Veterinary Atlas





Data, trends and developments in the Animal Health Industry













The industry-driven project Veterinary Atlas Germany

is supported by:









Developed by:



Sponsors and Supporters of the Veterinary Atlas Germany 2024

The industry-driven project Veterinary Atlas Germany 2024 is supported and financed by:









Other organisations that have supported the Veterinary Atlas Project financially and with data research:























The translation of the Veterinary Atlas Germany 2024 was realized with the kind and active support of

hardenbergconsulting.

Sparring partners for data evaluation:

- Prof. Marcus Doherr, Freie Universität Berlin
- Kathrin Haselbach, Sächsische Landestierärztekammer
- BTK-AG "Zukunft" Katharina Gratzke, Hannah Braun, Susanne Hofstetter
- The participants of the DZK conferences Wörlitz 2022 and 2023 and Eisenach 2023, at which the atlas concept was (further) developed. The editors would like to thank all supporters for their cooperation and constructive support during the realisation of the project, in particular the Bundestierärztekammer and the Landestierärztekammern for providing the basic data of the German Veterinary Statistics.



Icon and colour are used in graphics when women are meant



Icon and colour are used in graphics when men are meant



Icon and colour are used in graphics when all gender people are meant



Points out special features / noteworthy features of a data set and explains them



Indicates text passages that explain a particular aspect of a topic or contain relevant additional information



Identifies text passages that take up an assertion/statement and confirm, refute or categorise it on the basis of its sources

ĵ		Editorial	5
	1	Veterinary Profession	12
	2	Veterinary Students	23
	3	Veterinary Practitioners	33
		Employers Employees	
	4	Public Service	51
	5	Animal Health Industry	59
	6	Industry Data	71
		References/Sources	83

Editorial



Univ.-Prof. Marcus Doherr Head of the Institute of Veterinary Epidemiology and Biostatistics in the Department of Veterinary Medicine

Veterinary Data: Census, Samples and what makes them Different

In the context of studies to characterise populations and to show correlations between so-called population parameters, one speaks either of complete surveys (census) or of sampling approaches.

Census

Complete surveys cover practically all individuals in the target population. There is no selection bias and also no selection-related bias. In most cases, full surveys are based on a regulatory basis such as a registration, notification, or participation obligation. According to the professional regulations of the state veterinary chambers, reporting regulations apply to all veterinarians. Therefore, the resulting statistics of the <u>Bundestierärztekammer (1.2)</u> are based on these complete surveys.

Depending on how the parameters are recorded/ measured and how often the database is updated, there may be errors in terms of content and/or time. Content errors would be incorrect information provided by the veterinarians. Temporal errors arise due to changes not being recorded. The direction of such errors (absolute over- or underestimation of the true status) and their strength can only be estimated to a limited extent.

Assuming that these errors (distortions) in the database do not change substantially over time and do not differ significantly within subpopulations, developments can be described validly.

This applies to relative trends over time and relative comparisons between subpopulations. The present analyses of the Veterinary Atlas Germany are based on these aspects.

Samples

Samples always cover only a part of the target

population and extrapolate the results of the sample (parameter estimate) to the target population from which the sample was drawn.

On the one hand, a distinction is made between samples with genuine random selection. These claim to be statistically representative in the estimation of parameters and their correlations. On the other hand, there are samples with non-random participation. These are subject to a more or less stronger selection bias. One example is the voluntary participation in surveys. This can influence the realised sample (responses received) and thus potentially be distorted. The background to this is the accessibility and motivation of the individuals in the general population to answer the survey. The strength and direction of such selection biases can again only be estimated to a limited extent, as well as the errors in the recording/measurement of the individual parameters.

Assuming that the selection and measurement biases in subpopulations are comparable, relative comparisons between subpopulations can nevertheless be calculated and interpreted. A comparison of the demographics of the realised sample with the target population allows the bias to be estimated, at least for some parameters, if the relevant data is available.

An example for this is the higher proportion of younger female participants in the surveys conducted in recent years in the veterinary profession. There may be many reasons for this. As a consequence, it can be concluded that the results of such surveys reflect the opinions of the younger, primarily female generation of veterinarians.

Univ.-Prof. Dr. med. vet. Marcus DoherrPhD, Dipl. ECVPH is head of the Institute of Veterinary
Epidemiology and Biostatistics in the Department of
Veterinary Medicine at the Freie Universität Berlin.

The Veterinary Atlas Germany, an Industry Initiative

Dear Readers, dear Veterinarians, dear interested outlook perspective. Parties in Veterinary Medicine,

the first idea of the Atlas was born almost three years ago. Three face to face meetings and many working groups later, it has been printed. The first Veterinary Atlas Germany. A work that had been dormant in many people's minds for a long

Why?

We are now well aware, that the structural changes in our industry are far-reaching and that new approaches and requirements are needed. The keywords are shortage of veterinarians, women's career, re-entry, working conditions, pay, emergency services and training. However, in order develop these new approaches and solutions, you need to know the figures, data and facts on which the industry is based. We need to know what has developed well, what veterinary, entrepreneurial and scientific standards we have already achieved and how well we can compare ourselves internationally and with the rest of the industry.

The Veterinary Atlas Germany aims to provide a data basis for this. It provides a broad and intensive insight into our veterinary sector, reviews work force and market developments, categorises current structures and provides an

With a common database, the German veterinary profession and the public can address the right challenges in a more structured manner. In this way, they can work together with the veterinary schools and the corresponding industry to find solutions and make fact-based demands on institutions and political decision makers.

We need a sustainable, innovative and attractive veterinary medicine with appropriately trained specialists for the benefit of our animals and future generations.

This is the reason why we want to continue to develop this Veterinary Atlas Germany with experts from the industry and publish it regularly. We want to encourage dialogue and discussion and continuously provide reliable industry data.

This first issue, created as a cross-sector initiative of the veterinary associations, shows that we can achieve more together.

Many thanks to all sponsors and supporters. We look forward to continuing our constructive collaboration on this veterinary industry project.

The editors for the Dessauer Zukunftskreis (DZK),

Julia Henning Jörg Held **Hubertus Keimer**





Meeting of the Dessauer Zukunftskreis in Wörlitz 2023. Kickoff of the industry-driven project Veterinary Atlas Germany.







Dr. Holger VogelPresident of the
Bundestierärztekammer (BTK)

Ladies and Gentlemen, dear Colleagues,

In 2004, to mark the 50th anniversary of the Bundestierärztekammer (BTK), a report was published about the overcrowded veterinary labour market at that time. Now, 20 years later, the reality is different. In many veterinary professional fields and in many regions of Germany, there are complaints about a shortage of veterinarians.

This first Veterinary Atlas Germany confirms the trends that the BTK already pointed out in recent years. A shortage of veterinarians cannot be deduced from the figures collected. Therefore, it must be due to other factors.

With regard to the practicing veterinary profession, this certainly can be due to the trend toward salaried employment, as the current veterinary statistics show. By 2023, the number of salaried veterinarians will have caught up with the number of veterinary practitioners. This is understandable, given that the majority of new entrants to the profession are women and the legal rules on maternity and parental leave make it much easier to plan a family as an employee. The constantly growing bureaucracy is likely to play its part preventing young people from taking the path to self-employment.

However, the picture is not homogeneous. For example, although the number of veterinary practitioners has fallen slightly since 2023, the proportion of women choosing self-employment is growing. In order to determine in which regions there is actually a shortage of veterinarians, we would need numbers that show the supply of veterinarians in the regional districts by field of

activity. Just as in other professions, it can be assumed that there is a shortage of skilled labour, particularly in rural areas. In cities and their urban centres, especially around veterinary schools, a good supply can be assumed.

The following chapter of the Veterinary Atlas Germany focuses on the rather small proportion of veterinarians that do not work in the veterinary field. The majority of these are retirees. The remaining 4110 veterinarians who were not practicing the profession in 2023 make up less than 10 percent of the veterinary profession. It is pleasant as well to see that this figure is falling in percentage terms. Even more pleasing is the falling number of unemployed veterinarians and those without any professional experience.

The steady increase in veterinarians on parental leave between 2007 and 2018 shows that policy measures can have an impact. The parental allowance introduced in 2007 was aimed in particular at academics who were supposed to have children. We would urgently like to see similar legal support for self-employed veterinarians, so that the decision no longer has to be made between family planning and setting up a practice. Especially since male colleagues are also increasingly taking advantage of the benefits of "bonding" during parental leave.

Conclusion: The veterinary profession is attractive, other professions are losing significantly more people to activities outside their profession. Politicians, society and employers must respond to the needs of future generations and create incentives for young women in particular to return to their work quickly. Fortunately, the salary debate, which was bitterly fought 15 years ago, has ended in most areas—actually thanks to the shortage of vets.

Your Ltd. VD Dr. Holger Vogel, President of the Bundestierärztekammer e.V.

The Bundestierärztekammer e. V. (BTK) is the umbrella organisation of the veterinary profession in Germany. All 17 Landestierärztekammern from the federal states are members of this organisation. There are two chambers in the federal state of Nordrhein-Westfalen (NRW) for all medical professions: Photo: MIKA-fotografie, Maik Schulze

Nordrhein and Westfalen-Lippe. The more than 45,000 veterinarians in the Federal Republic of Germany are organised in these 17 Landestierärztekammern. The BTK represents the interests of veterinarians from all professional fields vis-à-vis politics, administration and the public at federal and EU level.



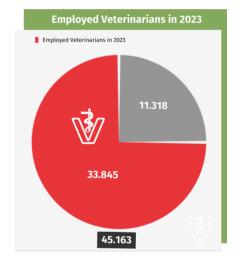


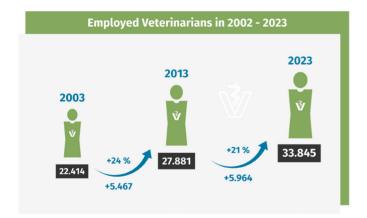
The Veterinary Profession in Germany is Growing Steadily

The number of veterinarians in Germany is steadily increasing. The statistics of the <u>Bundestierärztekammer (1.1)</u> count a total of 45,163 veterinarians working, non-working and retired as of the 31st of December 2023, which is 41% more than 20 years ago. Growth has slowed slightly over the past 10 years.

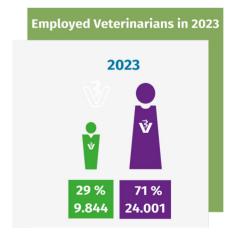
Veterinarians in Employment

Of these approximately 45,000 veterinarians, around three quarters (33,800) are currently working in the profession. This is an increase of almost 11,500 or 51% since 2003. The number of veterinarians in employment has grown more dynamically than the veterinary profession as a whole (including retirees and non-veterinarians). This shows that veterinary medicine is a comparatively "young" profession (age structure data on page 12). Growth averaged 2% annually, with a fluctuation range of 3% in 2006 to 1% in 2021. In the past three years, however, there has only been an average increase of 1.3% per year.





Women are clearly in the majority among working veterinarians in 2023, with 24,000 (71%). Their number has more than doubled since 2003 (+13,300/+133%). In the mid-1990s, the proportion of women was still below 35%. The number of men in the profession has been falling continuously since then.



Women in Veterinary Medicine

In labour market research, an occupation is considered a women's occupation if it has a share of 70% or more. If it has a share of 80% or more, it is considered a female-dominated occupation (,highly segregated'). Depending on the occupational field,

veterinarians in the profession have already reached or significantly exceeded this 70% mark. Well over half (64%) of the remaining men in employment are older than 50. 35% are older than 60 years. In turn, 87% of students are female (see page 24). This means that the proportion of women in the veterinary profession will continue to grow.





Occupational Fields and Gender Distribution in 2023

The veterinarians working in the profession are divided into the following fields of work:



The largest group are practicing veterinarians. In veterinary practices and veterinary clinics, 23,123 practitioners treat small animals, horses and farm animals. Over two thirds of them are women (16,173 / 70 %).

For the first time in 2023, the number of veterinarians in private practice (11,437) and the number of veterinarians employed in practices (11,429) were almost equal. In addition, there is a small group of self-employed practice representatives (257).



This is followed by the 7,366 veterinarians in the public sector and administration, including the German Armed Forces, with a 74% share of women.



The 1,846 veterinarians in the animal health industry and agriculture have a gender ratio of 69% (female) to 31% (male).

There are 1,502 veterinarians working in other areas that are not broken down in the veterinary statistics, with a 74% share of women.



Development of the Veterinary Professional Fields over the last 20 years

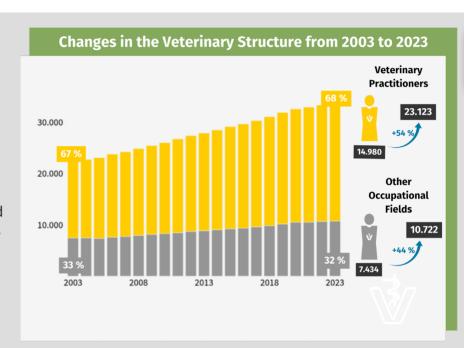
The total number of veterinarians actively working in the profession has increased by 51 percent over the last 20 years since 2003 (+11,431) up to 33,845 in 2023.

The growth rates of the individual occupational fields do not differ significantly. However, the percentage increase among veterinary practitioners is somewhat higher (+54% / +8,143) than in the other occupational fields.

No Migration from Practice

The data shows that there is no declining interest in the veterinary practice or a migration toward other professional fields.

Currently, 68% of veterinarians work in veterinary practices and 32% in other professional fields. Twenty years ago, the ratio was almost identical: 67% to 33%.





If we break further down "Other fields of activity" in the chart above, we see the following growth rates from 2003 to 2023:



More details about the changes and gender distribution can be found in the following chapters on the individual occupational fields.



Demographics: The Age Structure of the Veterinary Profession in 2023

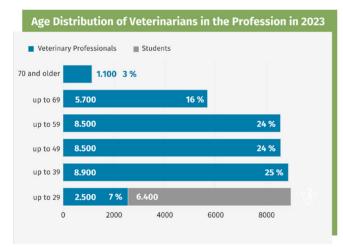
The veterinary profession is comparatively young. The overall age structure is balanced according to the <u>Tierärztestatistk (1.1)</u>. The age groups of the 30, 40 and 50-year-olds are roughly the same size at around 9,000 and also significantly larger than those of the older decades. The veterinarians moving up, given a constant market, could therefore statistically take over the tasks of the previous ones.





Age Structure of Employed Veterinarians

The age structure of the 33,845 veterinarians working in the profession is even more balanced. In comparison with the age structure of the <u>total population (3.1)</u> working in Germany (around 44 million), there are three significant differences:



70 and older 0,6 1%

up to 69 4,9 11%

up to 59 11,2 26%

up to 49 9,0 21%

up to 39 9,7 23%

up to 29 7,4 18%

0 2 4 6 8 10 12

in Mio.

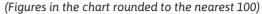
Age Distribution of Employed Persons in the General Population in 2023

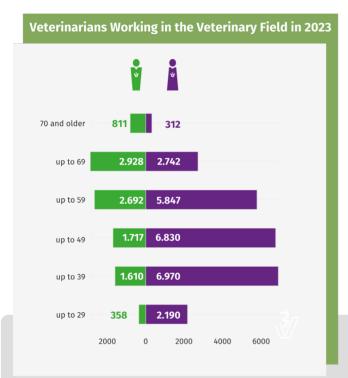
- The age group under 30 is significantly smaller. This is due to the veterinary studies, which usually take 5.5 years to complete. Most students do not join the labour market until their mid-20s. The approximately 6,400 veterinary students are therefore shown in grey in the age pyramid. (Figures in the chart are rounded to the nearest 100)
 - (Figures in the chart rounded to the nearest 100)
- Unlike in society as a whole, there is no clearly visible baby boomer overhang in the over-50s age group among working veterinarians. Therefore, the group up to the age of 59 is one of about three equally large age groups at around 24%. In society as a whole, it represents a 26% share, by far the largest group.
- In the age group over 60, but especially over 70, more veterinarians are still working compared to the overall population. In the 70+ age group, there are even more than twice as many (3.2% vs. 1.3%).
- This is mainly due to the veterinary practitioners. At 80%, they make up the largest proportion of the approximately 1,100 veterinarians still working beyond the age of 70. The majority of them are likely to be self-employed.



Age Pyramid with Gender Share

When the age structure of veterinarians in the profession is mapped by gender, the veterinary profession differs even more clearly from the population as a whole. In all age groups under 60, women are predominant in veterinary medicine. In contrast, men are always slightly in the majority in the working population as a whole.







oq

Consequences of the Age Structure

The age structure data shows that the age and gender distribution of the veterinary profession is predetermined for the next 20 years.

The proportion of men can only continue to fall, as the majority of men in the profession are older than 50 (65%), with 37% even more than 60. They will be leaving the veterinary profession in the foreseeable future.

The structure of the next generation of veterinarians is also predetermined. The number of students and thus the number of potential future veterinarians has remained practically unchanged over 30 years due to the limited number of university places (average of around

6,400 per year). This explains the balanced younger age decades.

The same applies to the proportion of women. Among veterinarians who pass the state examinations and are therefore authorised to practice the profession, the proportion of women has been around 85% for around 20 years, in some cases well over 85% (see chapter on veterinary medicine studies / page 24).

Details of the effects of this gender shift in the veterinary professions, especially among veterinary practitioners, can be found in the following chapters related to the respective professional groups.



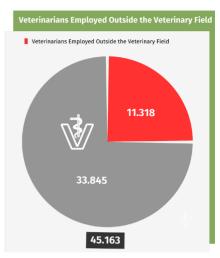
Veterinarians not Working in the Profession in 2023

The veterinary statistics show a considerable number of veterinarians who are registered with a veterinary association but do not work in the veterinary profession. As of the 31st of December 2023, this figure was 11,300, around a quarter of the total of around 45,000 registered veterinarians.

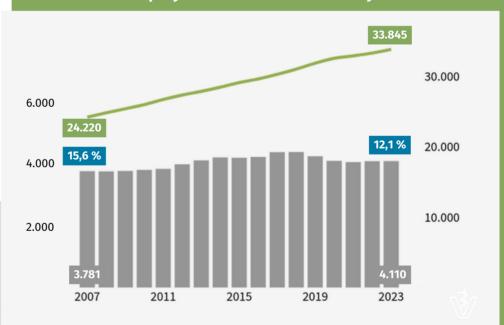
This figure includes the large group of retired veterinarians (6,942 / page 18) and also the small group of "unpaid doctoral students" (266).

For the Veterinary Atlas Germany, these two last groups were not taken into account in the "not employed" group. Retirees are normally no longer available to the labour market and the special group of doctoral students is also not working yet.

Accordingly, 4,110 veterinarians will not have actually been working in the profession in 2023. They could also have worked as veterinarians and therefore been able to participate in alleviating the current shortage of professionals.



Veterinarians Employed Outside the Veterinary Field 2007 - 2023



Proportion of Non-Active Veterinarians Decreases

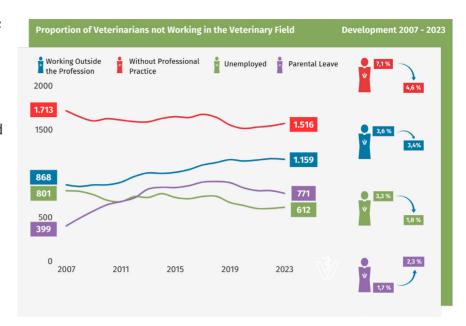
A closer look at this group over the period from 2007 to 2023 — as prior to this the allocations are not clearly comparable reveals the following developments:

- In absolute figures, there are slightly In comparison, during the same more veterinarians not working in the profession. In 2007, there were 3,781. At the highest point in 2018, there were 4,403, and as of the 31st of December 2023, the figure was 4,110 (bar chart).
- period from 2007 to 2023, the total number of veterinarians working in the profession rose by over 9,500 to 33,845 (line graph), and the proportion of them not active in the veterinary field fell from 15.7% to 12.1%.

Analysis of the Group of Veterinarians not Working in the Veterinary Field

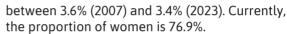
The 4,110 veterinarians recorded as "not practicing veterinary medicine" in 2023 are divided into four groups.

(The absolute development and the percentage shares of the total veterinary labour force from 2007 to 2023 are shown on the right)



₩.

Not practicing their profession are 1,568 female veterinarians. This is the largest group over the entire comparison period since 2007. The absolute number and thus also the percentage share in relation to the total number of veterinary professionals has also fallen most significantly, from 7.1% to 4.6%. The average proportion of women in this group is 82.7%.





As unemployed, 612 veterinarians are registered. Their number has also fallen noticeably in the same comparison period, both in absolute terms (-189) and as a percentage: from 3.3% to 1.8%. The proportion of women is currently 79.9%.



Working outside the profession are 1,159 veterinarians. They are registered with a veterinary association but work in another, non-veterinary profession. This group increased mainly in absolute terms between 2007 and 2023 (+291). In relation to the total number of veterinary professionals, their percentage share has remained constant over 17 years

₫

Only the proportion of veterinarians **on parental leave** has risen significantly to 771 and thus gone up from 1.7% to 2.3%. The number of men on parental leave is in single digits. The data on parental leave is explained separately below.

All figures in the veterinary statistic, are as of the 31st of December of a given year. Veterinarians who belonged to one of the above groups for a shorter period within the reporting year are not counted.





Fewer Women Dropping Out

The proportion of women among those not employed in the veterinary profession has risen up to 3,429, in line with their increase in the overall share of the profession. However, their relative proportion has fallen. In 2007, 23% (2,886) of the 12,591 female veterinarians in the profession were still inactive.

By 2023, this figure had fallen to 14% (with 24,001 women in the profession).

The number of men has fallen in absolute terms, but their relative share in relation to men in employment has remained almost the same at around 7%.

1

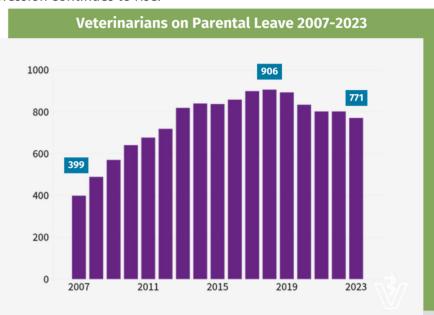
Veterinary Profession



Special Case of Parental Leave

Veterinarians on parental leave are also included among those not working in the veterinary profession. Their share has increased noticeably since the introduction of the <u>Federal Parental Allowance and Parental Leave Act (BEEG / 4.2)</u> in 2007 and with the growing proportion of women in the profession. Since 2018, however, their number has fallen again significantly, while at the same time the proportion of women in the profession continues to rise.

The number of men on parental leave cannot be recognised in the bar chart as it is in single digits.



go

Men do not take Parental Leave?

The number of men on parental leave in the veterinary statistics is in single digits. It fluctuates between 2 and 11 over 20 years (\leq 1%). This does not correspond to the 26% share of men on parental leave (2022) in society as a whole (3.4). One explanation for that, in addition to the generally low number of men in employment, may be the reporting date.

Overall in the population, the proportion of men on parental leave has increased in absolute terms (482,000 in 2022). However, the majority of them only take two months of parental leave (Ø 3.6 months), while women take 14 months on average.

This entitles a family to the full 14 months of basic parental allowance (4.3). Both parents must be involved in caring for the child. One parent (usually the woman) can take a maximum of 12 months of parental leave; the other (usually the male) parent must take at least two months.

With the <u>Parental Allowance Plus (4.3)</u>, the period of entitlement is doubled and the amount received per month is halved.

Explanations for the decline in parental leave

The <u>birth rate (3.5)</u> for society as a whole has been falling since 2017. This trend has intensified in the last two years (–7% in each). 2023 was the year with the <u>lowest birth rate</u> in Germany since 2013 (1.35 children per woman).

In veterinary medicine, for example, the Sächsische Landestierärztekammer is also observing this trend, that the number of women on parental leave is falling. On the other hand, the proportion of employment restrictions due to breastfeeding is increasing (page 17).

Nationwide figures are not available.

Data on the division of care work: Fathers' Report (5.3.1) and Family Report (5.3.2) of the Federal Government



Maternity Protection, Parental Leave and Employment Ban

The data on parental leave does not reflect all periods of absence from work for female veterinarians due to maternity protection legislation (4.2).

From six weeks before the expected date of delivery and up to eight weeks thereafter, there is always a general ban on employment.

For salaried female veterinarians — in curative practice, but also in other professional fields with animal contact — a period of leave can be granted from the announcement of pregnancy until delivery.

A "pregnancy-related prohibition" to which pregnancy- and of employment" may apply. This may be followed by a "ban on employment due to breastfeeding". For both cases, a risk assessment of the workplace must show that this risk to mother and child cannot be ruled out, in order for her not to work based on the protection of both rules.

During this time, the employer continues to pay the salary to the employee, but is reimbursed by the health insurance.

There is only sporadic data available about the extent

breastfeeding-related employment bans are implemented in veterinary medicine. It is assumed that almost all employed female veterinarians, particularly those working in curative practice, are prohibited from working before giving birth.

As of August 2024, the Sächsische Tierärztekammer has recorded nine female veterinarians who are banned from working after giving birth due to breastfeeding, with 25 on parental leave.



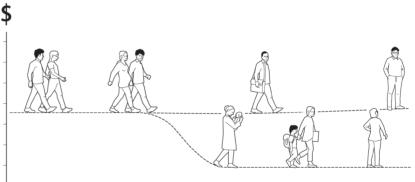
The Nobel Prize and the "Motherhood Penalty"

The federal government's "Fathers" Report 2023" (5.3.1) states:

- · With the birth and the start of parental leave for the first child, couples set the course for their division of responsibilities in the family and at work.
- This distribution changes hardly from the end of parental leave until after the end of the youngest child's primary school years.
- In 75 percent of the couples in which the mother takes over all or most of the childcare after the first parental leave, this division remains in place until the end of primary school.
- This also applies to other percentage splits.

This observation is also a key finding in the research by Claudia Goldin, honoured with the Nobel Prize in Economics 2023 (9.1). The Nobel Prize Committee has presented the related graphic.

Goldin calls it the "maternity penalty": Childcare is followed by reduced working hours and



©Johan Jarnestad/The Royal Swedish Academy of Sciences

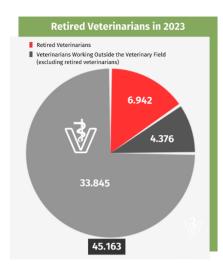
lower earnings, later resulting in a lower pension.

This risk is particularly high for female academics, who on average give birth to their first child at the age of 31.5. This means the care gap occurs during their key career phase — between the ages of 30 and 40 — while the partner increasingly assumes the role of main earner.

In veterinary medicine, the rules on the breastfeedingrelated ban on employment with continued wage payment further reinforce women's caregiving role. This initial caregiving phase is decisive for the longterm division of family labour and can even appear to offer short-term economic advantages for the family.







Demographic Change: Retired Veterinarians in 2023

According to veterinary statistics, 6,942 veterinarians were retired on the 31st of December 2023. This corresponds to around 15% of the entire veterinary profession (45,163).

The proportion of pensioners in the <u>total population (9.2)</u> was 25% in 2023.

The proportion of women among retired veterinarians has recently risen noticeably to 2,043 and currently stands at 29%.

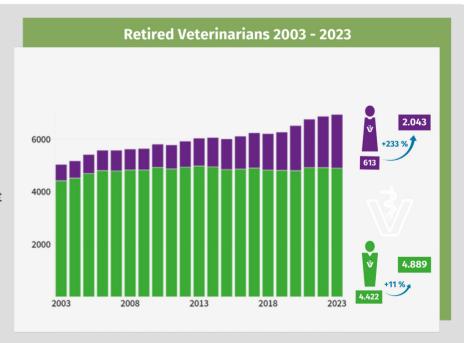
From 2003 to 2023, the number of retired veterinarians increased steadily, but not disproportionately, by a total of 1,865 (+38%). As the number of working veterinarians has also increased noticeably, their relative proportion in relation to working veterinarians has remained virtually unchanged (2003: 22% / 2023: 21%).



Since 2020, an initial trend among retirees toward a "baby boomer increase" can be recognised. This is mainly attributable to women. The age pyramid (next page) shows as well that significantly more women will soon be reaching retirement age.

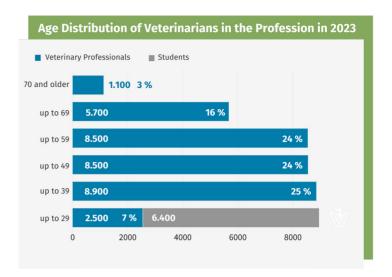
As the majority of them are employed, it is to be expected that unlike men in this age group, who are often self-employed, they will retire and are therefore less likely to work longer.

The absolute number of men in retirement has changed little so far.



No Problem with Baby Boomers

The baby boomer generation (55 years and older) is not a problem for the profession as a whole, in the sense that they represent a numerically oversized group entering retirement and leaving behind a corresponding "labour gap". This is shown by the age structure data of the veterinary profession. The subsequent age decades should also be able to compensate the retirees in terms of headcount in the future. However, this may look different from region to region.



Men are Leaving the Profession due to age

There is another demographic factor at work in veterinary medicine. With the baby boomers, the majority of the remaining men will be leaving the profession in the next 10 to 15 years in favour of retirement.

This in turn affects individual occupational fields or groups in particular. In the public sector, for example the civil servants (page 56). In the case of veterinary practitioners, the practice owners are mainly affected. (page 39). The extent to which the steadily increasing proportion of women in the under 50s generation will have an effect on the available working hours in these occupational fields is analysed in the following chapters.



Veterinarians Working in the Veterinary Field in 2023



Veterinarians in a "Retirement Backlog"

The age pyramid of working veterinarians suggests that a significant number of men and women in both the 60 to 69 and over 70s age groups have postponed retirement. This applies in particular to veterinary practitioners.

Details on this development can be found in the corresponding chapter from page 39.



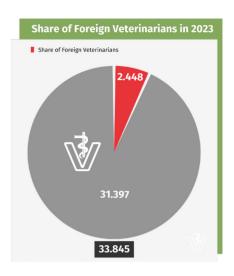
Veterinarians without German Citizenship

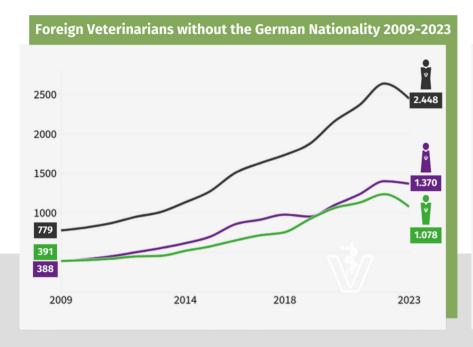
2,448 veterinarians without German citizenship are members of a state chamber of veterinarians according to the 2023 veterinary statistics.

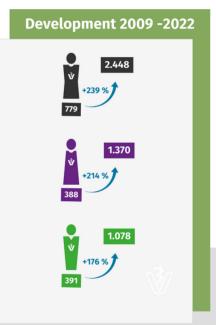
The data has only been available since 2009. By 2022, their share had more than tripled starting from 779. Their share of the veterinary profession amounts to 7% in total. At 44%, the proportion of men among

veterinarians without German citizenship is higher than among Germans (29%), but it is also declining.

The veterinary statistics do not differentiate between veterinarians from the European Union or third countries.







There is no explanation for this first-time significant decline in the number of foreign veterinarians in 2023 (-191 / -7 %).



Two factors, which may add up, are conceivable. A declining interest of foreign veterinarians in practicing their profession in Germany and a larger number of naturalisations. Neither of these can be proven from the available data.

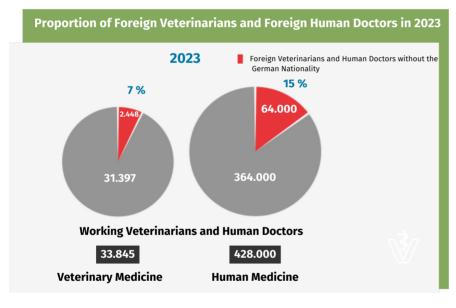
Comparison with Human Medicine

Without the increase in veterinarians from abroad up to 2,448 in 2023, the proportion of employed veterinarians would be significantly lower: 31,397 instead of 33,845.

Despite the considerable percentage increase, the recognition and integration of foreign veterinarians is considerably lower than in human medicine.

In the veterinary profession, the proportion of veterinarians without German citizenship in 2022 was around 8% with 2,639 in total. After the current decline in 2023, it went down to 7%.





According to German medical statistics (6.1), the proportion of doctors without a German citizenship in human medicine peaked in 2023 at just under 64,000. At 15%, the proportion is more than twice as high as in veterinary medicine.

Skilled Labour Immigration Act Identifies Veterinary Medicine as a Shortage Occupation

A new <u>Skilled Labour Immigration Act (4.1)</u> has been in force in Germany since November 2023. This act designates veterinary medicine officially as a "shortage occupation". This categorisation is intended to facilitate the immigration of suitably qualified people from third countries (residence status).

However, veterinary medicine belongs to the regulated professions. The complex professional recognition process is not supported by the Skilled Labour Immigration Act. Veterinarians from non-EU countries must continue to prove in up to 15 examinations that their degrees meet the requirements of the German licence to practise.

(More information: vetworkgermany.com)

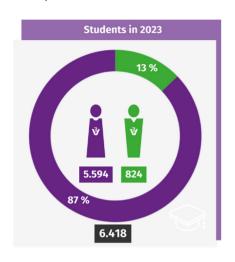






Veterinary Medicine for over 25 Years: A University Programme Dominated by Women

Veterinary medicine remains a sought-after degree programme. There are currently five applicants for one of the approximately 1,100 university places available each year. The share of men is 17%.





Students in 2023

6.418 students were enrolled at the five universities for the winter semester 2023/2024 according to statistics from the Bundestierärztekammer (1.1), 87% of whom were women and 13% men. The average period of study is 5.5 years.

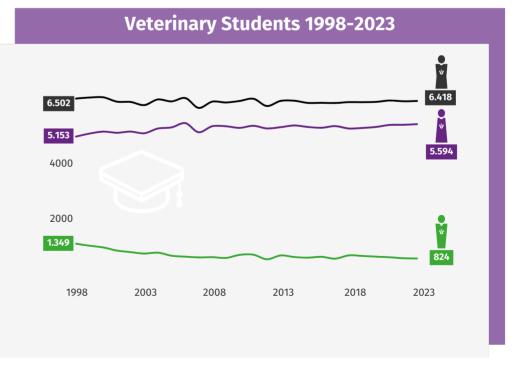
Students Over the Time Period of 1998 - 2023

After the two Berlin faculties were merged in 1993 87% (2023/87.2%). Accordingly, the proportion of following reunification (merger decision in 1992), there were five faculties of veterinary medicine left in Germany: Berlin, Giessen, Hanover, Leipzig and Munich.

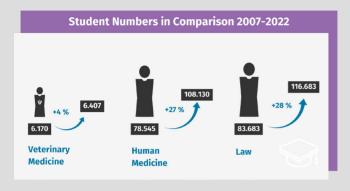
men studying veterinary medicine fell to around 13%.

The total number of veterinary students has remained largely constant over the last 25 years. It fluctuates between 6,593 (1999) and 6,170 (2007). On average, there were 6,404 veterinary medicine students (1.1).

The proportion of women was 79% even 25 years ago (1998). In the last ten years it ranged between 85% and



Human Medicine vs. Veterinary Medicine: a Comparison of Student Numbers



If one compares the number of students in veterinary medicine with human medicine and, as another liberal profession, with lawyers, there are considerable differences.



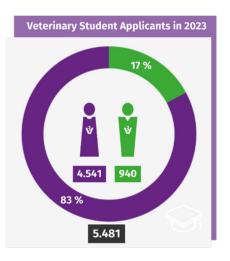
Starting from a German wide (common) low point for degree programmes in 2007 to the reference year 2022 (for which data is available for all degree programmes), in https://www.numan.numedicine (3.2), a 27% increase in students was recorded. In law (3.3), the figure is + 28 %. In veterinary medicine with + 4 %, the number of study places on offer remained practically unchanged.

In 2023 Five Applicants per Study Placement

Veterinary medicine is an admission-restricted degree programme. The selection procedure is carried out centrally by the Foundation for University Admissions (hochschulstart.de (2) / formerly ZVS: Central Allocation Office for University Places). The main, but not the only, criterion for admission is the average grade (2.1) A-level Numerus Clausus (NC).

The veterinary medicine degree programme starts only in the winter semester. For the start of

the programme in WS 2023/2024, 5,481 applicants applied for the veterinary medicine degree programmes 1,115 available university places at the five German universities. Of these, 940 were men. Compared to the previous year (2.2), twelve more university places were offered. The proportion of women among applicants was 83%. Among those admitted, 87% were women. The success rate for men in the application process was therefore slightly lower*.



(*Applicants without gender indication or with the indication diverse have a share of < 0.5 %)

The Interest in Studying Veterinary Medicine is Declining

There are still significantly more applicants than university places. In spite of this, the interest in studying veterinary medicine has been falling since the peak in applications (5,762) in 2007 both in absolute terms and even more so in relative terms.

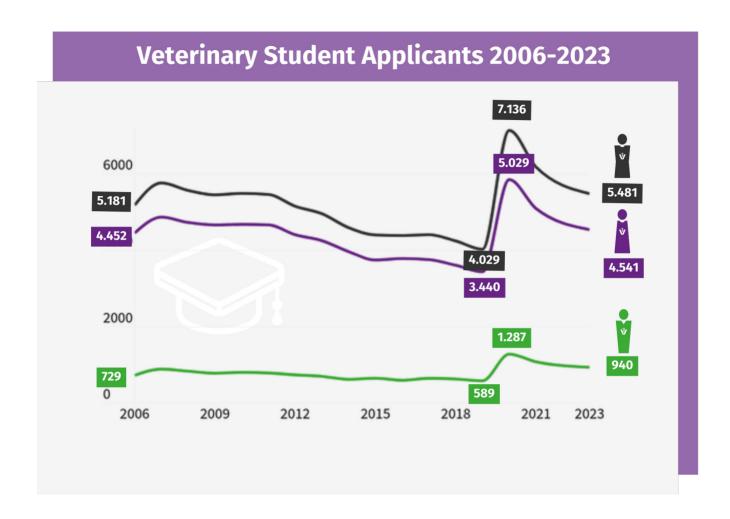
By 2019, the number had gone down by 30% or 1,733 people. Interest among men fell somewhat

more sharply (-305 / -34%) than among women (-1,428 / -29%). During the same period, the number of school leavers with a promising Abitur grade degree average of 1.0–1.4 has risen by over 70% according to data from the <u>Standing Education and Cultural Affairs Conference of the Ministers (5.1)</u>. from 16,400 (2007) to 28,400 (2019).

Since a change in the procedure for allocating study places in the winter semester 2020/21 took place, the figures are no longer directly comparable with previous years. Data on applicants by gender is only from 2006.









Changes in the Application Procedure

The application procedure was changed (2.3) for the 2020/2021 winter semester. Since then, multiple applications for the degree programmes Animal / Human / Dental Medicine and Pharmacy are permitted in parallel. This explains the sharp rise in application numbers.

Applicants must "prioritise their order of interest (2.4)" according to the new procedure. Around 44% of applicants in the 2021 to 2023 application years have set veterinary medicine on "applica-

tion priority 1", just under 22% to priority 2".

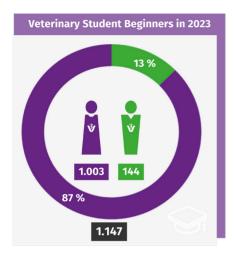
In the end, two thirds of those admitted came from the first group and around 16% from the second. It remains to be seen whether the possibility of multiple applications will lead to an increase in the number of students changing degree programmes.

With the option of submitting multiple applications, the men's share of applicants increased

slightly (approximately +3%). Here too, it remains to be seen whether they are possibly interested parties hoping to switch to human medicine, for example.

Of those ultimately admitted to the veterinary medicine programme, an average of 23% had a vocational qualification that increased their chances in the selection process, e.g. as a veterinary assistant.



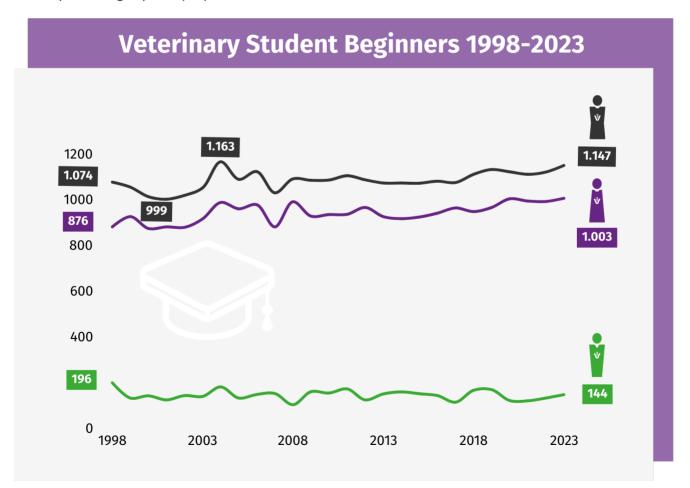


First-year Students in 2023

According to <u>veterinary statistics (1.1)</u>, there were 1,147 first-year students in the winter semester 2023/2024. This is based on the reports from the five faculties of veterinary medicine. The proportion of women was 87%.

First-year Veterinary Students Over a 25 Year Period

Over a period of 25 years (1998 to 2023), the data shows, that the number of university places on offer and thus the number of new students per year has remained relatively constant since 2008 and has recently risen slightly. The proportion of women has risen from 81% (1998) to 87% (2023). In the past 10 years, it has averaged at 87%. The proportion of men has fallen accordingly.







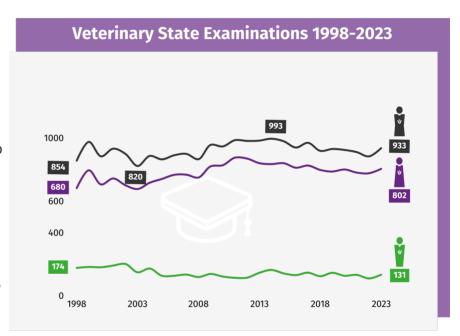
State Examinations in 2023

933 students passed their state examinations in 2023. This is the number of veterinarians who could enter the labour market each year. The proportion of women here was 86%.

State Examinations in Veterinary Medicine from 1998 - 2023

As the number of available university places has hardly changed over 25 years, this is also reflected in the number of state examinations taken. It fluctuates between 820 (2003) and 993 (2014), with an average of 924 over 25 years.

The proportion of women has also been consistently above 85% since 2005. At its peak (2012), it had already reached 89%.





These largely constant numbers of students and examinations taken over a long period of time also characterise the age structure of the veterinary profession as a whole (see page 12). This stability has ensured that in 2023 all age groups under 50 were almost of the same size and that the gender distribution differred only slightly.



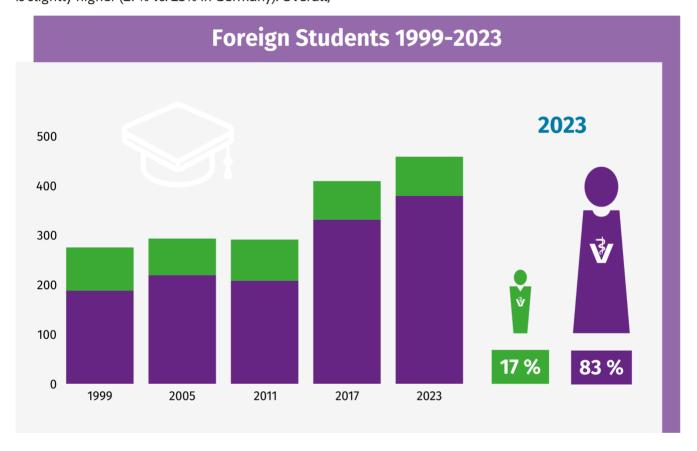
Students from Abroad

458 students without German citizenship were enrolled at German faculties of veterinary medicine in 2023. This is also the average for the past five years. Over the period from 1999 (275) to 2023 (458), their number has risen by 67%.

Among students from abroad, the proportion of men is slightly higher (17% vs. 13% in Germany). Overall,

however, the share of men has roughly halved over the past 25 years starting from a 30% at the turn of the millennium.

Veterinary medicine is also becoming a female profession internationally.





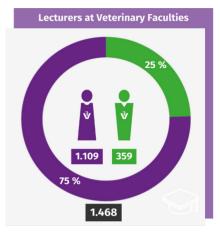
Veterinary Schools

After reunification, the two Berlin veterinary schools were merged in 1993 (merger decision in 1992). Since then, there have been five faculties of veterinary medicine in Germany.

The faculties at the Ludwig-Maximilians-Universität Munich with 1,675 students in 2023 and at the University of Veterinary Medicine Hannover (1,655) are roughly of the same size.

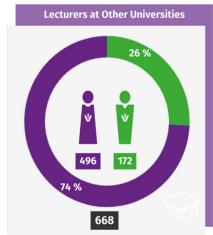
This is followed by the veterinary faculties at the Justus Liebig University Giessen (Hesse / 1,186) and the Freie Universität Berlin (1,077). The smallest faculty at the Leipzig University with 825 students is in Saxony.





Teaching Staff at Veterinary Schools in 2023

There are 1,468 veterinarians teaching at veterinary schools (proportion of women: 75%). In the case of civil servants (professorships), men are still slightly ahead with 54%.



Lecturers at Other Universities in 2023

There are also 668 veterinarians employed as lecturers at other universities (proportion of women: 74%).



Do Young Men Have Poor A-level Grades?

The reason for the low proportion of men studying veterinary medicine is often explained by the numerus clausus. The theory says that boys learn less well and therefore have lower A-level grades than girls. Because they do not achieve the average A-level grades required to study veterinary medicine (numerus clausus), only few men get admission to study veterinary medicine.

More men with good A-level grades

The data shows that the number of men applying for veterinary medicine has been consistently low for 18 years. A slight upwards trend from 13% to currently 17% can be observed following a change in the admissions procedure in 2020 (see page 26).

Statistically, however, the number of applicants with good prospects of success for a place in veterinary medicine could be twice as high.

According to data from the Standing Conference of the Ministers of Education and Cultural Affairs (5.1), the number of grade A students with an average grade of 1.0 to 1.4 increased by 144% to 36,623 across Germany from 2006 to 2023*. The Statistical Office of North Rhine-Westphalia (5.1.1) estimates the proportion of men in this group at around 37% for 2023.

This means that the pool of potential male applicants has grown significantly. However, their interest in studying veterinary medicine has decreased both in absolute terms and even more so in relative terms.

Only with the possibility of applying for human and veterinary medicine at the same time has the absolute number of male applicants initially doubled. In spite of this, in 2023 there were only 940 men compared to 4,541 women.

In the selection process itself men "lose out" somewhat to women.

In a change of procedure (2006 to 2019), their share among applicants was 14.5% on average and 13.3% among first-year students. Under the new procedure (2020 to 2023), the average proportion of male applicants is 17.6% but only 11.3% of first-year students. It is not yet clear why the change in procedure has had such an impact.

Proportion of Men from High School Graduation until the Beginning of University Studies in 2023

Proportion of Men with an A-Grade 1,0-1,4

Proportion of Men Applying at University Studies

Proportion of Men Beginning University Studies

1,0-1,4

17 % 83 % 13 % 87 %

The data do not support the NC thesis

Poorer A-level grades are not the decisive factor for the low proportion of men in veterinary medicine. It is the fundamentally lower interest in the veterinary profession.

Of course, there are many men who would like to study veterinary medicine but do not achieve the necessary NC. But this also applies to women.

Other socio-demographic factors are probably more relevant. Why an occupation ultimately becomes a "women's occupation" has not been conclusively clarified sociologically.

KMK data on A-level grades are available retrospectively up to 2006



3 Veterinary Practitioners

Veterinary Practitioners





Dr. Siegfried ModerPresident of the Bundesverband
praktizierender Tierärzte (bpt)

You Can't Do Without the Economy

The veterinary profession is particularly concerned about a number of issues. The growing workload, the extreme time burden caused by bureaucratic duties, the fact that salaried veterinarians are still often paid too little and a certain scepticism about becoming self-employed. This was revealed by the bpt member survey in 2023.

bureaucracy and this in times of a shortage of vets! Unbelievable!

We are therefore pushing for a clear 1:1 implementation of the new EU legislation on pharmaceuticals, as well as the Working Hours Act (AZG) and Data Protection regulations because that means easier documentation. Our arguments are effective when it comes to pharmaceutical legislation. There is hardly any movement in the flexibilisation of working time legislation away from a daily maximum working time and toward an unchanged weekly maximum working time. Flexible working time models are, however, an important instrument for keeping part-time employees on the labour market and maintaining the veterinary emergency services.

Naturally independent and self-employed

Promoting self-employment is therefore a central task. With our legal and business counselling services and business start-up seminars, we ensure that veterinarians can make a solid start into self-employment. This is important because, unfortunately, the veterinary degree programme still excludes these aspects. We are therefore working to ensure that the Veterinary Licensing Ordinance (TAppV) is supplemented by the fields of economics and communication.

Act economically

Veterinary practices are businesses that need to be run economically. That is why the adjustment of the 2022 fee schedule was and still is so important. Together with the Bundestierärztekammer BTK, the bpt not only played a key role in designing the new GOT, but was also involved in its political implementation. Now, until the evaluation in 2026, it is important to make it clear in the public discussions about "veterinary prices" that the GOT increase has led to a better pay for employees in practices and thus secured the supply of care.

Reduce bureaucracy

Something else is also making care more difficult. According to our member survey, veterinarians are now wasting up to 50% of their working hours in

The silver bullet: collective labour agreements?

The bpt would also welcome a nationwide collective agreement for veterinary employees. This would provide more flexibility. However, we cannot be a collective bargaining partner because the bpt is not just an employers association, but also has several thousand employees among its members and this trend is rising. The bpt committees, in particular the parity-based working group of salaried veterinarians, discuss intensively about the appropriate level of salaries. The lower salary limits regularly "negotiated" here are more than just salary demands. They are minimum salaries. No veterinary salary should be lower than this.

The fact is that veterinary working structures are changing. This is also shown in the data from the Veterinary Atlas Germany. Accompanying these processes takes time, educational work and a great deal of commitment. We can solve some problems within the profession. Others are the responsibility of politicians. We work on both of these issues on a daily basis.

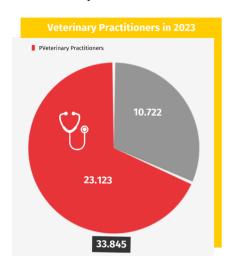
Dr. Siegfried Moder

President of the Bundesverband praktizierender Tierärzte (bpt)

The <u>bpt</u> is the leading independent organisation representing the interests of veterinary practitioners in Germany. It represents the profession's specific legal, economic and political interests of its approximately 8,000 members vis-à-vis politicians, the media, professional organisations and associations. It is committed to improving the social framework conditions for veterinary work, supports its members in securing and organising their livelihoods and offers them practice oriented further training.



Veterinary Practitioners, the Largest Professional Group in Veterinary Medicine



Veterinary Practitioners are the largest professional group within the veterinary profession (1.1): 23,123 veterinarians treat pets, hobby animals and farm animals as of the 31st of December 2023. The overall proportion of women in curative practice is 70%. 58% of practice owners are female.

The number of veterinary practitioners has grown by a total of 54% over the last 20 years. The increase in this field was therefore somewhat greater than in the other veterinary professional fields.

The data does not show a declining interest in the curative practice. Two thirds of all working veterinarians currently work in veterinary practices and clinics as was the case 20 years ago.



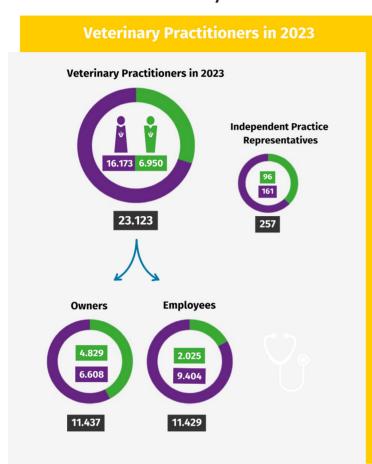


Women are clearly in the majority among veterinary practitioners in 2023 with 16,173 (70%). Their number has more than doubled since 2003 to +9,361 (+137%). However, the proportion of women in practice is still somewhat lower than in the public sector (page 53).

By contrast, the number of men in veterinary practices has fallen by 1,218 (-15%). This decline will continue to change inexorably due to the age structure of the profession (page 39).



Breakdown of Veterinary Practitioners in 2023



The approximately 23,000 veterinary practitioners are divided into three groups:

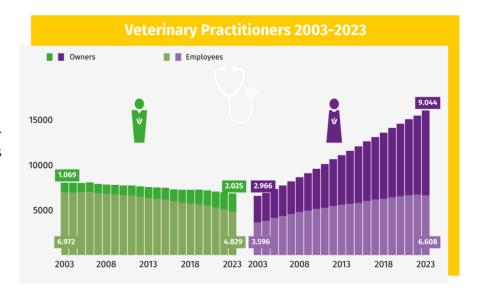
- 11,437 self-employed veterinarians have their own practice. Women have been in the majority among these practice owners since 2016; currently at 58% in 2023.
- 11,429 veterinarians are employed in veterinary practices and clinics. The proportion of women is significantly higher here and 82% are female. This is the highest proportion of women in all veterinary professional fields.
- There is still a small and constantly shrinking group of 257 independent veterinary practice representatives (63% female).

The group of practice representatives is no longer shown separately in the following development charts.

Shift in Gender Proportions

The gender distribution over 20 years also shows that more than two thirds of men in the practices are owners and that their number is falling steadily. This decline has so far been largely compensated for by female practice owners. In 2023, however, their number also fell for the first time.

The growth within practices ultimately occurred exclusively among salaried employees, especially women.





Employed Veterinarians "Overtake" the Number of Practice Owners

In the 2023 reporting year, the number of veterinarians employed in veterinary practices nationwide equalled that of veterinarians in private practice for the first time in the history of veterinary statistics (11,429 to 11,437). From 2024 onward, employees will be in the majority as a result of the age structure of veterinary practitioners.

There is an east-west difference in this development. In some large and also small western veterinary associations, employees had already caught up with and overtaken the self-employed earlier (see map).

The situation is different in the new federal states. There, the proportion of self-employed is still significantly higher. However, the total number of veterinarians is also significantly lower.

By 2024, this development toward a majority of employees will also be complete in Bavaria, the federal state with the largest number of veterinarians. The other federal states will follow due to the demographic structures of veterinary practitioners.

Veterinary Pactitioners 2023 (self-employed/angestellt n. Tierärztekammern) mostly self-employed: Bayern 2.135 2.114 Schleswig Brandenburg 519 Holstein Mecklenburg-**Bremen** Vorpommern 41 49 Hamburg Hessen 793 912 Bremen Mecklenburg-Vorpommern **Brandenburg** 178 Niedersachsen Rheinland-Pfalz Berlin 465 Sachsen Sachsen-431 Anhalt Westfalen Sachsen-Anhalt Lippe 247 Thüringen 178 Sachsen Nordrhein Thüringen mostly -employed Hessen Baden-Württemberg: 1.093 1.170 (since 2023) Rheinland-Berlin **Pfalz** 402 382 (since 2022) Hamburg 148 146 (since 2023) Saarland Niedersachsen 1 602 1.698 (since 2022) **Bayern** Nordrhein 1.255 1.090 (since 2022) Baden-Saarland Württemberg 126 (since 2021) Schleswig-Holstein (since 2021) Westfalen-Lippe 911 1.123 (since 2020) Source: Tierärztestatistik 2023

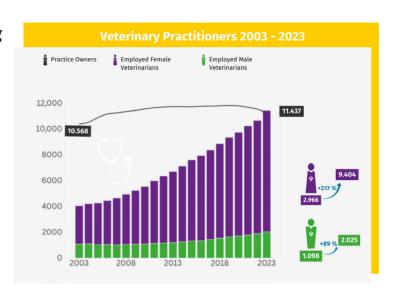


Interest in the Practice is not Declining

Interest in working as a veterinary practitioner continues unabated. From 2003 to 2023, the veterinary practice recorded an absolute increase of 8,143 veterinarians (+54%).

However, it is also clear that the number of established veterinarians (practice owners) has been on a plateau for years (black line) with a maximum of 12,019 self-employed people in 2019. Since then, it has been falling and most recently with increasing momentum (more on this from page 40).

Accordingly, the increase was ultimately attributable to the veterinarians employed in practices and clinics, and here as well primarily due to women (+6,438). Their share has thus risen by +217% since 2003, from 2.966 to 9.404 in 2023. There has also



been an increase since 2011 and a growing interest in long-term salaried employment for men. Since then, their number has risen noticeably over 20 years by +956. This corresponds to an increase of +89% on salaried employees (from page 44).



No Migration from the Practice to the Office

The explanation often given for the noticeable shortage of veterinarians is that young veterinarians, especially female, are less interested in a practice with compulsory emergency services. Instead, they prefer to work in the public sector or in the animal health industry with

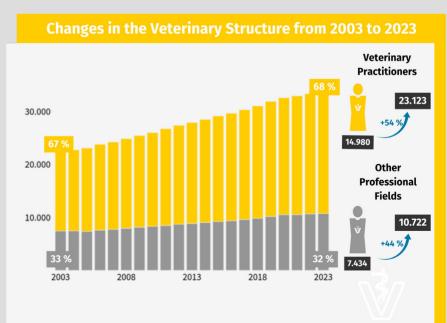
more regulated working hours.

The data refutes this assumption. The total number of veterinarians working in the profession has risen in 20 years (since 2003) by 51% to 33,845 in 2023. However, the increase in the number of veterinary practitioners is even greater at +54%.

Therefore, this increase of 8.143 veterinarians does not indicate either a decline in interest in the veterinary practice or a migration to other professional fields.

Today, 68% of working veterinarians work in veterinary practices and 32% in other professional fields. Twenty years ago, the ratio was almost identical (67% to 33%).

However, the ratio within veterinary practices has clearly shifted in favour of female employees. This has an impact on the available working hours (see page 46).



Demographics: Age Structure of Veterinary Practitioners

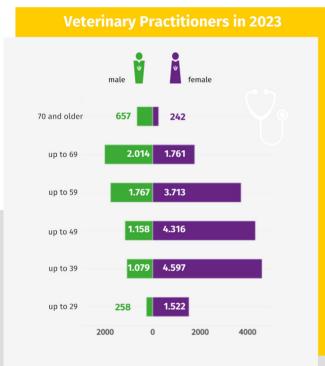
Veterinary practitioners are a comparatively young professional group. The age groups of the 30, 40 and 50 year-olds are each of the same size or larger than the next older decade. In a stable market, the veterinarians who are currently in training could therefore statistically take over the tasks of the previous ones.

Unlike in society as a whole, there is also no baby boomer surplus in the over-50s age group among veterinary practitioners.



At the same time, the age pyramid visualises the clear demographic gender shift in veterinary practices.

Only in the over-60s group do men still have a majority. The following decades after that are clearly dominated by women.



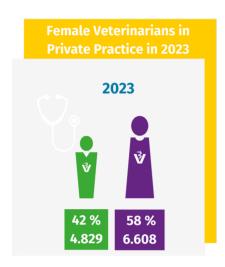
The age structure data is currently not broken down into employees and self-employed in the veterinary statistics for veterinary practitioners. However, by comparing the absolute numbers of employed and self-employed men and women (right bar chart) with those in the age pyramid of all practitioners (left), a comparison can be made.



The majority of the 4,800 men in private practice must belong to the over-50s age group. Conversely, the majority of the 9,400 employed women are in the under-50s age group. This suggests that at least 3,000 veterinary practices will have to find a successor solution in the next ten years.







Veterinarians in Private Practice: There will be Fewer

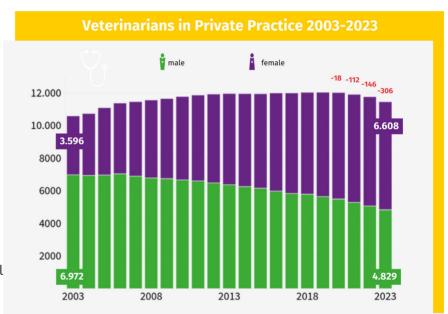
The total number of veterinarians in private practice was 11,437 in 2023.

The veterinary statistics, after a maximum of around 12,000 practitioners in 2019, have been recording an annual decline for 4 consecutive years. This decline is increasingly accelerating to a number of around 300 self-employed less in 2023.

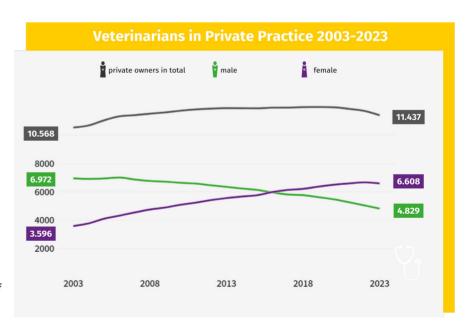
Still a Relatively High Proportion of Men

Previously, for many years, the increase in the number of women veterinary practitioners was at least able to compensate for the steady departure of male practice owners. As a result, the total number of established practices remained at a plateau from 2012 to 2021.

However, many of this "early" female owners are now also reaching retirement age, meaning that the proportion of women is also slowly decreasing. Women already made up the majority of owners in small animal practices at the end of the 90s.



Since 2016, female veterinarians have also been in the majority among practice owners, reaching 58% in 2023. The gender shift itself is somewhat delayed among practice owners compared to other professional fields, where the proportion of women is already around 70%.



The number of veterinarians in private practice is not the same as the number of practice locations

Practice Types and Locations

The number of veterinarians in private practice from the veterinary statistics does not correspond to the number of practice locations.

On the one hand, there are different forms of cooperation, e.g. joint practices, especially in larger units such as veterinary clinics or animal health centres with several veterinarians in private practice as owners.

On the other hand, some vets also run branch practices.

Since 2015, investors have increasingly entered the practice market. These around 450 locations are currently managed by veterinary directors and are not included in the statistics for veterinarians in private practice (see page 42).



Data on practice locations has only been available in the veterinary statistics since 2009. The practice figures are rounded, as some of the veterinary associations only provide estimated figures.

The "Clinic Death"



The number of veterinary practices designated as practice locations by the Landestierärztekammern since 2009 has changed marginally.

On the other hand, the number of "veterinary clinics" has more than halved within ten years. However, this does not mean that these locations have been abandoned.

Only locations that fulfil the standard in the clinic regulations of the state veterinary chambers may call themselves a "veterinary clinic". Among other things, they must offer an emergency service 24 hours a day, 7 days a week. Not all locations are able or willing to do this and therefore now often operate as "animal health centres" or "day clinics", etc., with otherwise the same range of medical services.





Single Practice Dominates

The owner-managed individual practice is the predominant practice model for veterinarians in private practice. This has not changed for over 20 years and has always prevailed with a share of around 75%.

The proportion of co-operations as joint practices or group practices has also changed little between 2003 and 2023. The small number of group practices has increased slightly.



The assumption that the number of cooperative forms of practice would increase with the steadily growing proportion of women among veterinarians in private practice has not vet been confirmed. The gender ratio in these types of practices has shifted. While still maledominated in 2013, it is equal in 2023 (m 1,433 to 1,415 f). This is not reflected yet in other cooperation forms like the private practice, where 58% of women are in the majority. There is a well-founded assumption, though not directly verifiable from the figures, that the majority of the larger practice units (see also structural data on the next page) is (co-)owned by men.

po

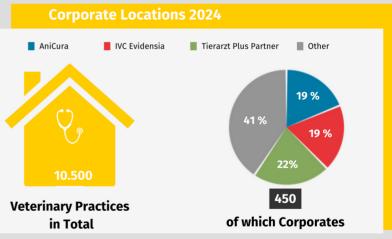
Corporates: Investors as Operators of Veterinary Chains

Since 2015, investors have gradually been buying veterinary clinics and larger veterinary practices in Germany. Primarily in the small animal sector, but also equine clinics and equine practices are affected.

These investors are usually backed by private equity funds. The resulting structures are known as practice chains or corporates.

There is no official record of all current corporate locations in Germany.
Research by the Atlas editorial team in August 2024 counted a total of around 450 locations from 16 different practice chains. The data does not claim to be complete.

This figure is very low compared to the total number of approx. 10,500 veterinary practices/veterinary clinics and a share of less than 5%. In other European countries, the corporates' share is significantly higher. In the UK, it is over 60%.



There, the antitrust authorities are currently investigating the market power of these companies.

In Germany, however, the vast majority of the 450 corporate locations belong to the group of "larger" veterinary practices / veterinary clinics / animal health centres, with sales of one million and upward. The market share for corporates in terms of turnover is therefore significantly higher.

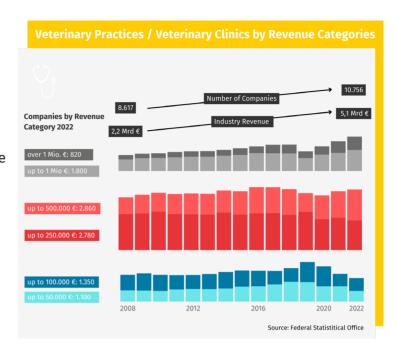


Turnover Structure Data for Veterinary Practices

The regular structural data survey of the Federal Statistical Office for the veterinary sector (WZ75 / 3.12) records a sector turnover of EUR 5.1 billion in 2022. More recent data is not yet available. The increase of EUR 2.9 billion over 14 years confirms the positive economic development of the sector. However, there is also an enormous range and shifts in practice turnover.

Part-time Practices

Almost 2,500 locations generate less than 100,000 Euros in sales, meaning that they are hardly full-service practices. Their number has fallen significantly in the last four years (-40%). Some have moved up to the next higher turnover category, others have withdrawn from the market.



2.780 2.780 2.865 2.865 2.

Broad Middle Class Group

Around half of all practices (approx. 5,600 locations) make up for the turnover category in the 100,000 to 500,000 € range. Despite their large number, relatively few employees (veterinarians and others) are employed here (approx. 15,000 / Ø 2.6). Their overall number has changed little, although some practices have recently "risen" from the lower-turnover category of < €250,000.

Growth Drivers

The 14 year period shows, that growth is mainly attributable to the total of around 2,600 locations, with sales of over 500,000. The sales group of up to 1 million \in (1,800 locations) employs 11,500 employees. The segment with sales of over 1 million \in is small in terms of numbers (820 companies / 8%), but generates almost 50% of the sector's sales.

This largest sales segment with around 23,200 employees also employs nearly half (46%) of the 51,000 employees of the approximately 10,750 veterinary companies.

In 2018, the survey was changed to the "Statistische Unternehmen nach EU - Definition" (3.12.1). The data before/after this change is only comparable to a limited extent. However, the trend development remains the same.







Dr. Elisabeth Brandebusemeyer 1st Chairwoman of the Bund angestellter Tierärzte (BaT)

Is Veterinary Medicine considered a Women's Profession?

The future of veterinary medicine is employed and female. Since 2024, the majority of employed veterinarians have been providing care in the curative practice. Over 80% of these are female. There is no sign of a trend reversal in the choice of students. The influx of female students to veterinary faculties remains high. A gap is also generated by sabbaticals, part-time work and migration from

the curative practice. Pregnancy and parenthood remain private pleasures. Retention strategies, qualification measures and attractive offers for those returning to work, reflecting employers "thinking along" about this phase of life, would be steps toward solving this problem. A constructive dialogue on how to achieve a mutually satisfactory work-life balance has not been yet sufficiently established.

Working conditions put to the test

At the same time, there is still too often a lack of good working conditions as well as of monetary and non-material appreciation. Due to the inadequate implementation of existing legislation, there are still violations of the Working Hours Act and inadequate pay for academics. There is still too little information about the consequences of paying insufficient pension contributions and the resulting risk of poverty in old age. A solution-orientated approach to the problem has not been yet been promoted decisively enough.

The new GOT as a driver for improvement?

It remains to be seen, to what extent the new version of the GOT will lead to an improvement in the situation in this area. According to a survey

conducted at the beginning of 2024, over 60% of veterinary employees have not yet received a salary increase following the introduction of the new fee schedule. There is no lack of basic willingness on the side of salaried veterinarians to provide emergency services, but there is a lack of motivation to do so without additional remuneration, as this is not common at present. The rightly politically demanded care of animals in terms of animal welfare, both during regular and emergency service times, can only be achieved with motivated, well-paid and well-rested employed veterinarians.

New players - an advantage?

New players on the market provide a breath of fresh air, but this does not necessarily blow in the right direction for employees. Business expertise as a success factor is an advantage for salaried professionals, provided that reliability, working atmosphere and employee management are not sacrificed to the interests of investors. The question whether owner-managed or smaller practices and clinics could perform better, cannot be answered in general terms.

Prove of willingness to make positive changes

The conclusion of the first in-house collective agreement by the Bund angestellter Tierärzte e.V., is a signal to the industry to improve the remuneration of employed veterinarians through collective agreements. It is now up to all those involved within the industry to prove, that a positive, fundamental and structural change is actually taking place with regard to improving working conditions and salaries in veterinary medicine.

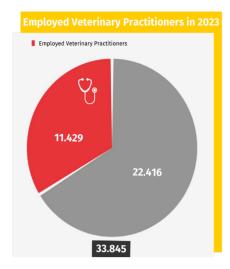
Dr. Elisabeth Brandebusemeyer

1st Chairwoman of the Bund angestellter Tierärzte (BaT)

As a professional association, the <u>Bund angestellter Tierärzte e.V. (BaT)</u> represents the interests of all employed and aspiring veterinarians in practice, in public service as well as in industry and research. The main objective of the BaT is the fundamental improvement of working conditions. To this end, it provides information on the rights and obligations of employees and employers and actively approaches politicians and the public. It works to establish collective agreements in the curative practice. The BaT was founded in 2016 and has around 1,000 members.



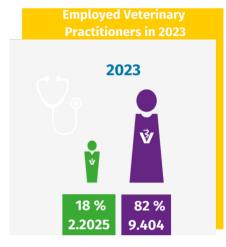




Employed Veterinarians in Veterinary Practices and Veterinary Clinics

11,429 veterinarians were employed in around 10,500 German veterinary practices and veterinary clinics in 2023 according to veterinary statistics (1.1). They make up for almost a third of the 33,845 veterinarians working in the profession.

The proportion of women among the employees in 2023 with 9,404 female vets is more than four times as high (82%) as the proportion of men (18%) with 2.025.



Number of Employees Versus Owners of Practices

20 years ago (2003), the number of veterinarians in private practice (10,568) was still more than twice as high than the 4,035 practitioners employed in practices. 20 years later, the ratio is practically 1:1 at around 11,400.

Since around 2007, the only relevant growth in the number of veterinary practitioners has been among salaried employees, primarily women. Their number has more than tripled in 20 years.

However, there is also a growing interest in working as an employee among the men who are moving into practice. The proportion of salaried employees among them has almost doubled.



Employed Veterinarians Unevenly Distributed

Over the past five years, the annual increase in the number of employees has averaged just over 500. At the same time, the number of veterinary practices remained stable overall.

The distribution of employees across the 10,500 veterinary practices is very uneven. In a set of

economic data on <u>veterinary medicine</u> (3.12), the Statistische Bundesamt shows, that just under 1,000 veterinary companies employ around half of all employees in the sector. However, this figure includes all types of employees as well as veterinarians and therefore are not shown separately.



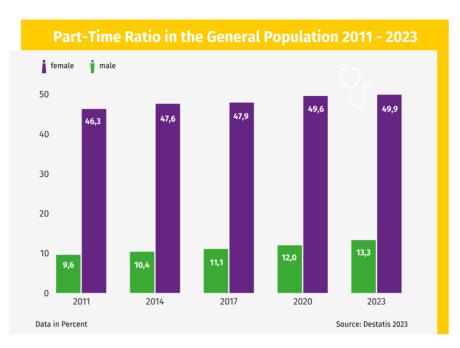


Working hours / Part-time

Employed in veterinary practices, the proportion of women is currently 82%. As the age structure data (page 39) and the gender distribution of veterinary students (page 27) show, this proportion will remain in a range between 80 and 85% over the course of the next 10 years. It may even increase slightly.

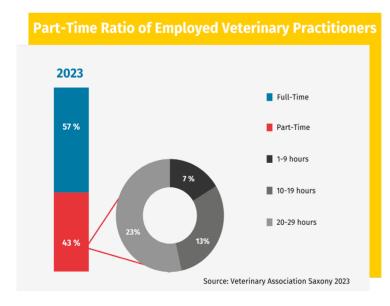
It is therefore assumed, analogous to the high part-time rate among working women in the population as a whole (5.2.1), that a large proportion of these female veterinarians are working part-time. However, there is no nationwide data available on veterinary working hours.

For more information on part-time work, see data on parental leave and maternity protection (page 16).



female veterinarians are working Part-time Rate in Society as a Whole

In society as a whole, the <u>part-time rate (3.8)</u> for working women has remained virtually unchanged for the past ten years at between 48% and 50%. Among men, there has been a slight increase up to 13%. It is unclear, whether a similar ratio can also be observed in female veterinary practitioners.



Part-time Work in Veterinary Practices

The most recent data on part-time work comes from the Sächsische Landestierärztekammer. It analysed 376 employment contracts of veterinarians employed in veterinary practices in Saxony in 2023 (men and women). The part-time rate was 43%, in this case defined as less than 30 working hours. Up to this limit, the contribution regulations provide for staggered chamber contributions depending on the amount of work.

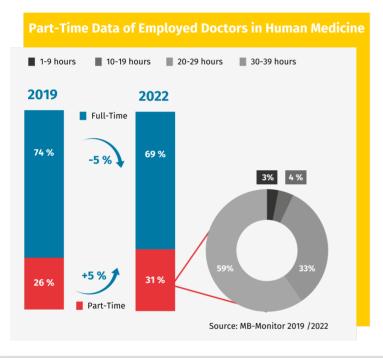
For a discussion on working hours, see also page 57 (Public service)

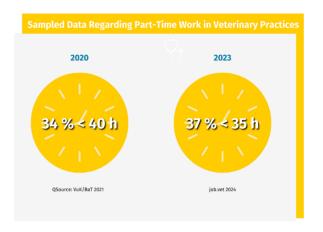


Part-time Sample Data

A survey conducted by the Verbund unabhängiger Kleintierkliniken (VuK) and the Bund angestellter Tierärzte e.V. (BaT / 7.4) in 2020, revealed a part-time rate of 34.2% (< 40 h / men and women). In another survey conducted by the Job.vet portal (7.9) in 2023 (n 1,533), the part-time rate was 37% (< 35 h / men and women). Women had an average working week of 33.6 hours.

In veterinary medicine, there is a range of sample data on working hours in veterinary practices from surveys conducted in several years. The underlying populations were different. The questionnaires were freely accessible online.





Part-time in Human Medicine

Human medicine data from a survey of members of the Marburger Bund (6.2) (men and women) shows comparable developments, with recognisable rates of increase. The part-time rate in 2022 was 31% (< 40 h). Among the participants in the Marburger Bund survey, however, the proportion of women (53%) is significantly lower than in veterinary medicine.

Salary Recommendations

In 2010, the **Bundestierärztekammer (BTK)** issued a minimum salary recommendation for the first time. For new veterinarians entering the practice it was €2,600 for a 40-hour week. It was a reaction to the debate about working conditions in practices. Eight years later, the BTK "dynamised" its recommendation (7.8.1), linking the starting salary to the public sector pay scale (TVöD / E13/1 Bund) after 6 months at the latest. This means, that it automatically rises in line with the corresponding pay increases in the public sector. In 2024, it will therefore amount to €4,190.

Since 2012, the **Bundesverband praktizierender Tierärzte (bpt)** has also defined a minimum amount below which no veterinary salary should fall. This accounts, as of 2022, to €3,500. The bpt has also developed a <u>remuneration concept (7.8.2)</u> that links salary development to performance and expertise.

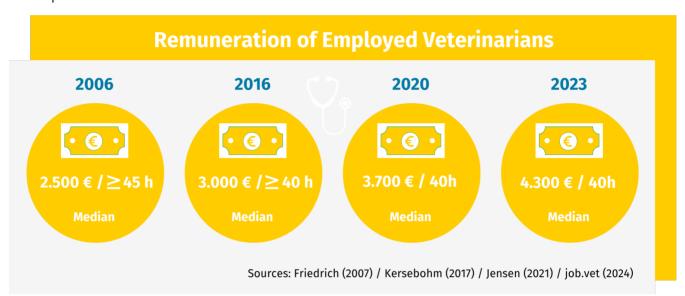
Another association, the **Bund angestellter Tierärzte e.V. (BaT)**, joined the BTK organisation in 2016 with the aim of establishing collective agreements. Accordingly, the BaT has developed a pay scale with salary requirements. It is part of a basic paper about <u>"Standards for employment relationships" in veterinary practices (7.8.3)</u>, which, as of 4/2024, states €3,710 as the starting salary.





Working Conditions and Salaries in Veterinary Practices

"Then you just clean at night" – this is how a <u>FAZ article (7.1.1)</u> concludes <u>Bettina Friedrich's dissertation (7.1)</u>, describing the desolate earnings situation of employed veterinarians in 2007. Her work was the start of a debate in the industry about the working conditions and remuneration of salaried veterinarians in veterinary practices. In the meantime, a number of survey-based studies on this topic are available.



Friedrich (2007)

Around 20 years ago, according to the <u>Friedrich</u> <u>dissertation (7.1)</u>, salaried veterinarians earned €2,500 in the 48 hours actually worked per week (both median figures). There were clear gender differences (women: €2,400; men: €2,950). Among women working full-time, 25% earned less than €2,000 (n = 1,945 employees / 79% female).

Kersebohm (2017)

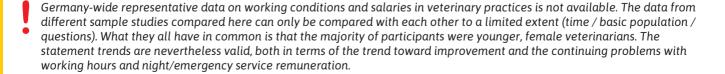
Ten years later, Johanna Kersebohm's dissertation (7.3), which was also based on a survey (n = 1,231 employees), found only slight improvements. The gross wage had risen to €3,000. However, the (excessively) long working hours (45.5 hours actually worked per week) remained relevant, while salaries remained low. The minimum wage was not even applied for veterinary newcomers working in clinics. 14% earned less than €8.50 per hour.

Jensen (2021)

The study (n = 1,414 / 88% female) by <u>Charlotte Jensen (7.5)</u> found that working conditions have continued to improve, particularly in the field of small animal medicine (contractual 40-hour week, fewer night and emergency services, bonuses for 40% of service providers). However, even in the 2020 survey year, violations of the Minimum Wage and Working Hours Act occurred again. In addition, the median hourly wage is still significantly lower than in other academic professions.

Job.vet (2024)

The most recent survey (job.vet salary report 2024 / 7.9) calculated median earnings of €4,286 (40 h) for 2023. Women starting their careers (≤ 1 year) reached €3,500. Working hours (71% worked 5 hours of overtime per week) and "unfair" night/emergency service pay are also further criticised.





Development of the Veterinary Fee Schedule (GOT)

oq

The scale of fees for veterinarians (GOT / 4.5) is a federal ordinance, in other words a law. The veterinarians must charge at least the minimum fee rates specified in it. In the sensitive area of animal health, the government imposed the transparency of prices on the one hand and the protection of animal owners from unfair treatment on the other hand. The GOT should ensure that veterinarians receive appropriate remuneration, so that they could fulfil the quality requirements of animal owners, for example through further training and investment. Competition between veterinarians should be based on performance and not on price.

"Steep" increases

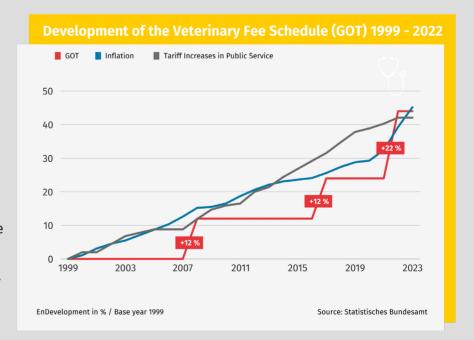
In 2008 and 2017, the legislator raised the fee rates by 12% across the board. The federal government in 2022 then requested a report (9.5) to calculate the need of GOT adjustment. The report states that the previous flat-rate increases had not been sufficient to compensate for the cost increases incurred. The new GOT 2022 therefore included not only a fee increase (+22% on average), but also a structural change to the so-called service catalogue. Previously, a version from 1999 applied, which could no longer reflect the medical progress made since then.

Special case emergency service

As in human medicine, emergency service provision has become increasingly critical. The federal government has also recognised this and therefore adjusted the emergency service fees (9.6) in the GOT in 2020. Since then, a flat-rate emergency service fee of €50 (plus VAT) must be paid for every veterinary visit during emergency service hours. In addition, practices must now charge at least double the rate for emergency veterinary services (upper limit is 4 times the GOT rate). According to initial observations in the sector, the "Notdienst-GOT" has led to a selective improvement in emergency services, including better remuneration for employees on emergency duty.

Criticism from the veterinary profession

The Bundestierärztekammer and the Bundesverband praktizierender Tierärzte e.V. have been criticising for years that the GOT is constantly lagging behind the inflation rate and tariff increases in the profession (see chart). They are calling for regular adjustments, so that veterinarians do not have to engage in discussions with clients and the media every five to seven years about supposedly unreasonably high price increases.



4 Public Service





Dr. Christine Bothmann President of the Bundesverband der beamteten Tierärzte (BbT)

Conflicting Expectations

The public service, as with all veterinary fields of activity, is also facing major changes. The causes lie in the way veterinarians themselves perceive their professional role, in society's expectations of an often conflicting. This is particularly noticeable in acceptable animal husbandry and in the increased demands that citizens are placing on the state.

We are dependent on information about the development and direction of the veterinary profession, in order to align ourselves better as an association with the needs of our members, both current and future.

appeal of working in the public sector also lies in

accelerated. This places enormous demands on

employees. After all, decisions need to be made

with legal certainty and be able to withstand

judicial review. In the run-up to a decision, our

members are increasingly exposed to massive

expectations are not necessarily uniform, but

areas such as animal welfare. However, the

social pressure. As in many other areas,

The gender distribution of the workforce and the attitude of employees toward the profession in general are also important aspects. The veterinary profession is becoming female in the public sector and that is a fact.

In this respect, I would like to thank the initiators and publishers of this Veterinary Atlas Germany.

The legal matter to be mastered is becoming increasingly complex, but also less coherent. And yet the decision-making processes have to be

Dr. Christine Bothmann

its challenges.

President of the Bundesverband der beamteten Tierärzte (BbT)

The "Bundesverband der beamteten Tierärzte e. V. – Vereinigung der Tierärztinnen und Tierärzte im öffentlichen Dienst" represents all veterinarians in the public sector, both employees and civil servants. Their membership is organised by affiliation to one of the 16 State Associations, which in turn have 1,700–1,800 members. The professional organisation of veterinarians in the Bundeswehr is associated with the BbT. The association has been in existence for over 70 years and represents the interests of veterinarians in the public service vis-à-vis politicians and the public.



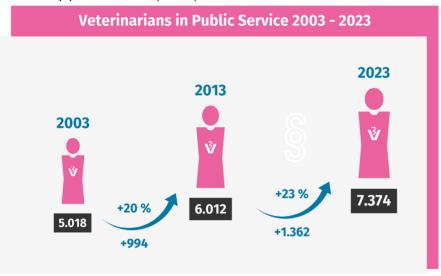


The Public Service, the Second Largest Veterinary Professional Group

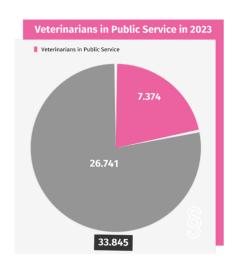
The second largest occupational group within the veterinary profession (1.1) is the public sector. 7,374 of the total of 33,845 veterinarians working in the profession are working there as of the 31st of December, 2023.

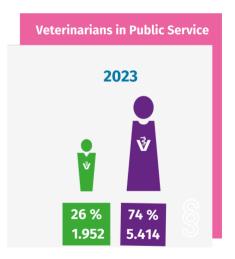
Over the course of 20 years, the total number of veterinarians in the public sector has risen by 47%, from 5,018 to 7,374, with the greatest increase in the last ten years.

Growth in the public sector is less pronounced than that of the veterinary practitioners (+54%).



At 74%, the proportion of women is currently already slightly higher than in the working profession as a whole (71%). It will increase noticeably over the next few years, because in the age groups under 50, well over 80% of veterinarians in the civil service are female (page 56). This is particularly noticeable for trainee vets or civil servants in training. Over the last ten years, the average proportion of women in this category has been just under 86%. In some years, it has even been over 90%.





Civil Servant or Employee

In the public sector, there are two different types of employment status.

There is one, a small group of the civil servants with 1,476 veterinarians in 2023 where the proportion of women is 60%. This is a relatively low figure for the veterinary profession.

The larger group, where the vast majority of veterinarians work, is that of the employed in the public sector with 5,730, 77% of whom are women.

Within the group of civil servants, it is noticeable that, at colleges and universities, for example, men are still barely in the majority at 54%. Civil servant veterinarians at federal institutes have the highest proportion of men in the profession with 60%.

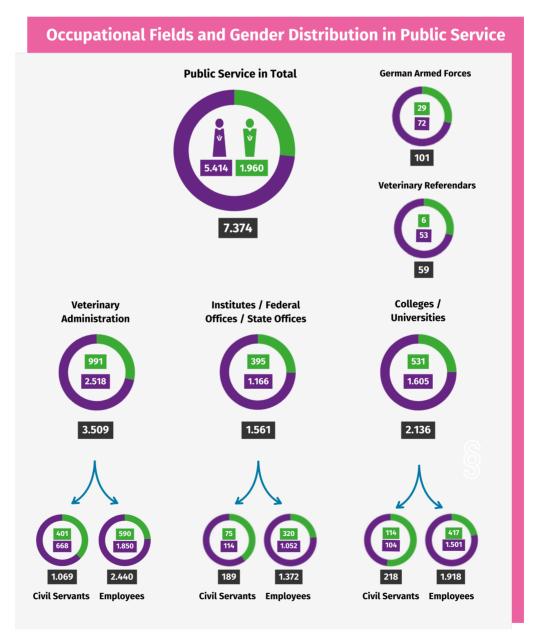


Occupational Fields and Gender Distribution in the Public Sector in 2023

The Veterinary Atlas Germany summarises the following areas under the generic term "Public Service":

- The veterinarians employed in the veterinary administration at federal, state, district and municipal level are 3,509. This is just under half of the veterinarians in the public sector and the proportion of women is 72%.
- In this group belonging to the local authorities as well, the veterinary offices are again the largest employer with 2,242 veterinarians and 73% of women.

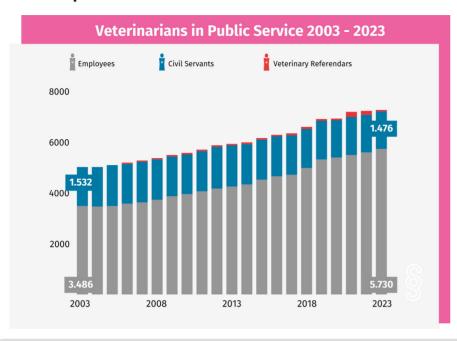
- The second largest group in the civil service are the veterinarians employed at colleges and universities with 2,136 (proportion of women is 75%).
- The institutes or offices at federal and state level are employers for 1,561 veterinary employees, 75% of whom are women.
- The veterinary statistics group and their veterinarians in training are represented as a separate group (59 / female share 90%).
- The Veterinary Atlas also categorises the 101 veterinarians in the Bundeswehr (71% of whom are women) as civil servants.







Development over 20 Years



The <u>veterinary statistics (1.2)</u> show the following development from 2003 to 2023.

The number of veterinarians in the public sector has increased by a total of 2,348 (47%) over 20 years to 7,374.

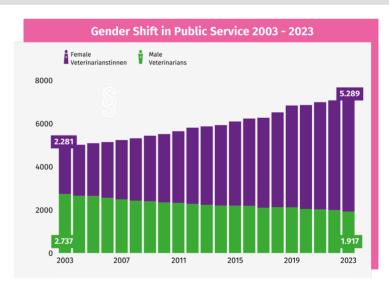
This increase was mainly attributable to salaried veterinarians (grey). In contrast, the number of female civil servant veterinarians (blue) declined slightly (–56). The age structure of the 1,476 civil servant veterinarians in 2023 (page 56) suggests a further decline.

It is noticeable that in the years 2020 to 2023, the number of civil servant candidates in training fluctuated greatly and deviated from the previous long-term average of 63. In the two years 2021/22 alone, the statistics counted a total of 363.



If we look at the gender shift within the civil service over 20 years, the proportion of women has more than doubled overall (+136%) from 2,289 to 5,414.

The number of civil servants doubled (from 440 to 886). The number of employed veterinarians increased by 2,244 (+64%).





The number of men fell significantly by 28% from 2,737 to 1,952.

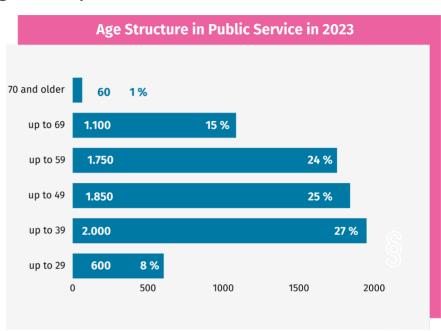
This decrease of 785 men was primarily attributable to the civil servant veterinarians. Their number has almost halved (from 1,092 to 590).

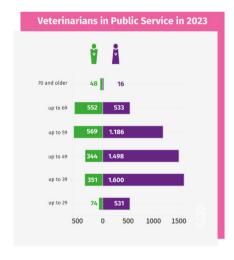


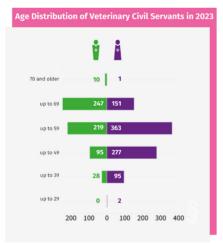
Age Structure: an Over-Aged Group of Civil Servants

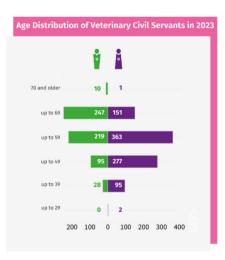
Veterinary medicine is a comparatively young profession. The public sector is still somewhat "younger" than the veterinary profession as a whole or even the veterinary practitioners. The younger age groups are larger than the previous ones. There is no threat of a demographically induced shortage of veterinarians. The subsequent age decades should be able to take over the tasks of the older ones, provided the scope of work is comparable.

A breakdown of the age structure data by gender shows that this "favourable" age structure only applies to women. The group of men in the public sector is significantly older.









If we then differentiate between salaried employees and civil servants, it becomes clear that the ageing problem affects mainly civil servant veterinarians. However, interest in working as a salaried professional in the public sector seems to be growing again among young men.

For the graphics of the age structure data, the veterinary civil servants in training were included in the group of civil servants.



Women's Profession and Part-time Work

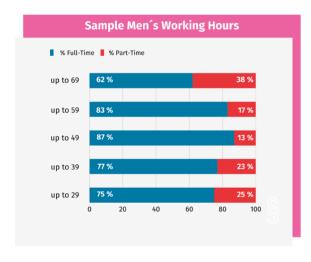
The proportion of women in the public sector is moving inexorably toward 80%. This is shown in the demographic data for this occupational field (page 46).

With this high proportion of women, it is always a topic of discussion that the headcount statistics of the veterinary profession are not the same as the number of full-time veterinarians (full-time equivalents). Therefore, this significant absolute growth in the number of veterinarians, about 47% in the public sector over 20 years, does not allow any conclusions to be drawn about the extent

to which the actual available working time has increased.

A Germany-wide evaluation of part-time work by veterinarians in the public sector is not available. This aspect also applies to all other veterinary professional fields.

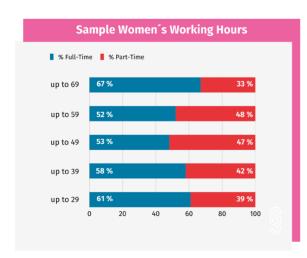
There are punctual analyses that show that staffing plans are "overstaffed", i.e. several people share one position. On the other hand, there are also regions and areas in which planned positions are not filled.



In her dissertation on "Working conditions, work and life satisfaction of non-curative veterinarians in Germany" (7.4), Maren Ewert also collected data on part-time employment in a survey (n = 174) in 2018. According to the survey, 44% of female veterinarians in the public sector worked part-time (≤ 40 hours). For mothers it was 59%. The average was 27 hours per week.

The proportion of men working part-time was around 20%. Among full-time employees (≥ 40 h) of both genders, women worked 2 hours per week less than men.

The charts show the percentage of part-time work by age group for men and women.



In society as a whole (5.2.1) in 2023, every second woman (50%) and 13% of men worked part-time (= less than 35 hours).

It is certain that, analogous to the development of parttime work in human medicine (6.2) and in society as a whole, the proportion of part-time work in veterinary medicine has risen and will continue to rise as the proportion of women increases. The available working time per capita is therefore decreasing.

More data on this aspect in the chapter "Veterinary Practitioners" (page 46).







Betina Prestel Chairwoman of the Bundesverband für Tiergesundheit (BfT)

Animal Health is Essential for the Protection of Animals. **Humans and an Intact Environment**

As members of the veterinary pharmaceutical industry and in the current challenging times, we want to continue to make our contribution to a sustainable food supply and support pet owners in caring for their four-legged friends.

From our point of view, we need and recognise

Germany as an attractive location with a strong economy also within Europe. This is necessary for us in order to master the current challenges we are facing and provide the adequate solutions.

The research, development and marketing of animal health products must fulfil a wide range of requirements.

Qualified, young veterinarians are essential for this. Comprehensive veterinary training at the cutting edge of scientific progress is an important basis of our work. Our industry offers up-andcoming talent an attractive working environment.

The Bundesverband für Tiergesundheit is actively driving forward the issues of the future in partnership with other organisations, above all for veterinarians. This aspect will continue to determine our association's work.

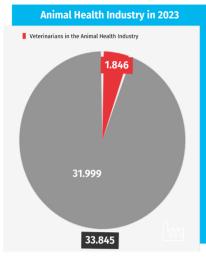
With this in mind, it is important for us to contribute to the Veterinary Atlas Germany with facts from our industry and to provide a sound basis for dialogue with legislators, politicians and society.

Betina Prestel

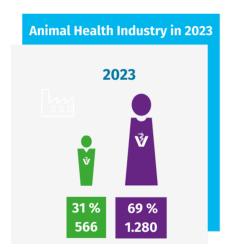
Chairwoman of the Bundesverband für Tiergesundheit (BfT)

The Bundesverband für Tiergesundheit e.V. (BfT) represents the leading manufacturers of veterinary medicines and feed additives in Germany. The member companies (currently 23) research, develop and produce vaccines and pharmaceuticals as well as diagnostics and other health solutions that drive progress in veterinary medicine and contribute to overcoming current social challenges. To this end, the BfT engages in dialogue with politicians, scientists, institutes, veterinarians, farmers, animal owners, the media and other partners.





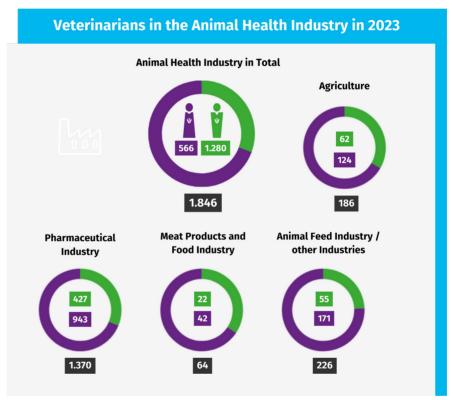
In 2023, a total of 1,846 veterinarians were employed in the animal health industry. This corresponds to around 5.5% of the 33,845 veterinarians working in the profession.



At 69%, the proportion of women in this field of activity is slightly lower than for veterinarians working in the profession as a whole (71%) – and noticeably lower than in the public sector (74%).

Veterinarians in the Animal Health Industry

The Veterinary Atlas summarises all veterinarians who are listed in the <u>German veterinary statistics (1.1)</u> under the headings "Industry/ Private Sector" and "Agriculture" with the generic term "Animal Health Industry". This also includes veterinarians who work in the human pharmaceutical industry. Their exact number is not known. They are therefore included in the data analyses in this chapter.



The four main areas of activity in the animal health industry are distributed as followed:

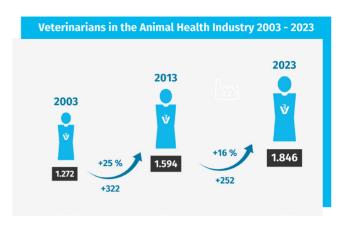
- The largest field of employment is the veterinary pharmaceutical industry, with 1,370 veterinarians and a 69% share of women. The other data in this chapter mainly relates to this occupational field.
- This is followed by the animal feed and other industries with 226 veterinarians, of which 76 % are female.
- 186 veterinarians are employed in agriculture. Here, the proportion of men is slightly higher at 33% (67% female).
- Finally, 64 veterinarians are employed in the food industry, again with a slightly higher proportion of men with 34% (66% female).



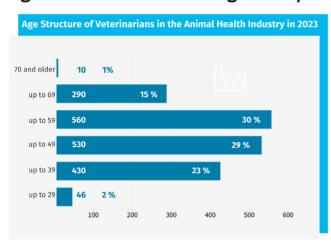
Over 20 years, the total number of veterinarians in the animal health industry has increased by 574 or 45%.

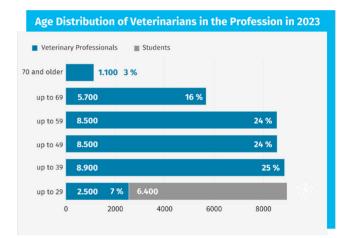
At +337 (+33%), the veterinary pharmaceutical industry accounted for the largest share of growth in absolute terms.

However, the largest growth relatively speaking was in agriculture. In 2023, more than six times as many veterinarians were employed in this field compared to 2003. Their number rose from 26 to 186.



Age Structure in 2023: Slight Baby Boomer Surplus

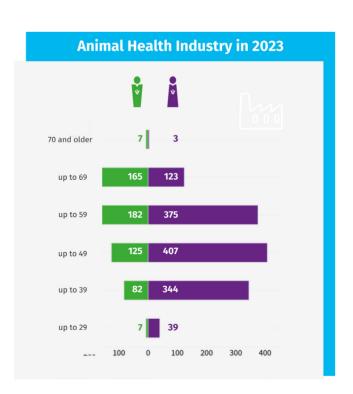




The baby boomer problem is becoming more apparent in the animal health industry, in slight contrast to the age structure of the working veterinary profession as a whole.

Up to the age of 59, the older age group is slightly larger than the next younger group. In this case, there may therefore be a shortage of young veterinarians when this older group reaches retirement age.

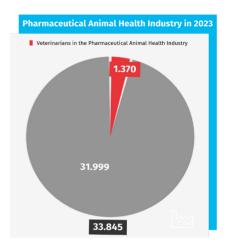
The age pyramid, broken down by gender, clearly shows that men are mainly responsible for this baby boomer imbalance in the animal health industry. Among them, 62% (350 out of 570) are older than 50. As in all professional fields of veterinary medicine, the younger generation is predominantly female. Among those under 40, the proportion of women is well over 80%.



The Veterinary Pharmaceutical Animal Health Industry in Germany

The 1,370 veterinarians employed by the veterinary pharmaceutical companies work in research or product management and are responsible for sales, marketing

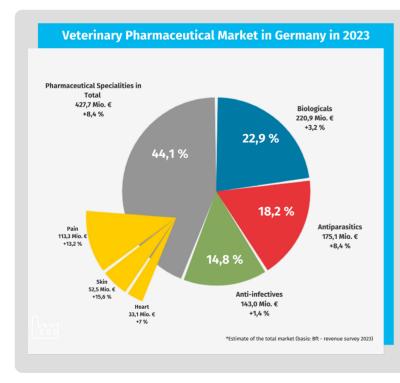
and distribution as well as professional customer advice. They also monitor compliance with authorisation regulations and the safety of veterinary pharmaceutical products.



Market Data for Veterinary Pharmaceuticals in Germany in 2023

In 2023, the market for veterinary pharmaceuticals grew by 6.1% year-on-year to a total of €965 million (BfT estimate for the overall market in Germany). As in the previous year, products for small animals and horses accounted for around 62% of this figure. The livestock segment accounted for 38%.

The distribution chart shows that even in 2023 the pharmaceutical specialities segment accounted for the largest share of the market with 44.1%. Vaccines recorded growth of 3.2%. With 18.2%, the antiparasitics segment's overall share of the market grew slightly compared to the previous year. The share of the anti-infectives segment remained the same as in the previous year, at 14.8%.



Grouping of Veterinary Pharmaceutical Products

Biologicals/Vaccines and Serums:

Products to boost the body's immune defence

Anti-infectives:

Therapeutics to combat infectious diseases

Antiparasitics:

Preparations for combating parasites on and in the host animal

Pharmaceutical specialities:

Other products to keep animals healthy, e.g. anti-inflammatory agents, wound-healing agents, cardiovascular preparations, agents to control metabolic diseases such as diabetes and fertility disorders

Market Assessment

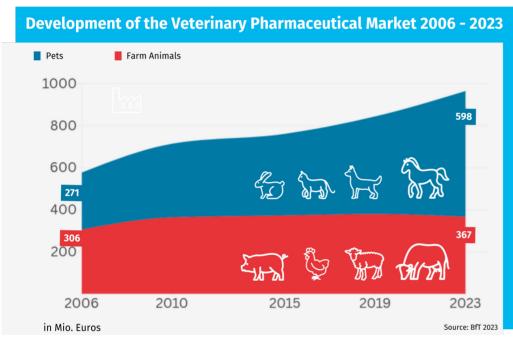
In terms of market development, significant effects from the inflation-related market restraint were observed at the end of 2022 and price adjustments due to increased costs in material procurement, production and logistics in 2023 were taken into account. Although the animal health market will see growth in 2023, it is more likely to stagnate overall.

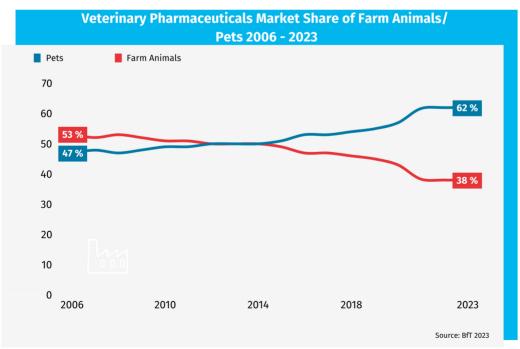


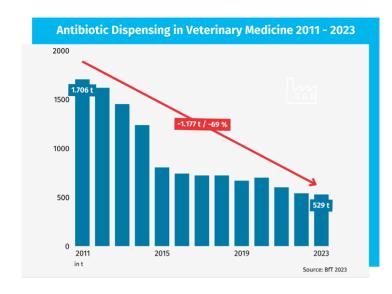
Market Shift from Farm Animals to Pets (2006 to 2023)

The market data of the veterinary pharmaceutical animal health industry reflects the changes in society and in animal husbandry. Sales of veterinary pharmaceuticals for livestock are stagnating or declining slightly. Continuous growth can be seen mainly for small animals and horses (area chart). The line graph shows the percentage of development and the intersection of the development around 10 years ago.

The number of pets is increasing and they are becoming more and more important as family members. In livestock farming, animal numbers are declining in line with falling meat consumption. (See also animal number trend in the "Industry data" section on page 72).





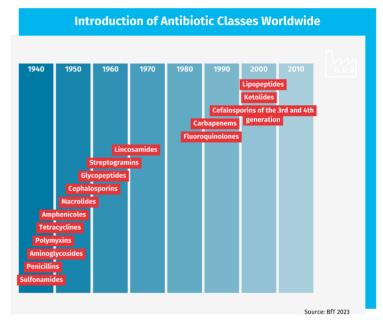


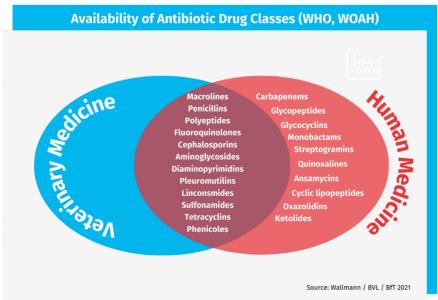
Significantly Fewer Antibiotics

The dispensing and use of antibiotics in veterinary medicine is monitored, using a comprehensive package of measures known as antibiotic monitoring. Since the introduction of the recording of dispensing quantities in 2011, their consumption has been reduced by almost 1,200 tonnes or 69% in Germany up to and including 2023.

No New Antibiotics for Veterinary Medicine

Unlike in human medicine, veterinary medicine has not been able to benefit from new antibiotics. No new active substances have been authorised for veterinary medicine since the end of the 1980s. In contrast, ten (newer) classes of antibiotics are reserved for human medicine. Their use is prohibited in veterinary medicine. A further twelve classes of active substances are shared between the two disciplines.



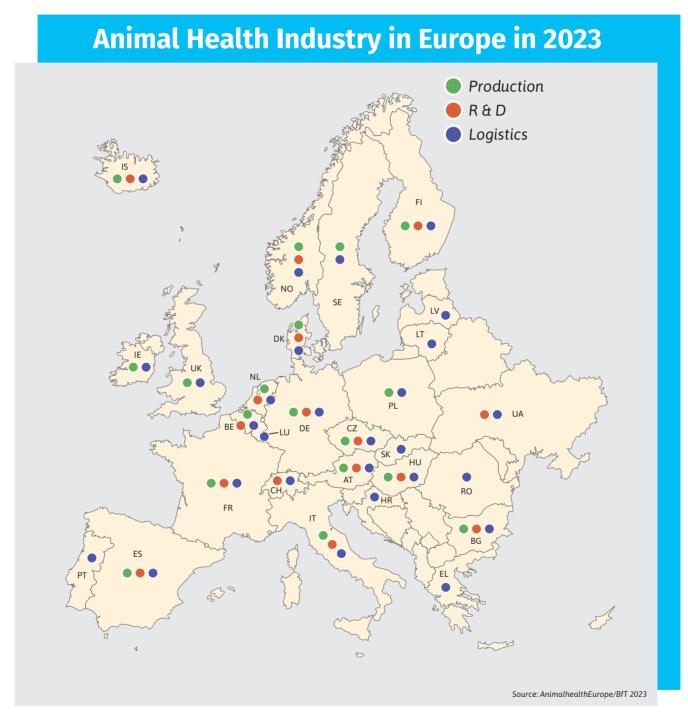


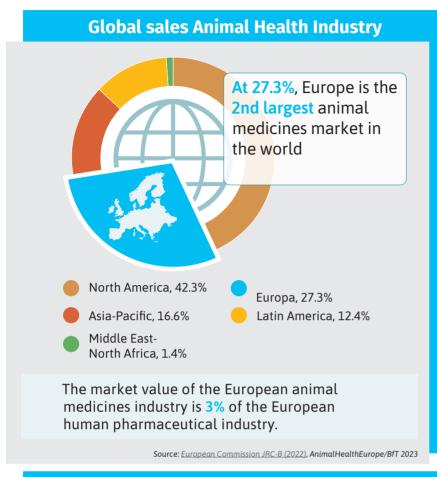


Veterinary Pharmaceutical Animal Health Industry in Europe

With a share of 26.6%, Europe is the second largest veterinary pharmaceutical market in the world after the USA (42.3%). This is shown by data from <u>AnimalhealthEurope (8.2)</u>. The market value of the

European veterinary pharmaceutical industry corresponds to around 3% of the European production of the human pharmaceutical industry.





Workplaces

Millions of jobs in Europe are directly and indirectly linked to activities of the animal health industry.

Arbeitsplätze Tiergesundheitsbranche Europa*

*direct & indirect jobs



Animal health indistry

Around 52,000

Source: AnimalhealthEurope

0000

Veterinarians

Over 325,000

Source: FVE 2023



Livestock farms

Around 3.3 Millionen

Source: Eurostat

Quelle: BfT 2023:

The pharmaceutical animal health industry employs around 52,000 people (9.2) in around 260 companies. These employees are spread across 26 countries. Its areas of activity are the distribution, manufacturing and development of veterinary medicinal products.

In addition, there are around 325,000 veterinarians (FVE / 6.3) and finally around 3.3 million people working in livestock farms.





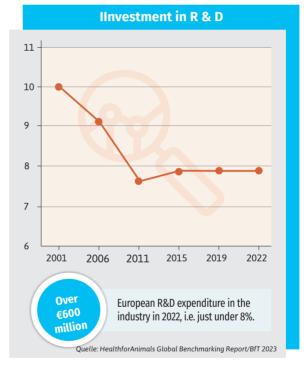
Research and Development: Millions Spent on New Drugs

In the European Union (EU), legal requirements for veterinary pharmaceutical products set standards and procedures that precisely regulate these important products before and after they enter the market. Veterinary pharmaceutical products are tested for quality, efficacy and safety for animals, users and the environment before being authorised in the market. Independent experts

carry out a comprehensive scientific evaluation of the data, including a benefit-risk analysis, on behalf of European and national regulatory authorities, in order to decide whether the drug can be recommended for marketing authorisation under defined conditions of use or not.

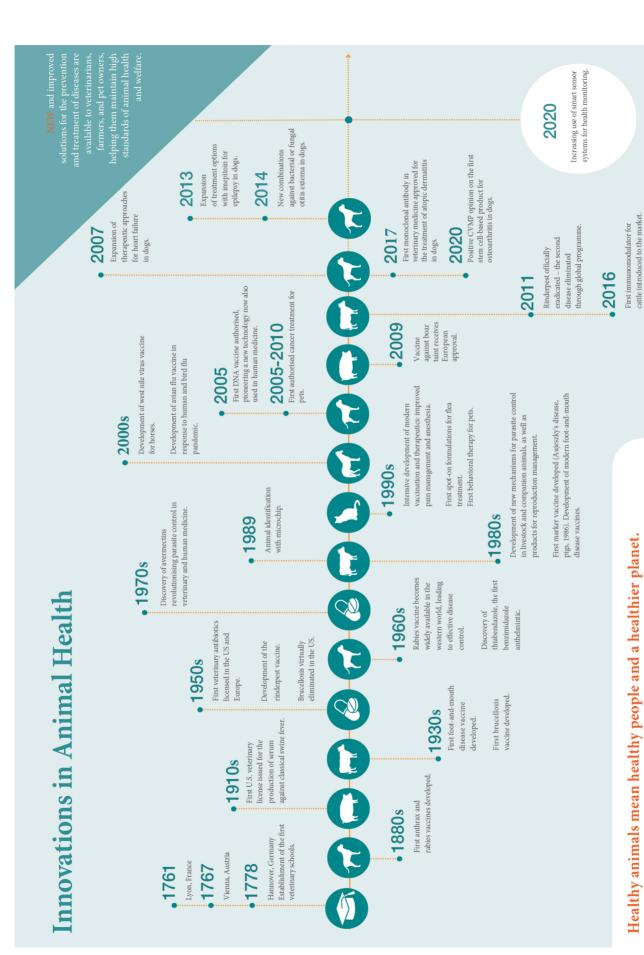
In 2023, the <u>European Medicines Agency</u> (EMA / 8.4) authorised 14 new animal health products. Of these, 9 were based on new active substances and 9 were vaccines. In Germany, around 2,800 pharmaceuticals are currently authorised or registered for animals and around 440 vaccines and serums.







Research and development (R&D) for animal health products is time and costintensive. The requirements for safety, quality and efficiency require complex scientific programs, in order to provide all the necessary data for regulatory approval. It can take 5 to 10 years before a product is ready for the market, at a cost of up to 150 million euros. Studies on pharmacokinetics, toxicity and metabolism take up a large part of the time for research and development of a new animal health product.



Source: Bundesverband für Tiergesundheit e.V. (BfT)

Our members provide solutions for the prevention and treatment of animal diseases.







The Demand Side of Veterinary Medicine: Developments in Animal Owners and Animal Numbers

The previous chapters have given an insight into the development of the veterinary profession. The supply of veterinary working hours can hardly keep up with the increasing demand for veterinary services. The for 25 years unchanged number of veterinary university places is limiting the number

of new recruits. This aspect and the fact that the proportion of women in the profession is moving toward 80%, as well as the steadily increasing proportion of salaried employees, have altogether led to fewer available working hours per capita.

Pet Numbers: Plus 50 %

On the other hand, the demand for veterinary services has risen massively, not just in quantitative terms, but also because the number of pets has risen by 50% or by around 10 million over 20 years.

Dogs, cats and rabbits have also increasingly become equal members of the family (see page 76). An adequate level of medical care is also expected in terms of quality, which, due to medical progress, is also possible.

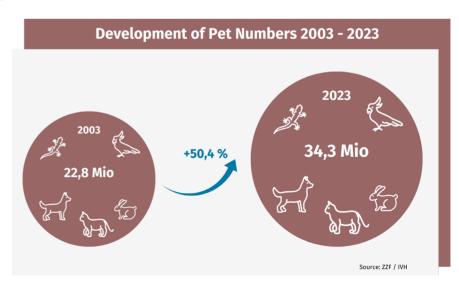
All in all, this requires significantly more veterinary working time. The same applies to horses.

In the livestock sector, on the other hand, the numbers of cattle and pigs are falling significantly, both in terms of animals and farms (see page 78).

The following pages provide an overview of the demand side of veterinary medicine.

Developments in the Pet

The figures clearly show a growing interest in pets. From around 22.8 million in 2003, the number of dogs, cats, small mammals and ornamental birds has risen to 34.4 million today. There are also additionally numerous ornamental fish and terrarium animals. This growth in the number of pets of around 50% contrasts with the population growth of just 2.5% to 84.6 million inhabitants over the same period. Pets are therefore becoming more and more important companions to people.

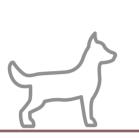


The data is based on annual representative surveys of the pet industry (ZZF / IVH / 8.5.1).



Different Developments in Dogs, Cats and Mice

<u>The number of pets (8.5.1)</u> has risen continuously over the last ten years, with peaks in the years of the coronavirus pandemic (2020 / 2021). After a setback, this number has now stabilised slightly above the pre-corona level, particularly for dogs and cats.



Dogs follow with an even more significant percentage increase of +52% (+3.6 million), from 6.9 to 10.5 million animals.

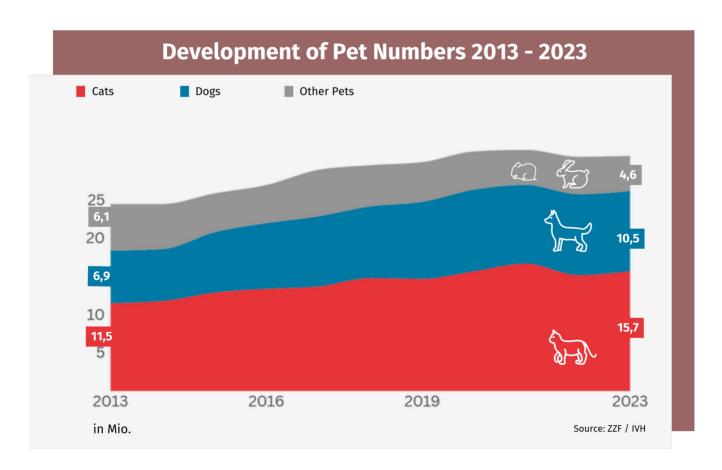


The most popular pet in Germany remains the cat. In the last ten years alone, their number has risen by more than four million from 11.5 to 15.7 million cats in 2023 (+36%). The high cat numbers are due to the fact that 42% of cat owners own two or more cats.



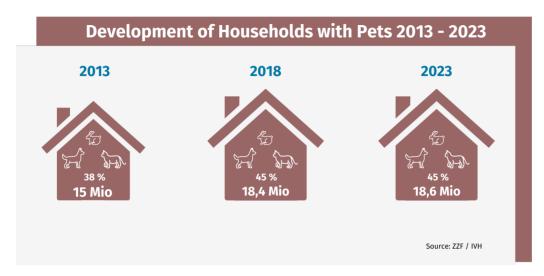
In contrast, the number of small animals (rabbits, guinea pigs, etc.) fell noticeably (–24.6%) by 1.5 million animals, from 6.1 to 4.6 million

In 2023, there were as well 3.5 million ornamental birds, around 3.5 million aquariums and garden ponds with fish and 1.2 million terrariums.



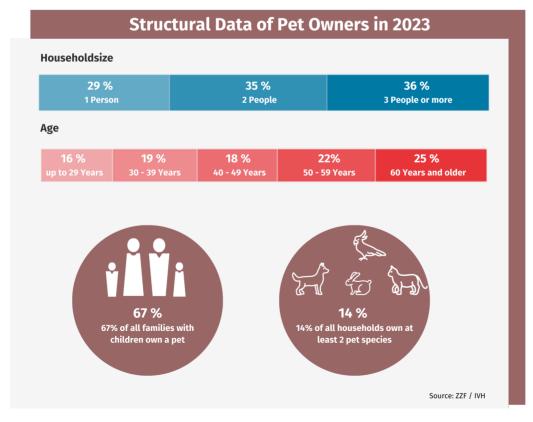


45% of Households in Germany Keep at Least One Pet



84.6 million people in Germany were living in around 41 million <u>households (3.10)</u> in 2023. According to <u>ZZF/IVH data (8.5.1)</u>, one or more pets are kept in almost every second household (45%). This means that after a brief "coronavirus high" of 47%, this figure has fallen back to pre-pandemic levels in percentage terms.

The Largest Age Group of Pet Owners are over 60



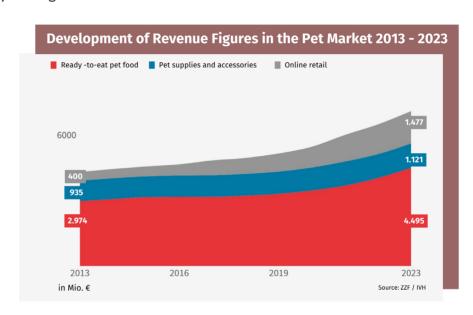
The largest of the five age groups of pet owners are the over 60 years of age with 25%. Their share of the population will continue to grow in the coming years due to demographic factors (3.11). In addition, 67% of families with children have a pet.



Pet Market with a Market Volume of Seven Billion Euros

The <u>number of pets (8.5.1)</u> has risen continuously over the last ten years, with peaks in the years of the coronavirus pandemic (2020 / 2021). After a setback, their number has now stabilised slightly above the pre-coronavirus level, particularly for dogs and cats.

As the number of animals has risen in Germany over the past 20 years (8.5.3), the importance of pets has also changed (page 76). As a result, pet owners are prepared to spend more and more money on their "family pet". Due to this quantitative and qualitative development, the market for pet supplies also grew significantly up to €4 billion. With a total market volume of EUR 7.1 billion in 2023, the sector is associated with around 210,000 jobs in the pet supplies industry.



The Cat, a "Market Factor"

With almost 4.5 billion euros revenue (63%), pet food, including wet and dry food as well as snacks, cat milk, etc., has always been the area with the highest turnover. In line with the large number of pets (15.7 million), cat food accounted for the largest share with sales of 2.3 billion euros. This also applies to pet supplies. Of the approximately €1.1 billion that pet owners spent on care products, technical products and accessories such as leashes, enclosures and scratching posts, slightly more than half of it (€592 million) was spent on products for cats and mainly for cat litter (€351 million) in 2023.

Growing Online Trade

The online market sector, with sales of €1.3 billion, also includes wild bird food (€161 million) in the chart. Differentiated sales data is not available for the online market itself.

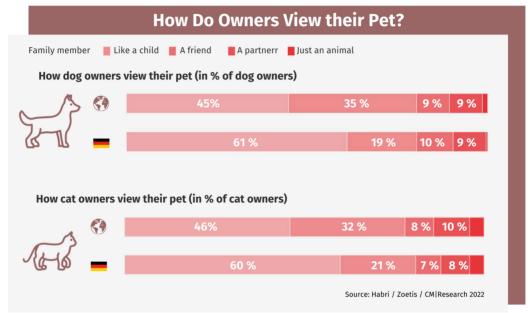
However, the chart clearly shows continuous growth, with a noticeable increase since the coronavirus pandemic. Online sales more than tripled between 2013 and 2023, with a market share of around 18%.



Human Animal Bond: The Pet as a Family Member

As the number of pets has grown, the relationship between humans and animals has also changed. Pets, especially cats and dogs, are increasingly becoming full members of the family. This is also happening worldwide. In Germany, according to

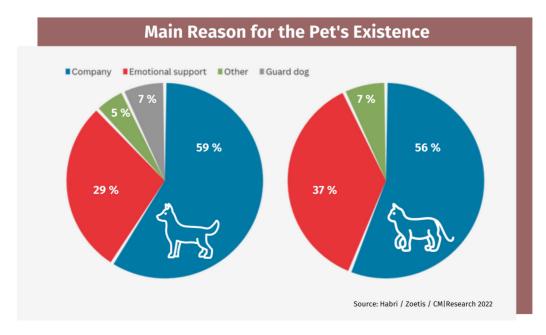
a survey by the Human Animal Bond Research Institute (<u>Habri / 2022 – 9.3</u>), around 60 % of dog and cat owners assign this role to their pet.



As a partner animal, their most important tasks are to provide company (dog 59% / cat 56%) and emotional support (cat 37% / dog 29%).

Well over 90% of German pet owners also say that their pet has a positive influence on their physical and mental health.

This change in the human-animal relationship also has an impact on the expectations placed on veterinarians in small animal practices. As the emotional bond increases, so does the emotional pressure that pet owners exert on the practice teams. Similar to emergency rooms in human medicine, aggression and violence also occur time and again in veterinary practices.





Data on Horse Keeping

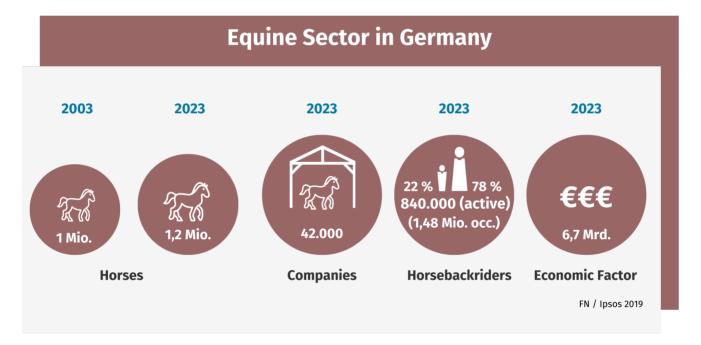
The <u>Deutsche Reiterliche Vereinigung (FN) / 8.6.1</u>) estimates that there were around 1.2 million horses in Germany in 2023. However, the data is based on older survey analyses from 2019. Ten years ago (2013), the population was estimated at around 1 million horses.

The FN calculates around 2.3 million equestrian athletes with reference to the 2019 lpsos study (8.6.2). Of these, 350,000 riders are actively organised in associations/clubs. Further 490,000 are considered active, non-organised equestrians and another 1.48 million consider themselves to be occasional riders. This means that just under

600,000 households own their own horses. In around 920,000 households where horses are ridden actively or occasionally, this is done via a riding licence.

The number of registered horses in private ownership is estimated at approx. 1.2 million. Just under a third of these are kept in private stables, while the majority (around 45%) are kept in boarding facilities. The remainder live on farms.

Regularly active riders are predominantly female (78%), 38 years old on average. The majority (62%) live in cities with fewer than 100.000 inhabitants.



The <u>Statistische Bundesamt (8.6.3)</u> counts up to 486,000 "solipeds" in its 2023 census. In addition to horses, donkeys, mules and hinnies are also recorded as "solipeds" in the agricultural structure surveys. However, these are only recorded on farms (41,200). According to DESTATIS, this survey does not adequately capture the large number of leisure horses. Time series are available in which it can be observed that, in the ten years (since 2013), the number of equidae initially fell from 461,000 to 442,000 (2016) and from then onward rose from 454,000 (2020) to 486,000 (2023).



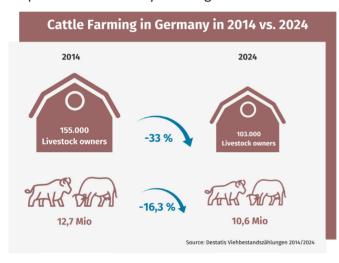
Development of Livestock Farming

The trend toward fewer livestock farms in Germany continued in 2023, according to the Bundesanstalt für Landwirtschaft und Ernährung (BLE / 8.7.1). The total number of animals is also declining compared to previous years. Animal husbandry is becoming more specialised. In the case of cattle, pigs and chickens, this is associated with larger numbers of animals per herd.

In comparison between the federal states, livestock farming was mainly concentrated in Bavaria, Lower Saxony and North Rhine-Westphalia. Corresponding data for the federal states is provided by the Statistische Bundesamt in its statistical reports on livestock farming (8.7.4).

Cattle Farming: Fewer Animals and more Animals per Farm

The largest number of livestock farms - 103,000 or 60 per cent in Germany - belongs to the cattle



farms, according to the livestock survey of May 2024 (8.7.2). This includes dairy cow, cattle and calf fattening farms, as well as suckler cow farms, etc. However, both the number of cattle and, in particular, the number of farms keeping cattle, is falling noticeably.

In May 2024, 10.6 million cattle were still being kept in Germany, including approx. 3.7 million dairy cows. In a ten-year comparison with 2014, this represents a decrease of 16.3% (–2.1 million animals) for cattle overall. The dairy cow herd included in this figure fell by 14.9% or around 643,000 animals during this period.



The Statistische Bundesamt publishes two surveys on livestock numbers and agricultural farms. The data from the livestock survey (current half yearly figures) cannot be compared 1:1 with the results of the triennial agricultural structure surveys. In the former, fewer animal species are recorded on a different reference date and different recording limits are taken into account. However, the development trends over longer periods of time are identical. The data on which the following charts are based is indicated in each case.



Shortage of Livestock Veterinarians

The debate about a shortage of veterinarians in livestock farming has been going on for a long time. Back in 2011, the Federal Ministry of Agriculture commissioned the Federal Statistical Office to conduct a "Survey on the shortage of young veterinarians in livestock medicine" (7.7). One result of it was, that men were more frequently employed in the veterinary care of farm animals than women.

The working hours of female veterinarians in farm animal care was often lower than that of male veterinarians. In addition, veterinarians on livestock care were on average significantly older than their female colleagues.

This demographic gender and age shift has become even more pronounced, as the data in this Veterinary Atlas shows. This prediction of the industry, that the shortage of livestock and declining farm numbers would neutralise

the declining interest in veterinary practice, has not been confirmed. There is still a noticeable shortage of livestock veterinarians, particularly in the designated regions.

However, with the exception of a study from Bavaria in 2021 (7.6), there is no reliable data on livestock care. In particular, there is no survey that explains the type of animal species that the 11,400 employed veterinarians treat primarily.



100,000 Cattle Farmers Have Given Up Since the Year 2000

The long-term downward trend is also continuing among cattle farms (including dairy cows). Around 100,000 farms have given up cattle farming since the turn of the millennium.

Over the course of 10 years (2014 to 2024), their number fell by 33% (approx. –51,800) from 155,000 to 103,000. The decline in the number of farms was greater than the decline in the number of animals. This means that the average number of

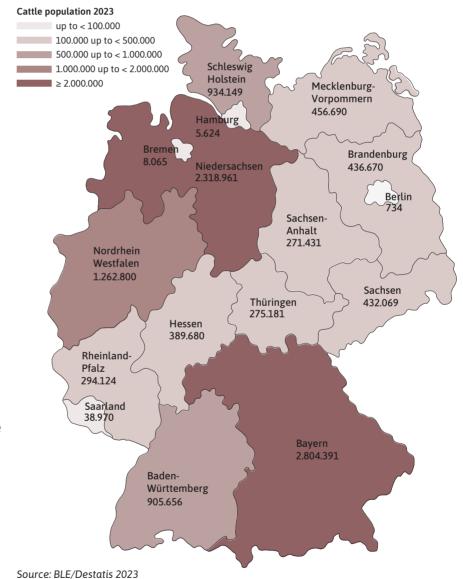
cattle per farm has risen from 82 to 103 within ten years.

This trend is also observed among dairy cow farmers, the largest group, where there are still 49,900 farms. Since 2014, 28,200 cow farms have stopped their production, a decrease of over a third (–36.3%). The average number of animals per farm rose from 55 to 74 dairy cows.

Dairy Cow Husbandry Varies Greatly from Region to Region

Most cattle in Germany are still kept in Bavaria. More than a quarter (26%) of the total cattle population are kept on Bavarian farms. Lower Saxony follows closely behind with around a fifth (22%) of the cattle population. Together with NRW, these three federal states account for over 60% of cattle (BLE / 8.7.1).

Bavarian farmers (8.7.6) alone keep around 46% of all German dairy cows. However, farming remains comparatively at a small-scale. Around 22,800 farms keep around 1,051,000 dairy cows, i.e. an average of 46 animals. In contrast, the average number of dairy cows per farm is the highest in Mecklenburg-Western Pomerania (8.7.7), at around 240 animals (149,000 dairy cows / 620 farms).



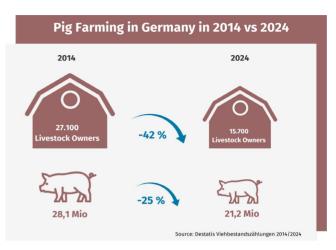


Pig Farming: 42% Fewer Farms in 10 Years

According to the <u>livestock survey</u> (8.7.2), there were 15,700 pig farms in Germany in May 2024. Compared to the previous year, the number fell by 3.4% (–600 farms). Over the course of ten years, the number of pig farms fell by 42% (–11,400 businesses since 2014).

These 15,700 farms kept, most recently, 20.9 million pigs. Over the past ten years, the pig population has shrunk significantly by 25% or 7.1 million animals.

According to the <u>Federal Office for Agriculture (8.7.1)</u>, the pig population in Germany in 2023 consisted of 30% piglets and a further 58% fattening pigs. The remaining 12% were mainly sows and boars for breeding.

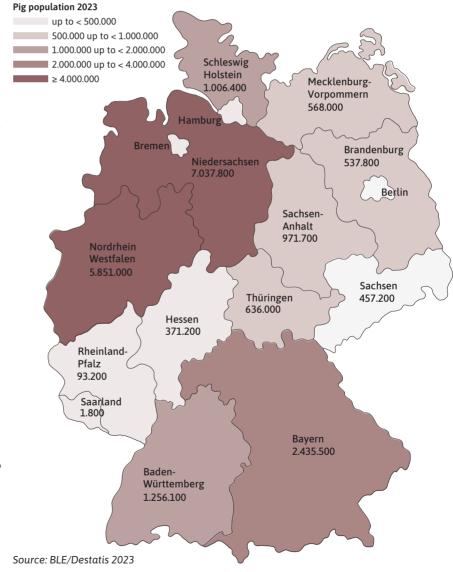


Trend toward Significantly Larger Pig Farms

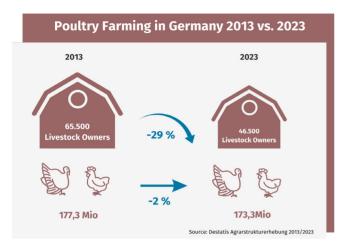
The trend toward larger farms is continuing. While the average farm had around 1,000 pigs in 2014, ten years later in 2024, there were over 1,300 animals per farm. Compared to 1992, there were even 14 times as many pigs (BLE / 8.7.1).

The following picture is presented for the individual animal categories in pig farming. As of the reporting date in May 2024, the number of pigs in Germany was 9.4 million fattening pigs. There were 2% or 195,000 fewer animals than six months previously. The number of piglets and young pigs fell slightly by 0.8% (almost 86,000 animals) to 10.2 million. The number of breeding sows remained almost constant compared to November 2023, at 1.4 million animals (-0.2% or -3.000 animals).

Pig farming in Germany is even more strongly concentrated than cattle farming. 72% of the pigs are in three of the 16 federal



states: Lower Saxony (7 million / 33%), North Rhine-Westphalia (5.8 million / 28%) and Bavaria (2.4 million / 11%). Over 1 million animals are also kept in Baden-Württemberg and Schleswig-Holstein.



Poultry Farming Remains Constant Overall

The number of poultry kept fell slightly again between 2020 and 2023, but remained largely constant in a ten-year comparison. The last peak in poultry stocks was recorded in the 2013 survey, with 160.8 million chickens (pullets, laying hens and broilers) and 16.5 million other poultry (geese, ducks and turkeys).

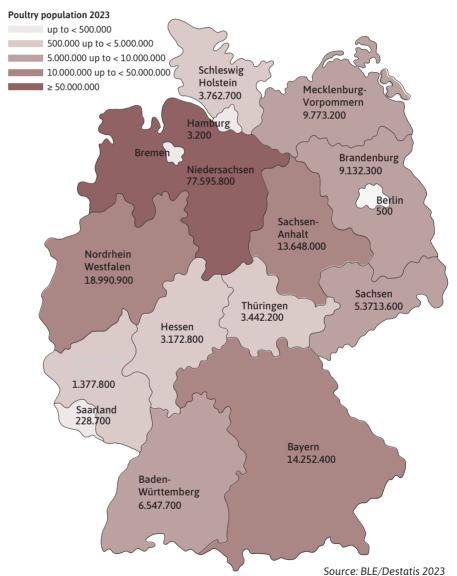
Significantly fewer turkeys and ducks

Over the last three years (2020–2023), the fattening poultry population fell by around 4.7%. Contrary to this trend, the number of laying hens grew by 2.4% and pullets by 1.8% in the same period.

In comparison, the population of ducks (-25%) and turkeys (-22%) decreased significantly during these three years.

Poultry: More Larger Farms as Well

In the poultry as well as in the pig sector, there is an increasing trend toward larger farms. In 2023, only around 2.0% of the largest farms (more than 50,000 places) kept around 68% of broilers and laying hens. If one adds the number of farms with between 10,000 and 50,000 housing places (5.8%), then this covers 94.5% of the total broiler and laying hen population. Only around 1.4% of the animals were housed on farms with fewer than 1,000 places.



Poultry stronghold Lower Saxony

Lower Saxony is Germany's poultry stronghold. Almost half of the flocks (77.6 million / 46.4%) were stalled there in 2023. This is followed by North Rhine-Westphalia with 11.4% (19 million), Bavaria 8.5% (14.2 million) and after that Saxony-Anhalt with just under 8% (13.6 million) of the poultry population.





Meat Consumption in Germany Falls Below 52 kg

Regarding meat consumption, different quantities are often quoted. The "Report on the market and supply situation for meat 2024" (8.7.1) published by the Bundesanstalt für Landwirtschaft und Ernährung contains the following data. According to provisional figures, the amount of meat available for consumption in Germany in 2023 was 5.9 million tonnes of carcass weight or 70.2 kg per capita. Ten years ago (2013), the per capita consumption was still around 80 kg. In addition to food consumption, this figure also includes the consumption of animal feed, industrial utilisation and all losses. This figure is calculated from the net production in Germany plus imports and minus exports.

In 2023, an average of 11.2 kg of beef, 34.6 kg of pork and 19.9 kg of poultry meat was "consumed" per capita.

By comparison, consumption in the United States of America and Argentina is the highest in the world at over 110 kg/capita. In contrast, consumption in India was only around 5.7 kg/capita.

Actual consumption

Statistical consumption is intended to reflect the amount actually consumed by humans. According to provisional figures, consumption continued to fall in 2023 and stood at 51.6 kg per capita or 4.4 million tonnes of carcass weight. Ten years ago, it was around 60 kg.

On average, every inhabitant in Germany in 2023 (2013 figures in brackets) consumed 8.9 kg (8.9 kg) of beef, 27.5 kg (38.1 kg) of pig meat and 13.1 kg (11.6 kg) of poultry meat.









Literature References and Sources

(all links last downloaded on 29.09.2024 – you will find a PDF - document with "active links" at tierärzteatlas.de/Quellen2024)

1. Deutsche Tierärztestatistik

Die deutsche Tierärztestatistik, erstellt von der Bundestierärztekammer in Zusammenarbeit mit den 17 Landestierärztekammern, ist die Hauptdatenquelle des Tierärzte Atlas

- 1.1. Die **Daten 2023** sind veröffentlicht im Deutschen Tierärzteblatt 7/2024, S. 844-854 → https://www.bundestieraerztekammer.de/btk/statistik/downloads/2023.pdf
- 1.2. Alle Tierärztestatistiken der Jahre 2002 bis 2023 sind hier als PDF abrufbar → https://www.bundestieraerztekammer.de/btk/statistik/

2. Stiftung für Hochschulzulassung

Daten und Informationen rund um den bundesweit zulassungsbeschränkten Studiengang Tiermedizin finden sich auf der Website der Stiftung für Hochschulzulassung \rightarrow <u>www.hochschulstart.de</u>

- 2.1. Die Auswahlkriterien für das Vergabeverfahren sind hier erklärt: https://www.hochschulstart.de/unterstuetzung/downloads
- 2.2. Die Statistiken des zentralen Vergabeverfahrens zum Wintersemester 2023/2024 sind hier als PDF abzurufen → https://www.hochschulstart.de/fileadmin/media/dosv/statistik/WiSe_23_24_Statistiken_des_Zentralen_Verfahrens_final.pdf
- 2.3. Änderung im Bewerbungsverfahren zum Tiermedizinstudium → https://www.hochschulstart.de/aktuelles-1?tx news pi1%5Baction%5D=detail&tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Bnews%5D=31&cHash=164f8afef11a152794a-69af775973868
- 2.4. Informationen zur "**Priorisierung"** einer Bewerbung → <u>https://www.hochschulstart.de/bewerben-beobachten/priorisierung</u>

3. Statistisches Bundesamt / Statistikportal

Als Datenquelle für gesamtgesellschaftliche Daten und Vergleiche mit anderen Berufs- und Bevölkerungsgruppen dient das Statistische Bundesamt (destatis.de), bzw. das Statistikportal von Bund und Ländern (statistikportal.de)

- 3.1. Altersstruktur der erwerbstätigen Gesamtbevölkerung
 - https://www.destatis.de/DE/Im-Fokus/Fachkraefte/Demografie/_inhalt.html
- 3.2. Studierendenzahlen der Humanmedizin →

 $\underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Tabellen/lrbil05.html \#242500 and \underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Tabellen/lrbil05.html \#242500 and \underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Lrbil05.html \#242500 and \underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Lrbil05.html \#242500 and \underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Lrbil05.html \#242500 and \underline{html.}$

- 3.3. Studierendenzahlen Jura →
 - $\underline{https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Tabellen/lrbil03.html \#242488$
- 3.4. Elternzeitanteile Männer und Frauen → https://www.statistikportal.de/de/elterngeld
- 3.5. Entwicklung der Geburtenzahlen → https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Geburten/_inhalt.html
- 3.6. 2023: Geburtentief in Deutschland → https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/05/PD24_174_126.html
- 3.7. Statistischer Bericht: Kinderlosigkeit und Mutterschaft → https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Geburten/kinderlosigkeit-und-mutterschaft.html
- 3.8. Tailzeitguatan in dar Gasamthavälkarung 🗅 https://www.dastatis.da/DE/Prossa/Prossamittailungan/2024/04/PD24_N017_12.ht
- 3.8. Teilzeitquoten in der Gesamtbevölkerung → https://www.destatis.de/DE/Im-Fokus/Fachkraefte/Erwerbstaetigkeit/_inhalt.html
- 3.9. Bevölkerungszahlen Deutschland → https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungs-stand/_inhalt.html
- 3.10. Haushaltsgrößen Deutschland 1991 bis $2023 \rightarrow https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Haushalte-Familien/Tabellen/1-3-privathaushalte-neuer-zeitvergleich.html$
- 3.11. Demographischer Wandel → https://www.destatis.de/DE/Themen/Querschnitt/Demografischer-Wandel/_inhalt.html
- 3.12. Wirtschaftsdaten "Strukturerhebung Veterinärwesen / WZ 75" → https://www-genesis.destatis.de/genesis/online?operation=statis-tic&levelindex=0&levelid=1725021104988&code=48112#abreadcrumb (tiefergehende Auswertung muss persönlich angefordert werden)
 - 3.12.1. Statistikumstellung auf das Statistische Unternehmen nach EU-Definition → https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Dienstleistungen/eu-unternehmensbegriff-2018.html

4. Gesetze, Rechtstexte und weiterführende rechtliche Informationen

- 4.1. Fachkräfteeinwanderungsgesetz der Bundesrepublik Deutschland → https://www.make-it-in-germany.com/de/visum-aufenthalt/fachkraefteeinwanderungsgesetz
- 4.2. Gesetz zum Elterngeld und zur Elternzeit → https://www.gesetze-im-internet.de/beeg
- 4.3. FAQ zum Elterngeld → https://familienportal.de/familienportal/familienleistungen/elterngeld
- 4.4. Mutterschutzgesetz → https://www.gesetze-im-internet.de/muschg_2018/
- 4.5. Gebührenordnung für Tierärzte (GOT) → https://www.gesetze-im-internet.de/got_2022/BJNR140100022.html

5. Daten aus Behörden und Ministerien

- 5.1. Kultusministerkonferenz: Entwicklung der Abiturnoten →
 - $\underline{https://www.kmk.org/dokumentation\text{-}statistik/statistik/schulstatistik/abiturnoten.html}$
 - 5.1.1. IT-NRW: Abiturnoten in NRW 2023 → https://www.it.nrw/nrw-der-abi-schnitt-im-schuljahr-202223-lag-bei-24-126541

5.2. Arbeitszeit-Daten

5.2.1. IAB-Forschungsbericht 16|2023: "Arbeitszeit: Trends, Wunsch und Wirklichkeit" – Institut für Arbeitsmarkt- und Berufsforschung der Bundesanstalt für Arbeit → https://doku.iab.de/forschungsbericht/2023/fb1623.pdf



- 5.3. Bundesfamilienministerium: Familienpolitische Daten / Berichte
 - 5.3.1. Väterreport der Bundesregierung (2023) → https://www.bmfsfj.de/bmfsfj/service/publikationen/vaeterreport-2023-230376
 - 5.3.2. Familienreport 2024 der Bundesregierung → https://www.bmfsfj.de/bmfsfj/service/publikationen/familienreport-2024-239470
- Daten aus (anderen) Verbänden
 - 6.1. Deutsche Ärztestatistik 2023 (Bundesärztekammer) → https://www.bundesaerztekammer.de/baek/ueber-uns/aerztestatistik/2023
 - 6.2. Teilzeitdaten angestellter Ärzt:innen in der Humanmedizin (Marburger Bund / MB Monitor 2022) → https://www.marburger-bund.de/epaper/Zahlen-Daten-Fakten/#0
 - 6.3. **Vet Survey 2023 (Europäischer Tierärzteverband / FVE)** → https://fve.org/cms/wp-content/uploads/FVE-Survey-2023-updated-13-Dec-23.pdf
 - 6.4. Tarifabschlüsse Öffentlicher Dienst (Deutscher Beamtenbund) → https://www.dbb.de/fileadmin/user_upload/globale_elemente/
 pdfs/2021/210923_Einkommensentwicklung_Tarifabschluesse_ab_1990_Stand_21.pdf
- 7. Daten / Studien zu Arbeitsbedingungen in der Tiermedizin
 - 7.1. "Untersuchungen zur beruflichen und privaten Situation tierärztlicher Praxisassistentinnen und -assistenten in Deutschland"
 Dissertation Bettina Friedrich (2006) → https://elib.tiho-hannover.de/dissertations/friedrichb ws07
 - 7.1.1. "Dann geht man eben nachts putzen" auf obiger Arbeit basierender FAZ-Artikel (2009) → https://www.faz.net/aktuell/karriere-hochschule/buero-co/traumberuf-tierarzt-dann-geht-man-eben-nachts-putzen-1871775.html
 - 7.2. "Zur Entwicklung des tierärztlichen Berufsstandes in Deutschland seit dem Jahr 2000 eine empirische Verbleibstudie mit Geschlechtervergleich" Dissertation Sarah Hübner (2017) → https://ul.qucosa.de%2Fapi%2Fqucosa%253A15682%2Fmets
 - 7.3. "Praktiker im Wandel: Untersuchung der Arbeitsbedingungen und Zufriedenheiten praktizierender Tiermediziner in Deutschland"– Dissertation Johanna Kersebohm (2016) → https://refubium.fu-berlin.de/bitstream/handle/fub188/7585/Kersebohm_online. pdf?seguence=1
 - 7.3.1. Artikel dazu in der Berliner und Münchener Tierärztliche Wochenschrift (2017) → https://www.vetline.de/system/files/frei/BMW OA 16093 Doherr onl300.pdf
 - 7.4. "Arbeitsumstände und Zufriedenheit nicht-kurativ tätiger Tiermediziner*innen in Deutschland" Dissertation Maren Ewert (2018) → https://refubium.fu-berlin.de/handle/fub188/31325
 - 7.5. **Befragung angestellter Tierärztinnen in Deutschland** Verbund unabhängiger Kleintierkliniken (VuK) / Bund angestellter Tierärzte (BaT) / Charlotte Jensen (2021)
 - 7.5.1. **Veröffentlichung Teil 1 "Arbeitsbedingungen"** → https://www.vetline.de/system/files/frei/BMTW-10.23761439-0299-2021-22-lensen.pdf
 - 7.5.2. Veröffentlichung Teil 2 "Arbeitszufriedenheit" → https://www.vetline.de/system/files/frei/BMTW-10.23761439-0299-2022-8-Jensen.pdf
 - 7.5.3. Handout zur BaT / VuK-Studie → https://www.vuk-vet.de/wp-content/uploads/2021/06/Praesentation_der_BaT_VUK_Studie Handout_06042021.pdf
 - 7.6. **Forschungsprojekt Veterinärmedizinische Versorgung von Nutztieren in Bayern** − Dr. Martina Sedlmayer, Kim Usko, Ines Casper / LGL-Bayern (2021) → https://www.lgl.bayern.de/downloads/forschung/doc/veterinaermedizinische_versorgung_nutztieren_abschlussbericht.pdf
 - 7.7. **Erhebung zum Nachwuchsmangel in der Nutztiermedizin** (Destatis / BMEL 2011) → https://www.destatis.de/DE/Methoden/WIS-TA-Wirtschaft-und-Statistik/2012/12/nachwuchs-nutztiermedizin-122012.pdf?_blob=publicationFile
 - 7.8. Gehaltsempfehlungen
 - 7.8.1. Beschluss der Bundestierärztekammer (BTK 2018) \rightarrow <u>https://www.bundestieraerztekammer.de/d.php?id=278</u>
 - 7.8.2. Vergütungsmodel des Bundesverbandes praktizierender Tierärzte (bpt) → https://www.tieraerzteverband.de/bpt/bpt-fuer-sie/Angestellte/verguetungsmodelle/index-verguetungsmodelle.php
 - 7.8.3. "Standards für Arbeitsverhältnisse" Bund angestellter Tierärzte (BaT) → https://bundangestelltertieraerzte.de/wp-content/uploads/2024/04/bat-standards-v21-03042024-homepage.pdf
 - 7.9. **Job.Vet Gehaltsumfrage 2024** → https://tierarzteatlas.de/Quellen2024
- 8. Datenquellen Tiergesundheitsindustrie / Tierzahlen
 - 8.1. Marktdaten Deutschland (Bundesverband für Tiergesundheit) \rightarrow <u>bft-online.de</u>
 - $8.1.1. \ \textbf{Marktdaten 2023 (BfT ",Blickpunkt 103" / Seite 5)} \rightarrow \underline{\text{https://www.bft-online.de/fileadmin/bft/tiergesundheit-im-blick-punkt/8Seiter_Blickpunkt_103_Einzelseiten.pdf}$
 - 8.2. Marktdaten Europäische Tiergesundheitsindustrie (AnimalhealthEurope) → https://animalhealtheurope.eu/facts-and-figures/
 - 8.3. Nutztierzahlen in Europa (Eurostat) \rightarrow https://ec.europa.eu/eurostat/documents/15216629/15559935/KS-FK-22-001-EN-N.pdf/1cb9d295-6868-70e3-0319-4725040cfdb8
 - 8.4. **Europäische Arzneimittelagentur EMA** → https://www.ema.europa.eu/en/news/annual-report-highlights-progress-science-medicines-health-2023
 - 8.5. Wirtschaftsfaktor Heimtier in Deutschland
 - $8.5.1. \ \ \textbf{Entwicklung des Heimtiermarktes} \ (\textbf{ZZF/IVH}) \rightarrow \underline{\text{https://www.zzf.de/marktdaten/entwicklung-des-heimtiermarktes}}$



- 8.5.2. Marktdaten / Tierzahlen Heimtiere 2023 (ZZF /IVH) → https://www.zzf.de/fileadmin/ZZF/Pressemeldungen/2024/2024_04_16_Marktdaten/ZZF_IVH_Der_Deutsche_Heimtiermarkt_2023.pdf
- 8.5.3. Archiv der Daten zum Heimtiermarkt Deutschland (Industrieverband Heimtierbedarf e.V. / IVH) → https://www.ivh-online.de/der-verband/daten-fakten/archiv.html
- 8.5.4. Markt-/Umsatzdaten des Heimtiermarktes 2023 (ZZF) → https://www.zzf.de/marktdaten/der-deutsche-heimtiermarkt

8.6. Wirtschaftsfaktor Pferd in Deutschland

- 8.6.1. Zahlen und Fakten aus Pferdesport und Pferdezucht 2023 (Deutsche Reiterliche Vereinigung / FN) → https://www.pferd-aktuell.de/deutsche-reiterliche-vereinigung/zahlen--fakten
- 8.6.2. Pferdesport in Deutschland (Ipsos / NF 2019 / Daten 2017 bis 2018) → https://www.pferd-aktuell.de/relaunch/assets/file-Push.php?mimeType=application/pdf&fullPath=https://www.pferd-aktuell.de/relaunch/files/2/45/Ergebnisbericht_lpsos-Studie 2019.pdf
- 8.6.3. Landwirtschaftliche Zählung Einhufer (Statistisches Bundesamt) → https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Tabellen/ausgewaehlte-merkmale-zv.html
- 8.6.4. Strukturdatenerfassung pferdehaltender Betriebe (Georg-August-Universität Göttingen 2017) → https://www.uni-goettingen. de/de/document/download/430d074d1886b8e9e7210cfee0c7fd9c.pdf/Brosch%C3%BCre%20Strukturdaten%20-%20Final.pdf

8.7. Nutztierhaltung in Deutschland

- 8.7.1. Bericht zur Markt und Versorgungslage Fleisch 2024 / Tierzahlen (Bundesanstalt für Landwirtschaft und Ernährung / BLE)

 www.ble.de/SharedDocs/Downloads/DE/BZL/Daten-Berichte/Fleisch/2024BerichtFleisch.pdf?__blob=publicationFile&v=2
- 8.7.2. Pressemeldung zur Viehbestandserhebung Mai 2024 (Statistisches Bundesamt) → https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/06/PD24_245_413.html
- 8.7.3. Pressemeldung zur Agrarstrukturerhebung 2023 (Statistisches Bundesamt) → https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/03/PD24_123_41.html2023
- 8.7.4. Statistischer Bericht Viehhaltung März 2023 (Statistisches Bundesamt) → https://www.destatis.de/DE/Themen/Branchen_Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Tiere-Tierische-Erzeugung/Publikationen/Downloads-Tiere-undtierische-Erzeugung/statistischer-bericht-viehhaltung-2030213239005.html
- 8.7.5. Viehhaltung der Betriebe Agrarstrukturerhebung 2013 (Statistisches Bundesamt) → https://www.statistischebibliothek. de/mir/servlets/MCRFileNodeServlet/DEHeft_derivate_00013372/2030213139004.pdf
- 8.7.6. Rinderhaltungen in Bayern Mai 2024 (Statistik Bayern) → https://www.statistik.bayern.de/presse/mitteilungen/2024/pm161/index.html
- 8.7.7. Rinderhaltung in Mecklenburg-Vorpommern Mai 2024 (Landesamt für innere Verwaltung M-V) → https://www.laiv-mv. de/static/LAIV/Statistik/Dateien/Publikationen/C%20III%20Viehwirtschaft%20und%20tierische%20Erzeugung/C%20 313/2024/C313%202024%2021.xlsx)

9. weitere Quellen

- 9.1. Wirtschaftsnobelpreis 2023 für Claudia Goldin zum Verständnis der Rolle von Frauen im Beruf → https://www.nobelprize.org/prizes/economic-sciences/2023/summary/
- 9.2. Daten zu Rentnern / Ruheständlern (Sozialpolitik aktuell / Deutsche Rentenversicherung) → https://www.sozialpolitik-aktuell. de/files/sozialpolitik-aktuell / Politikfelder/Alter-Rente/Datensammlung/PDF-Dateien/abbVIII23.pdf
- 9.3. Mensch-Tierbeziehung (Habri / Zoetis Human-Animal-Bond-Studie 2021) → https://tierärzteatlas.de/Quellen2024
- 9.4. Informationen zur Gebührenordnung für Tierärzte (GOT) und Notdienstgebühren
 - $9.4.1. \ \ \, \ddot{\textbf{U}} \textbf{bersichtsseite GOT der Bundestier\"{\textbf{a}}rztekammer} \rightarrow \underline{\textbf{https://www.bundestiera}} \underline{\textbf{a}}rztekammer}. \\ \textbf{de/tiera} \underline{\textbf{d}}rztekammer}. \\ \textbf{de/tier$
 - 9.4.2. Übersichtsseite Notdienstgebühren der Bundestierärztekammer → https://www.bundestieraerztekammer.de/presse/2020/02/GOT-Notdienstgebuehr.php
 - 9.4.3. FAQ Notdienstgebühren (Bundestierärztekammer 2023) → https://www.bundestieraerztekammer.de/d.php?id=8004
- 9.5. "Prüfung der finanziellen und strukturellen Auswirkungen hinsichtlich der Angemessenheit der Gebührensätze der Gebührenordnung für Tierärzte" sogenanntes "GOT-Gutachten" (AFC / BMEL 2021) → https://www.bmel.de/SharedDocs/Downloads/DE/_Tiere/Tierge-sundheit/abschlussbericht-pruefung-tieraerztegebuehrenverordnung.pdf?__blob=publicationFile&v=2
- 9.6. Verordnung zur Anpassung der Notdienstgebühren (Bundesregierung) → https://www.wir-sindtierarzt.de/download/Notdienst_GOT_Bundesgesetzblatt.pdf

Imprint

Veterinary Atlas Germany 2024 (1st Edition)
Publisher on behalf of the Dessauer Zukunftskreis
(Responsible according to German press law):
Julia Henning, Jörg Held, Hubertus Keimer

DZK GbR Dr. Julia Henning/Hubertus Keimer Erdmannsdorff Strasse 227 06785 Oranienbaum - Wörlitz Mail: kontakt@dessauer-zukunftskreis.de Instagram: @beruftierarzt Concept: Jörg Held, Julia Henning, Hubertus Keimer Research and Text: Jörg Held Graphics: Jens Kluth (vetion.de)/Adam Breitscheidel Design Concept, Layout and Typesetting: Adam Breitscheidel/Jakob Werth/Sophia Neukirchner Translation: Ushoa Lasa und Tanja Irion Printing: sedruck KG, Ludwig-Hupfeld-Straße 16, 04178 Leipzig

Distribution: www.tierärzteatlas.de – available as a free PDF download – available as a printed version for a nominal fee of €10





Veterinary Atlas Germany 2024 Dessauer Zukunftskreis (DZK) Erdmannsdorff Strasse 227 06785 Oranienbaum - Wörlitz

Mail: kontakt@dessauer-zukunftskreis.de

