What is Immunosuppression?

Immunosuppression is a condition in which the immune system does not work as well as it does in normal healthy workers. Workers who have immunosuppression are considered to be immunocompromised. They are more at risk for development of illness caused by an infectious disease.

What conditions cause immunosuppression?

There are many medical conditions that result in immunosuppression. In general, if you have a medical condition that result in problems with your immune system, your primary physician will have informed you. Please read this document carefully.

Below is a list of conditions that may result in immunosuppression.

- Infection with Human Immunodeficiency Virus (HIV)
- Prolonged use of corticosteroid (cortisone) medications by mouth or by injection. These drugs are given for a variety of diseases including asthma, allergies, and autoimmune disorders such as lupus and rheumatoid arthritis.
- Monoclonal antibody therapy
- Medications used by people who have received organ transplants
- Long term diabetes mellitus, kidney or liver disease
- Blood diseases (diseases that affect the bone marrow or white blood cells, for example leukemia or lymphoma)
- Certain forms of cancer, leukemia, and lymphoma.
- Cancer chemotherapy and radiation therapy
- Chronic under nutrition (malnutrition)
- Pregnancy will cause some degree of immunosuppression
- Individuals who have had a splenectomy

Immunosuppression and HIV

Immunosuppression may result from an infection with the Human Immunodeficiency Virus (HIV). Some workers may not be aware of HIV infection. If you are at risk for an HIV infection and do not know your HIV status, you should contact your doctor and complete a HIV test. If you have started on medications and receive regular care for HIV infection, you may not be significantly immunosuppressed, and can continue to perform almost all normal work activities without problems. The risk of immunosuppression from HIV depends on many factors, and an experienced doctor who treats HIV and is aware of your current condition is the best source of information.
If I am immunosuppressed, what infections am I at increased risk for?

- Almost any of the infectious disease agents that can infect healthy people pose more of a risk of infection for people who are immunosuppressed. Examples of some of the agents present in research laboratories include:
  - Tuberculosis (TB)
  - Q-Fever
  - Fungi, including Histoplasma capsulatum
  - Herpes viruses
  - Chlamydia
  - Enteric infections such as salmonella, campylobacter and cryptosporidium.

- Many infectious agents that do not normally cause serious health problems in healthy people can cause problems in immunosuppressed individuals. Examples include:
  - Mycobacterium marinum (found in fish tanks)
  - Mycobacterium avium (found in birds)
  - Cryptosporidium (found in many animals in the research laboratory)
  - Giardia (found in cats, dogs and sheep)
  - Salmonella (found in many different research animals, especially reptiles/rodents)
  - Shigella and campylobacter (found in many mammalian research animals)
  - Ectoparasites such as mites (found in many research animals including birds and rodents and other mammals)
  - Bordetella species (dogs, cats, pigs and other mammals)
  - Bartonella species (cats and cat fleas)

Which vaccines are safe for immunosuppressed people?

- Before receiving any live bacterial or viral vaccines, you should consult your personal physician/provider since these medications may pose risks of severe side effects:
  - MMR (mumps, measles and rubella)
  - Yellow fever vaccine
  - Varicella (chicken pox and shingles vaccines)

- In general, other vaccines that do not contain live bacteria or viruses are safe, but may be less effective and supply less protection in the case of laboratory exposure:
  - Hepatitis vaccines
  - Inactivated polio vaccine
  - Tetanus, diphtheria and pertussis vaccines

- In general, the tuberculin skin test is considered safe for immunosuppressed individuals but may be less efficacious than in a healthy individual.

If I am immunosuppressed, what can I do to reduce my risk of infection?

It is important to ask for help in evaluating your risks.

- **Know you workplace:** UCSF Environment, Health and Safety (EH&S) can help identify a list of possible infectious agents in the workplace that may be of concern to you and your doctor. Call the Public Health Officer at (415) 514-3531 for more information on what infectious agents may be present at work.
• **Talk to your Provider:** A primary care physician/provider who is aware of your medical condition and has a list of infectious agents present at work can help you make important decisions regarding whether you should ask for work place accommodation. You should discuss a list of infectious hazards present in your workplace with your doctor.

• **Consult with Occupational Health Services:** After talking to your physician/provider to discuss infectious agents present in your workplace and your health conditions, it may be necessary to minimize exposure through a restriction of job tasks. UCSF Occupational Health Services can assist in documenting any medical recommendation. Also, if you have concerns about your risks, you can call UCSF Occupational Health Services at (415) 885-7580 for confidential counseling.

**What else can I do to reduce my risk?**

- Always wear the recommended personal protective equipment.
- Always wash your hands after contact with animals, potentially infective materials and after taking off gloves.
- Ask for help in requesting accommodations in the workplace to avoid possible exposures through UCSF Occupational Health Services.

**What should I do if I have symptoms that suggest a work related infection, illness or injury?**

If you have any symptoms suggestive of infection from your workplace, you should seek medical evaluation as soon as possible.
- If your condition requires emergency treatment, you should go to the closest Emergency Department for evaluation.
- If you feel that your condition is not an emergency, you or your supervisor should call UCSF Occupational Health Services at (415) 885-7580 to schedule an appointment for evaluation.

**Where can I get more information?**

For a personalized evaluation of workplace hazards, contact the UCSF Public Health Office:

Office of Environment, Health and Safety  
50 Medical Center Way  
San Francisco, CA 94143  
Campus Mail: Box 0942  
Telephone: (415) 514-3531  
PublicHealthOffice@ucsf.edu

For confidential medical assessment and counseling regarding immunosuppression or medical treatment of suspected occupational infectious disease:

Parnassus: UCSF Occupational Health Services  
350 Parnassus Avenue, Suite 206  
or call (415) 885-7580

Mt. Zion: UCSF Occupational Health Services  
2330 Post Street, Suite 460
or call (415) 885-7580

Mission Bay: UCSF Occupational Health Services
1855 4th Street, Suite 1739
or call (415-) 885-7580

VA: VA Medical Center
Personnel Health
4150 Clement, Bldg. 203, GB17
Monday, Tuesday, Wednesday, and Friday
10:00 a.m. – 11:00 a.m. and 2:00 p.m. – 3:00 p.m.
or call (415) 221-4810, x2735
(Only for staff permanently assigned to the VA)

For confidential medical assessment and counseling regarding immunosuppression or medical treatment of suspected occupational infectious disease for students who use UCSF student health services as their primary care provider:

Parnassus SHS Parnassus
500 Parnassus Avenue
Millberry Union West, Level P8, Rm. 5
San Francisco, CA 94143
(415) 476-1281

Mission Bay SHS Mission Bay
1675 Owens Street
William J. Rutter Center, Room 330
San Francisco, CA 94143
(415) 476-1281