## Vaccinations in Children with Nephrotic Syndrome

#### ALWAYS TALK TO YOUR (YOUR CHILD'S) NEPHROLOGY HEALTHCARE TEAM BEFORE GETTING ANY VACCINES

## VACCINATION = VACCINE = IMMUNIZATION

### What are vaccines and how do they work?

Many diseases are caused by tiny invaders, called viruses and bacteria



Vaccinations help the body protect itself against certain viruses and bacteria



A very small amount of a killed or weakened virus or bacteria is given by needle, by mouth, or by nose



After the vaccine, the body then learns to defend itself against this type of virus or bacteria, so that if it ever encounters it again, it knows how to protect the body properly to prevent disease. Vaccines prevent you (your child) from contracting a contagious illness that could potentially make you (him/her) very sick.

# 🖋 DID YOU KNOW?

### Vaccinations DO NOT cause nephrotic syndrome, but may trigger relapses

Medication	Vaccines to take	Vaccines to avoid
Steroids - high daily dose (60 mg/m <sup>2</sup> )	Influenza (flu) - non-live	All Intranasal influenza
Steroids - low dose, alternate day (less than 2 mg/kg/day, or less than 20 mg/day or 40 mg every other day if weight is greater than 10 kg)	All	None
Cyclophosphamide (+ steroids)	None	All
Tacrolimus (± steroids)	Inactive vaccines* Influenza (flu) - non-live	Live virus vaccines†
MMF/myfortic (± steroids)	Inactive vaccines* Influenza (flu) - non-live	Live virus vaccines†
Tacrolimus + MMF/myfortic	Inactive vaccines* Influenza (flu) - non-live	Live virus vaccines†
Rituximab + other medications	None	All

\*Inactive vaccines: diphtheria, acellular pertussis, tetanus, inactivated polio, haemophilus influenza type B, meningococcal, pneumococcal, Hepatitis A, Hepatitis B, human papillomavirus †Live virus vaccines: MMR, varicella, intranasal influenza, some travel vaccines

When appropriate, vaccines should ideally be given before starting these medications.





Call the Nephrology Clinic at 416-813-7333

National Health Service: Nephrotic syndrome in children - Vaccinations https://www.nhs.uk/conditions/nephrotic-syndrome/

**Royal Children's Hospital Melbourne:** *Vaccinations and nephrotic syndrome* https://www.rch.org.au/uploadedFiles/Main/Content/clinicalguide/130561%20SC0TT%20Nephotic%20Syndrome%20booklet%20A5\_LR.pdf

**NephCure Kidney International:** *Should my child receive vaccinations?* https://nephcure.org/livingwithkidneydisease/raising-a-child-with-nephrotic-syndrome/