you have any questions.

Treatments

Commonly used treatments for lupus nephritis:

- Immunosuppressants
- Steroids
- Blood Pressure Medications
- Antimalarials



Early Diagnosis and Treatment

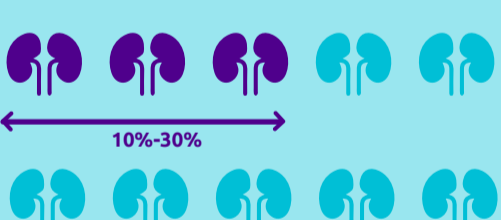
of lupus nephritis may improve long-term results⁵



Impact on Health and Wellbeing

In people with lupus nephritis...

10%-30% develop kidney failure within 15 years of diagnosis⁷



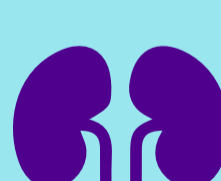
One study found that after 24 weeks of treatment, **9 out of 10** people still showed signs of kidney disease⁸

9 out of 10

Medical expenses are **4X** higher than for people with lupus alone⁹



A study of 255 people with SLE showed that the **impact on physical and emotional health** is greatest when lupus affects the **KIDNEYS**¹⁰



Interested in receiving more information and resources about lupus nephritis?



Register for an **ALL IN™** Lupus Nephritis Awareness Kit at www.ALLINforLN.com/register

References

1. Lim SS, Bayakly AR, Helmick CG, Gordon C, Easley KA, Drenkard C. The incidence and prevalence of systemic lupus erythematosus, 2002-2004: the Georgia Lupus Registry. *Arthritis Rheumatol.* 2014;66(2):357-368. doi:10.1002/art.38239
2. Somers EC, Marder W, Cagnoli P, et al. Population-based incidence and prevalence of systemic lupus erythematosus: the Michigan Lupus Epidemiology and Surveillance program. *Arthritis Rheumatol.* 2014;66(2):369-378. doi:10.1002/art.38238
3. Izmirlly PM, Wan I, Sahl S, et al. The incidence and prevalence of systemic lupus erythematosus in New York county (Manhattan), New York: the Manhattan Lupus Surveillance Program. *Arthritis Rheumatol.* 2017;69(10):2006-2017. doi:10.1002/art.40192
4. Dall'Era M, Cisternas MG, Snipes K, Herrinton LJ, Gordon C, Helmick CG. The incidence and prevalence of systemic lupus erythematosus in San Francisco county, California: the California Lupus Surveillance Project. *Arthritis Rheumatol.* 2017;69(10):1996-2005. doi:10.1002/art.40191
5. Almani S, Meara A, Rovin BH. Update on lupus nephritis. *Clin J Am Soc Nephrol.* 2016. doi: 10.2215/CJN.057806 16
6. Feldman CH, Hiraki LT, Liu J, et al. Epidemiology and sociodemographics of systemic lupus erythematosus and lupus nephritis among US adults with Medicaid coverage, 2000-2004. *Arthritis Rheumatol.* 2013;65(3):753-763. doi:10.1002/art.37795
7. Bertias GK, Tektonidou M, Amoura Z, et al. Joint European League Against Rheumatism and European Renal Association-European Dialysis and Transplant Association (EULAR/ERA-EDTA) recommendations for the management of adult and paediatric lupus nephritis. *Ann Rheum Dis.* 2012;71(11):1771-1782. doi:10.1136/annrheumdis-2012-201940
8. Appel GB, Contreras G, Dooley MA, et al. Mycophenolate mofetil versus cyclophosphamide for induction treatment of lupus nephritis. *J Am Soc Nephrol.* 2009;20(5):1103-1112. doi:10.1681/ASN.2008101028
9. Carls G, Li T, Panopalis P, et al. Direct and indirect costs to employers of patients with systemic lupus erythematosus with and without nephritis. *J Occup Environ Med.* 2009;51(1):66-79. doi:10.1097/JOM.0b013e31818a405a
10. Chaigne B, et al. Impact of disease activity on health-related quality of life in systemic lupus erythematosus—a cross-sectional analysis of the Swiss Systemic Lupus Erythematosus Cohort Study (SSCS). *BMC Immunology.* 2017;18. doi:10.1186/s12865-017-0200-5.