# Data Dictionary for supplemental data: A bibliometric analysis of One Health research, 2010 to 2024, guided by the Joint Plan of Action

Files are named according to the Table or Figure in the paper that they correspond to. For each file, a brief description is given for the fields provided.

## Table 3: Country policies that cite One Health research publications. Since publications may be assigned to multiple action tracks, the sum of percentages may exceed 100 (n=896)

Column descriptions:

* **Country / Region** – Where the publishing organisation is based
* **Policy Document Count** – Number of policy documents that cite One Health publications
* **Total Citations to One Health Publications** – Total number of citations from policy documents to One Health publications
* **AT1 Cites** – Total number of citations to One Health publications assigned to action track 1
* **AT2 Cites / AT3 Cites / AT4 Cites / AT5 Cites / AT6 Cites** – as above for each action track
* **% AT1** – Number of citations to AT1 publications (AT1 Cites column) divided by the total number of citations (Total Citations to One Health Publications column) \* 100
* **% AT2 / % AT3 / % AT4 / % AT5 / % AT6** – as above for each action track

## Figure 1: Alluvial diagram of 29 topics mapped to the 6 action tracks based on all (primary and non-primary) topic assignments for One Health publications. A publication (connecting lines) may connect more than one topic to more than one action track because up to three topics were assigned for each publication.

Column descriptions:

* **topic –** unique number assigned to the discovered topic
* **Source –** label assigned to the source (left) topic
* **action track –** unique id for the assigned action track
* **Target -** label assigned to the target (right) action track
* **count –** total number of publications that associated a topic to an action track (connecting chord thickness)

## Figure 2: Classification of publications to multiple action tracks. Panel A: Heatmap showing the percentage of publications assigned to action track (rows) that were also assigned to another action track (columns). Diagonal values, where rows and columns are for the same action track, show the percentage of publications that are assigned only to that action track. Panel B: Chord diagram - the chord thickness is proportional to the number of publications that share two action tracks, while lines that connect back to the same action track denote the publications assigned only to that particular action track.

The data file corresponds to the table in Panel A that is used to draw the chord diagram in Panel B.

## Figure 3: Number (Panel A) and proportion (Panel B) of One Health publications published between 2010-2024. Only years where the volume of publications for an action track is greater than twenty are included in Panel B.

Column descriptions:

* **PubYear** – Year the article was published
* **global count** – Total number of One Health publications in year
* **no AT count** – Count of publications not assigned to any action track
* **AT 1 count** – Count of publications in year assigned to action track 1
* **AT 2 count / AT 3 count / AT 4 count / AT 5 count / AT 6 count** – as above for each action track
* **% no AT** – Percentage of One Health publications in the year not assigned to any action track
* **% AT 1** - Percentage of One Health publications in the year assigned to action track 1
* **% AT 2 / % AT 3 / % AT 4 / % AT 5 / % AT 6 –** As above for each action track

## Figure 4: Geographical spread of One Health publications, based on author affiliations - count per region (panel A) and percentage global share out of all One Health publications (panel B). Note: Since a full counting methodology is used to attribute publications to countries, total percentages exceed 100 because a proportion of outputs have multiple countries associated with them.

Column descriptions:

* **Continent label** –The continent the time series data is for
* **2014 – 2023** - the percentage of One Health publications in each year that had an author based in the named continent

## Figure 5: One Health publications by country affiliation of authors and country of focus: Panel B: One Health publications by map of authorship

Column descriptions:

* **Country name** - Country where an author of the publication was based
* **Continent** –The continent code corresponding to the named country
* **Global count** –The number of One Health publications attributed to the country (full counting methodology).

## Figure 6: One Health country research focus – the percentage of One Health papers produced by the country (numerator) relative to all research across related fields (denominator). Note: Only countries with ≥5 One Health publications are plotted. *Color code: 'Africa': orange, 'North America': red, 'Europe': light blue, 'South America': green, 'Oceania': purple, 'Asia': yellow.*

Column descriptions:

* **Country** – The name of the country
* **Continent**– The continent where the country is location
* **Income group** – World Bank income classification for the named country
* **ISO** – two-digit ISO code for the country
* **ISO3** – three-digit ISO code for the country
* **Total publication output** – Total number of publications attributed to the country (i.e. national output)
* **Total One Health publication output –** Number of One Health publications with an author from the named country
* **% One Health focus –** The percentage of national output that is One Health (i.e. Total One Health publication output / Total publication output \* 100)
* **% Global share –** The number of publications attributed to the country as a percentage of the global publication output
* **% One Health share** - The percentage of all One Health publications that were attributed to the named country
* **% One Health share diff –** % One Health share - % Global share (i.e. the difference in share for One Health compared to the national output)

## Figure 7 - Heatmap of countries mentioned in OH publications (x-axis), against the author country (y-axis). Countries are grouped by continent (see colour bars) and ordered by country name. The strong diagonal is when authors mention locations in their home country, the most dominant form of location mention.

The data file is a matrix that lists how many publications (cell values) an author from a country (row) mentions a location in a country (columns) in the title or abstract.

## Figure 8: One Health institutional collaboration network (2012– 2024). Institutions (nodes, with size proportional to the number of publications) are linked by edges based on the number of collaborative outputs, with thicker lines indicating a higher number of papers. Nodes are grouped according to geographic continent (see legend).

The network is provided in Graph Exchange XML Format (GEXF)[[1]](#footnote-1) and can be loaded with tools such as Gephi[[2]](#footnote-2). Nodes have the following attributes:

* **Label –** the name of the institution
* **global\_count** – total number of One Health publications
* **country –** The country where the institution is based
* **continent** – the continent where the institutions is based
* **designation** - global north or global south
* **community** – clusters of institutions (Louvain communities with resolution=1.0)
* **eigen\_centrality**[[3]](#footnote-3) **-** how well the node is connected in the network)

Edge weight is equal to the number of One Health publications they collaborated on.

## Figure A2: Top 10 countries ranked by publication count (panel A) and percentage global share (panel B)

Column descriptions:

* country – the name of the country
* 2014-2023 – the year of publication
* Values specify the count (Panel A file) or percentage of One Health publications (Panel B file)

## Figure A3: Open Access over time – One Health publications. Counts all forms of open access (gold, silver, bronze, hybrid). Only years with 25 or more publications are plotted.

Column descriptions:

* Group – either the publications for an action track or other baselines
* 2012-2023 – the year of publication
* Values specify the percentage that are open access (gold, silver, bronze or hyrid)

## Figure A4: Alluvial diagram showing allocation of Australian Fields of Research[[4]](#footnote-4) (FOR) to different action tracks.

Column descriptions:

* for\_code – the four digit identification code for the group
* Source – label for the field or research
* action track – the assigned action track
* Target – label for the assigned action track
* at hex – colour in hexadecimal format for the connecting chord
* count – number of publications
1. <https://gexf.net/> [↑](#footnote-ref-1)
2. <https://gephi.org/> [↑](#footnote-ref-2)
3. <https://en.wikipedia.org/wiki/Eigenvector_centrality> [↑](#footnote-ref-3)
4. <https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-research-classification-anzsrc/latest-release> [↑](#footnote-ref-4)