

Short presentation

My focus area is cholera, water, sanitation, hygiene, and the transmission of diarrheal diseases. Currently, most of my work is related to Bangladesh, but many of the theories depart from our investigations of the 1853 cholera outbreak in Copenhagen. I am currently heading the disasters and environmental hygiene research group at the section of Global health in the Department of Public health. I have previously linked my environmental health profile with my interest in disasters through my position as Director of the Copenhagen Center for Disaster Research, COPE, and Head of Studies for the Master of Disaster Management program (MDMa), which I co-created in 2008.

Current research:

Combating Cholera caused by Climate Change in Bangladesh (C5)

A multidisciplinary DANIDA-funded study examining the risk and effects of climate-induced cholera on water stress and household hygiene in low-income area Tongi, Bangladesh.

Changing Disasters

An interdisciplinary research project embracing all six university faculties. The project investigates how modern societies interact with disasters.

Interdisciplinary Learning

Combining interdisciplinary research-based in COPE with interdisciplinary teaching at MDMa.

Primary research

My core area is Environmental Hygiene; mainly water and sanitation, as well as the transmission of hygiene-related diseases (such as cholera and other diarrheal diseases) during disastrous events and in developing countries.

Primary teaching

Master of Disaster Management core module

Water and Sanitation in Emergency course

Global Health course, Public health science

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Publications

Detecting Enteric Pathogens in Low-Risk Drinking Water in Dhaka, Bangladesh: An Assessment of the WHO Water Safety Categories

Saima, S., Ferdous, J., Sultana, R., Rashid, R. B., Almeida, Sara dos Santos, Begum, A. & Jensen, Peter Kjær, 2023, In: Tropical Medicine and Infectious Disease. 8, 6, 13 p.

Influence of Seasonal Hazards on Water, Sanitation, and Hygiene-Related Behavior and Implications for Cholera Transmission in Bangladesh

Grant, S. L., Lange, S., Almeida, Sara dos Santos, Hoque, B. & Jensen, Peter Kjær, 2023, In: American Journal of Tropical Medicine and Hygiene. 108, 3, p. 518-523 6 p.

Introduction of the Personal Domain in Water Sanitation and Hygiene (WASH), a New Approach to Identify Missing Health Impacts

Jensen, Peter Kjær, Hossain, Z. Z., Sultana, R., Ferdous, J., Almeida, Sara dos Santos & Begum, A., 2023, In: Tropical Medicine and Infectious Disease. 8, 5, 11 p.

***Escherichia coli* Ingested via Food May Overshadow the Positive Effects of Clean Drinking Water: An Example from Dhaka**

Jensen, Peter Kjær, Hossain, Z. Z., Ferdous, J., Sultana, R., Almeida, Sara dos Santos, Koch, E. B. & Begum, A., 2022, In: American Journal of Tropical Medicine and Hygiene. 106, 4, p. 1163–1169 7 p.

Abundance and biofilm formation capability of *Vibrio cholerae* in aquatic environment with an emphasis on Hilsha fish (*Tenualosa ilisha*)

Dey, S. S., Hossain, Z. Z., Akhter, H., Jensen, Peter Kjær & Begum, A., 2022, In: Frontiers in Microbiology. 13, 12 p., 933413.

Measuring Water Quantity Used for Personal and Domestic Hygiene and Determinants of Water Use in a Low-Income Urban Community

Sultana, R., Nahar, N., Luby, S. P., Swarna, S. T., Gurley, E. S., Tamason, C. C., Khan, S., Rimi, N. A., Kabir, H., Saifullah, M. K., Howlader, S. R. & Jensen, Peter Kjær, 2022, In: International Journal of Environmental Research and Public Health. 19, 23, 16 p., 15656.

The Meaning of “Hygiene” and Its Linked Practices in a Low-Income Urban Community in Bangladesh

Sultana, R., Nahar, N., Rimi, N. A., Swarna, S. T., Khan, S., Saifullah, M. K., Kabir, H. & Jensen, Peter Kjær, 2022, In: International Journal of Environmental Research and Public Health. 19, 16, 13 p.

Comparative Assessment of Fecal Contamination in Piped-to-Plot Communal Source and Point-of-Drinking Water
Ferdous, J., Sultana, R., Rashid, R. B., Saima, S., Begum, A. & Jensen, Peter Kjær, Apr 2021, In: *Water*. 13, 9, 1139.

COVID-19 and Business Continuity - Learning from the private sector and humanitarian actors in Kenya
Schmid, B., Raju, Emmanuel & Jensen, Peter Kjær, 2021, In: *Progress in Disaster Science* . 11, 8 p., 100181.

Cost of illness for severe and non-severe diarrhea borne by households in a low-income urban community of Bangladesh: A cross-sectional study

Sultana, R., Luby, S. P., Gurley, E. S., Rimi, N. A., Swarna, S. T., Khan, J. A. M., Nahar, N., Ghosh, P. K., Howlader, S. R., Kabir, H., Khan, S. & Jensen, Peter Kjær, 2021, In: *PLOS Neglected Tropical Diseases* . 15, 6, 16 p., e0009439.

Historical and contemporary views on cholera transmission: are we repeating past discussions? Can lessons learned from cholera be applied to COVID-19?

Jensen, Peter Kjær, Grant, S. L., Perner, Mads Linnet, Hossain, Z. Z., Ferdous, J., Sultana, R., Almeida, Sara dos Santos, Phelps, M. & Begum, A., 2021, In: *A P M I S. Acta Pathologica, Microbiologica et Immunologica Scandinavica (Online)*. 129, 7, p. 421-430 10 p.

Investigation of the Domestic Reservoirs of Diarrheagenic Escherichia coli in Diarrhea Case Households of Urban Bangladesh

Hossain, Z. Z., Sultana, R., Begum, A. & Jensen, Peter Kjær, 2021, In: *Current Microbiology*. 78, p. 2534-2547 14 p.

Is it human or animal? The origin of pathogenic e. coli in the drinking water of a low-income urban community in bangladesh

Ferdous, J., Rashid, R. B., Sultana, R., Saima, S., Prima, M. J., Begum, A. & Jensen, Peter Kjær, 2021, In: *Tropical Medicine and Infectious Disease*. 6, 4, 13 p., 181.

Developing a forecasting model for cholera incidence in Dhaka megacity through time series climate data

Daisy, S. S., Saiful Islam, A. K. M., Akanda, A. S., Faruque, A. S. G., Amin, N. & Jensen, Peter Kjær, 2020, In: *Journal of Water and Health*. 18, 2, p. 207-223 17 p.

Individual and household exposures associated with cholera transmission in case-control studies: a systematic review

Phelps, M. D., Simonsen, L. & Jensen, Peter Kjær, 2019, In: *Tropical Medicine & International Health*. 24, 10, p. 1151-1168 18 p.

The Cholera Phone: Diarrheal Disease Surveillance by Mobile Phone in Bangladesh

sengupta, L., Tamason, C. C., Sultana, R., Tulsiani, S., Phelps, M., Gurley, E. S. & Jensen, Peter Kjær, 2019, In: *American Journal of Tropical Medicine and Hygiene*. 100, 3, p. 510-516 6 p.

Water usage, hygiene and diarrhea in low-income urban communities - a mixed method prospective longitudinal study

Sultana, R., Tamason, C. C., Carstensen, L. S., Ferdous, J., Hossain, Z. Z., Begum, A. & Jensen, Peter Kjær, 2019, In: *MethodsX*. 6, p. 2822-2837 16 p.

A Comparative Analysis of *Vibrio cholerae* Contamination in Point-of-Drinking and Source Water in a Low-Income Urban Community, Bangladesh

Ferdous, J., Sultana, R., Rashid, R. B., Tasnimuzzaman, M., Nordland, Andreas, Begum, A. & Jensen, Peter Kjær, 2018, In: *Frontiers in Microbiology*. 9, 9 p., 489.

Can E. coli fly? The role of flies as transmitters of Escherichia coli to food in an urban slum in Bangladesh

Lindeberg, Y. L., Egedal, K., Hossain, Z. Z., Phelps, M., Tulsiani, S., Farhana, I., Begum, A. & Jensen, Peter Kjær, 2018, In: *Tropical Medicine & International Health*. 23, 1, p. 2-9 8 p.

Cholera epidemics of the past offer new insights into an old enemy

Phelps, M., Perner, Mads Linnet, Pitzer, V. E., Andreasen, V., Jensen, Peter Kjær & Simonsen, L., 2018, In: *The Journal of Infectious Diseases*. 217, 4, p. 641-649 9 p.

Comparative genomics of *Vibrio cholerae* O1 isolated from cholera patients in Bangladesh

Hossain, Z. Z., Leekitcharoenphon, P., Dalsgaard, Anders, Sultana, R., Begum, A., Jensen, Peter Kjær & Hendriksen, R. S., 2018, In: Letters in Applied Microbiology. 67, 4, p. 329-336

Exploring Droughts and Floods and Their Association with Cholera Outbreaks in Sub-Saharan Africa: A Register-Based Ecological Study from 1990 to 2010

Rieckmann, Andreas, Tamason, C. C., Gurley, E. S., Rod, Naja Hulvej & Jensen, Peter Kjær, 2018, In: American Journal of Tropical Medicine and Hygiene. 98, 5, p. 1269-1274 6 p.

Fecal contamination hotspots in low-income households in Bangladesh

Hossain, Z. Z., Farhana, I., Sultana, R., Begum, A. & Jensen, Peter Kjær, 2018, p. 55. 1 p.

Quantitative analysis of nucleic acid extraction methods for *Vibrio cholerae* using real-time PCR and conventional PCR

Hossain, Z. Z., Ferdous, J., Tulsiani, S., Jensen, Peter Kjær & Begum, A., 2018, In: Mymensingh Medical Journal. 27, 2, p. 327-335 9 p.

Transmission and Toxicogenic Potential of *Vibrio cholerae* in Hilsha Fish (*Tenualosa ilisha*) for Human Consumption in Bangladesh

Hossain, Z. Z., Farhana, I., Tulsiani, S. M., Begum, A. & Jensen, Peter Kjær, 2018, In: Frontiers in Microbiology. 9, 13 p., 222.

The importance of thinking beyond the water-supply in cholera epidemics: A historical urban case-study

Phelps, M. D., Azman, A. S., Lewnard, J. A., Antillón, M., Simonsen, L., Andreasen, V., Jensen, Peter Kjær & Pitzer, V. E., 27 Nov 2017, In: PLOS Neglected Tropical Diseases . 11, 11, p. 1-15 15 p., e0006103.

Diversity of Antibiotic Resistant Diarrheagenic *Escherichia coli* of Phylogroup B1 Isolated from Communal Source Water and Household Drinking Water

Saima, S., Ferdous, J., Tulsiani, S., Jensen, Peter Kjær & Begum, A., Jul 2017, p. 233. 1 p.

Development and Validation of a Novel Real-time Assay for the Detection and Quantification of *Vibrio cholerae*

Rashid, R. B., Ferdous, J., Tulsiani, S., Jensen, Peter Kjær & Begum, A., 19 May 2017, In: Frontiers in Public Health. 5, p. 1-12 12 p., 109.

Comparative Genomics of *Vibrio cholerae* O1 Isolated from Cholera Patients in Bangladesh

Hossain, Z. Z., Leekitcharoenphon, P., Dalsgaard, Anders, Sultana, R., Begum, A., Jensen, Peter Kjær & Hendriksen, R. S., May 2017. 1 p.

Singular cholera epidemics in 19th-century Denmark: Investigating patterns of transmission with historical source material

Perner, M. L., Phelps, M. D., Ingholt, M. M., Jensen, Peter Kjær & Simonsen, L., May 2017. 1 p.

Can Cholera Fly? A study of fly transmitted *Vibro Cholera* to food in a slum area in Bangladesh

Hossain, Z. Z., Farhana, I., Lindberg, Y., Egedal, K., Phelps, M., Tulsiani, S., Begum, A. & Jensen, Peter Kjær, Nov 2016. 1 p.

Epidemiological description of unmitigated cholera epidemics in 19th century Denmark

Phelps, M., Perner, M. L., Davidsen, E., Andreasen, V., Jensen, Peter Kjær & Simonsen, L., Nov 2016. 1 p.

Measuring domestic water use: a systematic review of methodologies that measure unmetered water use in low-income settings

Tamason, C. C., Bessias, S., Villada, A., Tulsiani, S. M., Ensink, J. H. J., Gurley, E. S. & Jensen, Peter Kjær, Nov 2016, In: Tropical Medicine & International Health. 21, 11, p. 1389-1402 14 p.

Survival of *Vibrio cholerae* O1 on fomites

Farhana, I., Hossain, Z. Z., Tulsiani, S. M., Jensen, Peter Kjær & Begum, A., Sep 2016, In: World Journal of Microbiology and Biotechnology. 32, 9, p. 1-8 8 p., 146.

Investigation of household contamination of *Vibrio cholerae* in Bangladesh

Hossain, Z. Z., Farhana, I., Mohan Tulsiani, S., Sultana, R., Jensen, Peter Kjær & Begum, A., Jun 2016. 1 p.

Molecular Analysis and Toxigenic Potential of *Vibrio cholerae* Isolated from Hilsha fish (*Tenualosa ilisha*), Bangladesh

Hossain, Z. Z., Farhana, I., Tulsiani, S., Jensen, Peter Kjær & Begum, A., Jun 2016. 1 p.

Prevalence of Virulent *Escherichia coli* Belonging B1 Phylogroup in Municipal Water Supply in Dhaka, Bangladesh

Ferdous, J., Rashid, R. B., Tulsiani, S., Jensen, Peter Kjær & Begum, A., Jun 2016. 1 p.

What is cholera? A preliminary study on caretakers' knowledge in Bangladesh

Tamason, C. C., Tulsiani, S., Siddique, A., Hoque, B. A. & Jensen, Peter Kjær, 9 Feb 2016, In: Journal of Health Population and Nutrition. 35, p. 1-4 4 p., 3.

Identification of *E. coli* through analysis of 16S rRNA sequencing, isolated from municipal water supply systems and household drinking water

Ferdous, J., Rashid, R., Tulsiani, S., Saima, S., Jensen, Peter Kjær & Begum, A., Feb 2016.

Optimization and Validation of Real Time PCR Assays for Absolute Quantification of toxigenic *Vibrio cholerae* and *Escherichia coli*

Ferdous, J., Hossain, Z. Z., Tulsiani, S., Rashid, R. B., Jensen, Peter Kjær & Begum, A., 2016, In: Tropical Biomedicine. 33, 4, p. 641-651 11 p.

Spatial and temporal analysis of the transmissibility and mortality burden of a 1853 cholera epidemic in Copenhagen

Phelps, M. D., Andreasen, V., Pitzer, V., Lewnard, J., Jensen, Peter Kjær & Simonsen, L., 3 Dec 2015. 1 p.

Evaluation of molecular typing methods- ERIC PCR and REP PCR to reveal genetic heterogeneity of *Vibrio cholerae* in water from river Turag

Ferdous, J., Tasminuzzaman, M., Tulsiani, S., Zaman, S., Akhter, H., Jensen, Peter Kjær & Begum, A., Dec 2015.

Incidence of *Vibrio cholerae* in Hilsha (*Tenualosa ilisha*) of Bangladesh

Hossain, Z. Z., Farhana, I., Mohan Tulsiani, S., Jensen, Peter Kjær & Begum, A., Dec 2015.

Prevalence of Pathotypes of *Escherichia coli* in Drinking Water of Dhaka, Bangladesh

Bin Rashid, R., Ferdous, J., Tulsiani, S., Saima, S., Jensen, Peter Kjær & Begum, A., Dec 2015.

Katastrofer og teologi

Jensen, Peter Kjær, Tulsiani, S. & von Ahnen Haugaard, H., 1 Sep 2015, In: Kritisk Forum for Praktisk Teologi. 141, p. 81-87 7 p.

Drinking cholera: salinity levels and palatability of drinking water in coastal Bangladesh

Grant, S. L., Tamason, C. C., Hoque, B. A. & Jensen, Peter Kjær, Apr 2015, In: Tropical Medicine & International Health. 20, 4, p. 455-461 7 p.

***Climatization*: A critical perspective of framing disasters as climate change events**

Grant, S., Tamason, C. C. & Jensen, Peter Kjær, 2015, In: Climate Risk Management. 10, p. 27-34 8 p.

Standard curve quantification for bacterial DNA using a real-time PCR assay

Ferdous, J., Hossain, Z. Z., Tulsiani, S., Jensen, Peter Kjær & Begum, A., 20 Dec 2014.

Store toilet dag

Jensen, Peter Kjær, Tamason, C. C. & Dahlberg, R., 15 Nov 2013, In: Weekendavisen. p. 12 1 p.

Combating cholera caused by climate change

Tamason, C. & Jensen, Peter Kjær, Sep 2013, In: Tropical Medicine & International Health. 18, p. 41-41

The CholeraPhone

Sengupta, L. C., Tamason, C. C. & Jensen, Peter Kjær, Sep 2013, In: Tropical Medicine & International Health. 18, p. 212-212

Accelerating uptake of household latrines in rural communities in the Volta region of Ghana.

Keraita, B., Jensen, Peter Kjær, Konradsen, Flemming, Akple, M. & Vildekilde, Thilde, 2013, In: Journal of Water, Sanitation and Hygiene for Development. 3, 1, p. 26-34 9 p.

The CholeraPhone: Cholera surveillance using mobile phones in Bangladesh

Jensen, Peter Kjær, Tamason, C. C. & sengupta, L., 2013.

Fra krig til katastrofehjælp

Jensen, Peter Kjær, Lauta, Kristian Cedervall & Dahlberg, R., 30 Oct 2011, In: Berlingske. p. 23-23 1 p.

How do we sell the hygiene message? With dollars, dong or excreta?

Jensen, Peter Kjær, Phuc, P. D. & West, L. G. K., 2010, In: Environmental health. 9, p. 27

[Water and sanitation in disaster situations.]

Jensen, Peter Kjær, Meyrowitsch, Dan Wolf & Konradsen, Flemming, 2010, In: Ugeskrift for læger. 172, 2, p. 109-112 3 p.

Enabling Environments for accelerated sanitation and hygiene uptake in Ghana: Lessons from the Danida supported projects. Project report to the Royal Danish Embassy, Ghana

keraita, B., Akple, M. S., Awunyo-Akaba, J., Jensen, Peter Kjær, Konradsen, Flemming & Abaidoo, R. C., 2009, Ghana. 55 p.

Survival of Ascaris eggs and hygienic quality of human excreta in Vietnamese composting latrines

Jensen, Peter Kjær, Phuc, P. D., Konradsen, Flemming, Klank, L. T. & Dalsgaard, Anders, 2009, In: Environmental health. 8, 57

The fear of awful smell: risk perceptions among farmers in Vietnam using wastewater and human excreta in agriculture

Knudsen, L. G., Phuc, P. D., Hiep, N. T., Samuelsen, Helle, Jensen, Peter Kjær, Dalsgaard, Anders, Raschid-Sally, L. & Konradsen, Flemming, Mar 2008, In: Southeast Asian Journal of Tropical Medicine and Public Health. 39, 2, p. 341-52 12 p.

Hygiene versus fertiliser the use of human excreta in agriculture - a Vietnamese example

Jensen, Peter Kjær, Phuc, P. D., Knudsen, L. G., Dalsgaard, Anders & Konradsen, Flemming, 2008, In: International Journal of Hygiene and Environmental Health. 211, 3-4, p. 432-439 8 p.

The fear of awful smell: Risk perceptions among farmers in Vietnam using wastewater and human excreta in agriculture

Knudsen, L. G., Phuc, P. D., Hiep, N. T., Samuelsen, Helle, Jensen, Peter Kjær, Dalsgaard, Anders, Raschid-Sally, L. & Konradsen, Flemming, 2008, In: Southeast Asian Journal of Tropical Medicine and Public Health. 39, 2, p. 341-352 12 p.

Successful sanitation promotion must recognize the use of latrine wastes in agriculture--the example of Viet Nam

Jensen, Peter Kjær, Phuc, P. D., Dalsgaard, Anders & Konradsen, Flemming, 2005, In: Bulletin of the World Health Organization. 83, 11, p. 873-4 1 p.

Is there an association between bacteriological drinking water quality and childhood diarrhoea in developing countries?

Jensen, Peter Kjær, Jayasinghe, G., Hoek, W. V. D., Cairncross, S. & Dalsgaard, Anders, 2004, In: *Tropical Medicine & International Health*. 9, 11, p. 1210-1215 6 p.

Effect of chlorination of drinking-water on water quality and childhood diarrhoea in a village in Pakistan.

Jensen, Peter Kjær, Ensink, J. H. J., Jayasinghe, G., van der Hoek, W., Cairncross, S. & Dalsgaard, A., 2003, In: *Journal of Health Population and Nutrition*. 21, 1, p. 26-31 5 p.

Domestic transmission routes of pathogens: the problem of in-house contamination of drinking water during storage in developing countries.

Jensen, Peter Kjær, Ensink, J. H. J., Jayasinghe, G., van der Hoek, W., Cairncross, S. & Dalsgaard, A., 2002, In: *Tropical Medicine & International Health*. 7, 7, p. 604-9 5 p.

Integration of irrigation and rural drinking water

Ensink, J., Jensen, Peter Kjær, Aslam, M. R. & Hoek, W. V. D., 2002, *Water, Sanitation and hygiene: Challenges of the millennium. 26th WEDC conference.* p. 329-332

Linkages between Irrigation and Drinking Water in Pakistan

Ensink, J., Aslam, M. R., Konradsen, Flemming, Jensen, Peter Kjær & Hoek, W. V. D., 2002, Sri Lanka: International Water Management Institute.

Domestic users of irrigation water - water quality and health impacts

Jensen, Peter Kjær, 2001, The Royal Veterinary and Agricultural University, Copenhagen.

Irrigation water as a source of drinking water: Is safe use possible?

Van Hoek, W. D., Konradsen, Flemming, Ensink, J. H. J., Mudasser, M. & Jensen, Peter Kjær, 2001, In: *Tropical Medicine and International Health*. 6, 1, p. 46-54 9 p.

Irrigation water as a source of drinking water: is safe use possible?

Hoek, W. V. D., Konradsen, Flemming, Ensink, J. H., Mudasser, M. & Jensen, Peter Kjær, 2001, In: *Tropical Medicine & International Health*. 6, 1, p. 46-54 8 p.

Limitations of irrigation water quality guidelines from a multiple use perspective

Jensen, Peter Kjær, Matsuno, Y., Hoek, W. V. D. & Cairncross, S., 2001, In: *Irrigation and Drainage Systems*. 15, 2, p. 117-128

Specificity for field enumeration of Escherichia coli in tropical surface waters.

Jensen, Peter Kjær, Aalbæk, Bent, Aslam, R. & Dalsgaard, Anders, 2001, In: *Journal of Microbiological Methods*. 45, 2, p. 135-41 6 p.

Integration of irrigation and rural drinking water

Ensink, J. H. J., Jensen, Peter Kjær, Aslam, M. R. & Van Der Hoek, W., 1 Jan 2000, *Water, Sanitation and Hygiene - Challenges of the Millennium: Proceedings of the 26th WEDC Conference*. WEDC, p. 329-332 4 p.

Multiple use of irrigation water, in Punjab

Jensen, Peter Kjær, Hoek, W. V. D., Konradsen, Flemming & Jehangir, W., 1998, *Sanitation and water for all. 24th WEDC conference*.