

Section 8: Glossary and Reference Material

Introduction This section provides an alphabetical list of all the terms used in a STEPS surveillance with definitions that are appropriate for STEPS and a list of all the source and reference material used to compile this manual.

In this section This section covers the following topics.

Topic	See Page
Glossary of Terms used in STEPS Stroke	8-2
Source Publications and References	8-3

Glossary of Terms used in STEPS Stroke

Term	Definition
Amaurosis fugax	Periodical blindness of an eye due to embolic occlusion of the artery supplying the retina.
Apraxia	The inability to execute a planned motor act in the absence of paralysis of the muscles normally used in the performance of the act.
Ataxia	Co-ordination disturbances.
Bilateral	Includes both sides of the body.
Case-fatality	The proportion of events which are fatal within a given period of time.
Contra-lateral	Refers to the opposite side of the body.
Demography	The composition of the population.
Diplopia	Double vision.
Dysarthria	A defect in the articulation of the speech.
Dysphagia	Impaired ability to swallow.
Dysphasia	Difficulty with comprehension or production of the language despite intact articulation and phonation.
Hemiplegia	Weakness of the arm and leg on one side of the body.
Homonymous hemianopia	Loss of vision in one half of the visual field. Lesions of the optic nerve behind the chiasm produce contra-lateral visual field deficits.
Incidence	The incidence of stroke is the number of new cases of stroke arising in a given period in a defined population: usually expressed as a rate per 100,000. Incidence gives an indication of the risk of stroke.
Intracerebral hemorrhage	Bleeding from intracerebral arteries and may cause stroke symptoms.
Ischemic stroke	Stroke symptoms known to originate from an occlusion of cerebral arteries.
Modified Rankin Scale	A scale that indicates the level of handicap in a person.
Morbidity	A rate of how many people get sick per person years.
Mortality	A rate of how many people die per person years.
Prevalence	Prevalence is the number of cases in a defined population at a specified point in time - gives a "snapshot" of survivors at any one time
Stroke	A clinical diagnosis based on recognisable clinical symptoms indicating a vascular cause of sudden onset of neurological deficits. For definition please see page 1-4.
Subarachnoid hemorrhage	A bleeding from intra cranial arteries leading to blood between two membranes that surround the brain.
Surveillance	Ongoing, continuous collection of epidemiologic data in a population.
Transient Ischemic Attack (TIA)	Sudden neurologic deficits that lasts less than 24 hours, and with full recovery.
Unilateral	Restricted to one side of the body.
Vertigo	A false sense of rotary movement of self or surrounding objects. May be associated with nausea and vomiting.

Source Publications and References

Introduction This section provides an alphabetical list of :

- References used in this publication
 - Resources available from the STEPS team
-

References This section provides an alphabetical list of references and sources used.

Anderson C, Carter, K, Hackett M, Feigen V, Barber, A, Broad J, Bonita R. Trends in stroke incidence in Auckland, New Zealand, between 1981 and 2003. *Stroke* 2005; 36:2087.

Armstrong T, Bonita R. Building capacity for an integrated noncommunicable disease risk factor surveillance system in developing countries. *Ethnicity and Disease* 2003;13(s)2

Asplund K, Bonita, Kuulasmaa, Rajakangas A-M, Feigin V, Schaedlich H, Suzuki K, Thorvaldsen P, Tuomilehto J; for the WHO MONICA project. Multinational comparisons of stroke epidemiology: evaluation of case ascertainment in the WHO MONICA Stroke Study. *Stroke* 1995;26:355-60

Asplund, K., Rajakangas, A., Kuulasmaa, K., Thorvaldsen, P., Bonita, R., Stegmayr, B., Suzuki, K., and Eisenblätter, D. WHO MONICA Project: Multinational comparison of diagnostic procedures and management of acute stroke. *Cerebrovasc Dis* 1996; 6: 66-74.

Adams HP Jr, Adams R, Adams RJ, Brott T, Brott TF, del Zoppo GJ, Furlan et al. Guidelines for the early management of patients with ischemic stroke: A scientific statement from the Stroke Council of the American Stroke Association. *Stroke* 2003; 34:1056-83.

Bonita R, Mendis S, Truelsen T, Bogousslavsky J, Toole J, Yatsu F. The Global Stroke Initiative. *Lancet Neurology*. 2004;3:391-93

Bonita R, Truelsen T. Stroke in Sub Saharan Africa: a neglected chronic disease. *Lancet Neurology*. 2003; 2: 592-4.

Bonita, R; Douglas, K; Winkelmann, R; De Courten, M; The WHO STEPwise approach to surveillance (STEPS) of noncommunicable disease risk factors. Chapter in (eds) McQueen, DV and Puska, P (editors); *Global Risk Factor Surveillance*. London: Kluwer Academic/Plenum Publishers, New York. 2003; pp 9-22

Continued on next page

Source Publications and References, Continued

Bonita, R; Truelsens, T. Edited by Barnett, H.J.M; Bogousslavsky, J, Meldrum, H. Advances in Ischemic Stroke Epidemiology. Chapter in Ischemic Stroke: Advances in Neurology. Vol 92. Lippincott Williams & Wilkins, Philadelphia 2003

Bonita, R; Strong, K; De Courten, M.; From surveys to surveillance. Rev Panam Salud Publica/Pan Am J Public Health; 2001; 10: 223–225

Bonita R, Broad JB, Anderson NE, and Beaglehole R. Approaches to the problems of measuring the incidence of stroke. Int J Epidemiol 1995;24: 535-542.

Bharucha, NE, Bharucha, EP, Bharucha AE, Bhise AV, Schoenberg BS.. Prevalence of stroke in the parsi community of Bombay. Stroke 1998; 19: 60-62.

Choi B, Corber, McQueen D, Bonita R et al. Enhancing regional capacity in chronic disease surveillance in the Americas. Rev Panam Salud Publica/ Pan Am J Public Health 2005;17: 130-141.

Prospective studies collaboration. Cholesterol, diastolic blood pressure, and stroke: 13,000 strokes in 450,000 people in 45 prospective cohorts. - Lancet 1995; 346:1647-53.

Collins RF, Armitage JF, Parish S, Sleight P, Sleight PF, Peto R. - Effects of cholesterol-lowering with simvastatin on stroke and other major vascular events in 20536 people with cerebrovascular disease or other high-risk conditions. - Lancet 2004; 363:757-67.

Chandramohan D, Maude GH, Rodrigues LC, and Hayes RJ. Verbal autopsies for adult deaths: issues in their development and validation. Int J Epidemiol 1994; 23: 213-222.

Dennis MS, Bamford JM, Molyneux AJ, and Warlow CP. Rapid resolution of signs of primary intracerebral haemorrhage in computed tomograms of the brain. BMJ 1987; 295:379-381.

Dhamija RK, Mittal S, and Bansal BC. Trends in clinico-epidemiological correlates of stroke in the community. J Indian Academy Clin Med. 2000;5:27-31

Doggett DL, Tappe KA, Mitchell MD, Chapell RF, Coates VF, Turkelson CM. Prevention of pneumonia in elderly stroke patients by systematic diagnosis and treatment of dysphagia: an evidence-based comprehensive analysis of the literature. Dysphagia 2001; 16:279-95.

Continued on next page

Source Publications and References, Continued

D'Olhaberriague LF, Litvan IF, Mitsias PF, Mansbach HH. A reappraisal of reliability and validity studies in stroke. *Stroke* 1996; 27:2331-6.

Donnan GA - Davis S, Davis SM. Stroke and cholesterol: weakness of risk versus strength of therapy. *Stroke* 2004; 35:1526.

Feng J H, Nowson CA, MacGregor GA. Fruit and vegetable consumption and stroke: a met analyses of cohort studies. *Lancet* 2006; 367:320-326

Feigin VL, Carter K. Editorial comment. Stroke incidence studies one step closer to the elusive gold standard? *Stroke*. 2004; 35: 2045-7.

Feigin V, Brainin M, Breteler MMB, Marytn C, Wolfe C, Bornstein N. Fieschi C et al . Teaching in neuro epidemiology in Europe: Time to get serious. *Eur J Neurology*; 2004; 11:795-9

Feigin VL, Lawes CM, Bennett DA, Anderson CS. Stroke epidemiology: a review of population-based studies of incidence, prevalence, and case-fatality in the late 20th century. *Lancet Neurol*. 2003; 2: 43-53. Review.

Foerch C, Misselwitz B, Sitzer M, Berger K, Steinmetz H, Neumann-Haefelin T. Difference in recognition of right and left hemispheric stroke. *Lancet* 2005; 366: 392-393.

Hatano S. Experience from a multi centre stroke register: a preliminary report. *Bull WHO* 1975; 54:541-553.

Heuschmann PU, Kolominsky-Rabas P, Kolominsky-Rabas PL, Roether J, Roether JF, Misselwitz BF, Lowitzsch KF, et al. - Predictors of in-hospital mortality in patients with acute ischemic stroke treated with thrombolytic therapy. *JAMA* 2004; 292:1831-8.

Heuschmann PU, Kolominsky-Rabas P, - Kolominsky-Rabas PL FAU, Misselwitz B, Misselwitz BF, Hermanek PF, Leffmann CF, et al. - Predictors of in-hospital mortality and attributable risks of death after ischemic stroke: the German Stroke Registers Study Group. - *Arch Intern Med* 2004 13; 164:1761-8.

Katzan IL, Cebul RD FAU, Husak SH, Dawson NV, Baker DW. - The effect of pneumonia on mortality among patients hospitalized for acute stroke. - *Neurology* 2003; 60:620-5.

Lavados PM, Sacks C, Prina L, Escobar A, Tossi C, Araya F, Feuerhake W, Galvez M, Salinas R, Alvarez G. Incidence, 30 day case-fatality rates and prognosis of stroke in Iquique, Chile (PISCIS project). *Lancet* 2005;365,:2206-2215

Continued on next page

Source Publications and References, Continued

Law MR, Wald NJ, Rudnicka AR. Quantifying effect of statins on low density lipoprotein cholesterol, ischaemic heart disease, and stroke: systematic review and meta-analysis. - *BMJ* 2003; 326:1423.

Murray CJL and Lopez AD. Mortality by cause for eight regions of the world: Global Burden of Disease Study. *Lancet*. 1997; 349, 1269-1276.

Nicoletti A, Sofia V, Giuffrida S, Bartoloni A, Bartalesi F, Bartolo MLL, Fermo SL, Cocuzza V, Gamboa H, Salazar E, and Reggio A. Prevalence of stroke. A door-to-door survey in rural Bolivia. *Stroke* 2000;31: 882-885.

Nor AM, Davis J, Sen B, Shipsey D, Louw SJ, Dyker AG, Davis M, Ford GA. The Recognition of Stroke in the Emergency Room (ROSIER) scale: development and validation of a stroke recognition instrument. *Lancet Neurology*. 2005; 4:727-734.

Pandian JD, Jaison A, Sukhbinder SD, Kalra G, Shamsheer S, Lincoln DJ, Abraham G. Public awareness of warning symptoms, risk factors, and treatment of stroke in Northwest India. *Stroke* 2005; 36: 644-648.

Pendlebury ST, Rothwell PM, Algra A, Ariesen M-J, Bakac G, Czlonkowska A, et al. Underfunding of stroke research: a European wide problem. *Stroke* 2004; 35:2368-71

Poungvarin N. Stroke in the developing world. *Lancet* 1998; 35:19-22.

Piechowski-Jozwiak BF, Bogousslavsky J. Cholesterol as a risk factor for stroke: the fugitive? *Stroke* 2004;35:1523

Reed SD, Cramer SC, Blough DK, Meyer KF, Jarvik JG. - Treatment with tissue plasminogen activator and inpatient mortality rates for patients with ischemic stroke treated in community hospitals. *Stroke* 2001; 32:1832-40.

Rothwell P, Coull A, Silver L, Fairhead J, Giles M, Lovelock C, Redgrave J, et al. Population-based study of event-rate, incidence, case fatality, and mortality for all acute vascular events in all arterial territories (Oxford Vascular Study) *Lancet*. 2005; 366: 1773-1783.

Sacco RL, Benjamin EJ FAU, Broderick JP FAU, Dyken MF, Easton JD, Feinberg WM et al. - AHA/Prevention Conference. IV. Prevention and Rehabilitation of Stroke. Risk factors. - *Stroke* 1997; 28:1507-17.

Setel PW, Sankoh O, Rao C, Velkoff VV, Mathers, Gonghuan Z, Hemed et al. Sample registration of vital events with verbal autopsy. A renewed commitment to measuring and monitoring vital statistics. *Bulletin WHO* 2005; 83: 611-17.

Continued on next page

Source Publications and References, Continued

Straus SE, Majumdar S, Majumdar SR, McAlister F, McAlister FA. New evidence for stroke prevention: clinical applications. *JAMA* 2002;288:1396-98.

Stroke Unit Trialists' Collaboration. Collaborative systematic review of the randomized trials of organized inpatient (stroke unit) care after stroke. *BMJ* 1997;314: 1151-1159.

Struijs JN, van Genugten ML, Evers SM, Ament AJ, Baan CA, van den Bos GA. Modelling the future burden of stroke in The Netherlands: impact of aging, smoking, and hypertension. *Stroke* 2005; 36:1648-55.

Sudlow CL, Warlow CP. Comparable studies of the incidence of stroke and its pathological types: results from an international collaboration. International Stroke Incidence Collaboration. *Stroke*. 1997; 28:491-9.

Thorvaldsen P, Asplund K, Kuulasmaa K, Rajakangas A-M, Schroll M; for the WHO MONICA Project. *Stroke*, 1995;26: 361-67.

Truelsen T, Bonita R. *Surveillance of Stroke: A Global Perspective*. *Int J Epidemiol* 2001; 30; Suppl 1: S11-S16

Truelsen T, Mähönen M, Tolonen H, Asplund K, Bonita R, Vanuzzo D, for the WHO MONICA Project: *Trends in Stroke and Coronary Heart Disease in the WHO MONICA Project*. *Stroke, JAMA*. 2003; 34: 1346-1352.

UK TIA Study Group. The United Kingdom transient ischaemic attack (UK TIA). Aspirin Trial: Final results. *J Neurol Neurosurg Psychiatry*. 1991; 54:1044-1054.

Walker RW, McLarty DG, Kitange HM, Whiting D, Masuki G, Mtasiwa DM, Machibya H, Unwin N, and Alberti KGMM. Stroke mortality in urban and rural Tanzania. *Lancet* 2000;355:1684

Weir NU, Sandercock PA FAU, Lewis SC FAU, Signorini DF, Warlow CP. - Variations between countries in outcome after stroke in the International Stroke Trial (IST). - *Stroke* 2001; 32:1370-7.

Wolf PA, Abbott RD, Kannel WB. Atrial fibrillation: a major contributor to stroke in the elderly. The Framingham Study. *Arch Intern Med* 1987; 147:1561-4

Wolfe CD, Tilling KF, Beech RF, Rudd AG. - Variations in case fatality and dependency from stroke in western and central Europe. The European BIOMED Study of Stroke Care Group. - *Stroke* 1999; 30:350-6.
