

National Institute of Health, Pakistan

Department-wise Publication List 2020–2026

Peer-reviewed publications grouped by current NIH Institute/Center (post-2021 re-organization), then by year

Publications by department and year

Department (current entity)	2020	2021	2022	2023	2024	2025	2026	Total
National Health Laboratory	25	56	38	35	33	47	17	251
Center for Disease Control (CDC)	7	18	15	5	3	5	6	59
Drug Control & Traditional Medicines	7	8	8	3	3	4	6	39
Health Research Institute (HRI)	–	2	6	9	5	3	–	25
Vaccine & Biological Products Center	–	–	5	2	1	4	1	13
Allergy Center	–	–	2	–	–	3	2	7
Institute of Nutrition & Health	–	–	–	–	1	1	–	2
Total	39	84	74	54	46	67	32	396

Old division → current entity (2021 re-organization)

Old / legacy division(s)	Current Institute / Center
Public Health Laboratories Division – Surveillance wing; Field Epidemiology & Disease Surveillance; FELTP	Center for Disease Control (CDC)
Public Health Laboratories Division – Testing wing; Department of Virology; Department of Microbiology	National Health Laboratory
Biological Production Division (BPD); Sera Processing; Animal House; Veterinary Farms	Vaccine & Biological Products Center
Pakistan Health Research Council (PHRC)	Health Research Institute (HRI)

Nutrition Division (Directorate of Nutrition Survey)	Institute of Nutrition & Health
Drugs Control Division	Drug Control & Traditional Medicines
Allergy Unit	Allergy Center

National Health Laboratory (251 publications)

2020 (25)

1. Aamir UB, **Salman M**, Nisar N, Badar N, Alam MM, Ansari J, Zaidi SSZ. Molecular characterization of circulating respiratory syncytial virus genotypes in Pakistani children, 2010–2013. *J Infect Public Health*. 2020;13(3):438–445. ° [doi:10.1016/j.jiph.2019.05.014](https://doi.org/10.1016/j.jiph.2019.05.014) · [PMID 31229412](https://pubmed.ncbi.nlm.nih.gov/31229412/)
2. Akhtar R, Mahmood N, Alam MM, Naeem M, Zaidi SSZ, Sharif S, Khattak Z, Arshad Y, Khurshid A, Mujtaba G, Rehman L, Angez M, Shaukat S, Mushtaq N, Umair M, Ikram A, **Salman M**. Genetic epidemiology reveals 3 chronic reservoir areas with recurrent population mobility challenging poliovirus eradication in Pakistan. *Clin Infect Dis*. 2020;71(7):e58–e67. [doi:10.1093/cid/ciz1037](https://doi.org/10.1093/cid/ciz1037) · [PMID 31665247](https://pubmed.ncbi.nlm.nih.gov/31665247/)
3. Ali A, Ali Q, Ali R, Mohsin M. Draft genome sequence of an extended-spectrum β -lactamase-producing *Escherichia coli* ST58 isolate from cattle in Pakistan. *J Glob Antimicrob Resist*. 2020;21:303–305. [doi:10.1016/j.jgar.2020.04.020](https://doi.org/10.1016/j.jgar.2020.04.020) · [PMID 32339848](https://pubmed.ncbi.nlm.nih.gov/32339848/)
4. Amir A, Ikram A, **Salman M**. Emergence of novel mutations in extensively drug-resistant *Salmonella enterica* serovar Typhi from Pakistan. *Antimicrob Agents Chemother*. 2020;64(8). ° [doi:10.1128/AAC.00696-20](https://doi.org/10.1128/AAC.00696-20) · [PMID 32457111](https://pubmed.ncbi.nlm.nih.gov/32457111/)
5. Badar N, **Salman M**, Aamir UB, Ansari J, Ranjha MA, Khan MA, Ikram A, Nisar N, Mushtaq N, Mirza HA. Evolutionary analysis of influenza A(H1N1)pdm09 during the pandemic and post-pandemic period in Pakistan. *J Infect Public Health*. 2020;13(3):407–413. [doi:10.1016/j.jiph.2019.03.008](https://doi.org/10.1016/j.jiph.2019.03.008) · [PMID 31000492](https://pubmed.ncbi.nlm.nih.gov/31000492/)
6. Badar N, **Salman M**, Ansari J, Aamir U, Alam MM, Arshad Y, Mushtaq N, Ikram A, Qazi J. Emergence of Chikungunya Virus, Pakistan, 2016–2017. *Emerg Infect Dis*. 2020;26(2):307–310. ° [doi:10.3201/eid2602.171636](https://doi.org/10.3201/eid2602.171636) · [PMID 31967539](https://pubmed.ncbi.nlm.nih.gov/31967539/)
7. Danish L, Siddiq R, Jahan S, Taneez M, Khan M, Sandhu M. Comparative study of protective effect of cimetidine and verapamil on paracetamol-induced hepatotoxicity in mice. *Int J Hepatol*. 2020;2020:9185361. ° [doi:10.1155/2020/9185361](https://doi.org/10.1155/2020/9185361) · [PMID 32099681](https://pubmed.ncbi.nlm.nih.gov/32099681/)
8. Haq W, Raza SH, Malik MW. Missed takes towards a pandemic of COVID-19? A systematic literature review of Coronavirus related diseases in Pakistan. *J Infect Dev Ctries*. 2020;14(7):726–731. ° [doi:10.3855/jidc.12771](https://doi.org/10.3855/jidc.12771) · [PMID 32794461](https://pubmed.ncbi.nlm.nih.gov/32794461/)
9. Hussain Gardezi SA, Ikram A. Application of biosafety principles in laboratory analysis of clinical samples from patients with COVID-19. *J Pak Med Assoc*. 2020;70(Suppl 3)(5):S48–S51. ° [doi:10.5455/JPMA.10](https://doi.org/10.5455/JPMA.10) · [PMID 32515375](https://pubmed.ncbi.nlm.nih.gov/32515375/)
10. Imtiaz A, Ikram A, Zaman G, Satti L, Sana F. Evaluation of direct drug susceptibility testing of blood culture isolates comparing it with conventional disk diffusion testing. *J Pak Med Assoc*. 2020;70(1):105–109. ° [doi:10.5455/JPMA.10801](https://doi.org/10.5455/JPMA.10801) · [PMID 31954033](https://pubmed.ncbi.nlm.nih.gov/31954033/)
11. Khan MA, Ikram A, Savul S, Lalani FK, Khan MA, Sarfraz M. Decontamination and reuse of N95 masks: A narrative review. *Can J Infect Dis Med Microbiol*. 2020;2020:8869472. ° [doi:10.1155/2020/8869472](https://doi.org/10.1155/2020/8869472) · [PMID 33299504](https://pubmed.ncbi.nlm.nih.gov/33299504/)
12. Khan MS, Dar O, Erondur NA, Rahman-Shepherd A, Hollmann L, Ihekweazu C, Ukandu O, Agogo E, Ikram A, Rathore TR, Okereke E, Squires N. Using critical information to strengthen pandemic preparedness: the role of national public health agencies. *BMJ Glob Health*. 2020;5(9). ° [doi:10.1136/bmjgh-2020-002830](https://doi.org/10.1136/bmjgh-2020-002830) · [PMID 32994228](https://pubmed.ncbi.nlm.nih.gov/32994228/)

13. Mahmood R, Khurshid A, Yousaf MS, **Aalam M, Salman M**, Ikram M. Effect of vitamin A as a neoadjuvant agent in chemotherapy and photodynamic therapy of Rhabdomyosarcoma cells. Photodiagnosis Photodyn Ther. 2020;32:102088. [doi:10.1016/j.pdpdt.2020.102088](https://doi.org/10.1016/j.pdpdt.2020.102088) · [PMID 33157333](https://pubmed.ncbi.nlm.nih.gov/33157333/)
14. Mansoor E, Azam N, Niazi SK, Sheikh N, **Baig MA**, Azim MT, et al. Rising HIV seroconversion rates & associated risks among employees of organization 'X': A case control study, Pakistan, 2017. Pak J Med Sci. 2020;36(6):1349–1354. ° [doi:10.12669/pjms.36.6.1735](https://doi.org/10.12669/pjms.36.6.1735) · [PMID 32968407](https://pubmed.ncbi.nlm.nih.gov/32968407/)
15. **Nisar N, Aamir UB, Badar N, Mahmood MR**, Yaqoob A, Tripathy JP, Laxmeshwar C, Tenzin K, **Zaidi SSZ, Salman M, Ikram A**. Epidemiology of Influenza among patients with influenza-like illness and severe acute respiratory illness in Pakistan: A 10-year surveillance study 2008-17. J Med Virol. 2020;92(12):3028–3037. [doi:10.1002/jmv.25913](https://doi.org/10.1002/jmv.25913) · [PMID 32314812](https://pubmed.ncbi.nlm.nih.gov/32314812/)
16. **Rana MS, Alam MM, Salman M, Ikram A**. Prevention and control of escalating dengue epidemics in Pakistan. J Med Virol. 2020;92(8):927–928. ° [doi:10.1002/jmv.25635](https://doi.org/10.1002/jmv.25635) · [PMID 31792995](https://pubmed.ncbi.nlm.nih.gov/31792995/)
17. Rasheed F, Saeed M, Alikhan NF, Baker D, Khurshid M, Ainsworth EV, Turner AK, Imran AA, Rasool MH, Saqalein M, Nisar MA, Fayyaz Ur Rehman M, Wain J, Yasir M, Langridge GC, **Ikram A**. Emergence of resistance to fluoroquinolones and third-generation cephalosporins in Salmonella Typhi in Lahore, Pakistan. Microorganisms. 2020;8(9). ° † [doi:10.3390/microorganisms8091336](https://doi.org/10.3390/microorganisms8091336) · [PMID 32883020](https://pubmed.ncbi.nlm.nih.gov/32883020/)
18. Saddique A, **Rana MS, Alam MM, Ikram A, Usman M, Salman M**, Faryal R, **Massab U**, Bokhari H, **Mian MS, Israr A**, Safiullah. Emergence of co-infection of COVID-19 and dengue: A serious public health threat. J Infect. 2020;81(6):e16-e18. [doi:10.1016/j.jinf.2020.08.009](https://doi.org/10.1016/j.jinf.2020.08.009) · [PMID 32800797](https://pubmed.ncbi.nlm.nih.gov/32800797/)
19. Saeed M, Rasool MH, Rasheed F, Saqalein M, Nisar MA, Imran AA, Tariq S, **Amir A, Ikram A**, Khurshid M. Extended-spectrum beta-lactamases producing extensively drug-resistant Salmonella Typhi in Punjab, Pakistan. J Infect Dev Ctries. 2020;14(2):169–176. ° [doi:10.3855/jidc.12049](https://doi.org/10.3855/jidc.12049) · [PMID 32146451](https://pubmed.ncbi.nlm.nih.gov/32146451/)
20. Sarwar M, Gardezi SAH, Zaman G, **Ikram A**, Satti L, Khadim MT. Evaluation of galactomannan and beta-d-glucan assays for the diagnosis of invasive aspergillosis in clinically suspected cases. J Pak Med Assoc. 2020;70(3):442–446. ° [doi:10.5455/JPMA.1476](https://doi.org/10.5455/JPMA.1476) · [PMID 32207422](https://pubmed.ncbi.nlm.nih.gov/32207422/)
21. Shaw AG, Majumdar M, Troman C, O'Toole Á, Benny B, Abraham D, O'Toole Á, Praharaj I, Kang G, **Sharif S, Alam MM, Shaukat S, Angez M, Khurshid A, Mahmood N, Arshad Y, Rehman L, Mujtaba G, Akthar R, Salman M**, Klapsa D, Hajarha Y, Asghar H, Bandyopadhyay A, Rambaut A, Martin J, Grassly N. Rapid and sensitive direct detection and identification of poliovirus from stool and environmental surveillance samples by use of Nanopore sequencing. J Clin Microbiol. 2020;58(9). ° [doi:10.1128/JCM.00920-20](https://doi.org/10.1128/JCM.00920-20) · [PMID 32611795](https://pubmed.ncbi.nlm.nih.gov/32611795/)
22. Tagg KA, **Amir A, Ikram A**, Chen JC, Kim JY, Meservey E, Joung YJ, Halpin JL, Batra D, Leeper MM, Katz LS, **Saeed A**, Freeman M, Watkins LF, **Salman M**, Folster JP. Sequencing and characterization of five extensively drug-resistant Salmonella enterica serotype Typhi isolates implicated in human infections from Punjab, Pakistan. Microbiol Resour Announc. 2020;9(13). ° [doi:10.1128/MRA.01466-19](https://doi.org/10.1128/MRA.01466-19) · [PMID 32217683](https://pubmed.ncbi.nlm.nih.gov/32217683/)
23. **Tamim S**, Heylen E, Zeller M, Ranst MV, Matthijnsens J, **Salman M**, Aamir UB, **Sharif S, Ikram A**, Hasan F. Phylogenetic analysis of open reading frame of 11 gene segments of novel human-bovine reassortant RVA G6P[1] strain in Pakistan. J Med Virol. 2020;92(12):3179–3186. [doi:10.1002/jmv.25625](https://doi.org/10.1002/jmv.25625) · [PMID 31696948](https://pubmed.ncbi.nlm.nih.gov/31696948/)
24. **Umair M, Ikram A, Salman M, Rana MS, Ashraf A, Ali Q, Alam MM**. Serotype diversity of dengue virus reveals the predominance of type 2 in Pakistan during 2019. J Med Virol. 2020;92(12):2900–2902. [doi:10.1002/jmv.26324](https://doi.org/10.1002/jmv.26324) · [PMID 32691898](https://pubmed.ncbi.nlm.nih.gov/32691898/)

25. Umair M, Khurshid A, Alam MM, Akhtar R, Salman M, Ikram A. Genetic diversity and phylogenetic analysis of Crimean-Congo Hemorrhagic Fever viruses circulating in Pakistan during 2019. *PLoS Negl Trop Dis.* 2020;14(6):e0008238. [doi:10.1371/journal.pntd.0008238](https://doi.org/10.1371/journal.pntd.0008238) · [PMID 32598383](https://pubmed.ncbi.nlm.nih.gov/32598383/)

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26. Adil S, Paracha RZ, Tariq S, Nisar M, Ijaz S, Siddiqua A, Hussain Z, Amir A. A computational systems analyses to identify biomarkers and mechanistic link in psoriasis and cutaneous squamous cell carcinoma. *Front Immunol.* 2021;12:662528. ° [doi:10.3389/fimmu.2021.662528](https://doi.org/10.3389/fimmu.2021.662528) · [PMID 34267747](https://pubmed.ncbi.nlm.nih.gov/34267747/)

27. Ahmad G, Ahmed F, Rizwan MS, Muhammad J, Fatima SH, Ikram A, et al. Evaluating data-driven methods for short-term forecasts of cumulative SARS-CoV2 cases. *PLoS One.* 2021;16(5):e0252147. ° [doi:10.1371/journal.pone.0252147](https://doi.org/10.1371/journal.pone.0252147) · [PMID 34019581](https://pubmed.ncbi.nlm.nih.gov/34019581/)

28. Ahmed A, Sana F, Ikram A, Yousaf S, Khan A. Reinfection or relapse of COVID-19 in health care workers; case series of 2 patients from Pakistan. *New Microbes New Infect.* 2021;42:100896. ° [doi:10.1016/j.nmni.2021.100896](https://doi.org/10.1016/j.nmni.2021.100896) · [PMID 33996101](https://pubmed.ncbi.nlm.nih.gov/33996101/)

29. Akhtar H, Khalid S, Rahman FU, Ali S, Afridi M, Khader YS, Hassan F, Akhtar N, Khan MM, Ikram A. Delayed admissions and efficacy of steroid use in patients with critical and severe COVID-19: an apprehensive approach. *J Public Health (Oxf).* 2021;43(Suppl 3):iii43-iii48. ° [doi:10.1093/pubmed/fdab239](https://doi.org/10.1093/pubmed/fdab239) · [PMID 34580731](https://pubmed.ncbi.nlm.nih.gov/34580731/)

30. Akhtar H, Khalid S, Rahman FU, Umar M, Ali S, Afridi M, Hassan F, Saleh Khader Y, Akhtar N, Khan MM, Ikram A. Presenting characteristics, comorbidities, and outcomes among patients with COVID-19 hospitalized in Pakistan: Retrospective observational study. *JMIR Public Health Surveill.* 2021;7(12):e32203. [doi:10.2196/32203](https://doi.org/10.2196/32203) · [PMID 34710053](https://pubmed.ncbi.nlm.nih.gov/34710053/)

31. Al Awaidy ST, Asghar RJ, Omais S, Salman M, Zaraket H. Implications of the emerging SARS-CoV-2 variant: Caution is the key. *Oman Med J.* 2021;36(2):e235. [doi:10.5001/omj.2021.107](https://doi.org/10.5001/omj.2021.107) · [PMID 33768966](https://pubmed.ncbi.nlm.nih.gov/33768966/)

32. Alam A, Tanveer F, Khalil AT, Zohra T, Khamlich S, Alam MM, Salman M, Ali M, Ikram A, Shinwari ZK, Maaza M. Silver nanoparticles biosynthesized from secondary metabolite producing marine actinobacteria and evaluation of their biomedical potential. *Antonie Van Leeuwenhoek.* 2021;114(10):1497–1516. [doi:10.1007/s10482-021-01616-5](https://doi.org/10.1007/s10482-021-01616-5) · [PMID 34324106](https://pubmed.ncbi.nlm.nih.gov/34324106/)

33. Amir S, Tzatzarakis M, Mamoulakis C, Bello JH, Eqani SAMAS, Vakonaki E, Karavitakis M, Sultan S, Tahir F, Shah STA, Tsatsakis A. Impact of organochlorine pollutants on semen parameters of infertile men in Pakistan. *Environ Res.* 2021;195:110832. [doi:10.1016/j.envres.2021.110832](https://doi.org/10.1016/j.envres.2021.110832) · [PMID 33549619](https://pubmed.ncbi.nlm.nih.gov/33549619/)

34. Arshad Y, Mahmood N, Zaidi SSZ, Sharif S, Ikram A, Alam MM, Ali MQ, Usman M, Akhtar R, Hassan M, Salman M, Adil N, Rana MS. Detection of SARS-CoV-2 in ophthalmic secretions. *J Infect.* 2021;82(2):e25-e26. [doi:10.1016/j.jinf.2020.08.035](https://doi.org/10.1016/j.jinf.2020.08.035) · [PMID 32853603](https://pubmed.ncbi.nlm.nih.gov/32853603/)

35. Aslam B, Khurshid M, Arshad MI, Muzammil S, Rasool M, Yasmeen N, Shah T, Chaudhry TH, Rasool MH, Shahid A, Xueshan X, Baloch Z. Antibiotic resistance: One Health one world outlook. *Front Cell Infect Microbiol.* 2021;11:771510. [doi:10.3389/fcimb.2021.771510](https://doi.org/10.3389/fcimb.2021.771510) · [PMID 34900756](https://pubmed.ncbi.nlm.nih.gov/34900756/)

36. Aziz B, Khurshid A, Mahmood R, Khan JA, Javaid S, Alam M, et al. Study of synergistic effects of Ficus Carica leaves extract mediated chemo-photodynamic therapy on rhabdomyosarcoma cells. *Photodiagnosis Photodyn Ther.* 2021;36:102565. [doi:10.1016/j.pdpdt.2021.102565](https://doi.org/10.1016/j.pdpdt.2021.102565) · [PMID 34614426](https://pubmed.ncbi.nlm.nih.gov/34614426/)

37. Aziz F, Tahir F, Qureshi NA. Millennium development goals (MDGs-2000-2015) to sustainable development goals (SDGs-2030): A chronological landscape of public sector health care segment of Pakistan. *J Pak Med Assoc.* 2021;71(2(B)):596–601. [doi:10.47391/JPMA.394](https://doi.org/10.47391/JPMA.394) · [PMID 33941942](https://pubmed.ncbi.nlm.nih.gov/33941942/)

38. Badar N, Ikram A, Salman M, Alam MM, Umair M, Arshad Y, Mushtaq N, Mirza HA, Ahad A, Farooq U, Yasin MT, Qazi J. Chikungunya virus: Molecular epidemiology of nonstructural proteins in Pakistan. *PLoS One*. 2021;16(12):e0260424. [doi:10.1371/journal.pone.0260424](https://doi.org/10.1371/journal.pone.0260424) · [PMID 34941888](https://pubmed.ncbi.nlm.nih.gov/34941888/)
39. Badar N, Ikram A, Salman M, Alam MM, Umair M, Arshad Y, Mushtaq N, Mirza HA, Ahad A, Yasin MT, Qazi J. Epidemiology of Chikungunya virus isolates 2016-2018 in Pakistan. *J Med Virol*. 2021;93(11):6124–6131. [doi:10.1002/jmv.26957](https://doi.org/10.1002/jmv.26957) · [PMID 33755229](https://pubmed.ncbi.nlm.nih.gov/33755229/)
40. Bashier H, Ikram A, Khan MA, Baig M, Al Gunaid M, Al Nsour M, et al. The anticipated future of public health services post COVID-19: Viewpoint. *JMIR Public Health Surveill*. 2021;7(6):e26267. ° [doi:10.2196/26267](https://doi.org/10.2196/26267) · [PMID 33592576](https://pubmed.ncbi.nlm.nih.gov/33592576/)
41. Bibi M, Qureshi NA, Sadiq A, Farooq U, Hassan A, Shaheen N, Asghar I, Umer D, Ullah A, Khan FA, **Salman M**, Bibi A, Rashid U. Exploring the ability of dihydropyrimidine-5-carboxamide and 5-benzyl-2,4-diaminopyrimidine-based analogues for the selective inhibition of L. [doi:10.1016/j.ejmech.2020.112986](https://doi.org/10.1016/j.ejmech.2020.112986) · [PMID 33187806](https://pubmed.ncbi.nlm.nih.gov/33187806/)
42. El-Sokkary R, Uysal S, Erdem H, Kullar R, Pekok AU, Amer F, Wongsurakiat P, **Khan MA**, Kurekci Y, Pilli HP, Grozdanovski K, Miftode E, Baljic R, Vahabolgu H, Rello J. Profiles of multidrug-resistant organisms among patients with bacteremia in intensive care units: an international ID-IRI survey. *Eur J Clin Microbiol Infect Dis*. 2021;40(11):2323–2334. ° [doi:10.1007/s10096-021-04288-1](https://doi.org/10.1007/s10096-021-04288-1) · [PMID 34155547](https://pubmed.ncbi.nlm.nih.gov/34155547/)
43. Erondur NA, Rahman-Shepherd A, Khan MS, Abate E, Agogo E, Belfroid E, Dar O, Fehr A, Hollmann L, Ihekweazu C, **Ikram A**, Iversen BG, Mirkuzie AH, **Rathore TR**, Squires N, Okereke E. Improving National Intelligence for Public Health Preparedness: a methodological approach to finding local multi-sector indicators for health security. *BMJ Glob Health*. 2021;6(1). ° [doi:10.1136/bmjgh-2020-004227](https://doi.org/10.1136/bmjgh-2020-004227) · [PMID 33495285](https://pubmed.ncbi.nlm.nih.gov/33495285/)
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