



DOSSIER · THERAPY

Animal-Assisted Therapy

The page classifies the controlled studies on animal-assisted therapy: focal points are cognitive impairments, fatigue and paediatrics. The most interesting finding is a labelling problem: under the same name run dogs, horses, robot animals and visiting services, and the most cited work in the field does not test animal-assisted therapy itself.

857

STUDIES IN
TOTAL

330

IN HUMANS

78

OF WHICH
CONTROLLED

180

IN ANIMALS

0

IN THE LAB

Figures from the IHR study database · Last updated 2026-10-04

How to Read This Dossier

ESTABLISHED

measured in humans, with a comparison group

PLAUSIBLE

supported by mechanism, animal studies or observation

HYPOTHESIS

a likely connection that still needs to be tested

Animal-Assisted Therapy at a Glance

ORIGIN:

Animal-assisted therapy refers to the planned, targeted inclusion of a living animal in a treatment or care process. It takes place in nursing homes, on paediatric and oncological wards, in psychiatric rehabilitation and in preparation for a magnetic resonance imaging scan. In addition to the animal, a professionally qualified reference person and a person who leads the animal usually work together.

EVIDENCE BASE:

857 evaluated papers · 78 controlled studies in humans · 252 observational studies · 72 review papers · 180 animal studies · 0 cell-culture studies

STRONGEST EVIDENCE:

- Cognition and psyche: Reviews on cognitive impairment pool exclusively randomised or quasi-randomised studies; 55 controlled human studies fall into this area.
- Dementia: One systematic review and meta-analysis of randomised controlled trials (2022) includes 825 participants, another review (2026) 1,881 participants.
- Hospitalised children and adolescents: One review with meta-analysis (2021) covers 348 participants; one randomised study examines biobehavioural stress responses.
- Pain, anxiety and distress in the medical setting: One review (2018) pools randomised and quasi-randomised studies, another paper (2021) addresses pain in children.
- Fatigue and stress: 26 controlled human studies are assigned to this area, which forms the second-largest focus after cognition and psyche.

LIMITATIONS:

- Many included studies are small, comparison conditions range from wait-list to usual care to activities with other objects, and blinding is usually not performed.
- The label covers dogs and horses in standardised programmes; meta-analyses average across animal species, target group, contact duration and comparison condition.
- Outcome measures are frequently questionnaires and observation scales, and most measurements lie close to the contact.

CLASSIFICATION:

Animal-assisted therapy is an umbrella term for very different animal-assisted interventions; the reviews and randomised studies with clearly described comparison conditions are robust.

1. What Animal-Assisted Therapy Is

Animal-assisted therapy refers to the planned, targeted inclusion of a living animal in a treatment or care process. It takes place in facilities where animals are not otherwise part of everyday life: in nursing homes, on paediatric and oncological wards, in psychiatric rehabilitation and in preparation for a magnetic resonance imaging scan. The literature distinguishes two forms that are already visible in the study titles: animal-assisted therapy as treatment with an individual goal and animal-assisted activity as broader contact without this goal. The boundary between the two is not handled uniformly; many reviews pool both forms.

One point is decisive for reading all studies: the label covers very different interventions. Dogs, horses in standardised equine-assisted programmes and robot animals, which served as a comparison to the living dog in one frequently cited study, have been examined. Different settings, contact durations and forms of accompaniment are added. The outcome measures are equally broad: restlessness and depressiveness in nursing-home residents, anxiety and pain in medical settings, social behaviour after acquired brain injury, biobehavioural stress responses in hospitalised children, cognitive test scores. Blinding of participants and practitioners is practically impossible with a living animal. Anyone reading a review must therefore first check which animal species, which setting and which comparison condition were pooled there.

2. How Robust the Research Is

The research is distributed unevenly. A large proportion of the papers does not originate from clinical testing: basic research, animal-related studies and reviews from environmental and agricultural research together form the majority. In humans, observational designs clearly predominate; controlled human studies are the smaller group. Within these controlled papers the focus lies on cognitive impairment, followed by fatigue and safety as a separate evaluation area. Musculoskeletal system, cardiovascular system, oncology, gut, immune system, inflammation and skin are markedly smaller. Clinically, the main groups studied are therefore older people with dementia, children and adolescents in medical settings and people in psychiatric treatment.

Robustness varies by application area, and the field has more summary papers than one would expect for such a heterogeneous label. **Proven:** Reviews that pool exclusively randomised or quasi-randomised studies exist for several areas, including pain, anxiety and distress in the medical setting, cognitive impairment and hospitalised children and adolescents. The limitations are named at the same time: many of the included studies are small, comparison conditions range from wait-list to usual care to activities with other objects, and blinding is usually not performed. Outcome measures are frequently questionnaires and observation scales. **Hypothesis:** The heterogeneity of the labels is a main reason why reviews reach differently sharp conclusions despite similar questions.

Distribution of **controlled human studies** by application area — the numbers are not additive because one paper can be assigned to several areas:

APPLICATION AREA	CONTROLLED STUDIES
Cognition and psyche	55
Fatigue and stress	26
Safety and tolerability	18
Musculoskeletal system	9
Heart and circulation	5
Oncology	4
Gut and microbiome	3
Immune system	2

The label describes a setting, not an effect

Anyone who wants to know what animal-assisted therapy achieves encounters a summarisation problem. Meta-analyses average across a dog on a dementia ward, a horse beside a child with autism and a robot animal in a nursing home. The reported overall estimate is then an average across interventions that differ in animal species, target group, contact duration, supervision and comparison condition.

PLAUSIBLE:

Part of the variation between the studies arises from these differences and not from the presence of the animal. As long as studies do not report animal species, contact duration, procedure and comparison condition according to a uniform pattern, every statement about animal-assisted therapy as a whole remains a statement about a bundle.

A second point concerns reception. The most cited work attributed to the field is a meta-analysis of early childhood autism interventions; its title does not name animal-assisted procedures. The well-known work on loneliness in nursing homes also compares a robotic animal with a living dog and is listed in the evaluation as an animal-related study. Citation numbers therefore measure the visibility of a topic, not the testing of a procedure. For practice, it follows that rankings and citation peaks provide no information on reliability; what is robust are the reviews and the randomised studies with a clearly described comparison condition.

3. What Is Frequently Claimed — and What the Data Provide

STATEMENT	STUDY SITUATION
Animal-assisted therapy alleviates agitation and depression in dementia	A case-control study with matched pairs as well as a review article are available for this. Controlled evidence is available, yet the studies cannot be blinded and
In autism the effect is established	There is a systematic review on autism spectrum disorder and a paper on a standardised horse-assisted programme. The most cited autism meta-analysis in th
Cognitive enhancement is the core of the method	Cognition is the largest single area of controlled studies. However, it includes dementia, acquired brain injury and children with developmental disorders and re
The effect can be measured objectively via stress markers	A randomised study investigates biobehavioural stress responses in hospitalised children. A marker is not a disease progression, and measurements are taken

4. The Most Robust Works

Ordered by strength of evidence, not by prominence: reviews and studies with many participants first. The complete evaluation comprises significantly more works; the most robust ones are listed here.

Controlled Studies in Humans

- ¹ Project AIM: Autism intervention meta-analysis for studies of young children (2020) — Review, 6.240 participants
- ² Effects of animal-assisted therapy on patients with dementia: A systematic review and meta-analysis of randomized controlled trials (2022) — Review, 825 participants
- ³ Animal-Assisted Therapy in Dementia: A Systematic Review and Meta-Analysis of Cognitive, Affective, and Behavioral Outcomes (2026) — Review, 1.881 participants
- ⁴ Animal-assisted intervention for individuals with cognitive impairment: A meta-analysis of randomized controlled trials and quasi-randomized ... (2018) — Review, 413 participants
- ⁵ Effects of Animal-Assisted Therapy on Hospitalized Children and Teenagers: A Systematic Review and Meta-Analysis (2021) — Review, 348 participants
- ⁶ Pet therapy in the emergency department and ambulatory care: A systematic review and meta-analysis (2022) — Review, 380 participants
- ⁷ Does use of animal therapy during dental care help to reduce anxiety in children and adolescents? A systematic review (2023) — Review, 146 participants
- ⁸ Animal-assisted therapy in patients with psychotic disorders: A systematic review and meta-analysis (2026) — Review, 408 participants
- ⁹ A meta-analysis of Animal Assisted Interventions targeting pain, anxiety and distress in medical settings (2018) — Review, 9 participants
- ¹⁰ A Systematic Review of Animal-Assisted Therapy on Psychosocial Outcomes in People with Intellectual Disability (2016) — Review
- ¹¹ Animal-Assisted and Pet-Robot Interventions for Ameliorating Behavioral and Psychological Symptoms of Dementia: A Systematic Review and Meta-Analysis (2020) — Review
- ¹² Effectiveness of animal-assisted therapy on pain in children: A systematic review and meta-analysis (2021) — Review
- ¹³ Animal-assisted therapy for schizophrenia and related disorders: A systematic review (2019) — Review
- ¹⁴ Animal-assisted and robotic animal-assisted interventions within dementia care: A systematic review (2023) — Review
- ¹⁵ Network meta-analysis of comparative efficacy of animal-assisted therapy vs. pet-robot therapy in the management of dementia (2023) — Review
- ¹⁶ Benefits of Equine-Assisted Therapies in People with Multiple Sclerosis: A Systematic Review (2022) — Review article
- ¹⁷ The effect of animal assisted rehabilitation practices on symptoms of Alzheimer's patients: systematic review and meta-analysis (2025) — Review article
- ¹⁸ Effectiveness of animal-assisted therapy for dementia patients: An evidence mapping of randomized controlled trials, systematic reviews, and ... (2026) — Review article
- ¹⁹ Animal-Assisted Therapy for Reducing Anxiety in Vulnerable Clinical Populations: A Systematic Review (2026) — Review article
- Non-pharmacological and physical strategies for managing dental anxiety: a systematic review with implications for dental education (2026) — Review article
- Effectiveness of Cognitive Interventions for Community-Dwelling Older Adults Living Alone: A Systematic Review and Meta-Analysis (2026) — Review article
- ²⁰ The Effectiveness of Animal-Assisted Interventions for People Living With Dementia: An Overview of Systematic Reviews and Meta-Analysis (2026) — Review article
- ²¹ Donkey-assisted therapy in mental health conditions: a systematic review (2025) — Review article
- A Systematic Review of Randomised Controlled Trials on the Effectiveness of Ecotherapy Interventions for Treating Mental Disorders (2020) — Review article

5. Summary

The focus of controlled human studies lies on cognitive impairments with 55 studies, followed by fatigue and stress with 26 and safety and tolerability with 18. The limitations are stated in the studies themselves: small studies, inconsistent comparison conditions, no blinding.

PLAUSIBLE Part of the variation between the studies arises from differences in animal species, target group, contact duration, supervision and comparison condition, and not from the presence of the animal. It follows that every statement about animal-assisted therapy as a whole remains a statement about a bundle, as long as studies do not report animal species, contact duration, procedure and comparison condition according to a uniform pattern. Reception also carries no ranking: the most cited work attributed to the field is a meta-analysis of early childhood autism interventions whose title does not name animal-assisted procedures.

The first point to clarify would be a minimum report: Which set of details — animal species, contact duration, procedure, supervision, target definition, comparison condition — must be present in every study so that results can be summarised? Second, blinding: How can a comparison condition without an animal be designed that keeps attention and expectation comparable? The comparison of live animal versus robotic animal is an approach that has been examined in a widely cited study. Third, duration: Most measurements are taken close to the contact, and whether observed changes persist beyond the session is the obvious next question. A study that addresses these three points simultaneously would clarify what animal-assisted therapy achieves beyond the setting.

6. What Remains Open

- **Minimum report:** Which set of details — animal species, contact duration, procedure, supervision, target definition, comparison condition — must be present in every study so that results can be summarised?
- **Blinding:** How can a comparison condition without an animal be designed that keeps attention and expectation comparable? The comparison of live animal versus robotic animal is an approach that has been examined in a widely cited study.
- **Duration:** Most measurements are taken close to the contact. Whether observed changes persist beyond the session is the obvious next question.

Frequently Asked Questions

How does animal-assisted therapy differ from animal-assisted activities?

The distinction appears in the study titles of the field. Animal-assisted therapy refers to the targeted use within a treatment framework, animal-assisted activity to the broader contact without an individual treatment goal. In the reviews both forms are frequently evaluated together. Efficacy statements then apply strictly to the entire bundle and not to one of the two forms alone.

Is animal-assisted therapy tested as an adjunct to standard treatment?

In several studies it is explicitly designed as an adjunct, for example in psychosocial rehabilitation for schizophrenia or alongside oncology. The design accounts for this role: standard care with animal-assisted contact is compared against standard care alone. Statements about a replacement for standard treatment cannot be derived from this.

How is measurement performed in the studies, and what do the values contribute?

Very differently: restlessness and depressiveness in nursing-home residents, anxiety and pain in medical settings, social behaviour after acquired brain injury, stress responses in hospitalised children, cognitive test scores. The comparison conditions range from waiting list through standard care to activities with other objects. Observation scales and questionnaires are markers; they show changes within the assessment window, not a disease course.

Sources

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International Health Research

Research, put in context. Every statement leads to the original paper; the decision in the individual case rests with the treating professional.
ih-research.com/en/knowledge/animal-assisted-therapy/ · Last updated 2026-10-04