



Definition, epidemiology and modern emergency management of hemorrhagic stroke, aSAH and ICH

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What is „hemorrhagic stroke“? = intraparenchymal hemorrhage

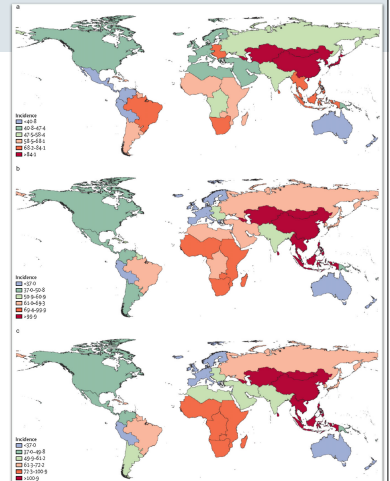


Global and regional burden of stroke during 1990-2010: findings from the Global Burden of Disease Study 2010



Age-standardized incidence of hemorrhagic stroke per 100 000 person-years for 1990 (a), 2005 (b), 2010 (c)

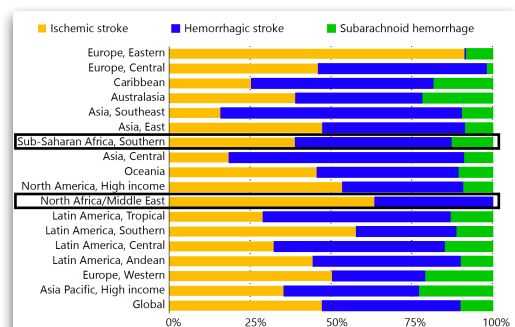
increasing in low- and middle income countries



Causes of death data in the Global Burden of Disease estimates for ischemic and hemorrhagic Stroke



Fraction of 'unspecified stroke' assigned to the 3 types of stroke by GBD region in men aged 50-69 years





Global burden of stroke and risk factors in 188 countries, during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013



Top risk factors ranked by number of DALYs attributable to stroke for both sexes combined in 21 regions in 2013

| Risk factor | Global | World Region | | | | | World Region | | | | | World Region | | | | | World Region | | | | |
|---|--------|--------------|----------------|-----------|----------------|---------------|----------------|-----------|-----------------|--------------|---------------|--------------|------------|----------------|----------------|-----------------|--------------------|--|--|--|--|
| | | High-income | Western Europe | Australia | Central Europe | South America | Eastern Europe | East Asia | South East Asia | Central Asia | South America | Caribbean | South Asia | Eastern Africa | Western Africa | Southern Africa | Sub-Saharan Africa | | | | |
| High systolic blood pressure | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| Diet low in fruits | 2 | 2 | 4 | 4 | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 2 | 2 | 3 | 3 | 2 | 3 | | | | |
| High body mass index | 3 | 6 | 2 | 2 | 2 | 2 | 2 | 5 | 2 | 2 | 6 | 3 | 2 | 2 | 8 | 2 | 2 | | | | |
| Diet high in sodium | 4 | 3 | 8 | 10 | 6 | 3 | 3 | 6 | 3 | 4 | 3 | 9 | 4 | 7 | 4 | 12 | 5 | | | | |
| Smoking | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 6 | 6 | 4 | 6 | 6 | 8 | 5 | 7 | 5 | | | | |
| Diet low in vegetables | 6 | 5 | 3 | 3 | 4 | 5 | 3 | 4 | 11 | 5 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | | | | |
| Ambient particulate matter (PM _{2.5}) pollution | 7 | 8 | 11 | 14 | 12 | 8 | 12 | 10 | 5 | 9 | 9 | 8 | 9 | 15 | 11 | 6 | 15 | | | | |
| Household air pollution from solid fuels | 8 | | | | | | | | 7 | 14 | 12 | 6 | 12 | 11 | 14 | 7 | 9 | | | | |
| Diet low in whole grains | 9 | 7 | 9 | 8 | 9 | 7 | 6 | 7 | 8 | 7 | 5 | 7 | 7 | 5 | 7 | 6 | 10 | | | | |
| High fasting plasma glucose | 10 | 10 | 10 | 9 | 7 | 11 | 7 | 9 | 9 | 8 | 7 | 10 | 9 | 10 | 9 | 10 | 9 | | | | |
| Low physical activity | 11 | 9 | 8 | 6 | 8 | 10 | 11 | 11 | 13 | 11 | 13 | 11 | 13 | 12 | 10 | 8 | 12 | | | | |
| Low glomerular filtration rate | 12 | 12 | 7 | 7 | 13 | 9 | 10 | 12 | 14 | 10 | 10 | 14 | 10 | 8 | 11 | 9 | 11 | | | | |
| Alcohol use | 13 | 11 | 12 | 11 | 10 | 12 | 9 | 8 | 12 | 12 | 11 | 15 | 11 | 14 | 16 | 15 | 15 | | | | |
| Lead exposure | 14 | 14 | 14 | 13 | 15 | 14 | 16 | 15 | 10 | 15 | 16 | 12 | 14 | 15 | 13 | 13 | 14 | | | | |
| High total cholesterol | 15 | 13 | 13 | 12 | 11 | 13 | 13 | 16 | 13 | 14 | 13 | 15 | 13 | 13 | 14 | 14 | 10 | | | | |
| Second-hand smoke | 16 | 15 | 15 | 15 | 16 | 15 | 14 | 14 | 15 | 16 | 17 | 16 | 16 | 17 | 15 | 17 | 16 | | | | |
| Diet high in sugar-sweetened beverages | 17 | 16 | 16 | 16 | 14 | 16 | 17 | 16 | 17 | 17 | 15 | 17 | 17 | 16 | 17 | 16 | 17 | | | | |