

A photograph showing two men in a farm setting. On the left, a man with grey hair wearing a white lab coat is looking towards the right. On the right, a man with dark hair wearing a plaid shirt and blue overalls is smiling and holding a small, fluffy yellow chick in his hands. The background is slightly blurred, showing farm equipment and a white wall.

COUNCIL ON ANIMAL AFFAIRS

CARE OF YOUNG ANIMALS

TOWARDS A GREATER FOCUS ON INDIVIDUAL
ANIMALS AND LOWER MORTALITY

SUMMARY

The purpose and activities of the Council

The Council on Animal Affairs (Raad voor Dierenaangelegenheden, RDA) is an independent Dutch council of experts that gives the Minister of Agriculture, Nature and Food Quality solicited and unsolicited advice on multidisciplinary issues in the field of animal health, welfare and ethical issues. The Council on Animal Affairs currently comprises around 40 members with very different backgrounds and expertise, whose membership is in a personal capacity and not bound by any instructions or binding mandate.

The Council on Animal Affairs deals with issues across the spectrum of public policy on animals: about farmed animals (hobby animals, companion animals, production animals and laboratory animals) and non-farmed animals (animals that are 'living in the wild').

The Council documents the conclusions of its deliberations in advisory reports. This gives details of the scientific and social background of an issue and gives advice on policy directions and possible solutions to dilemmas. Consensus is not necessary: a Council's advisory report can contain minority viewpoints.

Preface

The Minister of Agriculture, Nature and Food Quality requested the Council on Animal Affairs in a letter dated 23 July 2020 to write an advisory report on caring for young animals, in particular calves, piglets and goat kids. The Council on Animal Affairs set to work on this topic, which also fits within the framework of the moral dilemmas highlighted in the RDA report 'The State of the Animal in the Netherlands'. We dealt with the question in a broader context, since mortality and care among young animals can also be an issue of concern in relation to other animal species.

Mortality and care among young animals is a topic that has been discussed often and extensively and that regularly emerges in public debate. The animal owners themselves as well as other groups in society consider it to be an issue of significant concern. The Council on Animal Affairs takes the care of young animals as the starting point for reducing young animal mortality, as early death is caused by various factors that are related to the care of young animals.

With this advisory report, we aim to achieve a better understanding of the issue of young animal mortality. On that basis, we hope to give direction and guidance to the debate and the potential for reducing this mortality. We see many opportunities for improvement.

Clearer understanding of the mortality figures and the causes of premature death per animal category will provide animal owners with insight into possibilities for reducing the mortality figures.

Various external experts from outside the Council were consulted when drafting this advisory report, during separate interviews and in a joint session.

This publication contains an abridged version of the advisory report. The full version can be download from the Council's [website](#).

The Hague, January 2021



Jan Staman, voorzitter



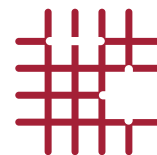
Marc Schakenraad, secretaris

COUNCIL ON ANIMAL AFFAIRS

CARE OF YOUNG ANIMALS

TOWARDS A GREATER FOCUS ON INDIVIDUAL
ANIMALS AND LOWER MORTALITY

SUMMARY



COUNCIL ON
ANIMAL AFFAIRS

Care of young animals

Advisory report at the request of the Minister of Agriculture, Nature and Food Quality

Question: the Minister of Agriculture, Nature and Food Quality requested the Council in a letter dated 23 July 2020 to write an advisory report on caring for young animals, in particular calves, piglets and goat kids. In particular, the Minister asked the Council: Where in the chain does responsibility lie for the premature death of young animals? Who is the owner of the problem, and who can and should solve it? In what way are system factors an obstacle to the care of these animals, and what does this mean for the action perspective for farms? What is the Council's view of the breadth/scope of the necessary public debate about young animal mortality?

Definition of the questions: the members of the working group discussed a number of questions, including: Why are people so concerned with the issue of young animal mortality? To what extent is there a problem? What can be done about it? Who is responsible? What can be done? What are realistic objectives? How should progress be monitored?

"During the first exchanges of ideas in the thirteen-strong forum, it quickly emerged that 'young animal mortality' is the result of a process," says forum chair Bert van den Berg, a member of the Council on Animal Affairs who works for the Dutch Society for the Protection of Animals; "The problem that we humans have with the death of young animals lies not just in death itself, but primarily in the process leading up to death. And that process is the care of young animals." There are significant differences between animal owners in terms of mortality figures, as well as in the extent to which data are recorded. "In addition to calves, piglets and goat kids, we also included poultry, rabbits, cats and dogs in our study, as early death also plays a role in these other



Photograph: Paul Voorham

Forum chair Bert van den Berg

animal categories," says Van den Berg: "Companion animals are bred under very different conditions. While some private individuals may occasionally, by chance or design, have a litter of kittens, puppies or rabbits, for example, others breed a particular companion animal as a hobby. There are also companies that breed companion animals as a source of income. There is a wide variety in how these pets and companion animals are kept and cared for, as well as how the newborn animals are helped through their first few critical weeks of life. Although we were unable to collect a lot of data on the care for and mortality amongst young companion animals, it is clear from what is known that there remains room for improvement in this category of care as well." Subgroups of forum members analysed the mortality figures for each animal category and formulated various points for attention. As a result, it quickly became clear that sectors can learn from one another. "Whereas accurate records are kept of mortality figures in the dairy farming industry, for example, such a structured approach is still under development in the goat industry. In addition, there are

significant differences across the formal and informal companion animal sector," observes Van den Berg.

Considerations: in this advisory report, we aim to achieve a better understanding of the figures, in order to unpack the issue of young animal mortality. On that basis, we give direction to the debate and provide guidance for improving the care of young animals so as to reduce young animal mortality. "We see many opportunities for improvement. Although the collected data per sector are often incomplete or non-specific, it is nonetheless evident that there are often considerable differences between animal owners and animal husbandry systems. This variation provides scope for improvement measures," comments Van den Berg. "With our advisory report, we also hope to offer animal owners perspective for action; while animal owners themselves always have ultimate responsibility for the welfare of their animals, they need concrete guidance to improve the care of these animals, where necessary." Other stakeholders, such as advisers and veterinarians, can also play an important role in this regard. We can identify various critical phases in the life of a young animal. A young animal is particularly vulnerable and requires extra attention and care around the time of birth (or immediately after hatching), in the first days and weeks of life, immediately after weaning and during the transition from maternal immunity to its own built resistance. It is therefore important, the forum concludes, to have clear insight into care and mortality during these critical periods in particular, so that targeted work can be undertaken on solutions. Greater insight into the mortality figures and the underlying factors can help in reducing the polarisation in the public debate

on this matter, thereby facilitating a constructive contribution to improving the care of young animals.

Recommendations: "Our main conclusion is that animal owners can learn a lot from each other", says Van den Berg. This will require animal owners to record data systematically and be willing to share those data. Reliable data will enable a benchmarking system to be set up on a sector-by-sector basis, providing animal owners with insight into their own results compared with others in the same field. "It is not a matter of doubting the good intentions of an animal owner," Van den Berg stresses: "But neither should animal owners automatically think that they know it all and are doing everything correctly. A willingness to reflect on your actions and make adjustments where necessary shows that you are taking responsibility for the care you provide and that you are doing what you can."

Good understanding of the various factors that determine young animal mortality enables targeted measures to be taken to improve their care and reduce the mortality rate. While this requires animal owners to invest in better recording of data, this will eventually pay off in the form of improved care of young animals, reduced premature mortality, improved results and enhanced societal acceptance of the livestock sector.

Van den Berg also sees opportunities for using digital resources, "Scale expansion and specialisation have been made possible by technology and automation. Digital technologies, such as sensors and cameras in animal sheds, can now ensure that individual animals once again receive the attention they deserve," concludes the forum chair.



Brief summary of the advisory report

Social context of the problem

In the RDA report 'The State of the Animal in the Netherlands', the themes 'the killing of animals' and 'the early death of young animals' emerged as thorny issues. In this advisory report, we focus on the theme of 'the early death of young animals'. Mortality among young animals is a topic that has long been on the agenda and regularly emerges in public debate. The definition of 'young' is different for each of the animal species covered in this advisory report, partly due to biology and partly due to the system in which the animal is kept. We have chosen to define certain periods in which we look at the specific risks for young animals. The unease in society with regard to this topic has to do with the fact that it is about young animals and that the deaths are usually premature and are felt to be unnecessary. These deaths are also seen by many as an indication of possible underlying problems in the form of inadequate care or an economic system that stands in the way of proper care. There is a broad consensus that young animal mortality is undesirable. Livestock farmers also believe in the importance of

working on reducing mortality among young animals in the interests of animal welfare, the economy and social acceptance.

A mortality rate of 0% is not a realistic goal. It is important to aim to provide the best care and to achieve the lowest mortality rate possible, but even with the best care, mortality can never be prevented entirely. For example, there may be young animals in such poor condition, due to genetic abnormalities or illness, that they have no prospect of recovery. In that case euthanasia is a relevant, and perhaps a necessary option. There may also be young animals that, due to systemic factors, have no value to the animal owner, such as a pet with undesirable physical characteristics, or have no benefit for a farmer, such as day-old male chicks or male goat kids. It would be wrong to point the finger at one type of animal husbandry system, such as organic or conventional farms, or professional or amateur breeders. Young animal mortality may be caused by many different factors. It can happen in all types of animal husbandry systems and among all types of animal species.



It is important to identify the underlying causes of mortality among young animals, including the opportunities for improvements. Usually, there is not a single cause; often it is a multi-factorial problem that cannot be solved with a single measure.

Objectives and figures

This advisory report examines young animal mortality for different animal species. We observed that there are differences between sectors in terms of both availability of data and the mortality rate of young animals. However, for all animal species, we noted a degree of variation between animal owners and animal husbandry systems, and even differences between consecutive groups of young animals reared by a single owner. This variation suggests that there is potential to reduce early death of young animals.



Photograph: David Mark

Action perspective: a return to caring for individual animals

In order to tackle the problem, it would be helpful to have a clear problem description of the early death among young animals for each animal species. This includes an analysis of the critical phases and risks that young animals could face. The most critical periods in the lives of young animals include fertilisation, care during the gestation period of the mother animal and the period before, during and immediately after birth or hatching. The latter phase includes the first few days after birth, the period immediately after weaning (for mammals) and the period in which the young animal's immune system has not yet fully developed. This comprehensive advisory report sets out examples of the risks and possible preventative and curative measures for each animal species. There is still much unknown about companion animals and the sector often lacks organisation. It is important for actors in this industry to be in better contact with each other and to exchange experiences. The industry would benefit from better infrastructure that allows the collection of both veterinary and organisational data.

When identifying the critical phases and risks for young animals, it is useful to make a distinction between management and systemic factors. Management factors, such as housing and care, are under the control of animal owners. To change systemic factors, such as genetics, housing systems or markets, animal owners generally require more time, money and help from other stakeholders. Major changes, such as new construction, selecting a different breeding line or introducing an innovation, are often suitable moments to make systemic improvements.

New technologies can help with making the switch from caring for the group to caring for the individual animal. For example, sensors can be used to monitor individual animals in a group. Good communication about these technologies is very important, as is a good balance between the opportunities and threats involved in the use of sensors. In particular, resistance relating to the care of animals may be engendered by the 'technologisation' of animal husbandry (see Digitisation of livestock farming, RDA, 2018).

Benchmark

In their search to provide optimal care for the individual animal, animal owners can learn a lot from each other. A mutual comparison with a benchmark would be a useful instrument for this purpose. Animal owners should be encouraged to monitor the essential care and mortality rates and make them available. In exchange, they will receive information and support to improve their animal care and with that, their results. Privacy protection must be guaranteed.

With regard to the availability of data on the care and mortality of young animals, we have noticed a significant disparity between the different animal sectors. For instance, in dairy farming, a great deal of information is available from all farms, which could be used to create a benchmark. But in the dog breeding industry, for example, data collection has not even begun.



Photograph: iStock

In benchmarking the provided care for young animals, it is important not to look only at the average mortality rate and the spread of mortality across an animal industry; the multifactorial nature of the problem must also be taken into account. It must be clear and explicit what 'young animal' entails for the purpose of the benchmark, which figures will be used and what they mean. In addition to mortality, parameters must be included that quantify the care of young animals, such as the use of medication.

The way data about calf mortality is collected and calculated in the dairy industry could serve as a model for other animal sectors. Records are kept for different critical periods and benchmarked across the entire industry. Where necessary, this is translated into measures for individual dairy farms to improve care, resulting among other things in reduced calf mortality.

Responsibilities in the chain

Animal owners are responsible for proper day-to-day care of their animals. For specific matters, they may involve others, such as a veterinarian, a housing specialist or a feed or breeding advisor, who can give advice on that matter. Where animal owners are faced with systemic factors, such as breeding lines that show complications, high healthcare costs or low selling prices, the breeding organisations, veterinarians and customers (such as supermarkets and the catering industry) also have a great responsibility. These parties need to be involved in working on solutions to these problems.

Action perspective

If we have insight in the young animal mortality problem in an industry, the critical periods and risks faced by young animals can be analysed. This analysis must cover day-to-day care as well as system factors, such as selected breeding lines and housing systems. Animal owners can then use the analysis to draw up an action plan (including objectives) for making improvements. It is important to put animal owners at the centre of this

process. Many risks can be addressed by making adjustments in day-to-day care. To remove systemic obstacles, the construction of new housing or renovation of existing housing, changes to selections and availability of breeding animals or the introduction of new systems and innovations are often ideal times to address these risks.

Public debate

Everyone wants to prevent and reduce young animal mortality. The first question when initiating a dialogue is whether there is agreement about the core of the problem. Is it only about reducing the mortality rate of young animals? Or is it about a broader unease that people have with keeping pets or farm animals, which can translate into mortality among young animals? In such a wide-ranging discussion, young animal mortality should not be a focus. A discussion about livestock farming in general deserves a broader approach, and the RDA is working on it, in the form of an opinion on humane livestock farming. For the purposes of this opinion, the focus should remain firmly on young animal mortality. Mortality among young animals is a moral issue. The question is the extent to which you accept this issue and why, under what conditions and how the problem can be alleviated. Accordingly, the main question for the discussion must not be: How can we reduce young animal mortality? But: What rate of mortality among young animals do we think is acceptable, and why? The debate must be about 'what we think is acceptable, why and for whom?'. We must not focus solely on the question of how we can reduce mortality. The debate must consider values, such as unilateral breeding for high production or physical characteristics, what to do with newborn animals with little chance of survival, how much room there is for improvement and what kind of mortality rate is acceptable. A dialogue must then be organised for each animal industry so that the interested parties can agree on the nature of the problem and be prepared to work together on solutions to improve the care of young animals and thus reduce mortality in a structural and significant way.



Photograph: Cissela Kontenbruck



Bibliography

Ministry of Agriculture, Nature and Food Quality (2018). Landbouw, natuur en voedsel: waardevol en verbonden [Agriculture, nature and food: valuable and connected]

RDA (2018). Denkkader Dierenwelzijn [Conceptual Framework Animal Welfare]. Council on Animal Affairs (RDA)

RDA (2018). Digitalisering van de Veehouderij [Digitisation of the livestock farming sector]. Council on Animal Affairs (RDA)

RDA (2019). The State of the Animal in the Netherlands. Schukken, Y. H. Van Trijp, J. C. M., Van Alphen, J. J. M. & Hopster, H. (eds.)

Appendix

This advisory report represents the view of the entire Council on Animal Affairs. It was prepared by a forum composed of J. P. van den Berg (chair), D. M. Eppink DVM (Young RDA network), Prof. R. Gehring, Prof. L. A. den Hartog, A. L. ten Have-Mellema, G. Hofstra, A. P. M. Kemps, Dr F. L. B. Meijboom, Prof. T. B. Rodenburg, Prof. Y. H. Schukken, Dr H. A. P. Urlings and J. van de Ven.

The working group was assisted by deputy secretary Dr K. van Hees and secretary M. H. W. Schakenraad MSc from the RDA agency.

Members of the Council on Animal Affairs effective 1 January 2021:

Prof. J. J. M. van Alphen

Dr G. B. C. Backus

J. P. van den Berg

W. T. A. A. G. M. van den Bergh

Prof. I. J. M. de Boer

Dr J. J. L. Candel, MA

H. R. Chalmers Hoynck van Papendrecht, DVM

Prof. G. van Dijk

A. G. Dijkhuis, LLM

Dr N. Endenburg

Prof. J. W. Erisman

Prof. R. Gehring

D. van Gennep, MSc

Prof. M. A. M. Groenen

Prof. S. Haring

Prof. L. A. den Hartog

A. L. ten Have-Mellema

Prof. J. A. P. Heesterbeek

G. Hofstra, MSc

J. A. M. Huijbers

Prof. A. van Huis

Prof. B. Kemp

A. P. M. Kemps

Dr L. J. A. Lipman

Dr F. L. B. Meijboom

F. E. Rietkerk, DVM

C. W. Ripmeester, LLM

Prof. T. B. Rodenburg

Dr M. C. Th. Scholten

Prof. Y. H. Schukken

G. C. Six, MSc

M. Slob, MA

Prof. G. R. de Snoo

J. Staman, LLM DVM, chair

Dr J. W. G. M. Swinkels

R. A. Tombrock, MSc

Prof. J. C. M. van Trijp

Dr H. A. P. Urlings

Dr J. B. F. van der Valk

J. van de Ven

F. A. L. M. Verstappen, DVM

2021, Council on Animal Affairs, The Hague

© Some rights reserved.

This publication is subject to usage rights as laid down in the Creative Commons Attribution 3.0 Netherlands licence. For the full text of this licence, see <http://www.creativecommons.org/licenses/by/3.0/nl/>

Design:

Ellen Bourma, www.ellenbouma.nl

Production and final editing:

Carolien Makkink, c.makkink@hetnet.nl

Cover photograph:

iStock

Photographs on inside pages:

Copyright stated alongside the photographs.

Layout and printing:

Xerox/Osage, The Hague

www.rda.nl

Council on Animal Affairs (RDA)

Bezuidenhoutseweg 73

2594 AC The Hague

The paper used for the production of this summary is certified by the Forest Stewardship Council® (FSC®). It is certain that the use of this paper has not led to deforestation. The paper is also 100% chlorine-free bleached and 100% recycled.

