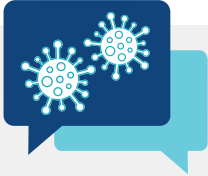




Pediatric Oncology Nursing during COVID-19

A collaboration of



How Does COVID-19 Affect Children with Cancer? ^{1, 5, 8, 10}

Children, generally, do not seem to be as vulnerable to COVID-19 as adults. However, children with cancer are thought to be vulnerable due to their immunocompromised state. Importantly, **it is not yet known how frequently or severely children with cancer will be affected by COVID-19.**

The care of children with cancer has been interrupted due to changes in health care systems during COVID-19. Travel restrictions, financial impacts, and medication shortages are also threats to pediatric cancer care delivery.

How Can I Protect My Patients? ^{1, 3}



The virus that causes COVID-19 is spread through the droplets of infected people, whether or not they are symptomatic:

- The virus is mainly spread through **large airborne droplets**. These are most likely to be spread when a person talks, coughs, sneezes, or sings.
- Although the virus has been found in small airborne particles, it is not known whether it is present in large enough amounts to infect someone.

The **best protection is through interventions that decrease the risk of transmission:**

- Frequent hand hygiene.
- Proper use of personal protective equipment.
- Physical distancing measures.
- Wearing a mask or face covering when in public to decrease the spread of respiratory droplets.

There are **no medications known to prevent** COVID-19.

Other ways to protect your patients:

- Guidance on hand hygiene, infection prevention, and physical distancing at home.
- Limit or decrease length of clinic appointments.
- Screen patients and families by phone and before entry to hospital.
- Limit caregivers to one per patient.
- Siblings and other family members should not visit at this time. Special arrangements should be considered for children nearing the end-of-life, or newly diagnosed or relapsed patients.
- **Strict isolation** for any patients with known or suspected COVID-19 infection.

What Are the Recommendations for Staffing? ^{2, 4, 7}



- Nurses caring for neutropenic patients **SHOULD NOT** care for patients with suspected/confirmed COVID-19.
- If nurses are exposed to COVID-19, they should not care for neutropenic patients for 14 days.
- Nurses who have **tested positive for COVID-19 with mild to moderate illness** can return to work when at least 10 days have passed since symptoms first appeared (or positive test if asymptomatic), at least 24 hours have passed without fever or use of anti-pyretics, and symptoms have improved. **No repeat testing is necessary for nurses to return to work.** (CDC Return to Work Criteria for Health Care Professionals).
- Refreshers or **training for any nurses who are asked to rotate or re-deploy** to another area to help manage patient surges.



What Are the Recommendations for Chemotherapy Administration? ^{6, 9}

- Use **PPE that is adequate for both chemotherapy administration and protection** from COVID-19.
- Strategies to optimize PPE during chemotherapy handling may be needed in order to conserve PPE
- Examples of **interim guidelines** (from the Oncology Nursing Society) include:
 - Using a mask with face and eye protection only if splashing is likely or for cleaning spills.
 - Reusing a single gown for a single patient.
 - Having one nurse perform all disconnections/take-down of chemotherapy.
 - Using gloves only (no gown) for lower hazardous-risk drugs.⁹

Pediatric Oncology Nursing during COVID-19

A collaboration of



Where Can I Get More Information?

Information will be continually updated as it becomes available at the Global COVID-19 Observatory and Resource Center for Childhood Cancer (<http://covid19childhoodcancer.org>)

Information for patients and families can be found at www.together.stjude.org

References

- ¹Bouffet E, et al. Early advice on managing children with cancer during the COVID-19 pandemic and a call for sharing experiences. *Pediatr Blood Cancer*, 2020 <https://doi.org/10.1002/pbc.28327>
- ²Centers for Disease Control and Prevention Criteria for Return to Work for Healthcare Professionals with Confirmed or Suspected COVID-19 (Interim Guidance). (n.d.). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html>
- ³Centers for Disease Control and Prevention Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings. (2020, April 12). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>
- ⁴Huang, L., Lin, G., Tang, L. et al. Special attention to nurses' protection during the COVID-19 epidemic. *Crit Care* 24, 120 (2020). <https://doi.org/10.1186/s13054-020-2841-7>
- ⁵Kotecha. R. Challenges posed by COVID-19 to children with cancer. *Lancet Oncol*, 2020 [https://doi.org/10.1016/S1470-2045\(20\)30205-9](https://doi.org/10.1016/S1470-2045(20)30205-9)
- ⁶ONS Interim Guidelines during the COVID-19 Pandemic. (n.d.). Retrieved from <https://www.ons.org/covid-19-interim-guidelines>
- ⁷ONS Recommendations for Oncology Staff Assignments During the COVID-19 Pandemic. (n.d.). Retrieved from <https://www.ons.org/oncology-staff-assignments-covid-19>
- ⁸Rasmussen SA & Thompson LA. Coronavirus Disease 2019 and Children: What Pediatric Health Care Clinicians Need to Know. *JAMA Pediatr*, 2020 <http://doi.org/10.1001/jamapediatrics.2020.1224>
- ⁹Centers for Disease Control and Prevention. Table 2, NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings: Proposed Additions to the NIOSH Hazardous Drug List 2018 (Under Review). Retrieved from <https://www.federalregister.gov/documents/2018/02/14/2018-02957/niosh-list-of-antineoplastic-and-other-hazardous-drugs-in-healthcare-settings-proposed-additions-to>
- ¹⁰Gertjan J. L. Kaspers (2020) COVID-19: how will this impact children with cancer, now and in the future?, *Expert Review of Anticancer Therapy*, 20:7, 527-529, DOI: [10.1080/14737140.2020.1781621](https://doi.org/10.1080/14737140.2020.1781621)

