

Increasing Rate of Medical Mistakes and Misdiagnosis

Analysis by [Dr. Joseph Mercola](#)

January 30, 2024

STORY AT-A-GLANCE

- › In the U.S., an estimated 795,000 people become permanently disabled or die every year due to misdiagnoses
- › Overall, medical conditions are misdiagnosed about 11% of the time, but the likelihood of misdiagnosis varies widely depending on the type of medical problem and the symptoms presented
- › Among strokes, a leading cause of disability in the U.S., misdiagnosis occurs more than 17.5% of the time
- › Among patients transferred to a hospital ICU or who died in the hospital, a missed or delayed diagnosis took place in 23% of cases, and 17% of the time the errors caused temporary or permanent harm or death
- › Compared to white men, ethnic minorities are 30% more likely to be misdiagnosed while women are at a 20% increased risk of misdiagnosis

Medical errors remain a leading cause of death in the U.S., where an estimated 795,000 people become permanently disabled or die every year due to misdiagnoses.¹ Among hospitalized adults who died or were transferred to the intensive care unit (ICU), diagnostic errors are also disturbingly common.²

Describing diagnostic errors as "the most under-resourced public health crisis we face," researchers with Johns Hopkins School of Medicine said the public is largely unaware of the full scope of medical misdiagnoses in the U.S.³

US Facing a Medical Emergency of Misdiagnoses

When you visit a doctor, whether you're at a doctor's office or hospital, you depend on getting expert care, including a correct diagnosis. But about 11% of the time,⁴ medical conditions are misdiagnosed, according to research published in *BMJ Quality & Safety*.⁵

The likelihood of misdiagnosis varies widely, however, depending on the type of medical problem and the symptoms presented. "We don't miss strokes when somebody is paralyzed on one side and can't talk," study author Dr. David Newman-Toker, told *USA Today*. "We miss them when they look like something else that's benign."⁶

For instance, only about 1.5% of heart attacks are misdiagnosed, compared to 62% of spinal abscesses, a rarer condition. But even among strokes, a leading cause of disability in the U.S.,⁷ misdiagnosis occurs more than 17.5% of the time.⁸ When a stroke occurs, some patients may experience only dizziness or headaches, which can easily be confused with other conditions.

A lack of training may be to blame, according to Newman-Toker, as "doctors are not being trained across the board on how to differentiate dizziness caused by stroke and the same symptom caused by inner ear disease," *USA Today* reported.⁹ Still, 15 diseases account for 50.7% of the serious harms due to misdiagnosis while just five – stroke, sepsis, pneumonia, venous thromboembolism and lung cancer – accounted for 38.7%.¹⁰

A review of nearly 300 studies by the U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality also found that a startling number of patients who visit U.S. emergency rooms get an incorrect diagnosis.¹¹ Overall, their research showed about 1 in 18 people who visit an emergency room will be misdiagnosed, 1 in 50 will suffer an adverse event as a result and 1 in 350 will suffer from permanent disability or death.

Out of the 130 million visits to emergency departments (EDs) that occur every year in the U.S., this amounts to 7.4 million misdiagnoses, 2.6 million related adverse events and 370,000 serious harms from diagnostic error. According to the study:¹²

"Put in terms of an average ED with 25,000 visits annually and average diagnostic performance, each year this would be over 1,400 diagnostic errors, 500 diagnostic adverse events, and 75 serious harms, including 50 deaths per ED.

... The strongest, most consistent predictors of ED diagnostic error were individual case factors that increased the cognitive challenge of identifying the underlying disorder, with nonspecific, mild, transient, or 'atypical' symptoms being the most frequent."

Diagnostic Errors Common in Hospitalized Patients

A study of 2,428 patients who were transferred to a hospital ICU or died in the hospital also revealed "diagnostic errors were common, harmful, and had underlying causes, which can be used to design future interventions."¹³ A missed or delayed diagnosis took place in 23% of cases, and 17% of the time the errors caused temporary or permanent harm or death.

Most often, the diagnostic errors were related to problems assessing the patient or ordering and interpreting tests. Speaking with The Harvard Gazette, study author Dr. Jeffrey Schnipper explained:¹⁴

"We know diagnostic errors are dangerous and hospitals are obviously interested in reducing their frequency, but it's much harder to do this when we don't know what's causing these errors or what their direct impact is on individual patients.

We found that diagnostic errors can largely be attributed to either errors in testing, or errors in assessing patients, and this knowledge gives us new opportunities to solve these problems ... It appears to be that only a minority of deaths in hospitals are linked to diagnostic errors, but even a single patient death that might have been prevented with a better diagnostic process is one death too many.

... These two parts of the diagnostic process feed directly into each other. If you don't think of the correct possible diagnosis during your assessment of a patient, you're not going to order the right tests. And if you order the wrong test or order the right test but misinterpret the result, this will inevitably change how you then assess a patient."

Are Diagnostic Errors a Top Cause of Death?

When racial and other disparities are factored in, misdiagnosis may be even more common than recognized. Compared to white men, ethnic minorities are 30% more likely to be misdiagnosed while women are at a 20% increased risk of misdiagnosis, something Newman-Toker called "significant and inexcusable."¹⁵

Another study similarly revealed that black children with appendicitis were more likely to be misdiagnosed than white children and had a higher likelihood of perforation.¹⁶ In an editorial review of the BMJ Quality & Safety study, it's further suggested that diagnostic errors may be a leading cause of death among certain populations:¹⁷

"The authors conclude that harm associated with diagnostic error far surpasses any other patient safety concern, and is probably the largest source of death across all care settings linked to medical error, while also acknowledging that it is uncertain how many serious harms can be prevented.

To place these estimates in context, the number of 371,000 deaths is similar to the number for several of the top 10 causes of death in the USA in 2014, the year used by Newman-Toker et al in their analyses."

An Institute of Medicine (IOM) report even revealed that such errors are so common that everyone is likely to be affected at one point or another:¹⁸

"It is likely that most people will experience at least one diagnostic error in their lifetime, sometimes with devastating consequences. Diagnostic errors may cause harm to patients by preventing or delaying appropriate treatment,

providing unnecessary or harmful treatment, or resulting in psychological or financial repercussions."

It's also revealing that diagnostic errors are the most common type of paid medical malpractice claim, and they're nearly twice as likely to have resulted in the patient's death compared to other types of malpractice claims.¹⁹ The IOM report cited a number of reasons behind diagnostic errors, including:²⁰

- Inadequate collaboration and communication among clinicians, patients and their families
- A health care system not well designed to support the diagnostic process
- Limited feedback to clinicians about diagnostic performance
- A culture that discourages transparency and disclosure of diagnostic errors

In many cases, however, misdiagnosis is preventable. "The vast majority of diagnoses can be made by getting to know the patient's story really well, asking follow-up questions, examining the patient, and ordering basic tests," Dr. Hardeep Singh with Baylor College of Medicine, who studies how to improve diagnosis, told NBC News. "One of the things we hear over and over [from people who've been misdiagnosed] is, 'The doctor didn't listen to me.'"²¹

It's an ongoing issue that continues to be widely overlooked. In 2016, Johns Hopkins patient safety experts, led by Dr. Martin Makary, calculated that more than 250,000 patients died each year from medical errors, making it the **third leading cause of death**.²²

In 2022, the World Health Organization announced that unsafe care by medical professionals and hospitals result in a "horrifying" 2.6 million deaths each year, worldwide, with at least 250,000 of those in the U.S.²³

And, in July 2022, the National Institutes of Health updated their library on medical errors, saying that number could be as high as 440,000 – and possibly even more because of lack of reporting – making it still the third leading cause of death.²⁴

How to Reduce Your Risk of Misdiagnosis

As a patient, taking an active role in your health care may help you receive the best care possible and reduce your risk of getting an incorrect diagnosis. This starts with choosing health care providers who listen to your concerns and view the whole picture of your health.

Seek a health care practitioner who will help you move toward health by helping you understand the foundational causes of your health challenges, and create a customized and comprehensive – i.e., holistic – treatment plan for you.

What's more, you can have an impact on your doctor's tendency to recommend natural alternatives, as when you inquire about them, some health care providers do in fact listen. If they don't, then keep shopping. Further, if something doesn't sound right about the diagnosis you're given, ask questions and get a second, or third, opinion if needed.

Remember, your doctor works for you, not the other way around. Ideally, health care should be a partnership, where you work together with your providers to identify the best solutions. Either way, if you're not satisfied with their know-how or the tools in their toolbox, find another doctor. If you're hospitalized or in an emergency situation, this is more challenging since you can't always choose who's providing your care.

There are many cases when it's in your best interest to avoid hospitals, particularly for elective procedures or chronic conditions, but if you're hospitalized due to a life-threatening emergency, be sure to have an advocate with you who can manage your care and act as a power of attorney if necessary. While close to 1 in 6 doctors say they make diagnostic errors daily, this increases to 26% among emergency medicine doctors.²⁵

If you're seriously ill, it can be very difficult to explain what's wrong while keeping tabs on what they're asking you to sign and the medications and treatments they're giving you, so having someone there who can double-check everything and advocate for you is essential.

And no matter where you're receiving medical care, be sure to explain all symptoms you're experiencing thoroughly. The more information you provide, theoretically the better the outcome should be. As always, **taking control of your health** is also key to staying healthy and disease-free throughout your life.

Sources and References

- ^{1, 5, 10} [BMJ Quality & Safety Published Online First: 17 July 2023. doi: 10.1136/bmjqs-2021-014130](#)
- ^{2, 13} [JAMA Intern Med. Published online January 8, 2024. doi: 10.1001/jamainternmed.2023.7347](#)
- ^{3, 4, 6, 8, 9} [USA Today July 18, 2023](#)
- ⁷ [American Stroke Association, About Stroke](#)
- ^{11, 12} [Agency for Healthcare Research and Quality, Diagnostic Errors in the Emergency Department August 14, 2023](#)
- ¹⁴ [The Harvard Gazette January 9, 2024](#)
- ^{15, 21} [NBC News January 15, 2024](#)
- ¹⁶ [Acad Emerg Med. 2021 Sep;28\(9\):949-956. doi: 10.1111/acem.14142. Epub 2020 Oct 21](#)
- ¹⁷ [BMJ Quality & Safety Published Online First: 04 October 2023. doi: 10.1136/bmjqs-2023-016496](#)
- ¹⁸ [Improving Diagnosis in Health Care, Washington \(DC\): National Academies Press \(US\); 2015 Dec 29](#)
- ^{19, 20} [Institute of Medicine, Improving Diagnosis in Health Care, Report in Brief, September 2015, Page 2](#)
- ²² [Johns Hopkins Medicine May 3, 2016](#)
- ²³ [Ideal Med Health May 6, 2022](#)
- ²⁴ [NIH. Medical Error. July 4, 2022](#)
- ²⁵ [Medscape Medical News September 10, 2019](#)