

n 2010, American Humane Association and Zoetis (formerly the animal health business of Pfizer) partnered to launch the *Canines and Childhood Cancer* study, a groundbreaking effort to measure the impacts of animal-assisted therapy for children with cancer, their parents, and therapy dogs. The goals of this collaboration are to promote innovation and evidence-based research and practice improvements to advance the field of animal-assisted therapy, as well as the treatment of childhood cancer for patients and their families.

Unlike the majority of existing research in the animalassisted therapy field, this rigorously designed study takes

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place at multiple sites and incorporates a randomized control cohort, relatively large sample size, and validated instruments to evaluate the effects of the addition of therapy dog sessions



to the standard-of-care treatment received by patients diagnosed

with Acute Lymphoblastic Leukemia (ALL). The *Canines and Childhood Cancer* study is anticipated to be a milestone in our understanding of the vital bond shared between people and animals.

Canines and Childhood Cancer Study Background and Rationale

American Humane Association and Zoetis have published a landmark, comprehensive review of existing animal-assisted therapy and pediatric oncology literature available at www.caninesandchildhoodcancer.org. Researchers also conducted interviews and focus groups with hospital staff, families of children with cancer, adolescent survivors, and therapy dog handlers. Major findings from these activities helped to inform the study's pilot design and overall planning efforts.

At any given time in the United States, more than 40,000 children are undergoing cancer treatment and nearly 13,500 parents each year are hit with the devastating news that their child has been diagnosed with cancer. Leukemia is the most common childhood cancer diagnosis, and



is usually most prevalent in children under the age of 10 years. ALL treatment lasts approximately two years for females and three years for males.

Childhood cancer is a family disease; it often affects patients, their parents/guardians, and siblings in profound ways. Children with cancer and their families not only cope with physical issues, but are also prone to psychosocial and behavioral issues including emotional distress, anxiety, trauma, depression, isolation, and significant strain in their relationships. While physical effects – such as pain and/or fatigue – may improve over time,

psychosocial effects can remain and impact cancer survivors and their families for the long term. Yet few evidence-based studies have either critically examined or recommended adjunctive interventions to help families thrive during the childhood cancer experience.







Why Animal-Assisted Therapy (AAT)?

Due to the high and stressful costs of cancer treatment, any adjunctive intervention aimed at addressing the family's psychosocial needs should be both accessible and affordable. Animal-assisted therapy (AAT) is one of several complementary, low-cost treatment options that could potentially address the immediate and ongoing psychosocial needs of many families coping with childhood cancer.

Increasingly, serious attention has been given to the roles that animals can play in supporting the health and emotional well-being of people in need. Many research studies have provided promising evidence that involving animals in therapeutic interventions provides benefits for many populations. For critically or terminally ill populations, such as children with cancer and their families, therapy animals have the potential of:

- Alleviating treatment-related distress
- Decreasing blood pressure and heart rate
- Normalizing the hospital environment
- Offering helpful distraction from pain or worry
- Motivating active participation in the treatment process
- Increasing opportunities for sensory stimulation and physical touch
- Decreasing depressive symptoms by offering joy, company, and something to look forward to

While the field of AAT research has expanded enormously in recent years, it is not yet clear that the incorporation of animals into clinical settings is effective from a scientific standpoint. The majority of findings documenting the benefits of AAT have largely been anecdotal and, as a result, the intervention has consistently struggled with gaining broad credibility and adoption. The *Canines and Childhood Cancer* study intends to add to the AAT knowledge base by rigorously examining the effects of therapy dog sessions with children who have cancer, their parents/guardians, and therapy dogs, and by understanding how best to integrate AAT interventions into pediatric oncology treatment and settings.

Goal of the Canines and Childhood Cancer Study

To rigorously measure the biological and psychosocial effects of therapy dogs on children
with ALL and their families, as well as the impact of AAT sessions on participating
therapy dogs

Hypotheses: A Focus on Distress

- Pediatric cancer patients with ALL who receive AAT will experience less distress throughout the course of their treatment sessions than patients who do not receive AAT
- Parents/guardians of pediatric cancer patients with ALL who receive AAT will experience less distress throughout the course of their child's treatment sessions than parents/guardians of patients who do not receive AAT
- Participating therapy dogs will exhibit minimal distress over the course of the Canines and Childhood Cancer study

Pilot Study Design Overview

- Study population = Children, aged 3 through 11 years, who are recently diagnosed with ALL and their parents/ guardians
- Design = A multi-site, randomized controlled study with the control cohort receiving the standard-of-care and the study cohort receiving standard-of-care plus AAT
- AAT Protocol = AAT sessions, lasting approximately 20 minutes, will occur on a weekly basis or during regularly scheduled appointments and will typically be held in the outpatient clinic. Each child will be matched with the same animal-handler team over the course of the data collection period.
- Measurement = A combination of biological, psychosocial and behavioral measures will be used to quantitatively compare the levels of distress experienced by the patients and their parents/guardians in the control and study cohorts, as well as distress among participating therapy dogs.

Pilot Study Sites

American Humane Association is currently conducting the project's pilot study at the following children's hospitals:

- St. Joseph's Children's Hospital in Tampa, FL
- East Tennessee Children's Hospital, in partnership with the University of Tennessee
 College of Veterinary Medicine, in Knoxville, TN





How to Get Involved

We need your help. In order to expand the pilot study to a minimum of five children's hospitals necessary to conduct a full clinical trial – estimated to begin in late 2013 – additional funding support is needed. No child...no family...should have to suffer through the trauma of a cancer diagnosis and treatment. But childhood cancer is a reality. As our pediatric oncology colleagues race to find ever-more effective preventative measures, treatments, and – one day – cures, our hope is that this study will help to provide the meaningful, enduring, affordable, accessible and powerful healing and comfort of a therapy dog to the children and families who need it now.

For more information or to make a donation to the *Canines and Childhood Cancer* study, please contact Amy McCullough at amym@americanhumane.org or Kevin Morris, Ph.D. at kevinm@americanhumane.org.



