Health Literacy



Of working age adults in England:



Average reading age is

11-14 years old ¹

42% are unable to understand or make use of everyday health information (health literacy) ²



This rises to 61% when numeracy skills are also required for comprehension (health numeracy) ²



43% of adults struggle to understand instructions to calculate a childhood paracetamol dose. ²

Prevalence of low health literacy and numeracy by local authority ⁴

	Low Health Literacy (%)	Low Health Literacy & Numeracy (%)
England	38.88	58.30
Herefordshire	37	56.78
Worcestershire	35.92	55.7

Long-term health conditions (LTCs)

- Low health literacy is more common among people with LTCs including diabetes ¹⁰, heart disease ¹¹, stroke ⁷, kidney disease ¹², and musculoskeletal disease ¹³ ¹⁴
- People with low health literacy less likely to successfully manage LTCs³

The strongest correlation to ill health – stronger than education level, deprivation, age or ethnicity – is health literacy ⁶

Low health literacy is more likely in populations that experience health inequalities, including:

- Disabled people ⁸ Only 30% of GP surgeries have information that is accessible to people with learning disabilities ⁹
- Older adults (65+) over four times more likely to have limited functional health literacy than the general population. 48% of people over 50 years with inadequate health literacy participated in cancer screening, compared with 58% of those with adequate health literacy ¹⁵
- Disadvantaged socioeconomic groups such as people with low basic education ¹⁷ and lower income adults ²⁴.



Why is Health Literacy Important?

People with inadequate health literacy skills are more likely to experience poor health outcomes:

More likely to have worse health-limiting conditions and to report deteriorating self-rated health ²⁵ More likely to engage in unhealthy behaviours; smoking, drinking alcohol, sedentary lifestyle, unhealthy diet 7, 19 - 22

Less likely to access prevention services (e.g. immunisation and cancer screening programmes) ²³

1.5 - 3 x more likely to experience increased hospitalisation or death ¹⁸

Lower Activation

In people with a chronic disease, those with low health literacy know significant less about their disease than those with adequate literacy" ⁵

For example, In a diabetes study 94% with adequate health functional health literacy knew the systems of hypoglycaemia compared with 50% of those with inadequate literacy. ³



Financial Cost

Economic cost of poor health literacy in England crudely estimated between £2.95 billion and £4.92 billion per year ¹⁶



References



- 1. 2011 skills for life survey: a survey of literacy, numeracy, and ICT levels in England, 2012. Departments for Business Innovation and Skills. 2011 skills for life survey GOV.UK (www.gov.uk)
- 2. Rowlands, G., Protheroe, J., Winkley, J., Richardson, M., Seed, P. T., & Rudd, R. (2015). A mismatch between population health literacy and the complexity of health information: an observational study. The British journal of general practice: the journal of the Royal College of General Practitioners, 65(635), e379–e386. https://doi.org/10.3399/bjgp15X685285
- 3. Williams, M. V., Baker, D. W., Parker, R. M., & Nurss, J. R. (1998). Relationship of functional health literacy to patients' knowledge of their chronic disease. A study of patients with hypertension and diabetes. Archives of internal medicine, 158(2), 166–172. https://doi.org/10.1001/archinte.158.2.166
- 4. HEALTH LITERACY Home (geodata.uk) University of Southampton (2024). Estimated prevalence of low health literacy and health numeracy Herefordshire. [online] Estimated prevalence of low health literacy and health numeracy Herefordshire. Available at: https://healthliteracy.geodata.uk/ [Accessed 19 Jan. 2024].
- 5. Gazmararian JA, Williams MV, Peel J, Baker DW. Health literacy and knowledge of chronic disease. Patient Educ Couns. 2003 Nov;51(3):267-75. doi: 10.1016/s0738-3991(02)00239-2. PMID: 14630383.
- 6. National Voices. (2017). A new relationship with people and communities. https://s42139.pcdn.co/wp-content/uploads/a_new_relationship with people and communities 0.pdf
- 7. Adams, R. J., Piantadosi, C., Ettridge, K., Miller, C., Wilson, C., Tucker, G., & Hill, C. L. (2013). Functional health literacy mediates the relationship between socio-economic status, perceptions and lifestyle behaviors related to cancer risk in an Australian population. Patient education and counseling, 91(2), 206–212.
- 8. World Health Organisation. (2013). Health Literacy: The solid facts. https://www.who.int/europe/publications/i/item/9789289000154
- 9. Mencap. (2004). Treat me right! Better healthcare for people with a learning disability. https://www.mencap.org.uk/sites/default/files/2016-08/treat_me_right.pdf
- 10. Adams, R. J., Appleton, S. L., Hill, C. L., Dodd, M., Findlay, C., & Wilson, D. H. (2009). Risks associated with low functional health literacy in an Australian population. The Medical journal of Australia, 191(10), 530–534. https://doi.org/10.5694/-j.1326-5377.2009.tb03304.x
- 11. Baker, D. W., DeWalt, D. A., Schillinger, D., Hawk, V., Ruo, B., Bibbins-Domingo, K., Weinberger, M., Macabasco-O'Connell, A., & Pignone, M. (2011). "Teach to goal": theory and design principles of an intervention to improve heart failure self-management skills of patients with low health literacy. Journal of health communication, 16 Suppl 3(Suppl 3), 73–88. https://doi.org/10.1080/10810730.2011.604379
- 12. Fraser, S. D., Roderick, P. J., Casey, M., Taal, M. W., Yuen, H. M., & Nutbeam, D. (2013). Prevalence and associations of limited health literacy in chronic kidney disease: a systematic review. Nephrology, dialysis, transplantation: official publication of the European Dialysis and Transplant Association European Renal Association, 28(1), 129–137. https://doi.org/10.1093/ndt/gfs371
- 13. Loke, Y. K., Hinz, I., Wang, X., Rowlands, G., Scott, D., & Salter, C. (2012). Impact of health literacy in patients with chronic musculoskeletal disease--systematic review. PloS one, 7(7), e40210. https://doi.org/10.1371/journal.pone.0040210
- 14. Lowe, W., Ballinger, C., Protheroe, J., Lueddeke, J., Nutbeam, D., Armstrong, R., Falzon, L., Edwards, C., Russell, C., McCaffery, K., & Adams, J. (2013). Effectiveness of musculoskeletal education interventions in people with low literacy levels: a systematic review. Arthritis care & research, 65(12), 1976–1985. https://doi.org/10.1002/acr.22085
- 15. Kobayashi, L. C., Wardle, J., Wolf, M. S., & von Wagner, C. (2016). Aging and Functional Health Literacy: A Systematic Review and Meta-Analysis. The journals of gerontology. Series B, Psychological sciences and social sciences, 71(3), 445–457. https://doi.org/10.1093/geronb/gbu161
- 16. Lamb P, Berry J. Health Literacy the agenda we cannot afford to ignore: Community Health & Learning Foundation, 2014.
- 17. Royal College of General Practitioners. Health Literacy: Report from an RCGP-led health literacy workshop. London, 2014
- 18. Dewalt DA, Berkman ND, Sheridan S, et al. Literacy and health outcomes: a systematic review of the literature. Journal of general internal medicine 2004;19(12):1228-39.
- 19. Wolf MS, Gazmararian JA, Baker DW. Health literacy and health risk behaviors among older adults. American journal of preventive medicine 2007;32(1):19-24.
- 20. von Wagner C, Knight K, Steptoe A, et al. Functional health literacy and health-promoting behaviour in a national sample of British adults. Journal of epidemiology and community health 2007;61(12):1086-90.
- 21. Bostock, S., & Steptoe, A. (2012). Association between low functional health literacy and mortality in older adults: longitudinal cohort study. BMJ (Clinical research ed.), 344, e1602. https://doi.org/10.1136/bmj.e1602
- 22. Adams, R. J., Appleton, S. L., Hill, C. L., Dodd, M., Findlay, C., & Wilson, D. H. (2009). Risks associated with low functional health literacy in an Australian population. The Medical journal of Australia, 191(10), 530–534. https://doi.org/10.5694/-j.1326-5377.2009.tb03304.x
- 23. Berkman ND, Sheridan SL, Donahue KE, et al. Low health literacy and health outcomes: an updated systematic review. Annals of internal medicine 2011;155(2):97-107. http://dx.doi.org/10.1059/0003-4819-155-2-201107190-00005
- 24. Kutner M, Greenburg E, Jin Y, et al. The health literacy of America's adults: Results from the 2003 National Assessment of Adult Literacy. Washington, D.C., 2006.
- 25. Sabates R, Parsons S. The Contribution of Basic Skills to Health Related Outcomes During Adulthood: Evidence from the BCS70, 2012.