

# Mortality rate

Mortality [rate](#) is a [measure](#) of the number of [deaths](#) (in general, or due to a specific cause) in a population, scaled to the size of that population, per unit of time. Mortality rate is typically expressed in units of deaths per 1,000 individuals per year; thus, a mortality rate of 9.5 (out of 1,000) in a population of 1,000 would mean 9.5 deaths per year in that entire population, or 0.95% out of the total.

It is distinct from [morbidity rate](#), which refers to the number of individuals in poor health during a given time period (the prevalence rate) or the number of newly appearing cases of the disease per unit of time (incidence rate). The term “mortality” is also sometimes inappropriately used to refer to the number of deaths among a set of diagnosed hospital cases for a disease or injury, rather than for the general population of a country or ethnic group. This disease mortality statistic is more precisely referred to as “case fatality rate” (CFR).

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With the passage of the [Affordable Care Act](#) in 2010, healthcare metrics and patient outcomes, especially [mortality rates](#), are increasingly emphasized as integral measures of overall quality of care and hospital reimbursements <sup>1) 2) 3) 4)</sup>.

Due to the intrinsically high risk of [adverse events](#) in [neurosurgery](#), compared to other surgical subspecialties, [mortality rates](#) are one of the most frequently assessed [measures](#) of departmental- and hospital level performance <sup>5)</sup>.

Due to the acuity and complexity of many neurosurgical [patients'](#) conditions, [preoperative risk stratification](#) can have significant implications for [mortality](#) on neurosurgical services. Commonly, assessment involves [documentation](#) of health-assessment metrics that include a 1 to 4 rating of [risk of mortality](#) (ROM) and [severity of illness](#) (SOI) on [admission](#) and [discharge](#), which are reflections of patients' risk of inhospital [death](#) and degree of illness, respectively. [Case mix index](#) (CMI) assesses the complexity of care and accounts for patient comorbidities <sup>6)</sup>.

<sup>1)</sup>

Hammers R, Anzalone S, Sinacore J, Origitano TC. Neurosurgical mortality rates: what variables affect mortality within a single institution and within a national database? J Neurosurg. 2010;112(2):257-26.

<sup>2)</sup>

Spurgeon A, Hiser B, Hafley C, Litofsky NS. Does improving medical record documentation better reflect severity of illness in neurosurgical patients? Neurosurgery. 2011;58:155-163.

<sup>3)</sup>

Zalatimo O, Ranasinghe M, Harbaugh RE, Iantosca M. Impact of improved documentation on an academic neurosurgical practice. J Neurosurg. 2014;120(3):756-763.

<sup>4)</sup>

Reyes C, Greenbaum A, Porto C, Russell JC. Implementation of a clinical documentation improvement curriculum improves quality metrics and hospital charges in an Academic Surgery Department. J Am Coll Surg. 2017;224:301-309.

<sup>5)</sup>

Houkin K, Baba T, Minamida Y, Nonaka T, Koyanagi I, Iiboshi S. Quantitative analysis of adverse events in neurosurgery. Neurosurgery. 2009;65(3):587- 594; discussion 594.

<sup>6)</sup>

Spurgeon A, Hiser B, Hafley C, Litofsky NS. Does improving medical record documentation better reflect severity of illness in neurosurgical patients? Neurosurgery. 2011;58:155-163

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