European Health Misconception Study 2019
Introduction

In this report, Gapminder presents nine common health misconceptions in Europe:

- Europeans think the rest of the world smokes more than they do.
- Europeans don’t realize Africa’s health is like Europe in 1950.
- In Europe, childhood obesity is less common than people think.
- Europeans don’t know that almost all their children are immunized against measles.
- Europeans think young boys drink alcohol like it’s 2002.
- Europeans think HIV cases are decreasing.
- Europeans don’t realize how unusual depression is.
- Lives in Eastern Europe are shorter than Western Europeans think.
- When fewer people commit suicide, nobody notices.

Our findings show that these misconceptions aren’t just common—they’re systematic across the three countries we surveyed: Germany, the United Kingdom and France. The pictures European people have in their minds about health are not based on reliable data, despite the fact that it’s freely available online. Instead, their perceptions are based on what they learnt in school, media headlines and their human intuition, which consistently distorts reality.

Although this study was conducted in three countries, we believe the results are reflective of Europe as a whole. We have conducted similar experiments in many other countries using local fact questions on the same topics. Overall, the performance of our respondents indicates that similar misconceptions exist everywhere.

Understanding these misconceptions is important for a wide range of professionals, including health journalists, health professionals meeting patients, and policymakers who shape health reforms. The information presented here should be fundamental to the process of evaluating and designing public health strategies and, in essence, any public debate about healthcare.

Finally, these results should be a wakeup call for us humans. We need to remember to always check the facts first, long before relying on our intuition or on the picture painted by the media. No amount of fake news or alarmist reports can be blamed for our misperceptions of reality, when the facts and data are freely available to us.
Methodology

As part of the European Health Misconception Study 2019, Gapminder asked nine fact questions to 1,950 members of the general public in three countries: Germany, the United Kingdom, and France. We tested their knowledge on HIV infections, obesity in children, measles vaccinations, smoking, child deaths, alcohol consumption, depression, life expectancy, and suicide rates.

We used Google Surveys for this purpose—a platform for online market research. In each of the countries, 650 people responded to our questions. The respondents might have encountered the surveys through so-called ‘surveywalls’—a form of a paywall, where users must answer the questions before they are granted access to a website. Others might have found the questions in the Google Play Store, and earned store credit by completing the survey.

Once the sample was completed, Gapminder calculated the number of questions answered correctly by each respondent (overall and per country), as well as national results for the nine questions.

The fact questions in this study use statistics about Europe provided by reliable organizations. When Europe is mentioned, we don’t refer to the European Union, but to the larger set of countries which make part of the World Health Organization’s European region: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, and Uzbekistan.

Gapminder is an independent Swedish foundation with the mission to identify people’s worst misconceptions about the world. This report was developed by the Gapminder Misconception Research Team (Ola Rosling, Anna Rosling Rönnlund, Keith Moore, Andrea Nilsson, Maike Winters, Klara Elzvik, Harry Gosling, Diane Ingabire and Helena Nordenstedt) with the support of external consultants Pete Hugh, Gustaf Holmer, Fatima Bashir, and Padraig Lyons.
Results

Gapminder asked nine basic fact questions about health in Europe to 1,950 people spread evenly across Germany, the United Kingdom, and France. What did we discover? Most people in three European countries are absolutely wrong about the current state of health in their part of the world.

71% of our respondents scored less than three correct answers, with most people getting one or two answers right. Not one person managed to answer eight or nine questions correctly. The average score for the three countries was 1.9 correct answers out of 9 — a terrible result, showing that people in these countries have absolutely no idea about some of the most important health issues in Europe.

We asked the same 9 questions to chimpanzees in the zoo. We gave them bananas marked with A, B and C to see what they would answer. To our big surprise, they picked up the right banana 33% of the time, just by guessing randomly and thereby scored 3 out of 9.

This is far better than the answers given by our European respondents, who — at least we hope — have much better access to education and information than the chimpanzees. Our German, British, and French respondents performed systematically worse than random throughout the entire survey.

*Number of correct responses*

*AVERAGE SCORE: 1.9 (of 9 possible) • 10.0% SCORED BETTER THAN RANDOM*
While the results were terrible across all three countries. France was the “least bad”. Our French respondents managed 1.9 correct answers on average, with 72% of them scoring two or fewer, 17% scoring three (equal with the chimps), and just 11% managing to beat the chimps by answering four or more questions correctly.

**France**  
AVERAGE SCORE: **1.9** (of 9 possible) • **10.9% SCORED BETTER THAN RANDOM**

Germany came in second place, also with an average score of 1.9. Out of our Germany respondents, 69% answered two or fewer questions correctly, 21% got three right, and only 10% managed to score four or more.

**Germany**  
AVERAGE SCORE: **1.9** (of 9 possible) • **10.4% SCORED BETTER THAN RANDOM**

In last place came the **United Kingdom**, with a terrible 1.7 correct answers on average. Almost three-quarters (73%) of UK respondents answered less than three questions correctly, 18% scored three exactly, and a sad 9% got four or more.

**United Kingdom**  
AVERAGE SCORE: **1.7** (of 9 possible) • **8.8% SCORED BETTER THAN RANDOM**
Europeans think the rest of the world smokes more than they do

In Europe, almost 30% of all adults are smokers. How many adults in the world smoke?

✓ A. 20%  ✘ B. 30%  ✘ C. 40%

The answer

According to data from the World Health Organization (WHO), 19.9% of all adults in the world smoke. In Europe, 29.4% of all adults are smokers, which is more than any other region. Other WHO regions, such as Africa, the Americas, and South-East Asia have far lower number of smokers — 9.8%, 16.9% and 16.9% respectively - bringing the global figure down to 19.9%.

The terrible results

The results were terrible, with just 21% of respondents selecting the correct answer. Meanwhile, a monumental 79% thought that rates of smoking in other parts of the world were as high or even higher than in Europe. The results were terrible across all three surveyed countries, with the United Kingdom having the “least horrible” results. 23% of Brits got the answer right, while Germany and France lagged behind with 21% and 20% respectively.

Why do people pick the wrong answers?

Because they think that Europe is always best!

There’s a tendency for people to envisage European people as being extremely healthy. So, if 30% of Europeans are smokers, the rate for the rest of the world must be higher, right? Wrong. Europe may be the best in some areas, but certainly not all. And when it comes to smoking Europeans are leading the world by some margin, with far higher rates than are found in Africa, the Americas, or South-East Asia.

Data source for the correct answer

The evidence for the correct answer comes from the World Health Organization. Data per region and globally are available here: https://gapm.io/xwhos
Europeans don’t realize Africa’s health is like Europe in 1950

Child deaths in Africa today are at the same level as in Europe in:

- A. 1850
- B. 1900
- C. 1950

The answer

In Africa today, 7% of children die before their fifth birthday. That number is much higher than it should be, but is closer to what was common in Europe back in 1950, when 14% of children died before reaching 5 years of age.

In 1850, 38% of all children in Europe died before they reached age five, and the rate fell only very slightly to 34% by 1900. Imagine if that was the case today in Africa! Fortunately, child mortality has decreased significantly, not only in Africa but worldwide.

With declining poverty rates, improved hygiene and sanitation, introduction of and better access to vaccines, wide-spread basic healthcare, and improved women’s access to education, more and more children live to celebrate their 6th birthday and beyond.

The (not so) terrible results

The results still weren’t great for this question, but our respondents did manage to score as well as the chimps on average: 33% chose the correct answer. With that said, it is disappointing and concerning that two-thirds (67%) thought Africa is currently at the same level for child deaths as Europe was back in 1850 or 1900.

Why do people pick the wrong answers?

Because they think that things are TERRIBLE in Africa!

People have an outdated view of Africa. We think about the images of Africa displayed on TV shows, the news, or in movies, where it is portrayed as being extremely poor, with people suffering, starving, or at war. While it’s true that some things are still bad — just like many parts of the world — some African countries are more like 60 years behind (not 160!) when it comes to children’s health. There’s a long way to go, certainly, but it’s not nearly as bad as our survey respondents thought!

Data sources for the correct answer

In Europe, childhood obesity is less common than people think

How many children in Europe are obese today?

✓ A. 10%  ❌ B. 25%  ❌ C. 40%

The answer

According to the World Health Organization, the rate of childhood obesity in Europe is 8.6%. Answers B and C are just terribly wrong. At 14%, the Americas is the region with the highest proportion of children with obesity today. The idea that 25% or 40% of all children in Europe (or in any region!) could be obese is just crazy — at least for now.

Why do we say “for now”? Because since 1975, obesity rates have been rising. If things don’t change, those crazy figures we mentioned above could happen in the future.

The terrible results

Our respondents in Germany, France, and the United Kingdom didn’t seem to have a clue about children with obesity, with only one in six respondents choosing the right answer. They weren’t extremely negative either, though. Just over half (51%) of our respondents picked the middle option, which is at least close to the right answer for the share of children in Europe who are overweight (not obese).

Why do people pick the wrong answers?

Because they think this is a HUGE problem!

There are probably two reasons why people choose the wrong answers for this question: First, the “obesity epidemic” is well-covered in the news, leading people to think it’s a bigger problem than it really is. Second, the lack of public understanding of the difference between the terms obese and overweight. The conditions are often mixed up — even by professionals. To be clear: not all overweight people are obese.

With all this said, obesity really is one of the largest health problems in the world today, and it is slowly growing... it’s just not quite as bad as our survey respondents thought. And there’s still time to change the trend!

Data source for the correct answer

The evidence for the correct answer comes from the World Health Organization: https://gapm.io/xwhoo
Europeans don’t know that almost all their children are immunized against measles

How many children in Europe receive the full two doses of the measles vaccine?

✘ A. 30%  ❌ B. 60%  ✓ C. 90%

The answer

In 2018, 91% of children in Europe received the two full doses of the measles vaccine. More children in Europe are being vaccinated against this disease than ever before! Options A and B aren’t just wrong — they’re very wrong. 60% would have been the correct answer for Europe as recently as the early 2000s, while 30% was the global figure at around the same time. Over the last two decades, however, things have progressed substantially.

There are still gaps in vaccination in some countries — particularly among small communities, in the older population, and in areas in conflict. That’s why cases of measles have risen in Europe over the past couple of years (about 80,000 cases in 2018, compared to about 24,000 in 2017). Due to media coverage, people in Europe are very well aware of this, which is probably why they might think vaccination rates are lower than they actually are.

The terrible results

This time our German respondents scored best... if we can call it that! Still only 20% of them got it right. The United Kingdom came in second with 19%, while France brought up the rear with 18%. This isn’t exactly encouraging — more than 80% thought the proportion of European children fully vaccinated against measles was far lower than in reality.

Why do people pick the wrong answers?

Because they think that if one thing is getting worse, then EVERYTHING must be getting worse! Clearly, people in Europe don’t realize that the vast majority of their children are getting the full two vaccine doses against this terrible disease. And ignorance about this fact is getting even worse as a result of news stories about the increasing number of measles cases across Europe (and the world). If cases are increasing, then the vaccination rates must be either low, or going down, or both... right? Wrong! The spread of measles is mainly due to issues related to confidence in the vaccine among fractions of the population, as well as logistical problems in areas where there is conflict. It’s not caused by a reduction in vaccinations overall.

Data sources for the correct answer

Europeans think young boys drink alcohol like it’s 2002

How many 15-year-old boys drink alcohol weekly in Europe?

✓ A. 16% ❌ B. 32% ❌ C. 48%

The answer

16% of 15-year old boys drink alcohol weekly in Europe.

Option B would have been correct in 2002, when 32% of 15-year old boys in Europe consumed alcohol on a weekly basis. Option C has never been true anywhere in the world for this age bracket. According to the World Health Organization, there has been a large reduction in weekly alcohol use in most countries and regions between 2002 and 2014 (the most recent available data, published in 2018). Good news, right?!

The terrible results

This was not one of the worst questions, but it wasn’t good either. Our French respondents were almost as good as the chimps this time, with 31% correct answers. In Germany the figure was 26%, while in the UK just a fifth (21%) of respondents knew the answer. Apparently, almost half of the people we asked overall still think they’re living in 2002... Especially in the United Kingdom, where the largest decreases happened!

Why do people pick the wrong answers?

Because they think that the world was better in the past. It’s tempting to believe the world was better in the good old days. You know: youngsters were better behaved than they are now, everything was cheaper, there was less crime... many people fall into the trap of thinking this way.

But it’s just not true. In a great many ways, the world has never been better than it is now... and young people definitely drink less now than they did in the past.

Data source for the correct answer

The evidence for the correct answer comes from the World Health Organization: https://gapm.io/xwhoa
Europeans think HIV cases stayed the same

What happened to the rate of newly diagnosed HIV infections in the last 10 years in Europe?

✘ A. Decreased by about 40%  ❌ B. Stayed about the same ✓ C. Increased by about 40%

The answer

The rate of newly diagnosed HIV infections in Europe increased by 37% in the last ten years, going from 14.6 per 100,000 people in 2008 (about 110,000 cases in total) to 20 per 100,000 people in 2017 (about 160,000 cases).

Eastern Europe, and particularly Russia, have a great influence on the increase in new HIV infections in the region. In 2017, 82% of all new cases were reported from Eastern Europe, 14% were reported from Western Europe, and only 4% from Central Europe.

The terrible results

As with most of the questions in this study, our respondents didn’t seem to know anything about what’s going on in Europe from a health standpoint. Only 16% of the people we asked in the United Kingdom got this question right, compared to 17% in France, and 20% in Germany. A massive 82% of respondents didn’t even realise the situation has gotten worse regarding HIV in Europe.

Why do people pick the wrong answers?

Because they think that what they see in their country is true for all of Europe… People in rich countries tend to think their country is the best, and that their region is the most advanced. It’s difficult to think the situation has been going downhill when it comes to a disease that Europeans thought was getting better.

This level of ignorance is also most likely due to the fact that infection rates in the countries we surveyed are not increasing, and that most people don’t really think about Russia or the wider Eastern Europe when asked about Europe. In the past 10 years, none of the three polled countries has seen an increase in HIV rates, so it is quite plausible that people just extrapolate what they might have heard (or not heard) about their own country to Europe as a whole.

Data source for the correct answer

The evidence for the correct answer comes from the World Health Organization and the European Centre for Disease Prevention and Control: https://gapm.io/xecdch
Europeans don’t realize how unusual depression is

How many people in Europe suffer from depression?

✓ A. 5%  ❌ B. 25%  ❌ C. 45%

The answer

In 2015, 44.3 million people—5.1% of the total population—suffered from depression in Europe, according to the World Health Organization. Option B (25%) would better describe the lifetime risk of depression, rather than the number of people suffering from depression at a specific point in time. Thinking that 45% of the population suffer from depression is just crazy… that would be like every second person around you!

Another data source, the Institute for Health Metrics and Evaluation (IHME) show that 4.2% of people in Europe suffered from depression in 2017, followed by the Western Pacific region (3.9%), the Americas (3.8%), the Eastern Mediterranean region (3.5%), South-East Asia (3.3%), and Africa (2.9%). No matter which data source we use, Europe is the most highly affected region.

The terrible results

How do you think our respondents did this time? You guessed it: The results for this question were terrible, just like almost all the others. Only 15% of the people we surveyed answered this question correctly. That’s worse than the chimps yet again, who (as usual) managed 33% correct answers. German respondents were the "least bad" this time with 19% correct, followed by France with 16%, and the United Kingdom with measly 12%.

Why do people pick the wrong answers?

Because they think that this is a BIG problem! Mental health issues are often covered by the media as well as a variety of non-governmental organizations. Unfortunately, in many cases the phrases “depression” and “mental health” are used interchangeably, leading many people to confuse the two.

And, as explained above, there’s a big difference between the proportion of people suffering from depression within a single year compared to “at some point in their lives”.

Ultimately, it’s true that depression and other mental health disorders are a huge problem, as well as the incapacity of some of our health systems to meet the needs of patients who suffer from them. But yet again, it just isn’t as big a problem as we think it is. It is possible for us to address this without being overwhelmed.

Data sources for the correct answer

Lives in Eastern Europe are shorter than Western Europeans think

What is the life expectancy of a baby born today in Europe?

✓ A. 78  ✗ B. 82  ✗ C. 86

The answer

The life expectancy of a baby born in Europe in 2016 is 77.5 years. Turkmenistan has the lowest life expectancy at birth, at 68.2 years, while Spain the highest at 83.3 years. 82 would be the correct answer for countries like Luxembourg, Iceland, Austria, and Israel, but at the moment not a single country in Europe has a life expectancy at birth of 86 years. However, when it comes to living long lives, women by far outdo men. On average, women in France, Spain, Italy, and Switzerland actually do live to 86.

The terrible results

Our human respondents didn't do quite so badly on this question, but they still scored worse than random: 30% managed to answer correctly. Germany had the lowest score for this question at 25% correct answers. France came in second with 32%, while only the United Kingdom managed to match the chimps with 33% of respondents answering correctly.

Why do people pick the wrong answers?

Because they think that what they see in their country is true for all of Europe... Life expectancy has been on a nearly continuous upward path since the late 19th Century—a fact that most people in Europe are aware of. And because they know it has been rising for so long — and that it continues to rise — it's easy to assume that the highest number must be correct.

It is also possible that people in France, Germany, and the UK believe that life expectancy in Europe as a whole is closer to the number for their own countries. Life expectancy at birth in Germany and in the United Kingdom is 81 years, while in France it's 83 years. However, the overall figure is brought down by lower life expectancies in a number of Eastern European countries.

Data source for the correct answer

The evidence for the correct answer comes from the World Health Organization: https://gapm.io/xwhol
When fewer people commit suicide, nobody notices

What has happened to the suicide rate in Europe in the past 20 years?

✓ A. It decreased by a third  ❌ B. It stayed about the same  ❌ C. It increased by a third

The answer

The rate of suicides in Europe has dropped from 21.2 per 100,000 people in 1997 to 15.5 per 100,000 people in 2017—a decrease of more than a third. Data from the Institute for Health Metrics and Evaluation show that suicide rates in Europe peaked in 1994 (after the fall of the Soviet Union) and that there has been a near continuous decline since then. The main reason the rate has improved is the economic development and stabilization in former Soviet countries, as well as the introduction of selective serotonin reuptake inhibitors (SSRIs)—a form of antidepressant—in the 90s.

The terrible results

A massive 90% of our respondents got this question wrong, with the majority opting for the most negative option. Thankfully, our respondents’ answers are not a reflection of reality, as the rate of suicides in Europe has actually been decreasing for many years! The chimps were much more positive than our human respondents, and consequently scored a higher proportion of correct answers.

Why do people pick the wrong answers?

Because they think that things are getting worse! It’s not a surprise that most people chose the most negative option… or that hardly anybody got this question right. Many of us fall into the trap of believing that things are getting worse, so a rise in suicide rates would be the only logical conclusion.

But everything isn’t getting worse. In fact, most things are getting better. And that includes a significant fall in the rate of suicides in Europe over the last 25 years. Mental health and suicides have received a lot of attention in the media, which almost always highlights the exceptions. After all, when was the last time you heard about somebody NOT committing suicide? There has also been a lot of coverage of the increasing rate of suicides in the United States—which is true, but still an exception to the situation globally.

Now of course, suicide is something that needs attention, and even though it has become more uncommon in most European countries in the past 20 years, it is still far too common for us to relax. It has tragic consequences for all those around, friends and family, and when attention is given it needs to be done with compassion and knowledge about the subject.

However, if we are unaware of that suicide is actually becoming less common, we could easily come to believe that the measures being taken to prevent suicide don’t work—worse, that they don’t matter. Clearly, this is not true. We can and must continue suicide-preventive work. It makes a difference. It saves lives.

Data source for the correct answer

The evidence for the correct answer comes from the Institute for Health Metrics and Evaluation: https://gapm.io/xihme

https://gapm.io/ehms2019
Conclusions

People in three European countries (Germany, France, and the United Kingdom) were asked nine fact questions about the health status of Europe. Our results showed that in all three countries, respondents consistently scored worse than chimpanzees. Put another way, they scored less correct answers than if they had selected answers at random without even reading the questions.

Amongst the terrible results of our study, some patterns could be discerned. Most worryingly, while great health improvements have been made in Europe during the past decades, many of them have gone unnoticed by the general public. Examples of these “hidden” positive trends are the dramatic decline in weekly alcohol consumption among young boys, and the declining rate of suicide across the continent. When the public misses important improvements like these, it’s easy for people to become apathetic and think that no matter what we do, nothing will ever change — that things will just keep getting worse.

Another pattern we identified is that when a topic receives a lot of media attention, people tend to overestimate how common it is. Examples of this phenomenon are obesity rates in children, suicide rates, and the number of people suffering from depression — each of these topics receives a lot of media attention, and as a result our survey respondents overestimated the scale of the problems they pose.

Similarly, we found that few people in Europe are aware that 91% of all their children are fully vaccinated against measles. The media has (rightly) drawn a lot of attention to the rising number of European measles cases over the past few years, but the fact that 91% of children are fully vaccinated has not seeped through into the minds of the general population.

Finally, it’s easy to assume that other areas of the region you live in are similar to your own country. Respondents in our three countries consistently overestimated the average life expectancy of a person born in Europe today, and also missed the fact that HIV infections are on the rise in parts of the region. The answers our respondents gave for these questions would have been correct if the question had been about their own countries, but are not representative of the entire continent.

So what can we learn from all this? Once we’ve made our minds up about something, we tend to file away the facts in our mind, and rarely think to check and see if they still hold true. So no matter what, any time we’re about to form an opinion about something, we must remember to check the facts, check the source, and maybe even double check another source before making up our minds. Equally, don’t forget to update your fact-bank from time to time — things do change, and many (but not all) things tend to get better over time.

If you can do this consistently, you can proudly say you have a fact-based worldview, and you will beat the chimps every single time.