

Request for Proposal (RFP) for the retrieval, synthesis and evaluation of evidence on what constitutes effective hand hygiene and what are minimum requirements for its practice in community settings

1. Background, Aim and Objectives

1.1. Background

Hand hygiene is critical for public health protection, but in most low- and-middle income countries (LMIC) many people lack access to minimum requirements for practicing it¹, and in all regions of the world the practice of hand hygiene at critical moments is often limited^{2,3}.

In response to increased demand for policy guidance on this issue in recent years, and under its mandate to address demand for guidance on areas of public health, the WHO is developing Guidelines on Hand Hygiene in Community Settings. The guidelines will provide evidence-based recommendations to governments on how to improve hand hygiene in community settings, focusing on areas of persistent uncertainty or controversy in what constitutes effective hand hygiene and what government measures can be implemented to rapidly improve it. For the purposes of the guidelines, 'community settings' are defined as domestic (e.g., households), public (e.g., plazas and squares, parks, marketplaces, shopping areas, and transportation hubs), and institutional (e.g., schools, prisons and places of detention, workplaces, and places of worship).

WHO follows internationally-recognized methods and standards for guideline development to ensure that its guidelines are of the highest quality. A critical step in the guideline development process is retrieval, synthesis and evaluation of available evidence on questions of interest, to underpin the formulation of recommendations.

Questions requiring systematic retrieval, synthesis and evaluation of evidence have been identified under four priority topics:

1. What constitutes effective hand hygiene?
2. What are the minimum requirements for effective hand hygiene practice?
3. What behaviour change approaches are conducive to sustained adoption of effective hand hygiene practice?
4. What government measures can support sustained practice of effective hand hygiene?

Under each of these topics, questions have been identified that relate to areas of controversy or uncertainty in existing global guidance, respond to WHO Member State demand, and are not already covered in existing systematic reviews.

This request for proposals (RFP) is for the retrieval, synthesis and evaluation of evidence on sub-questions relating to priority topics 1 and 2. The specific questions are listed below under Section 1.2. – 'Aim and Objectives'. A further two RFPs have been issued in connection with questions under priority topics 3 and 4.

Teams are welcome to bid for multiple RFPs.

¹ Prüss-Ustün, A., Wolf, J., Bartram, J., Clasen, T., Cumming, O., Freeman, M.C., Gordon, B., Hunter, P.R., Medlicott, K. and Johnston, R., 2019. Burden of disease from inadequate water, sanitation and hygiene for selected adverse health outcomes: an updated analysis with a focus on low-and middle-income countries. *International journal of hygiene and environmental health*, 222(5), pp.765-777

² Wolf, J., Johnston, R., Freeman, M.C., Ram, P.K., Slaymaker, T., Laurenz, E. and Prüss-Ustün, A., 2019. Handwashing with soap after potential faecal contact: global, regional and country estimates. *International journal of epidemiology*, 48(4), pp.1204-1218

³ Freeman, M.C., Stocks, M.E., Cumming, O., Jeandron, A., Higgins, J.P., Wolf, J., Prüss-Ustün, A., Bonjour, S., Hunter, P.R., Fewtrell, L. and Curtis, V., 2014. Systematic review: hygiene and health: systematic review of handwashing practices worldwide and update of health effects. *Tropical Medicine & International Health*, 19(8), pp.906-916

1.2. Aim and Objectives

Aim

The aim of the work outlined in this RFP is to design and deliver a protocol for the retrieval, synthesis and evaluation of available evidence on what constitutes effective hand hygiene and what are minimum requirements for effective hand hygiene practice in community settings.

Objectives

- Design and register an evidence retrieval and synthesis protocol
- Implement the evidence retrieval and synthesis protocol
- Prepare a scientific manuscript(s) with results

Questions

The specific questions are:

1. Which hand hygiene products are effective at removing or deactivating pathogens linked to the transmission of different diseases in community settings?
2. What are the minimum requirements for the sustained practice of effective hand hygiene in community settings?
3. What are the principal design considerations for hand hygiene facilities to ensure equitable access to minimum requirements in community settings?

These questions are specified by PICOD criteria in Annex 1.

2. RFP specification

This section sets out the specification of services for this RFP exercise. Suppliers will be able to suggest their own methodology for the project with alternative / additional activities to achieve the deliverables, but they should use this section to fully understand WHO's requirements and to inform their response.

2.1. Work to be performed (due approx. 12 months after the contract start date)

Output 1: Registered protocol

- Activity 1.1: Rapid literature scoping to inform protocol
- Activity 1.2: Development of a protocol in collaboration with WHO technical leads
- Activity 1.3: Pre-registration of the protocol at appropriate registry⁴ as approved by technical WHO leads

Output 2: Implemented protocol

- Activity 2.1: Searches, study screening and inclusion completed as per protocol
- Activity 2.2: Data extraction and quality assessment of studies and evidence completed as per protocol
- Activity 2.3: Summary report (methods, results, conclusions) finalised in collaboration with WHO leads

Output 3: Draft manuscript for publication

- Activity 3.1: Preparation of manuscript for publication in collaboration with WHO technical leads

⁴ For example PROSPERO

- Activity 3.2: Submission of manuscript for publication to peer-reviewed scientific journal

2.2. General requirements

- The supplier will be asked to attend relevant WHO-organised virtual meetings that may inform the outcomes of the project, and to attend meetings to present findings as required
- For all meetings related to the TOR, minutes must be prepared and circulated to WHO technical leads on a timely basis
- All outputs should be delivered as word documents, with an accompanying slide deck of summary findings.

2.3. Specific requirements of the consultant

Qualifications and experience

- Demonstrable experience designing and implementing relevant systematic and/or scoping reviews
- Track record of relevant scientific publication, including systematic and/or scoping reviews but also related primary research
- Excellent academic track record, including a doctoral level degree in a related field or demonstrable commensurate research experience combined with relevant advanced level degree
- Experience of undertaking evidence retrieval and synthesis to inform policy.

Technical skills and knowledge

- Skills and knowledge relating to the underlying research methods for the types of studies that will be reviewed under this RFP
- Skills and knowledge to design protocols for rigorous evidence retrieval and synthesis, specifically familiarity with relevant methods for systematic reviews and/or scoping reviews, e.g. pre-registration of review protocols
- Skills and knowledge for assessment of study quality and extraction of data in this or related fields, specifically familiarity with relevant quality assessment approaches/methods, e.g. Cochrane Risk of Bias tool
- Skills and knowledge for qualitative and quantitative synthesis of relevant data, specifically familiarity with methods of synthesis of relevant data, e.g. pooled analysis of data
- Skills and knowledge for grading of evidence, specifically familiarity with established methods for grading of evidence, e.g., GRADE.

3. RFP timetable

Activity	Responsibility	Target date
RFP issue to suppliers	WHO	5th Aug 2022
Submission of expression of interest ¹	Supplier	22nd Aug 2022
Invitation to submit full proposal	WHO	24th Aug 2022
Submission of RFP response	Supplier	5th Sep 2022
RFP evaluation period	WHO	w/c 5th Sep 2022
Notification of contract award	WHO	w/c 12th Sep 2022
Contract negotiation	WHO & Supplier	w/c 12th Sep 2022
Proposed contract start date	WHO & Supplier	w/c 26th Sep 2022

Notes:

¹ Suppliers are asked to submit a short one paragraph expression of interest by e-mail. Suppliers are invited to share any questions for clarification that they might have as part of the EOI.

4. RFP proposal template

Suppliers are required to submit proposals which respond to the following sections:

4.1. Contract feedback

Suppliers have an opportunity to provide specific feedback to the contractual agreement which will be used should their proposal be successful. Contract feedback is to be incorporated into your proposal as an annex and in the following format:

Clause #	Issue	Proposed solution/comment

4.2. RFP questions

Suppliers are asked to provide responses to the following specific questions:

#	Question	Max (pages)
1	Provide a brief overview of your organisation, including track record and expertise relevant to analysis of the type outlined in this RFP	1
2	Describe how your team's qualifications, experience, technical skills and knowledge match with the specific requirements for this consultancy described above	1
3	Describe how you propose to meet our requirements, including stages and timeframes. Literature search and synthesis methodology	1
4	Provide a cost proposal which details and justifies the proposed costs to meet our requirements	1
5	Provide confirmation that if you were appointment by WHO this would not create a conflict of interest	1
6	What makes you best places to fulfil WHO's requirements set out within this request? Highlight to us any risks you foresee with meeting WHO's requirements	1

5. About WHO's Dept for Environment, Climate Change and Health

WHO's Department for Environment, Climate Change and Health pursue a healthier environment by strengthening health sector leadership, building mechanisms for political and social support and monitoring progress towards the Sustainable Development Goals regarding environmental threats to health.

6. Non-disclosure and confidentiality

The information contained within this document or subsequently made available to prospective suppliers is deemed confidential and must not be disclosed without the prior written consent of WHO unless required by law.

7. Independent proposal

By submission of a proposal, prospective Suppliers warrant that the prices in the proposal have been arrived at independently, without consultation, communication, agreement or understanding for the purpose of restricting competition, as to any matter relating to such prices, with any other potential supplier or with any competitor.

8. Funding

For the avoidance of doubt, the output of this RFP exercise will be funded as a contract, not as a grant.

9. Costs incurred by prospective suppliers

It should be noted that this document relates to an RFP only and not a firm commitment from WHO to enter into a contractual agreement. In addition, WHO will not be held responsible for any costs associated with the production of a response to this RFP.

10. WHO contact details

The single point of contact within this RFP exercise for all communications is as indicated below:

Name: Joanna Esteves Mills

Email: estevesj@who.int

Please send with copy to

Name: Clara MacLeod

Email: macleodclara@gmail.com

Annex 1

1. Which hand hygiene products are effective at removing or deactivating pathogens linked to the transmission of different diseases in community settings?	
1.2. How effective are soap products at removing or deactivating key pathogens ⁵ and for what duration?	<p><u>Participants</u> – general population in community settings</p> <p><u>Intervention</u> – handwashing with antimicrobial liquid or bar soap</p> <p><u>Comparison</u> – handwashing with plain bar soap, handwashing with water alone</p> <p><u>Outcome</u> – microbial load reduction</p> <p><u>Design</u> – laboratory and field efficacy studies</p>
1.3. Where soap and water are not available, what are appropriate alternatives for hand hygiene?	<p><u>Participants</u> – general population in community settings</p> <p><u>Intervention</u> – alcohol-based hand rub (with at least 60% alcohol), friction-generating materials (e.g., ash, sand, soil, borax)</p> <p><u>Comparison</u> – soap (e.g., bar soap or liquid soap)</p> <p><u>Outcome</u> – microbial load reduction</p> <p><u>Design</u> – laboratory and field efficacy studies</p>
1.4. Which hand-drying methods are effective at preventing recontamination of washed hands?	<p><u>Participants</u> – general population in community settings</p> <p><u>Intervention</u> – any hand drying method after handwashing with soap (e.g., drying hands with warm air dryer, drying hands with paper towels, drying hands with cloth towels)</p> <p><u>Comparison</u> – air drying</p> <p><u>Outcome</u> – microbial load reduction</p> <p><u>Design</u> – laboratory and field efficacy studies</p>
2. What are the minimum requirements for the sustained practice of effective hand hygiene in community settings?	
2.1. What quantity of water is required to enable effective hand hygiene?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – quantity of water required for handwashing with soap at key moments</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p> <p><u>Research type</u> – qualitative</p>
2.2. What microbial water quality is required for safe handwashing?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – microbial water quality required for handwashing with soap at key moments</p> <p><u>Design</u> – microbiological risk assessment model</p> <p><u>Evaluation</u> – microbial water quality safety (e.g., free from contamination)</p> <p><u>Research type</u> – quantitative</p>
2.3. What quantity of soap is required to enable effective hand hygiene?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – quantity of soap required for handwashing with soap at key moments</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p> <p><u>Research type</u> – qualitative</p>

⁵ Defined based on question 1.B.ii.

2.4. Where should soap and water be located to enable effective hand hygiene at key moments?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – location of soap and water required for handwashing with soap at key moments</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p> <p><u>Research type</u> – qualitative</p>
2.5. What is the optimal spacing and number of users per hand hygiene facility ⁶ to enable effective hand hygiene?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – spacing and number of users per hand hygiene facility required for handwashing with soap at key moments</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p> <p><u>Research type</u> – qualitative</p>
3. What are the principal design considerations for hand hygiene facilities to ensure equitable ⁷ access to minimum requirements in community settings?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – design of hand hygiene facilities for equitable access to handwashing with soap at key moments</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p> <p><u>Research type</u> – qualitative</p>
3.1. What is the potential for harm and/or discrimination associated with each recommendation?	<p><u>Sample</u> – general population in community settings</p> <p><u>Phenomenon of interest</u> – potential for harm and/or discrimination associated with recommendations</p> <p><u>Design</u> – observational study</p> <p><u>Evaluation</u> – effective hand hygiene</p>

⁶ Key factors to consider include total number of users over a given time period, operation and maintenance requirements, security, distancing requirements (e.g., COVID response)

⁷ Applying the key elements of UN human right to water and sanitation: availability, accessibility, affordability, quality and safety, and acceptability (link [here](#)).