Immune System Disorders - Fast Facts

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1. The body's immune system involves a complex network of organs, cells and proteins located throughout the body. The immune system defends against infections from germs (such as bacteria, viruses, fungi, parasites), and other invaders (such as cancer cells), while protecting the body's own cells.
2. In most people, their immune system is an effective network that responds and adapts to defend the body against infections and cancer. However, some people have immune system disorders which interrupt this protective process.
3. Immune system disorders are caused by dysfunction which can result in overactive immune responses (allergies or autoimmunity) or underactive immune systems (immunodeficiencies).
4. In allergic diseases, the immune system creates an excessive response to proteins in substances (known as allergens). Allergic diseases are extremely common and include food, drug or insect allergy, hay fever (allergic rhinitis), sinus disease, asthma, hives (urticaria) and eczema (atopic dermatitis). Anaphylaxis is the most severe type of allergic reaction and should always be treated as a medical emergency.
5. In autoimmune diseases, the immune system mounts a response against normal components of the body. Autoimmune diseases range from common to rare, and include systemic lupus erythematosus (lupus), rheumatoid arthritis and vasculitis.
6. Underactivity or dysfunction of the immune system is also known as immunodeficiency, which leads to infections and/or swellings that can be life threatening in severe cases.
7. Immunodeficiencies include:
    - Primary immunodeficiency (PID) disorders, also known as inborn errors of immunity (IEI) are caused by defects in the genes that control the immune system and are usually inherited.
    - Acquired immunodeficiencies include AIDS (acquired immunodeficiency syndrome), that is due to human immunodeficiency virus (HIV).
    - Secondary immunodeficiencies may be caused by immunosuppression treatment, that is often required for recipients of cancer chemotherapy and transplants, to prevent rejection or graft versus host disease.
8. Clinical immunology/allergy specialists in Australia and New Zealand diagnose, treat and manage patients with allergy, immunodeficiencies and other immune system disorders. Details for these specialists are listed at www.allergy.org.au/patients/locate-a-specialist

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For more information go to www.allergy.org.au/patients/immune-system

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