PAEDIATRIC COVID 19 INFECTION AND IMMUNIZATION

DR KAREN CHANG

COVID 19 INFECTION

ASYMPTOMATIC

MILD TO MODERATE INFECTION

SEVERE INFECTION

SYMPTOMS



SYMPTOMS



TREATMENT



TREATMENT

HOSPITALIZATION

IV FLUIDS

IV MEDICATIONS

RESPIRATORY SUPPORT OXYGEN

ICU CARE IN SEVERE CASES

DIAGNOSIS

SYMPTOMS

CONTACT HISTORY

SWAB

RAT (RAPID ANTIGEN TEST)

PCR

COVID 19 VIRUS

SPREAD FROM INFECTED PERSON

COUGH, SNEEZE, SPEAK, SING, BREATHE AND SPREAD PARTICLES

INFECTED BY BREATHING IN VIRUS

INFECTED BY TOUCHING CONTAMINATED SURFACE AND TOUCHING EYES, NOSE OR MOUTH

VIRUS CAN SURVIVE HOURS TO DAYS ON SURFACES

INDOOR SPREAD GREATER THAN OUTDOOR

RISK SERIOUS COVID 19 ILLNESS

UNDER 1 YEAR

OBESITY

DIABETES

ASTHMA (12 TO 17 YEARS AGE)

CONGENITAL HEART DISEASE

GENETIC CONDITIONS (T 21)

NERVOUS SYSTEM/ METABOLIC CONDITION

IMMUNOCOMPROMISED

OTHER EFFECTS COVID 19 INFECTION

MYOCARDITIS/PERICARDITIS

MIS -C (MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN)

POST COVID (LONG HAUL) SYNDROME with headache, fatigue, sleep / concentration problem, cough, muscle/joint pain

UNFORSEEN EFFECTS COVID 19



PREVENTION



MASKS



IMMUNIZATION

PREVENT	PREVENT INFECTION
PREVENT	PREVENT SPREAD AT HOME AND SCHOOL
PREVENT	PREVENT SEVERE ILLNESS
ALLOW	ALLOW CHILD TO STAY IN SCHOOL
ALLOW	ALLOW SAFE PARTICIPATION IN GROUP ACTIVITIES

IMMUNIZATION

A PROCESS BY WHICH A PERSON BECOMES PROTECTED AGAINST A DISEASE THROUGH VACCINATION

VACCINATION.....THE ACT OF INTRODUCING A VACCINE INTO THE BODY TO PRODUCE PROTECTION FROM SPECIFIC DISEASE

IMMUNIZATION

INTRODUCES VIRUS PARTICLE (NOT LIVE) TO BODY AND STIMULATES CELLS TO PRODUCE ANTIBODIES

THE BODY NOW HAS AMMUNITION (ANTIBODIES) AVAILABLE TO KILL VIRUS AS SOON AS VIRUS ENTERS BODY TO PREVENT INFECTION OR LIMIT INJURY

IMMUNITY



PROVIDED BY ANTIBODY

ANTIBODY LEVEL FALL WITH TIME BUT MEMORY PERSISTS IN B AND T CELLS HIGHER LEVELS RESULT IN LONGER LASTING INFECTION AND BETTER OMICRON PROTECTION PROTECTION AGAINST SERIOUS DISEASE PERSISTS AT LOWER LEVELS

m RNA COVID 19 VACCINES

CHILDREN 6-11 YEARS

Pfizer-BioNTech Comirnaty 10mcg DOSE

Moderna Spikevax 50mcg DOSE

LOCAL SIDE EFFECTS

PAIN

REDNESS

SWELLING

GENERAL SIDE EFFECTS

FEVER/CHILLS

HEADACHE

FATIGUE

MUSCLE/JOINT PAIN

SWOLLEN LYMPH NODES



SERIOUS SIDE EFFECT

ALLERGY MYOCARDITIS/PERICARDITIS

VACCINES

8 WEEK INTERVAL- > LONGER INTERVAL = STRONGER IMMUNE RESPONSE = HIGHER VACCINE EFFECTIVENESS = LONGER PROTECTION

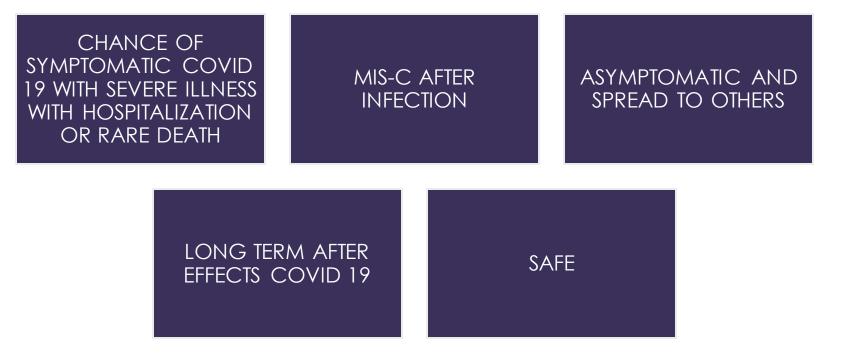
LONGER INTERVAL DECREASES RISK MYOCARDITIS/ PERICARDITIS

BOOSTER DOSE HIGHER IMMUNE RESPONSE THAN AFTER 2ND DOSE

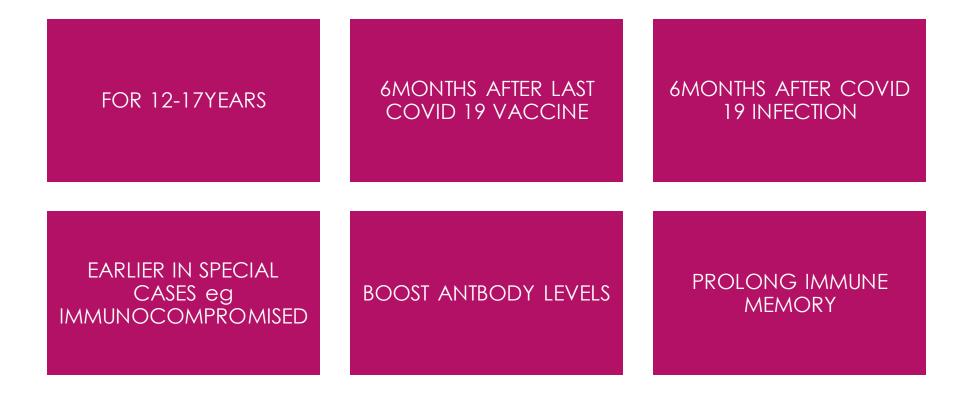
INFECTION BEFORE VACCINE...8 WEEKS AFTER START SYMPTOM OR POSITIVE TEST

INFECTION AFTER 2 DOSES...... 3 MONTHS AFTER INFECTION OR AT LEAST 6 MONTHS FROM 2ND DOSE

WHY VACCINATE



BOOSTER



SAFETY CONTINUED MONITORING

HEALTH CANADA

PUBLIC HEALTH AGENCY OF CANADA

VACCINE MANUFACTURERS