

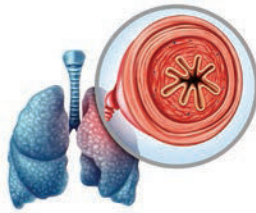
Sistemas simplificados de diagnóstico de la epoc

A pesar de su elevado impacto sociosanitario, la epoc tiene una elevada tasa de infradiagnóstico

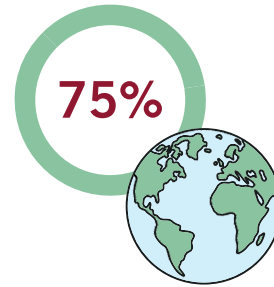
Prevalencia >10%

3.^a causa de muerte

Tendencia al aumento en ciudades y mujeres






3.^a causa de DALY en personas de 65-80 años



Tasa similar en países desarrollados y en vías de desarrollo; por lo tanto, independiente del grado de acceso a los sistemas sanitarios.

¿Cómo reducir el infradiagnóstico de la epoc?

Las guías GOLD y GesEPOC recomiendan el cribado oportunista de la población general, especialmente la de riesgo y con síntomas respiratorios crónicos

Herramientas para el cribado de la epoc		
Cuestionarios de síntomas	Microespirómetros <ul style="list-style-type: none"> • Usan maniobra forzada • Buena correlación con la espirometría convencional • Resultados: FEV₁, FEV₆ y FEV₁/FEV₆ • Dos modelos disponibles en España 	
CAPTURE[®]  <ul style="list-style-type: none"> • Sensibilidad, 95% • Especificidad, 45% 	PiKo-6[®]  <ul style="list-style-type: none"> • AUC ~0,85 • Sensibilidad >80% 	COPD-6[®]  <ul style="list-style-type: none"> • AUC ~0,85 • Sensibilidad >80%
Cuestionario + microespirómetro: Sensibilidad, 89%; especificidad, 93%		



Posterior confirmación diagnóstica con espirometría convencional

Problema: escaso uso de los microespirómetros en consulta

Una **causa puede ser** la necesidad de establecer contacto con el sistema sanitario para realizar las pruebas



La telemedicina puede ser la solución

APP de función pulmonar para smartphones



AUC: Área bajo la curva; DALY: Años de vida ajustados por discapacidad; FEV: Volumen espiratorio forzado; GesEPOC: Guía española de la epoc; GOLD: Estrategia global para el diagnóstico, la prevención y el manejo de la epoc.

Bibliografía

- Tai A, Tran H, Roberts M, Clarke N, Gibson AM, Vidmar S, et al. Outcomes of childhood asthma to the age of 50 years. *J Allergy Clin Immunol*. 2014; 133(6): 1572-1578.e3. doi: 10.1016/j.jaci.2013.12.1033.
- The Childhood Asthma Management Program Research Group. Long term effects of budesonide or nedocromil in children with asthma. *N Engl J Med*. 2000; 343: 1054-1063.
- McGeachie MJ, Yates KP, Zhou X, Guo F, Sternberg AL, Van Natta ML, et al. Patterns of growth and decline in lung function in persistent childhood asthma. *N Engl J Med*. 2016; 374: 1842-1852.
- Lange P, Parne J, Vestbo J, Schnohr P, Jensen GA. 15-year follow-up study of ventilatory function in adults with asthma. *N Engl J Med*. 1998; 339: 1194-1200.
- Soremekun S, Heaney LG, Skinner D, Bulathsinhala L, Carter V, Chaudhry I, et al. Asthma exacerbations are associated with a decline in lung function: a longitudinal population-based study. *Thorax*. 2022; thoraxjnl-2021-217032. doi: 10.1136/thorax-2021-217032.
- Denlinger LC, Phillips BR, Sorkness RL, Bleecker ER, Castro M, DeBoer MD, et al. Responsiveness to parenteral corticosteroids and lung function trajectory in adults with moderate-to-severe asthma. *Am J Respir Crit Care Med*. 2021; 203(7): 841-852. doi: 10.1164/rccm.202002-04540C.
- Coumou H, Westerhof GA, De Nijs SB, Zwinderman AH, Bel EH. Predictors of accelerated decline in lung function in adult-onset asthma. *Eur Respir J*. 2018; 51: 1701785.
- Ulrik CS, Backer V. Nonreversible airflow obstruction in life-long nonsmokers with moderate to severe asthma. *Eur Respir J*. 1999; 14(4): 892-896. doi: 10.1034/j.1399-3003.
- Cibella F, Cuttitta G, Bellia V, Bucchieri S, D'Anna S, Guerrera D, et al. Lung function decline in bronchial asthma. *Chest*. 2002; 122: 1944-1948.
- Tracey M, Villar A, Dow L, Coggon D, Lampe FC, Holgate ST, et al. The influence of increased bronchial responsiveness, atopy, and serum IgE on decline in FEV1. A longitudinal study in the elderly. *Am J Respir Crit Care Med*. 1995; 151: 656-662.
- Kole TM, Vanden Berghe E, Kraft M, Vonk JM, Nawijn MC, Siddiqui S, et al. Predictors and associations of the persistent airflow limitation phenotype in asthma: a post-hoc analysis of the ATLANTIS study. *Lancet Respir Med*. 2023; 11(1): 55-64. doi: 10.1016/S2213-2600(22)00185-0.
- Graff S, Demarche S, Henket M, Paulus V, Louis R, Schleich F, et al. Increase in blood eosinophils during follow-up is associated with lung function decline in adult asthma. *Respir Med*. 2019; 152: 60-66.
- Smith BM, Zhao N, Olivenstein R, Lemiere C, Hamid Q, Martin JG. Asthma and fixed airflow obstruction: long-term trajectories suggest distinct endotypes. *Clin Exp Allergy*. 2021; 51(1): 39-48. doi: 10.1111/cea.13714.
- Shimizu K, Tanabe N, Oguma A, Kimura H, Suzuki M, Yokota I, et al. Parenchymal destruction in asthma: fixed airflow obstruction and lung function trajectory. *J Allergy Clin Immunol*. 2022; 149(3): 934-942.e8. doi: 10.1016/j.jaci.2021.07.042.
- Mogensen I, Vonk JM, Wijnant SRA, Zhou X, Boezen HM, Brusselle G, et al. Blood eosinophil level and lung function trajectories: cross-sectional and longitudinal studies in European cohorts. *ERJ Open Res*. 2020; 6(4): 00320-2020. doi: 10.1183/23120541.00320-2020.
- Grol MH, Gerritsen J, Vonk JM, Schouten JP, Koëter GH, Rijcken B, et al. Risk factors for growth and decline of lung function in asthmatic individuals up to age 42 years. A 30-year follow-up study. *Am J Respir Crit Care Med*. 1999; 160: 1830-1837.
- Kitch BT, Paltiel AD, Kuntz KM, Dockery DW, Schouten JP, Weiss ST, et al. A single measure of FEV1 is associated with risk of asthma attacks in long-term follow-up. *Chest*. 2004; 126(6): 1875-1882.
- Ali Z, Dirks CG, Ulrik CS. Long-term mortality among adults with asthma: a 25-year follow-up of 1,075 outpatients with asthma. *Chest*. 2013; 143(6): 1649-1655.
- Tsai CL, Delclos GL, Huang JS, Hanania NA, Camargo CA Jr. Age-related differences in asthma outcomes in the United States, 1988-2006. *Ann Allergy Asthma Immunol*. 2013; 110(4): 240-6, 246.e1.
- Huang S, Vasquez MM, Halonen M, Martínez FD, Guerra S. Asthma, airflow limitation and mortality risk in the general population. *Eur Respir J*. 2015; 45(2): 338-346.
- Tan DJ, Bui DS, Dai X, Lodge CJ, Lowe AJ, Thomas PS, et al. Does the use of inhaled corticosteroids in asthma benefit lung function in the long-term? A systematic review and meta-analysis. *Eur Respir Rev*. 2021; 30(159): 200185. doi: 10.1183/16000617.0185-2020.
- Hoshino M, Ohtawa J. Effects of adding omalizumab, an anti-immunoglobulin E antibody, on airway wall thickening in asthma. *Respiration*. 2012; 83(6): 520-528. doi: 10.1159/000334701.
- Flood-Page P, Menzies-Gow A, Phipps S, Ying S, Wangoo A, Ludwig MS, et al. Anti-IL-5 treatment reduces deposition of ECM proteins in the bronchial subepithelial basement membrane of mild atopic asthmatics. *J Clin Invest*. 2003; 112(7): 1029-1036. doi: 10.1172/JCI17974.