





Imprint

BfR Consumer Monitor 2018 | Special Tattoos

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Foreword

Dear Readers,

Tattoos have been in vogue since the 1990s. In the new representative study commissioned by the BfR, 12% of the German population say they have already had themselves tattooed. Many of them decided to get a tattoo mainly because they find it attractive and they do not think of possible health risks.

In an international research project, scientists at the BfR have shown that ink pigments from tattoos can be permanently deposited in the lymph nodes in the form of nanoparticles. Depending on their chemical structure and potential contamination with substances such as metals, these pigments can differ in terms of their toxicity. If these pigments are transported into other organs, this can lead to the formation of metabolic products that can in turn possess their own health-damaging properties.

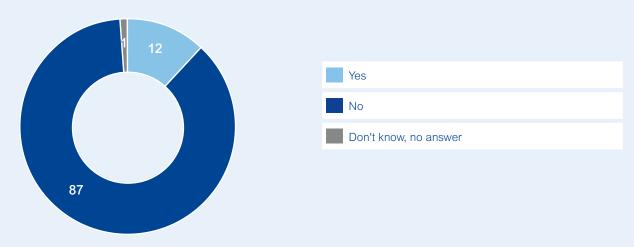
In order to ascertain the attitudes of the population towards tattoos, the BfR asked questions relating to, among other things, the status of people's knowledge and their perception of risks. You can find the results of this survey in this special issue of the BfR Consumer Monitor.

Professor Dr. Dr. Andreas Hensel

President German Federal Institute for Risk Assessment (BfR)

Do you have, or have you ever had, a tattoo?

Have/had tattoos

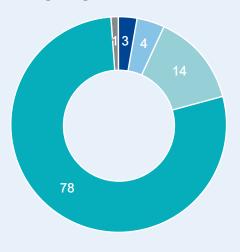


Basis: 1,009; Figures given as percentages

How likely is it that you will get a tattoo in the future?

Please answer this question if you have **never** had **a tattoo**.

Likelihood of getting a tattoo in the future





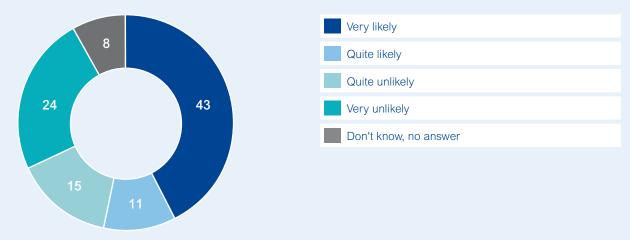
Shown: Answers of respondents who have **never** had **a tattoo**

Basis: 882; Figures given as percentages

How likely is it that you will get another tattoo in the future?

Please answer this question if you already have a tattoo or had a tattoo in the past.

Likelihood of getting another tattoo in the future

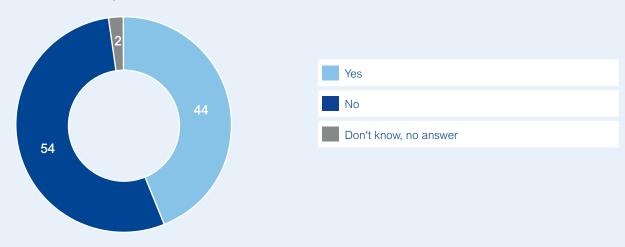


Shown: Answers of respondents who already have a tattoo or had a tattoo in the past

Basis: 121; Figures given as percentages

Have you heard, seen or read anything about tattoos in the media during the last twelve months?

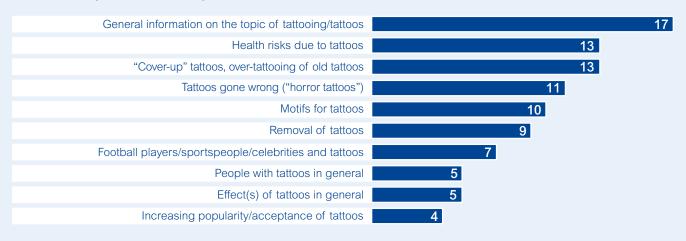
Awareness of media reports on tattoos



Basis: 1,009; Figures given as percentages

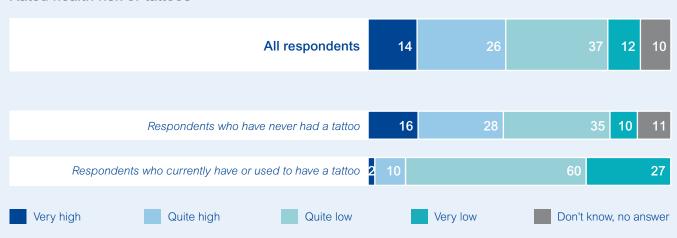
And what were these media reports about?

Perceived topics in media reports



Basis: 447 respondents who have noticed reports in the media; Figures given in percentages How would you rate the health risk of tattoos?

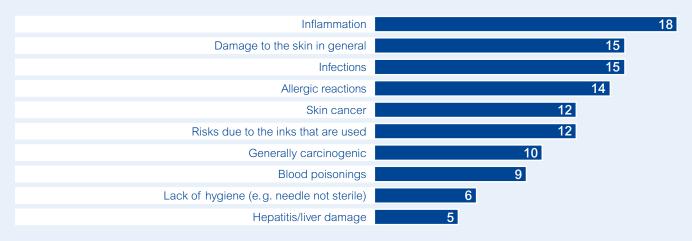
Rated health risk of tattoos



Basis: 1,009; Figures given in percentages; The difference in responses between the two subgroups (882 respondents who never had a tattoo & 121 respondents who currently have or used to have a tattoo) is statistically significant (p < .05).



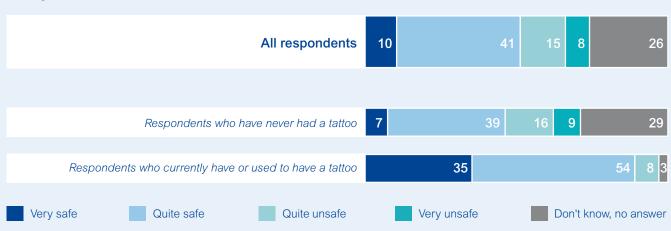
Possible health risks



Basis: 785 respondents who consider the health risk of tattoos to be very high, quite high or quite low; Figures given in percentages

How safe or unsafe are the inks used for tattooing in Germany in your opinion?

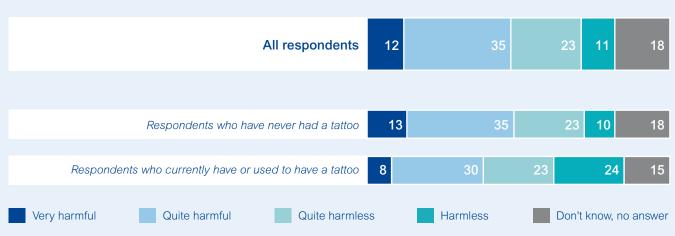
Safety of tattoos



Basis: 1,009; Figures given in percentages; The difference in responses between the two subgroups (882 respondents who never had a tattoo & 121 respondents who currently have or used to have a tattoo) is statistically significant (p < .05).

In your opinion, how harmful or harmless are laser removals of tattoos?

Laser removal of tattoos



Basis: 1,009; Figures given in percentages; The difference in responses between the two subgroups (882 respondents who never had a tattoo & 121 respondents who currently have or used to have a tattoo) is statistically significant (p < .05).

Which of the following statements do you agree with and which statements do you disagree with?

Agreement with statements on tattoos



Basis: 1,009; Figures given in percentages; Total less than 100% due to: Don't know, no answer; *Comparative statements that are, however, incorrect or based on wrong recommendations

How were the data collected?

Date of the survey: 16 to 18 July 2018

Random sample: 1,009

Presentation of results: All figures in percent, rounding differences possible

Population: German-speaking population aged 14 years and over in private households in the

Federal Republic of Germany

Sampling: Samples drawn at random from land line and mobile telephone numbers which can

also include telephone numbers not listed in directories (in line with standards set by

the Association of German Market Research Institutes – ADM)

Method: Telephone interview (CATI omnibus survey, Dual Frame)

Conducted by: KANTAR EMNID

Tattoos

Tattoos are permanent "skin drawings". The inks are tattooed into the lower layer of the skin. There is no authorisation process for tattoo inks, and the producers of the inks are the ones responsible for the safety of the substances used. However, the effects of many of the substances in tattoo inks on the human body is not yet known, and there is insufficient data for a comprehensive risk assessment.

In general, tattoos can have various undesired health effects. Like other open wounds, freshly tattooed skin can come into contact with bacteria, viruses or fungi as a result of inadequate hygiene or contaminated inks. The substances in tattoo inks can also trigger undesirable reactions in the human body, such as allergies and other complaints. The potential carcinogenic effect of certain substances is also a subject of discussion.

Lengthy exposure to direct sunlight and tattoo removal using laser technology can also pose health risks for people with tattoos, as both can result in the release of harmful substances.

Little is currently known about the effects of ink pigments in the human body. The German regulations on tattoo inks prohibit the use of certain substances that are harmful to health, but there is currently no list of safe substances for tattoo inks ("positive list").

About the BfR

Do nanoparticles promote the occurrence of allergies? Does apple juice contain too much aluminium? The German Federal Institute for Risk Assessment, or BfR for short, is responsible for answering questions on all aspects of the health assessment of foods and feeds, consumer products and chemicals. Through its work, it makes a decisive contribution towards ensuring that food, products and the use of chemicals have become safer in Germany. The Institute's main tasks comprise the assessment of existing health risks and identification of new ones, the development of recommendations to limit risks and the transparent communication of this process. This work results in the scientific advice given to political decisionmakers. To help with the strategic alignment of its risk communication, the BfR conducts its own research in the field of risk perception. The Institute is independent in its scientific assessments, research and communication. The BfR belongs to the portfolio of the Federal Ministry of Food and Agriculture (BMEL).



More information at: www.bfr.bund.de/en

Tattoo:

- > A-Z-Index > Tattoo
- > FAQ > Tattoo inks
- > FAQ > Study lead of BfR investigating the distribution of tattoo ink as nano-sized particles in lymph nodes

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