

Key Messages

3 Steps Toward Preventing Infections During Cancer Treatment

www.preventcancerinfections.org

Key Messages:

- Given cancer patients' vulnerable condition, great attention to infection prevention is warranted throughout the course of their care.
- Some chemotherapy treatments cause low white blood cell counts, a condition called neutropenia, and places patients at risk for developing infections.
- Neutropenia represents the most serious hematologic toxicity of cancer chemotherapy, limiting the doses of chemotherapy that can be administered.
- Preventing infections during treatment can result in significant decreases in morbidity and mortality for cancer patients.
- The interactive Web site for patients and caregivers, *3 Steps Toward Preventing Infections During Cancer Treatment*, includes:
 - an interactive risk assessment tool that helps cancer patients assess their risk for developing a low white blood cell count during chemotherapy.
 - educational information to help prepare, prevent and protect cancer patients against potentially life-threatening infections.

Key Points:

- The resource is available online at www.preventcancerinfections.org. Cancer patients and caregivers complete a short online questionnaire about their risk factors and receive downloadable information about how to help lower their risk for infection and keep themselves healthy while receiving chemotherapy.
- This Web site is useful for most cancer patients receiving chemotherapy and their caregivers. The information is meant to serve as a resource to generate conversation between the health care provider and patients and their caregivers about risk of infection and steps patients can take to lower their risk.
- This Web site does not address infection prevention issues that are unique to bone marrow transplant or stem cell transplant patients.
- To help prevent infections, at a minimum, cancer patients receiving chemotherapy (and their caregivers) should:
 - Keep their hands clean.
 - Treat a fever as an emergency, and call their doctor right away if they develop a fever.
 - Know the signs and symptoms of an infection and what to do if they develop any of these signs or symptoms.

Program Components and Resources:

- As part of the comprehensive program, CDC also produced a collection of resources. The educational materials are available online at www.cdc.gov/cancer/preventinfections and include the following:
 - Video Podcast for patients and caregivers
 - Neutropenia and Risk for Infection Fact Sheet for cancer patients and caregivers
 - Health e-card for cancer patients
 - Health e-card for caregivers of cancer patients
 - Poster directed toward a cancer patient
 - Poster directed toward ER staff
 - Preventing Infections in Cancer Patients Program 1-pager

Preventing Infections in Cancer Patients Program Summary:

The Centers for Disease Control and Prevention (CDC) will be introducing two new educational resources as part of the Preventing Infections in Cancer Patients program October 25, 2011. The comprehensive program, first announced in 2009, focuses on providing information, action steps and tools for patients, their families and their healthcare providers to help reduce the risk of developing potentially life-threatening infections during chemotherapy treatment. New resources include an interactive website for cancer patients and caregivers as well as a Basic Infection Control and Prevention Plan for Outpatient Oncology Settings.

This comprehensive program was developed by experts from CDC's Division of Cancer Prevention and Control and CDC's Division of Healthcare Quality Promotion. The program was made possible by a CDC Foundation partnership with Amgen.

Background:

Some cancer patients receive chemotherapy regimens which puts them at risk for neutropenia or low white blood cell counts (1). It has been estimated that each year, 60,000 cancer patients are hospitalized for chemotherapy-induced neutropenia, and one patient dies every two hours from this complication in the United States[2]. Preventing infections during treatment can result in significant decreases in morbidity and mortality for cancer patients (3).

In 2010, an estimated 1.5 million new cases of cancer were diagnosed in the United States [4]. With the improvement in early detection and better treatments as well as the growth and aging of the U.S. population, the total number of persons diagnosed with cancer is expected to increase substantially [5]. Despite advances in oncology care, infections remain a major cause of morbidity and mortality among cancer patients [6-8]. The risk for infection is attributed, in part, to the patient's immunosuppression caused by the underlying malignancy and/or chemotherapy and to certain necessary healthcare procedures. [9]

Cancer patients may not be aware of actions they can take to minimize their risk of infection. Educational programs directed toward this population may reduce the risk of preventable infections and decrease morbidity and mortality.

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