



### WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit Ministry of Health, Nutrition & Indigenous Medicine

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#### Bridge the Implementation or Action Gap- Part III

Different databases work in different ways, so you may need to adapt your search strategy to each database that you use. This process is often referred to as 'tailoring' your search. You may also decide to develop separate search strategies for different aspects of your research.

Note that implementers do not always have access to all databases or to the evidence identified through the databases. This underpins the importance of establishing an intersectoral collaborative team from the outset; ideally, this team will include academic researchers who will typically have access to most online databases and sources of evidence

When searching for relevant evidence there is a tradeoff between sensitivity and specificity; specificity decreases as sensitivity increases. Searches that are
highly sensitive will identify all or most of the relevant
literature, however they will also likely identify literature
that is not relevant. Searches that are highly specific
will exclude all or most of the literature that is not relevant, however they may also exclude some of the
literature that is relevant. The more sensitive the
search, the more time needs to be spent sifting out
irrelevant studies. Given that implementers are often
time-constrained or resource-limited, some sensitivity
may have to be sacrificed in the knowledge that some
potentially relevant evidence may be missed.

# Stage 4: Searching for relevant evidence (applying the search strategy)

This stage involves searching for all relevant evidence using the selection criteria identified and the predetermined search strategy for a specific database(s). The search will aim to identify as much of the literature that meets the inclusion criteria as possible.

If time and resources allow, it is a good idea to have more than one person performing the same search independently, and then comparing the evidence identified to make sure that findings are consistent and there is no bias in the way that searches are made and evidence is selected.

When searching for research evidence, it is important to ensure you consider which study design will best answer your research question. For example, a systematic review of randomized control trials is ideal if you wish to determine the best type of intervention to prevent or manage a condition. However, if you are wishing to know how common the problem is, then local and current random sample surveys (or censuses) would be more appropriate. The Oxford Centre of Evidence Based Medicine (OCEBM) provides a hierarchy of evidence depending on the research question.

#### Stage 5: Assessing the quality of evidence found

The quality of evidence is likely to vary considerably. Therefore, you must decide on explicit criteria for appraising studies in order to separate those of higher quality from those of lower quality.

Three main dimensions considered when appraising the quality and relevance of studies are:

- the methodological quality of the study;
- the relevance of that research design to the objectives;
- \* the relevance of the study focus to addressing the objectives.

Checklists such as the Jadad scale (also known as the Oxford quality scoring system) are commonly used for assessing the methodological quality of trails.

WHO uses the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach to assess the quality of a body of evidence.

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WHO uses this approach as it represents internationally agreed standards for making transparent recommendations. Detailed information on GRADE is available through the WHO Guidelines Review Committee (GRC) secretariat and on the following websites:

\* GRADE working group:
 www.gradeworkinggroup.org

\* GRADE online training modules: <a href="http://cebgrade.mcmaster">http://cebgrade.mcmaster</a>.ca

\* GRADE profile software: http://www.cochrane.org

### Stage 6: Assembling and analyzing the most complete data set feasible

After assessing the evidence, you will have to collate and analyze all your assessments to determine if there are sufficient grounds to implement the policy or intervention that you are interested in. This is likely to be the stage that implementers, particularly policy officials, are most interested in. You should therefore ensure that output from the knowledge synthesis is presented in a clear format that meets their needs (for example, by drawing out policy implications).

## Stage 7: Making an informed decision based on a structured report of the research

Only when all available evidence have been collated and assessed, and evidence for the effectiveness has been ranked, is it possible to select a policy or intervention for adaptation to and implementation in your local context.

## Systematic reviews and other approaches to knowledge synthesis

The guidance provided above is sufficient to identify and assess evidence relevant to the effectiveness of policies and interventions for an outcome of interest within a relatively short period of time and with limited resources. A more rigorous approach to identifying, assessing and synthesizing evidence from numerous sources is to carry out a systematic review.

Systematic reviews bring the same level of rigour to reviewing research evidence as should have been used in producing that research evidence in the first place. Using the systematic review approach, however, is time and resource consuming and is not usually possible in the circumstances where most programme implementers are seeking to implement a new policy or intervention (or to implement an existing policy or intervention in a new setting).

A faster approach is that of rapid evidence assessment, which uses targeted literature searches to produce a report in a relatively short period of time. This is less rigorous than a full systematic review, but more so than an ad hoc search. It is well aligned with the approach described.

#### Adapting and piloting the policy or intervention

The interplay between a policy or intervention and its local context can impact both its implementation and its effectiveness. For example, differences in culture, language, age and socioeconomic status of the

target population can – and often do – influence successful implementation of a policy or intervention

either positively or negatively . This means that a policy or intervention may need some adaptation.

Adapting a policy or intervention to the context in which it will be delivered is a delicate balancing act: on the one hand adaptation is crucial to ensure relevance to the local context, improve feasibility, increase local pertinence and adoption, encourage fidelity, foster sustainability and maximize effectiveness; on the other hand, one has to be careful not to modify the policy or intervention so much that fidelity to some of the core components of the policy or intervention is lost and effectiveness is threatened.

**Source:** A guide to implementation research in the prevention and control of non-communicable diseases. Geneva: World Health Organization; 2016. Licence: CC BY-NC-SA 3.0 IGO.

#### Compiled by:

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| Table 1: Water Quality Surveillance     |      |      |
|---|------|------|
| Number of microbiological water samples | June | 2018 |

| District      | MOH areas | No: Expected * | No: Received |
|---------------|-----------|----------------|--------------|
| Colombo       | 15        | 90             | 85           |
| Gampaha       | 15        | 90             | NR           |
| Kalutara      | 12        | 72             | NR           |
| Kalutara NIHS | 2         | 12             | 4            |
| Kandy         | 23        | 138            | 72           |
| Matale        | 13        | 78             | 22           |
| Nuwara Eliya  | 13        | 78             | 10           |
| Galle         | 20        | 120            | 46           |
| Matara        | 17        | 102            | 5            |
| Hambantota    | 12        | 72             | 46           |
| Jaffna        | 12        | 72             | 132          |
| Kilinochchi   | 4         | 24             | 37           |
| Manner        | 5         | 30             | NR           |
| Vavuniya      | 4         | 24             | 35           |
| Mullatvu      | 5         | 30             | NR           |
| Batticaloa    | 14        | 84             | 74           |
| Ampara        | 7         | 42             | 73           |
| Trincomalee   | 11        | 66             | NR           |
| Kurunegala    | 29        | 174            | 40           |
| Puttalam      | 13        | 78             | 56           |
| Anuradhapura  | 19        | 114            | 81           |
| Polonnaruwa   | 7         | 42             | 53           |
| Badulla       | 16        | 96             | 141          |
| Moneragala    | 11        | 66             | 64           |
| Rathnapura    | 18        | 108            | 57           |
| Kegalle       | 11        | 66             | 10           |
| Kalmunai      | 13        | 78             | 83           |

<sup>\*</sup> No of samples expected (6 / MOH area / Month)

NR = Return not received

Table 1: Selected notifiable diseases reported by Medical Officers of Health 07th - 13th July 2018 (28th Week)

| No.   |                |        |         |       |      |            |     |           |     |     |     |         |      |                 |    |     |    |             |       |       |       |        |               |      |            |        |
|---|----------------|--------|---------|-------|------|------------|-----|-----------|-----|-----|-----|---------|------|-----------------|----|-----|----|-------------|-------|-------|-------|--------|---------------|------|------------|--------|
| No.   No. | OHS<br>ivision | Dengue | e Fever | Dyser |      | Encer<br>s |     | Enteric F |     | ood |     | Leptosp |      | Typhus<br>Fever | ΣΪ | ral | Ra | man<br>bies | Chick | xodue | Menir | ngitis | Leishn<br>sis |      | VRCD       |        |
| Hand   |                | 4      | В       | ∢     | В    |            |     |           |     |     |     |         |      |                 | ∢  | В   | ∢  | В           | 4     | В     | ∢     | В      |               |      |            | *<br>Č |
| 1   | odmolo         | 431    | 5464    |       | 20   | 0          | 2   | 0         | 32  | 1   | 56  | 2       | 116  | 0               |    | 0   |    |             |       |       |       | 29     | 0             | 2    |            | 100    |
| 11   11   11   11   11   11   11   1  | ha             | 212    |         | 7     | 39   | 0          | 2   | 1         | 14  | 0   | 14  | m       | 134  | 0               |    | 0   |    |             |       | 452   |       | 27     | 0             | 22   | 99         | 100    |
| 1   | ılutara        | 123    |         | Н     | 44   | 0          | m   | П         | 9   | 9   | 43  | 17      | 340  | 0               |    | 0   |    |             |       |       |       | 53     | 0             | 6    | 25         | 100    |
| 1   | ındy           | 119    |         | 9     | 53   | 0          | 4   | 0         | 3   | 0   | 6   | т       | 37   | 0               |    | 0   |    |             |       |       |       | 18     | П             | 15   | 09         | 100    |
| 14         10         13         1  | atale          | 27     |         | С     | 12   | 0          | П   | 0         | 7   | 0   | 31  | 2       | 29   | 0               |    | 8   |    |             |       | 21    |       | 11     | 2             | 69   | 29         | 100    |
| 1   1   1   1   1   1   1   1   1   1   | ıwaraEliya     | 4      | 107     | 0     | 36   | 0          | က   | 0         | 6   | 0   | 47  | 0       | 19   | Ŋ               |    | 0   |    |             |       | 147   |       | 23     | 0             | 0    | 31         | 100    |
|   | alle           | 36     |         | 3     | 31   | 1          | 8   | 0         | 0   | 0   | m   | 13      | 257  | 1               |    | 0   |    | 0           | 10    |       |       | 36     | 0             | 2    | 14         | 100    |
|   | ambantota      | 33     |         | 0     | 11   | 0          | 4   | 0         | 2   | 0   | 4   | 7       | 34   | m               |    | 0   |    |             |       | 170   |       | 4      | 17            | 427  | 73         | 100    |
|   | Matara         | 53     |         | 7     | 27   | 0          | 2   | 0         | 4   | 1   | 22  | 10      | 144  | 7               |    | 1   |    |             |       | 180   |       | 8      | 54            | 244  | 24         | 100    |
|   | ffna           | 77     |         |       | 101  | 0          | 7   | 0         | 33  | 0   | 500 | 0       | œ    |                 |    | 0   |    |             |       | 193   |       | 6      | 0             | c    | 37         | 93     |
| 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,  | linochchi      | 8      | 201     | 0     | 20   | 0          | П   | 2         | 13  | 0   | 7   | 1       | m    | 7               |    | 0   |    |             |       | 28    |       | 2      | 0             | П    | 21         | 100    |
| 1   | annar          | 17     |         | 0     | 17   | 0          | 0   | 1         | 3   | 0   | 7   | 0       | П    | 0               |    | 0   |    |             |       | 27    |       | 2      | 0             | 7    | 37         | 100    |
| 1   1   1   1   1   1   1   1   1   1   | ıvuniya        | 56     |         | 0     | 14   | 0          | c   | 2         | 32  | 0   | 11  | 0       | 56   | 0               |    | 0   |    |             |       | 38    |       | m      | П             | 2    | 28         | 100    |
| Hand   | ullaitivu      | П      | 09      | 0     | 5    | 0          | 0   | 0         | 8   | 0   | 10  | 0       | 8    | 0               |    | 0   |    |             |       | 9     |       | П      | 0             | н    | 21         | 100    |
| Hand   | ıtticaloa      | 74     |         |       | 102  | 0          | 2   | П         | 4   | m   | 23  | m       | 36   | 0               |    | 0   |    |             |       | 06    |       | 12     | 0             | 0    | 65         | 100    |
| ee         7         7         8         9         1         6         1         3         0         1         6         1         1         0         1         3         0         1         3         0         1         0         1         1         0         1         1         0         1         1         0         1  | npara          | 17     |         | 4     | 39   | 0          | 3   | 0         | н   | 1   | 2   | 0       | 32   | 0               | 0  | П   |    |             |       | 141   |       | 14     | 0             | П    | 99         | 100    |
| a         1         1554         9         9         9         1         1         9         0         1         2         2         2         2         2         2         2         2         2         3         2         3         2         3         4         3         3         4         3         4         3         4         3         4         3         4         3         4         3         4         3         4         3         4  | incomalee      | 27     |         | Н     | 35   | 0          | 1   | 0         | 4   | 0   | 13  | 1       | 39   | 0               |    | 0   |    |             |       | 146   |       | 7      | 0             | 18   |            | 100    |
| 45128673116949311673116731167311893119192311923143131431war1225232333<  | ırunegala      | 71     |         |       | 91   | 0          | 8   | 0         | 10  | 0   | m   | 11      | 66   | 0               |    |     |    |             |       |       |       | 62     | 18            | 185  | <b>6</b> 7 | 100    |
| way         12         20         1         2         2         2         2         2         2         6         1         2         2         6         1         2         3         1         1         2         6         1         2         2         2         6         1         2 <td>ıttalam</td> <td>34</td> <td></td> <td></td> <td>31</td> <td>П</td> <td>9</td> <td>0</td> <td>4</td> <td>0</td> <td>4</td> <td>2</td> <td>31</td> <td>m</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td>92</td> <td></td> <td>25</td> <td>0</td> <td>П</td> <td>11</td> <td>100</td>  | ıttalam        | 34     |         |       | 31   | П          | 9   | 0         | 4   | 0   | 4   | 2       | 31   | m               |    | 0   |    |             |       | 92    |       | 25     | 0             | П    | 11         | 100    |
| wa122041120012001200120012001200120012001200120012001200012000  | nuradhapura    |        |         | 7     | 30   | 0          | 9   | П         | cc  | 0   | 38  | 72      | 93   | П               | 9  | 2   |    |             |       | 273   |       | 27     | 14            | 231  | 43         | 95     |
| 1         1         2         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         2         4         1         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         2         2         4         2         2         2         4         2         3         4         3         3         3         3         3         3         3         4         3         3         4         3         4         3         4         3         4         3         4         3         4         3         4         3         4         3   | olonnaruwa     | 12     |         | П     | 17   | 0          | 7   | 0         | 0   | 0   | 12  | ٣       | 83   | 0               |    | 0   |    |             |       | 152   |       | 15     | 7             | 137  | 09         | 88     |
| 18515261536252525252525253625363636373 <td>adulla</td> <td>20</td> <td></td> <td>С</td> <td>75</td> <td>0</td> <td>2</td> <td>0</td> <td>9</td> <td>0</td> <td>10</td> <td>9</td> <td>101</td> <td>7</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>71</td> <td>0</td> <td>2</td> <td>46</td> <td>100</td>   | adulla         | 20     |         | С     | 75   | 0          | 2   | 0         | 9   | 0   | 10  | 9       | 101  | 7               |    | 0   |    |             |       |       |       | 71     | 0             | 2    | 46         | 100    |
| 4554555 <td>onaragala</td> <td>19</td> <td></td> <td>0</td> <td>47</td> <td>0</td> <td>2</td> <td>0</td> <td>П</td> <td>0</td> <td>7</td> <td>7</td> <td>202</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>102</td> <td></td> <td>28</td> <td>П</td> <td>24</td> <td>99</td> <td>100</td>   | onaragala      | 19     |         | 0     | 47   | 0          | 2   | 0         | П   | 0   | 7   | 7       | 202  | 7               |    |     |    |             |       | 102   |       | 28     | П             | 24   | 99         | 100    |
| A1130496641106512112  | atnapura       | 109    |         |       | 112  | 7          | 30  | 0         | 17  | 0   | 4   | 30      | 373  | 0               |    |     |    |             |       | 198   |       | 72     | 0             | 140  | 45         | 100    |
| A         1715         30496         64         1106         5         121         12         <  | galle          | 55     |         |       | 41   | 0          | 7   | 0         | 2   | 7   | 73  | 10      | 138  | 0               |    | 0   |    |             |       | 222   |       | 29     | 2             | œ    | 65         | 100    |
| 1715     30496     64     1106     5     121     12     217     15     648     13     2417     21     770     9     163     0     14     147     4627     44     656     90     1556     53   | almune         | 35     |         |       | 56   | -1         | 7   | 0         | П   | 1   | 28  | 0       | 4    | 0               |    | 0   |    |             |       | 124   |       | ∞      | 0             | П    | 20         | 100    |
|   | ILANKA         | 1715   |         |       | 1106 | 7          | 121 | 12        | 217 | 15  | 648 | 13      | 2417 |                 |    |     |    |             |       | 4627  |       | 929    | 06            | 1556 | 23         | 66     |

•T=Timeliness refers to returns received on or before 13th July , 2018 Total number of reporting units 353 Number of reporting units data provided for the current week: 351 C\*\*-Completeness A = Cases reported during the current week. B = Cumulative cases for the year. Source: Weekly Returns of Communicable Diseases (WRCD).

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### Table 2: Vaccine-Preventable Diseases & AFP

### 07th - 13th July 2018 (28th Week)

| Disease               | No. of | Cases b | y Province | Э  |    |    |    |    |     | Number of cases during current | Number of cases during same | Total number of cases to date in | Total number of cases to date in | Difference<br>between the<br>number of |
|-----------------------|--------|---------|------------|----|----|----|----|----|-----|--------------------------------|-----------------------------|----------------------------------|----------------------------------|--|
|                       | W      | С       | S          | N  | Е  | NW | NC | U  | Sab | week in<br>2018                | week in 2017                | 2018                             | 2017                             | cases to date in 2018 & 2017           |
| AFP*                  | 01     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 01                             | 01                          | 36                               | 41                               | - 12.1 %                               |
| Diphtheria            | 00     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 00                             | 00                          | 00                               | 00                               | 0%                                     |
| Mumps                 | 01     | 00      | 01         | 00 | 00 | 03 | 01 | 00 | 03  | 09                             | 06                          | 199                              | 196                              | 1.5 %                                  |
| Measles               | 00     | 01      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 01                             | 02                          | 73                               | 134                              | - 45.5 %                               |
| Rubella               | 00     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 00                             | 00                          | 04                               | 05                               | - 20 %                                 |
| CRS**                 | 00     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 00                             | 00                          | 00                               | 00                               | 0%                                     |
| Tetanus               | 00     | 00      | 01         | 00 | 00 | 00 | 00 | 00 | 00  | 01                             | 02                          | 14                               | 10                               | 40 %                                   |
| Neonatal Tetanus      | 00     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 00  | 00                             | 00                          | 00                               | 00                               | 0 %                                    |
| Japanese Encephalitis | 00     | 00      | 00         | 00 | 00 | 01 | 00 | 00 | 00  | 01                             | 00                          | 18                               | 21                               | - 14.2 %                               |
| Whooping Cough        | 00     | 00      | 00         | 00 | 00 | 00 | 00 | 00 | 02  | 02                             | 00                          | 32                               | 09                               | 255.5 %                                |
| Tuberculosis          | 129    | 24      | 04         | 08 | 00 | 00 | 11 | 05 | 05  | 186                            | 170                         | 4457                             | 4429                             | 0.6 %                                  |

#### Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna,

KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP\* (Acute Flaccid Paralysis ), Japanese Encephalitis

CRS\*\* =Congenital Rubella Syndrome

NA = Not Available

| Influenza Surveil | lance in Sentinel | Hospitals - ILI & SARI            |        |        |                |               |           |
|-------------------|-------------------|-----------------------------------|--------|--------|----------------|---------------|-----------|
| X 4               | Human             |                                   |        |        | Animal         |               |           |
| Month             | No Total          | No Positive                       | Infl A | Infl B | Pooled samples | Serum Samples | Positives |
| July              | 107               | 40                                | 29     | 11     | 1225           | 693           | 0         |
| Source: Medical   | Research Institut | e & Veterinary Research Institute |        |        |                |               |           |

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