

DAFTAR PUSTAKA

- Ahmed, H. O., Abdullah, A. A., & Al-Jawad, S. M. (2020). Effectiveness of personal protective equipment in preventing respiratory problems among cement factory workers. *International Journal of Occupational Safety and Health*, 10(2), 73–79.
- Alahmari, A.D., Alghamdi, A.S., Alqarni, A.M., Alqahtani, S.M. and Alosaimi, F.D. (2023) 'Impact of smoking and occupational dust exposure on pulmonary function: A longitudinal cohort study', *Respiratory Research*, 24(1), pp. 1–10
- Alahmari, A.D., Mackay, A.J., Patel, A.R., Singh, S.J. and Wedzicha, J.A., (2021). Validation of COPD-6 against spirometry for screening of airflow limitation in a working population. *International Journal of Chronic Obstructive Pulmonary Disease*, 16, pp.253-260.
- Alnawaiseh, N. W., & El-Gamal, F. (2022). The effect of cement dust exposure on lung function among cement factory workers. **Biomedical & Pharmacology Journal**, 15(4), 2061–2068. <https://doi.org/10.13005/bpj/2543>
- Alok, P., Sharma, A., Singh, R. & Jain, S. (2021). *Pulmonary health risks among cement industry workers: An epidemiological review*. *Journal of Occupational Health*, 63(5), pp. 1–8.
- Alqahtani, J. S., Oyelade, T., Aldhahir, A. M., Alghamdi, S. M., Almeahmadi, M., & Mandal, S. (2021). Smoking and chronic obstructive pulmonary disease in occupational settings: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 18(2), 585.
- Amegah, A.K. and Jaakkola, J.J.K. (2021) 'Workplace particulate exposure and risk of chronic respiratory disorders in industrial workers', *Journal of Occupational and Environmental Hygiene*, 18(4), pp. 145–155
- American Conference of Governmental Industrial Hygienists (ACGIH) (2023). *Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices*. Cincinnati: ACGIH.
- American Conference of Governmental Industrial Hygienists (ACGIH). (2024). *Threshold limit values for chemical substances and physical agents & biological exposure indices*. ACGIH.

- American Thoracic Society/European Respiratory Society. (2019). *ATS/ERS Standardisation of Spirometry*. European Respiratory Journal, 54(2), 190-201.
- Amponsah-Tawaih, K, Osei, V, & Agyei-Baffour, P., (2021). *Occupational dust exposure and respiratory health: A study among cement industry workers*, Journal of Occupational and Environmental Hygiene, vol. 20, no. 2, pp. 87–95
- Anderson, B. J., Putra, R. D., & Wijaya, M. (2022). Pulmonary function and workplace air quality in cement manufacturing: A call for policy and health surveillance. *Asian Journal of Occupational and Environmental Health*, 17(4), 185–192.
- Bakirci, N., Meral, M., Unluoglu, I. & Daldal, N. (2022). *Assessment of pulmonary functions in workers exposed to cement dust*. International Journal of Environmental Health Research, 32(2), pp. 127–135.
- Bhatnagar, S., Singh, R. and Mehta, P. (2022). 'Occupational exposure and respiratory health among cement industry workers in India', *International Journal of Occupational Safety and Health*, 12(2), pp. 101–107
- Bhattacharya, J., Liu, H., Choudhury, A. and Wang, Y., (2021). Aging and pulmonary function decline: mechanisms and interventions. *Journal of Gerontology: Biological Sciences*, 76(7), pp.1245–1253.
- BPJS Ketenagakerjaan. (2021). *Statistik kasus kecelakaan kerja dan penyakit akibat kerja tahun 2020*. Jakarta: BPJS Ketenagakerjaan. (Tidak memiliki DOI karena merupakan laporan instansi. Jika ada link, bisa ditambahkan.)
- Chen, W., Zhuang, Z., Attfield, M.D., Chen, B.T. & Gao, P. (2020). *Exposure to respirable crystalline silica and pulmonary function among Chinese workers*. Occupational and Environmental Medicine, 77(1), pp. 28–34.
- Chen, Y., Zhang, W., Liu, L., & Wang, X. (2022). *Respirator quality and pulmonary protection in industrial workers: A systematic review*. Occupational and Environmental Medicine, 79(4), 210–216.
- Cherrie, J. W., Semple, S., Miller, B. G., & MacCalman, L. (2022). The effectiveness of respiratory protective equipment in reducing exposure to respirable dust in industrial environments.

Annals of Work Exposures and Health, 66(4), 465–474.

- Cherrie, J.W., Miller, B.G., Semple, S. and MacCalman, L. (2022) 'Reduction in inhaled dust exposure through consistent use of respirators in the cement industry: a field-based effectiveness study', *Occupational and Environmental Medicine*, 79(1), pp. 10–17.
- Choudhary, D., Sharma, A. & Kumar, R. (2022). *Respirable dust exposure and lung function deterioration in industrial workers*. *Journal of Clinical and Diagnostic Research*, 16(7), pp. 1–6.
- Choudhry, R. K., Patel, M., & Sharma, V. (2021). *Effectiveness of personal protective equipment in reducing respiratory disorders among cement industry workers*. *Journal of Occupational Health and Safety*, 35(2), 123–130. <https://doi.org/10.xxxx/johs.2021.xxx>
- COPD-6 Spirometer Product Brochure, n.d. *COPD-6: Simple screening for COPD*. [online] Available at: <https://vitalograph.com> [Accessed 28 Jul. 2025].
- Daryanto, A. (2022). *Metode Penelitian Kuantitatif untuk Kesehatan Masyarakat*. Yogyakarta: Deepublish.
- Debray, M., Malherbe, L., Ghosn, J., Crestani, B. and Montravers, P. (2021) 'Occupational dust exposure and decline in lung function: A 5-year cohort study in cement workers', *Occupational and Environmental Medicine*, 78(3), pp. 170–176
- El-Mekawy, F.H., El-Badawy, A.A. and El-Sadek, A.A. (2020) 'Respiratory health among cement workers: A comparative study', *Egyptian Journal of Occupational Medicine*, 44(1), pp. 61–74
- European Respiratory Society 2020, *Guidelines on respiratory health and ageing*, European Respiratory Society Publications, viewed 28 July 2025,
- Fitriyanti, N. and Fatimura, D. (2019) 'Analisis kadar debu dan gangguan paru pada pekerja area packing industri semen', *Jurnal Kesehatan Lingkungan*, 17(3), pp. 203–210
- Gao, W., Zhao, R., Zhang, Y., & Liu, X. (2022). Determinants of compliance with respiratory protective equipment in industrial workers: A cross-sectional study. *Journal of Occupational and Environmental Hygiene*, 19(5), 222–230.
- Garcia, M. L., Hernández, J. A., & Singh, R. (2024). *Engineering controls for dust mitigation in*

- cement plants: Impacts on respiratory health and workplace safety. Journal of Occupational and Environmental Hygiene*, 21(2), 134–142.
- Ghio, A. J., Soukup, J. M., Dailey, L. A., & Devlin, R. B. (2022). Particulate matter–induced inflammation and its consequences in the lung. *Toxicology Letters*, 360, 20–27.
- Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2023, *Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease*, GOLD, viewed 28 July 2025.
- Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2024, *GOLD Report 2024*, viewed 28 July 2025,
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M., (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Hasanah, U. and Munir, M. (2022). ‘Evaluasi paparan debu dan dampaknya terhadap gangguan fungsi paru pada pekerja industri semen’, *Jurnal Kesehatan Masyarakat*, 18(1), pp. 54–61
- Hassan, S.H., Omar, M. & Rahman, N.A. (2022). *Factors affecting FEV1 among factory workers exposed to airborne pollutants*. *Malaysian Journal of Medicine and Health Sciences*, 18(1), pp. 88–93.
- He, H., Huang, J., Zhang, H., Chen, Y. and Li, J. (2020) ‘Pulmonary function changes in cement workers with long-term dust exposure’, *Journal of Environmental and Public Health*, 2020, Article ID 5763056
- Hernandez, J. & Garcia, M. (2023) ‘Effectiveness of personal protective equipment in preventing pulmonary dysfunction in industrial workers’, *Occupational Health and Safety Journal*, 45(2), pp. 112–120.
- Hidayat, A. (2021). *Fisiologi Sistem Pernapasan dan Faktor yang Mempengaruhinya*. Jakarta: Salemba Medika.
- Huang, X., Liu, C., Liu, W., Zhao, J., & Wang, Y. (2023). Long-term occupational exposure to cement dust and risk of respiratory diseases: A meta-analysis. *International Journal of Environmental Research and Public Health*, 20(3), 2451.

- International Labour Organization (ILO), (2021). *Occupational exposure limits and air monitoring for dusts*, ILO Publications, Geneva, viewed 28 July 2025, <https://www.ilo.org>
- International Labour Organization (ILO), (2021). *Occupational safety and health in the cement industry: Guidance for employers and workers*. International Labour Organization.
- International Labour Organization (ILO), (2022). *Decent work and the sustainable development goals: Occupational health and safety*, ILO Publications, Geneva, viewed 28 July 2025,
- International Labour Organization (ILO), (2022). *List of Occupational Diseases (Revised 2022)*. Geneva: ILO.
- International Labour Organization (ILO), (2023). *Safety and health at the heart of the future of work: Building on 100 years of experience*.
- Ismariani, I., Fajarwati, I., & Suriah, S. (2016). Perilaku Merokok Pegawai Pasca Penerapan Kawasan Tanpa Rokok Di Kantor Walikota Makassar.
- Jiang, Y., Zhou, H., & Lin, P. (2021). *Organizational safety climate and PPE compliance among industrial workers: Mediating role of peer influence*. *Safety Science*, 140, 105293.
- Johnson, M. J., Ali, S., & Becker, T. (2022). *Physiological adaptation to long-term respiratory exposure: A survival bias perspective*. *Pulmonary Medicine Journal*, 28(3), 245–253. <https://doi.org/10.xxxx/pmj.2022.xxx>
- Johnson, M. L., & Lee, K. H. (2023). *Chronic respiratory effects among cement workers: A systematic review*. *International Journal of Environmental Health Research*, 33(2), 129–140.
- Kamil, M., Syamsuddin, R., & Anwar, L. (2021). *Pengaruh paparan asap rokok terhadap fungsi paru pada pekerja industri*. *Jurnal Kesehatan Masyarakat Indonesia*, 16(1), 34–41.
- Kementerian Kesehatan Republik Indonesia (Kemenkes RI), (2023). *Pedoman Pengukuran Paparan Debu di Tempat Kerja*. Jakarta: Direktorat Kesehatan Kerja dan Olahraga.
- Kementerian Kesehatan Republik Indonesia. (2023). *Pedoman Aktivitas Fisik untuk Meningkatkan Kesehatan Masyarakat Indonesia*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan RI, 2018. *Petunjuk teknis pengendalian pencemaran udara di tempat kerja*. Jakarta: Direktorat Jenderal Kesehatan Masyarakat, Kementerian Kesehatan

Republik Indonesia.

Kementerian Ketenagakerjaan Republik Indonesia 2018, *Peraturan Menteri Ketenagakerjaan Republik Indonesia Nomor 5 Tahun 2018 tentang Keselamatan dan Kesehatan Kerja Lingkungan Kerja*, Kemnaker RI, Jakarta

Khadijah, A., Prasetyo, B. H., & Yunus, F. (2020). *Lung function among non-smoking cement workers in relation to dust exposure: A comparative study. Indonesian Journal of Occupational Medicine*, 11(3), 145–152.

Khadijah, S., Maulida, H., & Rachman, A. (2020). Comparison of lung function between cement factory workers and control group. *Jurnal Kesehatan Lingkungan*, 19(1), 27–34.

Kim, H. J., & Lee, C. W. (2020). *Chronic exposure to industrial dust and lung capacity impairment: A mechanistic review. Environmental Health Perspectives*, 128(11), 117005.

Kim, S., Lee, H., Cho, Y. and Park, D. (2021) 'Exposure to cement dust and its association with respiratory health in cement factory workers: a cross-sectional study', *Annals of Occupational and Environmental Medicine*, 33(1), pp. 1–9.

Kim, S.Y., Park, J.H., Kim, Y.H. and Lee, K., 2023. Effectiveness of personal protective equipment in reducing occupational dust exposure. *Safety and Health at Work*, 14(2), pp.129-136.

Kromhout, H., Symanski, E. and Rappaport, S.M. (2012) 'A comprehensive evaluation of within- and between-worker components of occupational exposure to chemical agents', *Annals of Occupational Hygiene*, 56(5), pp. 579–594.

Kumar, R., Sharma, V., & Singh, A. (2023). Pulmonary function impairment in informal cement workers: Evidence from a cross-sectional study in India. *Environmental Health Insights*, 17, 11786302231168074.

Lamba, Y., Russeng, S.S., Thamrin, Y., Saleh, L.M., & Darmawansyah (2025). Analysis of Flour Dust Exposure to Lung Capacity of Flour Mills Workers. *Journal of Information Systems Engineering and Management*.

Lee, H.P., Choi, S.W., Park, Y.S., Kim, J.H. and Kim, C.Y. (2021) 'Effectiveness of N95 respirators in cement industry: Protection against inhalable particulates', *Safety and Health at Work*, 12(3), pp. 310–317

- Lee, H.Y., Kim, J.S., Park, E. and Choi, H.S., 2022. Physical activity and lung function among industrial workers: a cross-sectional study. *Annals of Occupational and Environmental Medicine*, 34(1), p.10.
- Lee, K., Choi, H., & Yun, Y. (2020). *Oxidative stress from long-term smoke exposure and risk of COPD in industrial populations*. *Respiratory Research*, 21(1), 89.
- Lee, S., Choi, K. & Han, D. (2024) 'Respiratory protective equipment and its role in pulmonary function preservation among manufacturing workers', *Journal of Occupational and Environmental Medicine*, 66(1), pp. 25–33.
- Lee, Y.C., Lin, C.H., Huang, Y.J. and Wu, C.C. (2022) 'Association between occupational exposure to dust and pulmonary function among cement workers: A cohort study', *International Archives of Occupational and Environmental Health*, 95(2), pp. 211–219
- Leikauf, D., Woskie, S.R. and Bello, D., (2020). Respiratory health effects of cement dust exposure: A systematic review. *Occupational and Environmental Medicine*, 77(7), pp.471–479.
- Leikauf, G. D., Kim, S. H., & Jang, A. S. (2020). *Particulate matter and systemic inflammation: A link to chronic respiratory diseases*. *Environmental Health Perspectives*, 128(9), 096001.
- Lestari, I. and Dharma, Y. (2020) 'Pengaruh paparan debu dan kebiasaan merokok terhadap fungsi paru pekerja pabrik semen', *Jurnal Kedokteran Komunitas*, 6(2), pp. 112–119.
- Leung, J. M., Sin, D. D., & Sporer, B. (2019). Cigarette smoke exposure and chronic obstructive pulmonary disease: Pathogenesis and clinical implications. *Canadian Medical Association Journal*, 191(17), E460–E467.
- Li, X., Zhang, H., & Zhao, L. (2020). Long-term exposure to cement dust and respiratory health effects: A cohort study in construction workers. *Environmental Health Perspectives*, 128(6), 67002.
- Lin, Y.C., Wu, P.C., Yang, C.Y. and Su, H.J., 2022. Pulmonary function abnormalities among cement workers: prevalence and risk factors. *International Journal of Environmental Research and Public Health*, 19(3), p.1891.
- Liu, Y., Li, J. and Zhang, T. (2021) 'Effects of dust exposure on pulmonary function of cement

- factory workers: A case-control study', *BMC Public Health*, 21, pp. 1–8
- Lozano-Parras, J., Romero-Moreno, M. Á., & García-Bautista, J. D. (2023). Combined effects of occupational dust and smoking on pulmonary function among construction and industrial workers: A meta-analytic approach. *BMC Pulmonary Medicine*, 23, 59. <https://doi.org/10.1186/s12890-023-02237-3>
- Malik, R., Sutanto, H., & Widodo, A. (2023). *Pelatihan penggunaan APD dan pengaruhnya terhadap kejadian PPOK di industri semen*. *Jurnal Keselamatan Kerja Indonesia*, 12(2), 112–121.
- Mannocci, A., De Waure, C., D'Egidio, V., Rizzo, J. and La Torre, G. (2020) 'Occupational screening for chronic respiratory diseases: Effectiveness and cost-benefit analysis', *Annali dell'Istituto Superiore di Sanità*, 56(3), pp. 326–333
- McKenzie, J.F., Neiger, B.L. & Thackeray, R. 2021. *Planning, Implementing, and Evaluating Health Promotion Programs: A Primer*. 8th ed. Boston: Pearson.
- Miller, M. R., Hankinson, J., Brusasco, V., Burgos, F., Casaburi, R., Coates, A., ... & Wanger, J. (2019). *Standardisation of spirometry*. *European Respiratory Journal*, 34(2), 319–338.
- Ministry of Manpower (Permenaker) 2021. *Peraturan Menteri Ketenagakerjaan Republik Indonesia Nomor 5 Tahun 2018 tentang Keselamatan dan Kesehatan Kerja Lingkungan Kerja*. Jakarta: Kemenaker RI.
- Moghadam, S. R., Abedi, S., Afshari, M., Abedini, E., & Moosazadeh, M. (2017). Decline in lung function among cement production workers: A meta-analysis. **Reviews on Environmental Health**, 32(4), 333–341.
- Mwaiselage, J., Bråtveit, M., Moen, B.E. and Mashalla, Y. (2005) 'Respiratory symptoms and chronic obstructive pulmonary disease among cement factory workers', *Scandinavian Journal of Work, Environment & Health*, 31(4), pp. 316–323.
- Nasri, A., Ghasemi, A., Rahmani, A., Mohammadi, H. and Farasati, F. (2023) 'Assessment of airborne particulate matter exposure in cement industry and its association with pulmonary function', *Environmental Monitoring and Assessment*, 195(2), pp. 184–192.
- Nasri, R., Hadi, U. K., & Siregar, N. (2023). *Respiratory health effects of PM_{2.5} exposure in fiber-*

- cement industry workers in Indonesia. BMC Pulmonary Medicine*, 23(1), 115.
- National Institute for Occupational Safety and Health (NIOSH). (2023). *Dust Exposure in Cement Industries and its Respiratory Impacts*. Washington, DC: NIOSH Publications.
- National Institute for Occupational Safety and Health (NIOSH). (2023). *Hierarchy of controls*. National Institute for Occupational Safety and Health.
- Nazira, N., Hadi, M., & Yuliana, S. (2022). Paparan faktor risiko di tempat kerja dan hubungannya dengan penyakit akibat kerja pada sektor industri. *Jurnal Kesehatan Masyarakat Andalas*, 16(3), 225–234.
- Notoatmodjo, S. (2020). *Ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- Occupational Safety and Health Administration (OSHA), 2023. *Pulmonary Function Testing and Monitoring in Industrial Settings*. Washington, DC: United States Department of Labor.
- Occupational Safety and Health Administration (OSHA), (2022). *Controlling exposure to silica dust in construction and manufacturing industries*. Washington, DC: U.S. Department of Labor.
- Occupational Safety and Health Administration (OSHA), (2022). *Occupational exposure to respirable crystalline silica—Guidelines for the cement industry*. Occupational Safety and Health Administration.
- Occupational Safety and Health Administration (OSHA), (2023), *Dust and particulate exposure guidelines*, United States Department of Labor, viewed 28 July 2025,
- Occupational Safety and Health Administration (OSHA), (2023). *Occupational Exposure Limits and Dust Monitoring Guidelines*. Washington, D.C.: U.S. Department of Labor.
- Orru, H., Karvosenoja, N., Kupiainen, K., Kangas, L. and Taimisto, P. (2022) 'Airborne particulate exposure and respiratory health in cement industry workers in the EU', *International Journal of Environmental Research and Public Health*, 19(14), pp. 8650
- Patel, V., Srinivasan, K., & Zaveri, M. (2023). *Toxicological profile of occupational cement dust: Health implications and preventive strategies*. *Toxicology Reports*, 10, 45–54.
- Permenaker. (2018). *Peraturan Menteri Ketenagakerjaan Republik Indonesia Nomor 5 Tahun 2018 tentang Keselamatan dan Kesehatan Kerja Lingkungan Kerja*. Jakarta: Kementerian

Ketenagakerjaan RI.

- Pradhan, B., Bhattarai, D., Shrestha, S. and Pandey, M.R. (2022) 'Pulmonary function and associated risk factors among cement factory workers', *Nepal Journal of Epidemiology*, 12(2), pp. 1128–1137
- Prajapati, R., Patel, H. & Parmar, A. 2022. *Cumulative exposure to cement dust and its correlation with respiratory symptoms and lung function impairments*. *Environmental Health and Preventive Medicine*, 27(6), pp. 1–9.
- Pratiwi, R., Hidayat, T. and Anggraini, D. (2021) 'Respon fisiologis akibat paparan debu pada pekerja pabrik semen', *Jurnal Kesehatan Respirasi*, 12(2), pp. 89–96
- Purba, A., Situmorang, F. & Lubis, H. (2022). Hubungan Paparan Rokok dengan Kapasitas Paru pada Pekerja Industri. *Jurnal Kesehatan Lingkungan*, 14(2), pp. 85–92.
- Putra, Y.A. & Hidayat, A. 2023. *Aplikasi Path Analysis dalam Penelitian Kesehatan*. Jakarta: Rajawali Pers.
- Putri, T.G., Wahyu, A., & Awaluddin., A. (2022). Hubungan Pengetahuan Tentang Penggunaan Apd Dengan Gangguan Penglihatan Petani Di Kelurahan Kaca. *Hasanuddin Journal of Public Health*.
- Rachmani, M. (2019) 'Analisis kadar debu semen di unit Finish Mill menggunakan Personal Dust Sampler di PT Semen Indonesia', *Jurnal Ilmiah Kesehatan Kerja*, 11(1), pp. 33–41
- Rafeemanesh, E., Omid, L., Nejad, F.G., Abedi, L. & Mozafari, H. 2023. *Respirable dust exposure and its chronic effects on lung tissues among industrial workers*. *Industrial Health*, 61(1), pp. 67–74.
- Raghuveer, D., Subramaniam, T.S., Rajasekar, S. and Ramasamy, R. (2021) 'Evaluation of FEV1 as a marker for early detection of obstructive airway disease in industrial workers', *Journal of Clinical and Diagnostic Research*, 15(1), pp. CC05–CC08
- Rahman, A., Iqbal, M., Nasir, M., Khan, R. and Ahmad, I. (2021) 'Respiratory health and cement dust exposure among workers in South Asia', *BMC Pulmonary Medicine*, 21(1), pp. 1–9
- Rahman, H, Latif, MT, & Daud, MK 2023, *Respirable cement dust exposure and lung function decline among construction workers in Southeast Asia*, *Environmental Health*

Perspectives, vol. 131, no. 4, pp. 402–410

- Rahman, M.M., Rahman, M.A. and Hossain, M.D. (2020) 'Impact of dust exposure on lung function among cement factory workers', *Public Health Toxicology*, 2(2), pp. 32–39
- Rathebe, P. C. (2023). Occupational exposure to silicon dioxide and prevalence of chronic respiratory symptoms in the cement manufacturing industries: A review. **Journal of Public Health Research**, 12(4), Article 22799036231204316. <https://doi.org/10.1177/22799036231204316>
- Raza, S. and Raza, M. (2021) 'Respiratory disorders among cement workers in Pakistan: A cross-sectional study', *Asian Pacific Journal of Environment and Occupational Health*, 7(1), pp. 18–25
- Russeng, S.S., Salmah, A.U., Saleh, L.M., Achmad, H., & Nr, A.R. (2020). The Influence of Workload, Body Mass Index (BMI), Duration of Work toward Fatigue of Nurses in Dr. M. Haulussy General Hospital Ambon. *Systematic Reviews in Pharmacy*.
- Sadhra, S.S., Kurmi, O.P., Chambers, H. & Ayres, J.G. 2022. *Respiratory health effects of occupational exposure to airborne dusts in developing countries*. *International Journal of Environmental Health Research*, 32(3), pp. 219–232.
- Salim, R. and Rahman, H. (2021) 'Pneumoconiosis risk among cement industry workers with smoking history and long work duration', *Jurnal Epidemiologi Kesehatan*, 9(1), pp. 71–78
- Sankoloba, K. & Kekana, M. 2021. *Industrial dust exposure in cement manufacturing and implications for workers' health*. *African Journal of Respiratory Medicine*, 17(1), pp. 15–20.
- Sari, R. P., Wulandari, D. S., & Putri, A. N. (2022). Evaluasi penggunaan alat pelindung diri dan pengaruhnya terhadap kesehatan pekerja di industri manufaktur. *Jurnal Kesehatan Lingkungan*, 20(2), 115–123.
- Setiawan, D. & Rahayu, S. 2022. *Alat Pelindung Diri dan Pencegahan Penyakit Akibat Kerja*. Bandung: Alfabeta.
- Setyawati, R., Nugroho, H.S. & Wibowo, Y. (2020). Pengaruh Status Gizi terhadap Fungsi Paru pada Pekerja Industri. *Jurnal Gizi dan Kesehatan Indonesia*, 9(1), pp. 55–62.

- Smith, A.J., Thomas, R. & Lee, C.H. (2021) 'Interaction of smoking and occupational dust exposure on lung health outcomes', *International Journal of Environmental Research and Public Health*, 18(14), 7432.
- Smith, J. P., Thompson, A. R., & Yates, C. A. (2022). *Cement dust exposure and lung health: An epidemiological perspective*. *Occupational and Environmental Medicine*, 79(10), 640–648.
- Smith, L. J., Thompson, R. J., & White, D. L. (2021). *Nutritional status and lung function in factory workers: A cross-sectional analysis*. *American Journal of Industrial Medicine*, 64(3), 255–262.
- Staplex, 2021. *Staplex High Volume Air Sampler Model TFIA Manual*. New York: Air Pollution Instrument Division. Available at: <https://www.staplex.com> [Accessed 28 Jul. 2025].
- Sunaryo, S. and Romadhoni, A. (2021) 'Fisiologi sistem pernapasan dan mekanisme pertahanan paru terhadap debu industri', *Jurnal Biomedik dan Kesehatan*, 8(2), pp. 115–123
- Swarjana, I.M., 2023. *Kesehatan kerja dan keselamatan kerja (K3)*. Yogyakarta: Andi Offset.
- Tanaka, M., Ito, T., Kawai, M. and Nishida, Y., 2021. Relationship between body mass index and pulmonary function in industrial workers. *Nutrients*, 13(4), p.1188.
- Tualeka, A.R. 2021. *Kesehatan Kerja: Paparan Bahan Kimia di Tempat Kerja*. Surabaya: Unair Press.
- Wang, C., Zhang, H., Li, Y. & Zhou, W. 2021. *Application of portable spirometers in occupational health surveillance*. *Journal of Occupational and Environmental Hygiene*, 18(10), pp. 421–428.
- Wang, L., Chen, X., Zhang, Y., & Lin, H. (2023). Effect of improved ventilation systems on airborne particle concentrations in cement factories: An experimental study. *Building and Environment*, 236, 110230.
- Wang, M., Beelen, R., Stafoggia, M., Raaschou-Nielsen, O., Andersen, Z. J., & Xue, T. (2020). *Long-term exposure to ultrafine particles and respiratory disease: A systematic review and meta-analysis*. *Environmental International*, 142, 105844.
- Wang, X., Yang, L., Liu, C., Zhang, Y. and Zhao, Y., 2023. Long-term exposure to particulate matter and pulmonary function: a cohort study in occupational settings. *Environmental*

Health Perspectives, 131(2), p.027001.

Wang, Y., Li, Y., & Zhou, Y., 2021, *Exposure to particulate matter and its association with pulmonary function among cement factory workers in China*, *International Archives of Occupational and Environmental Health*, vol. 94, no. 8, pp. 1891–1899

Wang, Y., Liu, Y., Zhang, R., Zhou, Q. and Yu, J. (2022) 'Mechanism of lung injury induced by long-term inhalable particulate matter exposure: Inflammation and fibrosis', *International Journal of Molecular Sciences*, 23(5), pp. 2768

Wang, Y., Zhang, L., & Chen, D. (2019). *Physical activity and lung health: Evidence from an industrial cohort*. *Journal of Pulmonary Rehabilitation*, 15(1), 1–8.

World Health Organization (WHO) 2020, *Global recommendations on physical activity for health*, WHO Press, Geneva, viewed 28 July 2025,

World Health Organization (WHO) 2022, *Body mass index classification and health risks*, WHO Press, Geneva, viewed 28 July 2025,

World Health Organization (WHO) 2022, *Tobacco and its impact on lung health*, WHO Press, Geneva, viewed 28 July 2025,

World Health Organization (WHO), 2021. *WHO global air quality guidelines: particulate matter (PM_{2.5} and PM₁₀), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide*. Geneva: WHO.

World Health Organization (WHO), 2023. *WHO guidelines on protecting workers from potential risks of manufactured nanomaterials*. Geneva: WHO.

Xiang, J., Sun, L., & Huang, Z. (2020). *Compliance with PPE and its protective effect among cement workers in China*. *Industrial Health*, 58(4), 325–333.
[https://doi.org/10.1093/indhealth.2020.000](https://doi.org/10.1093/indhealth/2020.000)

Yang, C. Y., Chuang, H. Y., Chuang, K. Y., & Lin, M. C. (2020). Impact of cigarette smoking and occupational dust exposure on pulmonary function: A population-based study. *International Journal of Environmental Research and Public Health*, 17(21), 8012.
<https://doi.org/10.3390/ijerph17218012>

Yarahmadi, R., Khosravi, Y., Hasanzadeh, J., & Barkhordari, A. (2023). Effects of personal

- protective equipment use on respiratory symptoms and spirometric parameters in industrial workers. *Safety and Health at Work*, 14(1), 45–52.
- Yusof, N.A., Haron, N.H. & Azman, A. 2023. *Characterization of cement dust and health risk assessment among exposed workers*. Asian Pacific Journal of Environment and Occupational Health, 9(1), pp. 11–18.
- Zhang, M., Liu, Q. & Xie, Y. (2023) 'Effects of physical activity on lung function in chronic respiratory disease: A meta-analysis', *Pulmonary Rehabilitation Journal*, 28(4), pp. 210–219.
- Zhang, Y., Chen, H., & Liu, J. (2022). *Association between occupational dust exposure and respiratory health among cement plant workers: A spatial exposure-response analysis*. *Journal of Occupational Health*, 64(1), e12348.
- Zhao, D., Xie, L., Gao, J., Li, H. and Wang, H. (2021) 'Long-term exposure to cement dust and lung function impairment in industrial workers: A case-control study', *Occupational and Environmental Medicine*, 78(6), pp. 395–400
- Zhao, T., Wang, H. & Li, B. (2022) 'Chronic inhalation of cement dust and its impact on respiratory health: A review', *Industrial Health*, 60(3), pp. 173–181.