

Economic Benefits of One Health

This compilation of publications focuses on the Economic Benefits of using a One Health approach.

If you are aware of additional publications on the Economics of One Health that need to be included in this compilation please notify ohc@onehealthcommission.org

2022

How a One Health approach can mitigate the social and economic burdens of zoonoses in Africa

Ochu CMC, June 2022, PreventionWeb

<https://www.preventionweb.net/news/how-one-health-approach-can-mitigate-social-and-economic-burdens-zoonoses-africa>

2020

Funding for One Health Capacities in Low- and Middle -Income Countries

Jonas O, Published Jan 2020 on the One Health Commission Narratives of One Health in Action webpage

https://www.onehealthcommission.org/documents/news/OJonas_OH_Funding_Challenges_21320_BE75F3F806A43.pdf

See Table 1. Economic costs of outbreaks are often more significant than public health (preventive measures) impacts. Most infectious diseases with epidemic and pandemic potentials are of animal origin; control at the source thus requires detection in animals, before the threat extends to human populations. Core veterinary and human public-health systems that use One Health approaches are the first line of defense against contagion and antimicrobial resistance (AMR). Adequate financing for core veterinary and human public-health systems is important for their performance. Despite the remarkably low costs of core public-health systems, financing has been inadequate, and spending has not even been officially monitored.

2019

Infectious disease and economics: The case for considering multi-sectoral impacts

Smith KM, Machalaba CC, Seifman R, Feferholtz Y, Karesh WB, One Health, Vol 7, June 2019

<https://doi.org/10.1016/j.onehlt.2018.100080>

Societal cost of zoonoses: One Health economics

Article from free online course 'One Health: Connecting Humans, Animals and the Environment'

Accessed 2-4-19, <https://www.futurelearn.com/courses/one-health/0/steps/25480>

Pandemic Preparedness Financing: Status Update

World Bank Group, September 2019, Global Preparedness Monitoring Board,
<https://www.gpmb.org/annual-reports/overview/item/pandemic-preparedness-financing-status-update>
This report, intended for policy-makers, government officials, financing agencies, and the public, discusses pandemic preparedness financing. See Executive Summary p. viii: To succeed will require a multipronged effort to persuade policy makers and communities to take measures of the political economy, cultural environment, and embrace a “One Health” approach which recognizes human health as connected to that of animal health and the environment requiring multisectoral engagement when mobilizing and allocating resources.

2018

Understanding the Economics of Microbial Threats: Proceedings of a Workshop

National Academies of Sciences, Engineering and Medicine. (2018) Washington, DC: The National Academies Press. <https://doi.org/10.17226/25224>

[See Chapter 6, Costs and Benefits of Implementing a One Health Approach Against Microbial Threats, pp. 61-73]

Economics of bovine tuberculosis: a one health issue

Azami HY, Zinsstag J, Chapter 3 (Page no: 31) Book Chapter in *Bovine Tuberculosis*
Editors: Chambers M, Gordon S, Olea-Popelka F, Barrow P, 2018, ISBN9781786391520,
DOI 10.1079/9781786391520.0000, <https://www.cabi.org/vetmedresource/ebook/20183117957>

2017

Economics of One Health: Costs and benefits of integrated West Nile virus surveillance in

Emilia-Romagna

Paternoster G, Martins SB, Mattivi A, Cagarelli R, Angelini P, Bellini R, Santi A, Galletti G, Pupella S, Marano G, Copello F, Rushton J, Stärk KDC, Tamba M, PLOS, November 27, 2017
<https://doi.org/10.1371/journal.pone.0188156>

One Health Economics to confront disease threats

Machalaba C, Smith KM, Awada L, Berry K, Berthe F, Bouley TA, Bruce M, Cortiñas Abrahantes J, El Turabi A, Feferholtz Y, Flynn L, Fournié G, Andre A, Grace D, Jonas O, Kimani T, Le Gall F, Miranda JJ, Peyre M, Pinto J, Ross N, Rüegg SR, Salerno RH, Seifman R, Zambrana-Torrel C, Karesh WB. *Trans R Soc Trop Med Hyg.* 2017 Jun 1;111(6):235-237, <https://academic.oup.com/trstmh/article/111/6/235/4554987>

One health economics for healthy people, agriculture and environment

The World Bank Blog post On Mon, 02/06/2017 by Franck Berthe, Timothy Bouley, Patrick Osewe
<http://blogs.worldbank.org/health/one-health-economics-healthy-people-agriculture-and-environment>

2016

Evaluating one health: Are we demonstrating effectiveness?

Baum SE, Machalaba C, Daszak P, Salerno RH, Karesh WB, *One Health Journal* (3), Elsevier, First published online November 2016, <https://doi.org/10.1016/j.onehlt.2016.10.004>

2015

Linking Human Health and Livestock Health: A “One-Health” Platform for Integrated Analysis of Human Health, Livestock Health, and Economic Welfare in Livestock Dependent Communities

Thumbi et al. PLoS One, 2015; 10(3): e0120761. Published online 2015 Mar 23. doi: 10.1371/journal.pone.0120761

Economic Assessment of Zoonoses Surveillance in a ‘One Health’ Context: A Conceptual Framework

S. Babo Martins, J. Rushton, K. D. C. Stärk, Zoonoses and Public Health, First published: 26 November 2015, <https://doi.org/10.1111/zph.12239>

2014

A review of the metrics for One Health benefits

Häsler B, Cornelsen L, Bennani H, Rushton J, Rev. sci. tech. Off. int. Epiz. 2014, 33(2), 453-464
<https://pubmed.ncbi.nlm.nih.gov/25707176/>

Initial and Long-Term Costs of Patients Hospitalized with West Nile Virus Disease

Staples JE, Shankar MB, Sejvar JJ, Meltzer MI, Fischer N, Am. J. Trop. Med. Hyg., 90(3), 2014, pp. 402–409, doi:10.4269/ajtmh.13-0206

The business case for One Health

Grace D, 2014, Onderstepoort Journal of Veterinary Research 81(2), Art. #725, <http://dx.doi.org/10.4102/ojvr.v81i2.725>

This paper discusses pandemic preparedness financing and cuts across the dimensions of country capacity strengthening, governance and coordination, and research and development. The report is intended for a wide audience including policy-makers, government officials, financing agencies, and the public.....Executive Summary p. viii: To succeed will require a multipronged effort to persuade policy makers and communities to take measures of the political economy, cultural environment, and embrace a “One Health” approach which recognizes human health as connected to that of animal health and the environment requiring multisectoral engagement when mobilizing and allocating resources.

2012

People, Pathogens and Our Planet: The Economics of One Health. Vol 2., Washington, DC., World Bank. 2012. © World Bank. <https://openknowledge.worldbank.org/handle/10986/11892>

Economics of One Health: Extraordinarily High Returns on Investments in One Health

Power Point Presentation by Olga Jonas (World Bank Group) at the One Health Summit 2012, Davos, Feb 2012 <http://bit.ly/2RHq8OT>

The Economic Value of One Health in Relation to the Mitigation of Zoonotic Disease Risks

Häsler B, Gilbert W, Jones BA, Pfeiffer DU, Rushton J, Otte MJ, Book Chapter, Part of the *Current Topics in Microbiology and Immunology* book series (CT MICROBIOLOGY, volume 365) First Published Online: 04 July 2012 <https://pubmed.ncbi.nlm.nih.gov/24264885/>

A One Health Framework for Estimating the Economic Costs of Zoonotic Diseases on Society

Narrood C, Zinsstag J, Tiongco M, Ecohealth. 2012 Jun; 9(2): 150–162.

Published online 2012 Mar 7. doi: 10.1007/s10393-012-0747-9

Economic benefits or drivers of a ‘One Health’ approach: Why should anyone invest?

Rushton J, Häsler B, De Haan N, Rushton R, 2012, *Onderstepoort Journal of Veterinary Research* 79(2), Art. #461, <https://pubmed.ncbi.nlm.nih.gov/23327381/>

Proceedings of the Conference of the Southern African Centre for Infectious Disease Surveillance ‘One Health’ held at the National Institute for Communicable Diseases, Johannesburg, July 2011.

Slide two presentations on:

- **Economic benefits or drivers of a ‘One Health’ approach: Why should anyone invest?**

Rushton J, de Haan N, Rushton R.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiMjfeTpZH_AhXnglQIHUpNCjIQFnoECBYQAQ&url=https%3A%2F%2Fwww.cdc.gov%2Fonehealth%2Fpdfs%2Fatlanta%2Fjonathan_rushton.pdf&usg=AOvVaw3_W5FkqUCAnKpnw8_1veVU

- **Economic benefits or drivers of a ‘One Health’ approach: Why should anyone invest? – for its added value** Schelling E, Zinsstag J.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiMjfeTpZH_AhXnglQIHUpNCjIQFnoECCEQAQ&url=https%3A%2F%2Fwww.cdc.gov%2Fonehealth%2Fpdf%2Fatlanta%2Fsther_schelling.pdf&usg=AOvVaw1UJckY4RcvqN7ajN46h-x2