

# RISK OF ZONOTIC INFECTION WITH ANIMAL-ASSISTED THERAPY IN PEDIATRIC HEMATOLOGY/ONCOLOGY PATIENTS

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## Abstract

**Background:** The benefits of human-animal interaction in healthcare are widely accepted, and utilized to aid in stressors of illness. However, risk of zoonotic infection from animal-assisted therapy (AAT) is less well studied. Policies around AAT in pediatric hospitals, particularly with regard to immunocompromised patients, vary widely due to lack of evidence-based guidelines. Therefore, we aimed to identify zoonoses in our hematology/oncology patients who received AAT. **Procedure:** We retrospectively reviewed hematology/oncology patients admitted at UCSF Benioff Children's Hospital Oakland between May 2018 and September 2019 that received AAT and compared this cohort to prior admissions starting November 2013 when AAT was not received. Clinical outcomes including length of stay, number of blood cultures, number of positive blood cultures, organisms identified, and *C. difficile* infection were compared for patient admissions where AAT was and was not received to determine potential zoonotic infection. **Results:** A total of 666 admissions occurred during the allotted time period including 310 admissions with standard and 56 admissions with strict immune precautions. There was no hospital acquired zoonotic bloodstream infection and no increase in *C. difficile* infection in those with standard or strict immune precautions receiving AAT compared to those admissions when not receiving AAT. **Conclusion:** There was no increase in zoonotic infection in immunocompromised pediatric hematology/oncology patients receiving AAT. Though further validation is required, liberalization of hospital infection control practice to allow AAT for immunocompromised pediatric patients appears safe as long as routine hygienic practice is strictly followed and patients monitored for potential increase in zoonotic infection.

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