Your Care if Your Immune System is Weakened

Health problems such as arthritis or lupus, or some of the medicines you take for treatment may weaken your immune system. Your immune system helps your body fight infections. Your system may not be as weak as someone who has had an organ transplant or the person having cancer treatment, but you still need to take care to reduce your risk of infection.

Certain medicines can weaken your immune system, such as:

- Steroids, such as prednisone or methylprednisolone (Medrol)
- Azathioprine (Azasan, Imuran)
- Cyclosporine (Neoral, Sandimmune, Gengraf)
- Hydroxychloroquine (Plaquinil)
- Leflunomide (Arava)
- Methotrexate (Trexall, Rheumatrex Dose Pack)
- Mycophenolate mofetil (Cellcept)
- Sulfasalazine (Sulfazine, Azulfidine)

Talk to your doctor or pharmacist about your medicines and take precautions to prevent problems. Follow these care guidelines to help keep you healthy.
Care Guidelines

Eye Care
- See an eye doctor each year for a check up and more often if you have a vision problem.
- Be sure to report any vision changes or problems to your doctor right away. These may include blurring, seeing halos around lights, or loss of vision.

Skin Care
- Use sunscreen with skin protection factors (SPF) rated 30 or higher. Apply it 20 minutes before going outside. Reapply it every 2 hours and after swimming.
- Try to stay out of the sun between 10:00 AM and 4:00 PM when the sun's rays are the strongest. You will be able to avoid about 75% of the sun's most damaging rays.
- Wear protective, tightly woven clothing such as long-sleeved shirt and pants. If you can see light when holding fabric up to the light, sun can get in. If you are sun sensitive, you may want to buy sun-protective lightweight clothing.
- Wear a tightly woven hat with a circular brim and sunglasses, even when walking short distances.
- Avoid tanning beds and use of sun lamps.
- If you notice you have more problems with acne or bruising, or wounds are slow to heal, talk to your doctor.

Dental Care
- Brush and floss your teeth each day to prevent gum disease that can lead to infection.
- Visit your dentist on a regular schedule to check for any problems in your mouth.
- Talk to your doctor to know whether you should take antibiotics before having dental treatments to reduce your risk of infection.

Food Safety
Some food items carry germs that may not be harmful to most people, but can cause problems for the person with a weak immune system. Use these guidelines to prevent infection from foods you eat.
• **Dairy products** – Avoid drinking or eating food made with unpasteurized milk. Avoid soft cheeses like feta, brie, camembert or any cheese made with unpasteurized milk. Check the labels to find these products made with pasteurized milk.

• **Eggs** – Eat eggs that are fully cooked. Avoid raw or undercooked eggs and foods that may contain raw or undercooked eggs such as cake batter, cookie dough, Caesar salad dressing, mayonnaise or hollandaise sauce.

• **Meat and poultry** – All meat and poultry should be cooked so the juices run clear. Avoid rare meats.

• **Seafood** – Avoid all raw or undercooked oysters, clams or mussels.

• **Fruits and vegetables** – Use a scrub brush to wash fruits and vegetables, even when you are not going to eat the peel or they are prepackaged. Avoid salad bars. Do not drink unpasteurized fruit or vegetable juices or cider.

• **Keep food prep areas clean and keep cooked and raw foods separate.** Clean cutting boards between cutting meats and vegetables. Be sure to clean counter surfaces well.

• When **dining out**, order meat, seafood and poultry cooked medium or well done. Do not eat pink animal meat. Make sure shellfish is well cooked and firm.

• Avoid using well water.

**Alcohol**
Talk to your doctor or pharmacist about drinking alcohol. Drinking alcohol when taking some medicines can damage your liver. This includes medicines such as methotrexate, cyclosporine, azathioprine and leflunomide.

**Protect Yourself**
• Wash your hands well and often to reduce the chance of infections. If soap and water are not available, use alcohol hand sanitizer.

• Wear an N-95 mask when working with dirt or plants, or when cleaning the attic, basement or moldy spaces. These masks can be found in drugstores, hardware and home improvement stores.

• Keep any cuts, burns, scrapes or other wounds covered with clean, dry bandages until healed.
• Avoid swimming in fresh water, such as lakes, creeks, or ponds.
• Be sure you keep up to date with your vaccines.
  ▶ Have a flu shot each year.
  ▶ Have a vaccine to prevent pneumonia every 3 to 5 years.
  ▶ Have vaccines for hepatitis A and B.
  ▶ Avoid any vaccine that has live virus, such as the measles, mumps and rubella vaccine, shingles vaccine, or the nasal flu vaccine.

Other Issues
• Smoking and the use of other tobacco products can put you at risk for infections.
• Women should avoid pregnancy if they are taking medicines that weaken the immune system. Talk to your doctor about birth control methods.
• Men may have trouble fathering a child or have a child with health problems if taking certain medicines that weaken the immune system. Talk to your doctor about your risks.
• If you are traveling out of the United States, be sure your vaccines are up to date. Be sure to check with your doctor about medicines you may need to prevent infections.

Call Your Doctor
Call your doctor if you have any of these signs:
• Fever greater than 100.5 degrees F or 38 degrees C
• Chills or night sweats
• Severe sore throat, ear or sinus pain
• Productive cough
• Problems breathing
• Painful or frequent urine flow
• Draining from wounds or wound that will not heal
• Unplanned weight loss
• Nausea, vomiting or diarrhea that lasts more than 2 days