



# Quick Start Guide

## LeDeR Data Tool – Beta Release

Digital Intelligence



## DOCUMENT CONTROL

### Change Record

Date	Author	Version No.	Reason for Change
28/03/2023	Dan White	1.0	New Document
29/03/2023	Tara Liu	1.1	Updated visuals and descriptions and redacted visuals
30/03/2023	Dan White	1.2	Reinstate visuals with sensitive information obscured
30/03/2023	Tara Liu	1.3	Updated wording relating to a variable, reference to the Variables & Filters Mapping page within the tool and updated Notes and Variables & Filters Mapping page visuals.
04/04/2023	Tara Liu	1.4	Edits as per feedback from Emma Stark

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## Introduction

The purpose of this document is to provide a simple understanding of how to use the LeDeR Data Tool.

The LeDeR Data Tool shows deaths reported to the LeDeR programme for which a review has been completed on the South Central and West (SCW) platform before the last refresh date and time. The date of the latest data refresh can be found in the header on each page of the tool. The aim of the tool is to give local areas access to data from LeDeR reviews to inform service improvement. **This tool is not intended for performance reporting or tracking progress of reviews.**

The LeDeR Data Tool is an automated, at scale solution. The data sources are the LeDeR database and medical certificate of causes of death (MCCD) data.

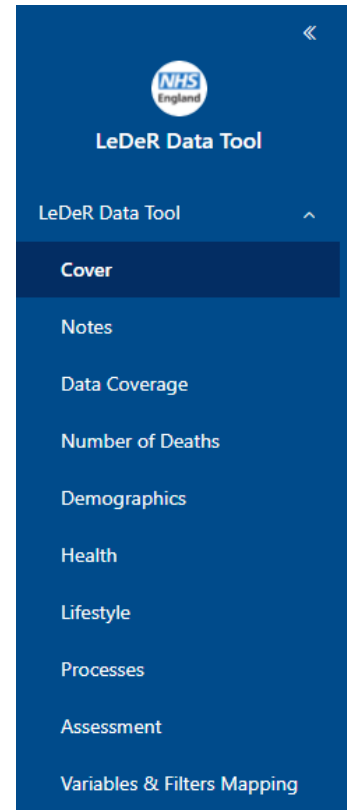
The report is checked for refreshed source data automatically and is updated on a monthly basis. This ensures that the most up to date information is available at your fingertips.

For the purpose of this guide, we assume that the user has permission to access the LeDeR Data Tool.

## LeDeR Data Tool App Navigation

Each report page displays a navigation menu at the side of the page

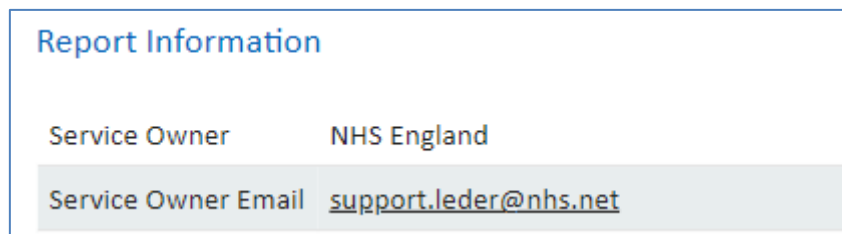
The LeDeR Data Tool pages are accessed by clicking on the page title within the navigation menu. Click on the page that you wish to view. It will then load and be displayed.



The title bar displays the page name, along with any relevant information regarding the data displayed on the page.

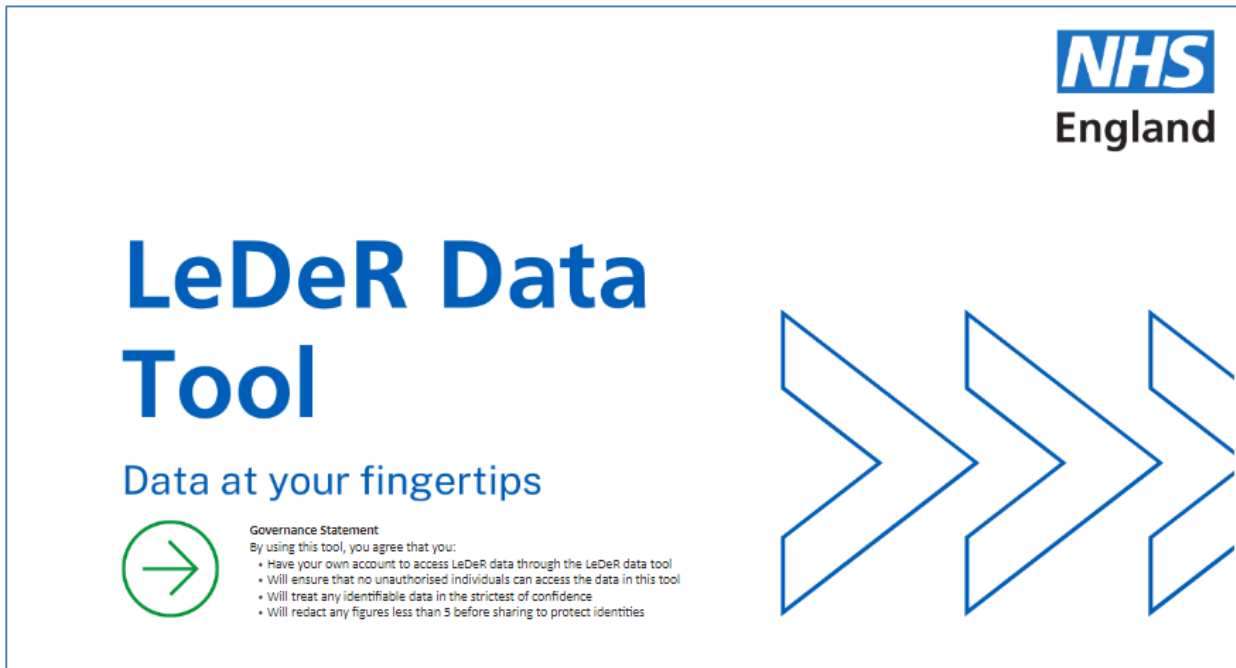


If you have any feedback regarding the LeDeR Data Tool, go to the Notes page and click on the Service Owner Email address to generate an email to the LeDeR support team.



## Cover and Notes Pages

The Cover page displays the report title as well as an information governance statement related to the report contents. By using this tool and clicking into the tool, you agree to the governance statement. Click on the green arrow button to access the report contents.



**NHS England**

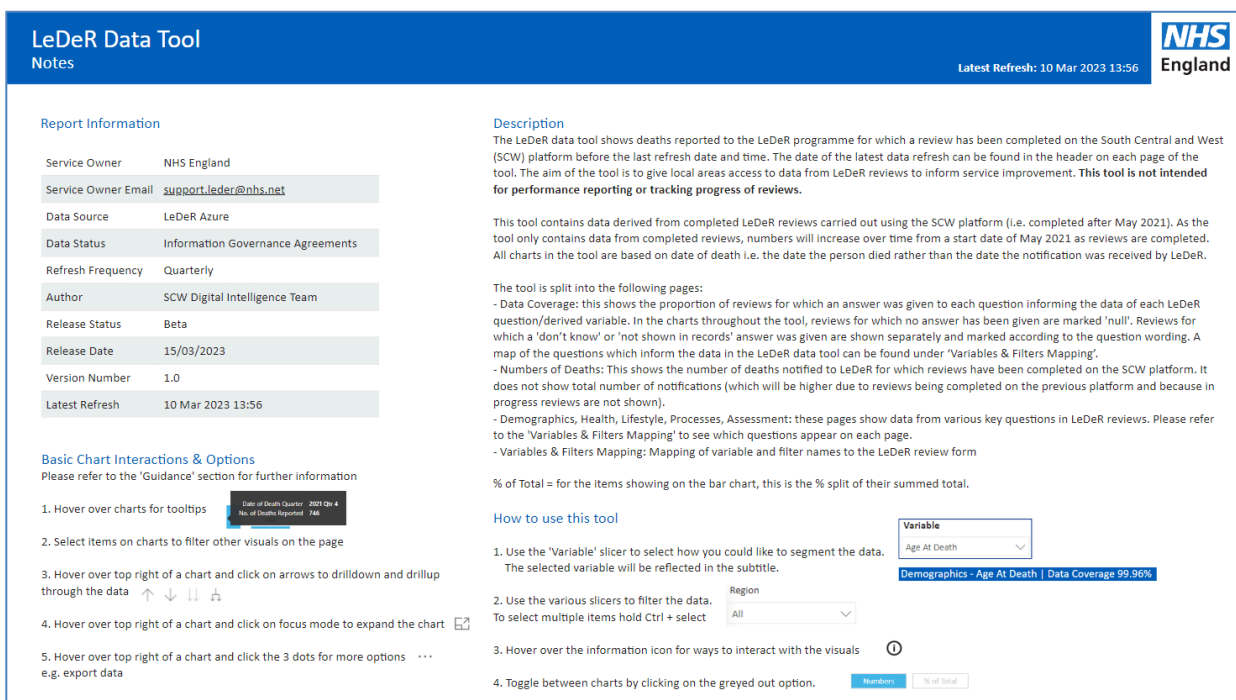
# LeDeR Data Tool

Data at your fingertips

**Governance Statement**  
By using this tool, you agree that you:

- Have your own account to access LeDeR data through the LeDeR data tool
- Will ensure that no unauthorised individuals can access the data in this tool
- Will treat any identifiable data in the strictest of confidence
- Will redact any figures less than 5 before sharing to protect identities

The Notes page contains technical information about the report, such as the report version number, release status and date. The Report Information table displays the latest refresh from the LeDeR system and refresh frequency.



**LeDeR Data Tool**  
Notes

Latest Refresh: 10 Mar 2023 13:56

**Report Information**

Service Owner	NHS England
Service Owner Email	support.leder@nhs.net
Data Source	LeDeR Azure
Data Status	Information Governance Agreements
Refresh Frequency	Quarterly
Author	SCW Digital Intelligence Team
Release Status	Beta
Release Date	15/03/2023
Version Number	1.0
Latest Refresh	10 Mar 2023 13:56

**Basic Chart Interactions & Options**  
Please refer to the 'Guidance' section for further information

1. Hover over charts for tooltips
2. Select items on charts to filter other visuals on the page
3. Hover over top right of a chart and click on arrows to drilldown and drillup through the data
4. Hover over top right of a chart and click on focus mode to expand the chart
5. Hover over top right of a chart and click the 3 dots for more options e.g. export data

**Description**  
The LeDeR data tool shows deaths reported to the LeDeR programme for which a review has been completed on the South Central and West (SCW) platform before the last refresh date and time. The date of the latest data refresh can be found in the header on each page of the tool. The aim of the tool is to give local areas access to data from LeDeR reviews to inform service improvement. **This tool is not intended for performance reporting or tracking progress of reviews.**

This tool contains data derived from completed LeDeR reviews carried out using the SCW platform (i.e. completed after May 2021). As the tool only contains data from completed reviews, numbers will increase over time from a start date of May 2021 as reviews are completed. All charts in the tool are based on date of death i.e. the date the person died rather than the date the notification was received by LeDeR.

The tool is split into the following pages:

- Data Coverage: this shows the proportion of reviews for which an answer was given to each question informing the data of each LeDeR question/derived variable. In the charts throughout the tool, reviews for which no answer has been given are marked 'null'. Reviews for which a 'don't know' or 'not shown in records' answer was given are shown separately and marked according to the question wording. A map of the questions which inform the data in the LeDeR data tool can be found under 'Variables & Filters Mapping'.
- Numbers of Deaths: This shows the number of deaths notified to LeDeR for which reviews have been completed on the SCW platform. It does not show total number of notifications (which will be higher due to reviews being completed on the previous platform and because in progress reviews are not shown).
- Demographics, Health, Lifestyle, Processes, Assessment: these pages show data from various key questions in LeDeR reviews. Please refer to the 'Variables & Filters Mapping' to see which questions appear on each page.
- Variables & Filters Mapping: Mapping of variable and filter names to the LeDeR review form

% of Total = for the items showing on the bar chart, this is the % split of their summed total.

**How to use this tool**

1. Use the 'Variable' slicer to select how you could like to segment the data. The selected variable will be reflected in the subtitle. **Variable: Age At Death**
2. Use the various slicers to filter the data. To select multiple items hold Ctrl + select. **Region: All**
3. Hover over the information icon for ways to interact with the visuals
4. Toggle between charts by clicking on the greyed out option. **Numbers | % of Total**

The column on the right displays additional information regarding the LeDeR Data Tool.

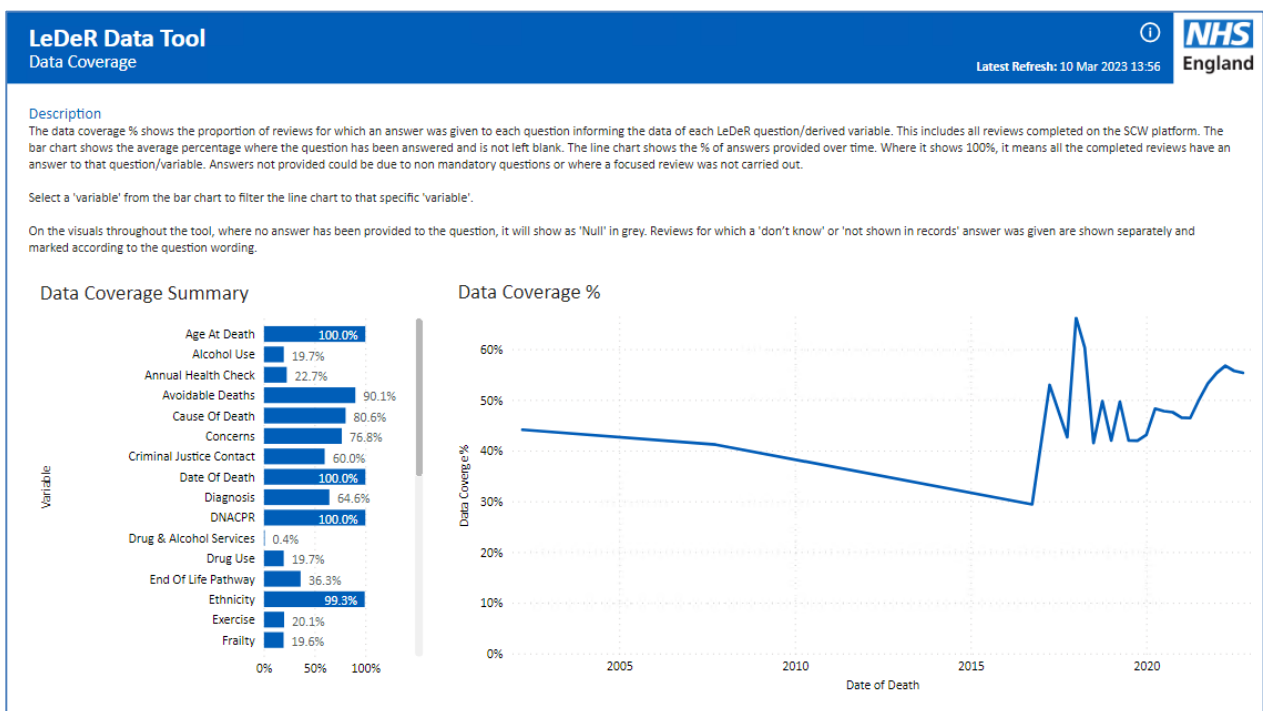
## LeDeR Data Tool Report Structure

There are seven data pages and a data mapping page within the LeDeR Data Tool, described below.

### Data Coverage

This page shows the data coverage of a LeDeR question/derived variable. i.e. the proportion of reviews for which an answer was given to each question informing the data of each LeDeR question/derived variable. There are several reasons that data coverage might be low for a particular question:

- the question is in the focused review and therefore not answered for anyone who has an initial review only.
- the question is not mandatory or was not mandatory in the past and therefore is not answered for everyone who has a LeDeR review.
- the question is in the initial review but has moved from the focused review.
- the question is new and was therefore not answered in older reviews.



## Number of Deaths

This page shows the number of people for whom LeDeR reviews have been completed on the SCW system. Please note that the data is organised by date of death rather than notification date and that it does not show the number of deaths notified to LeDeR because reviews not yet completed are not included.



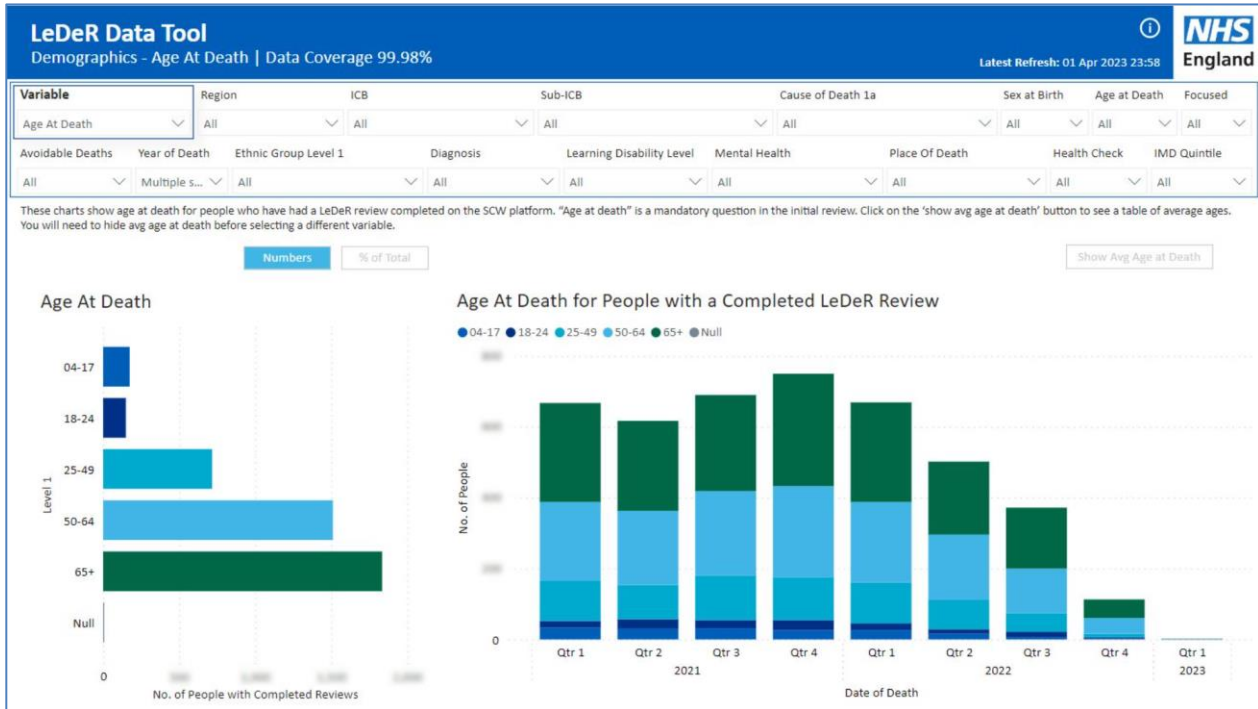
The data can be displayed by year, quarter and/or month using the chart arrows. Please refer to “[Drilling Down – Data Levels and Hierarchies](#)” in this guide.





## Demographics

This page shows the number of people for whom LeDeR reviews have been completed on the SCW system and percentage splits by variables/LeDeR questions related to demographics such as age at death, diagnosis etc. Use the “Variable” filter to select which view of the data you would like to show.



Please refer to the “Variables & Filters Mapping” page within the tool to see the full list of variables under Demographics.

For the bar chart on the left, use the buttons to select whether you want to see the number of people or percentage split.

**Variable**

Age At Death ▼

Numbers % of Total

This bar chart contains 3 levels of data shown on the y axis on the “Numbers” chart and x axis on the “% of Total” chart. For example, for ‘Age at Death’, these levels are:

- Level 1 = age groupings from the LeDeR annual report
- Level 2 = age groupings with an additional group for children not eligible for an annual health check
- Level 3 = no groupings (individual ages)

Use the chart arrows to drill up and down to show the data by the different levels. Please note, only some variables will have differing data for the 3 levels, e.g. Age at Death, Geography, Ethnicity, however some will not e.g. IMD Quintile.

For the stacked bar chart on the right, the data can be displayed by year, quarter and/or month using the chart arrows to drill up and down.

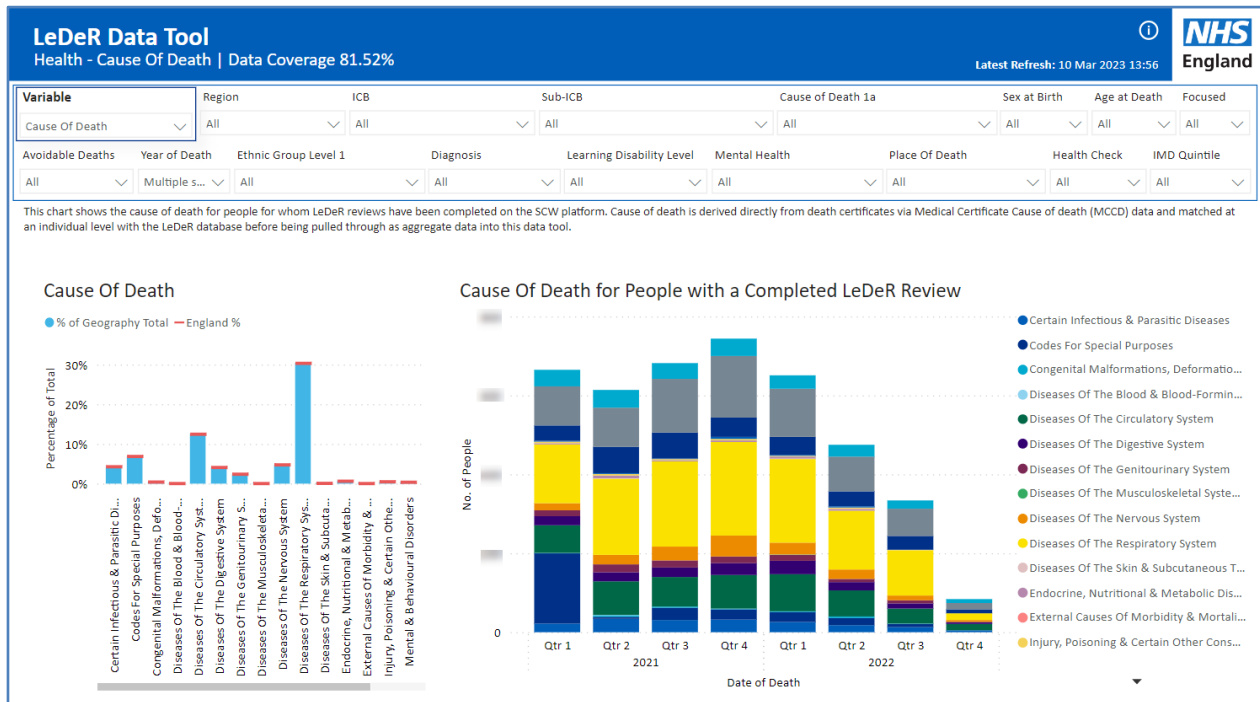
For further information Please refer to [“Drilling Down – Data Levels and Hierarchies”](#) in this guide.

Specifically for Variable, “Age at Death”, a button is available to “Show Avg Age at Death”, select this to show a data table for the average (mean) age at death. The data table also has chart options to view the data by year, quarter or month using the chart arrows. Remember to click on “Hide Avg Age at Death” before moving onto another Variable.



## Health

This shows the number of people for whom LeDeR reviews were completed on the SCW system and percentage splits by variables/questions relating to health such as, “Cause of Death” and, “Frailty”.



Use the “Variable” filter to select which view of the data you would like to show. Please refer to the “Variables & Filters Mapping” page in the tool to see the full list of variables/LeDeR questions under Health.

The left bar chart contains 3 levels of data shown on the x axis. Use the chart arrows to drill up and down to show the data by the different levels. For cause of death, this shows the cause of death by ICD10 code derived directly from medical certificate of cause of death (MCCD) data.

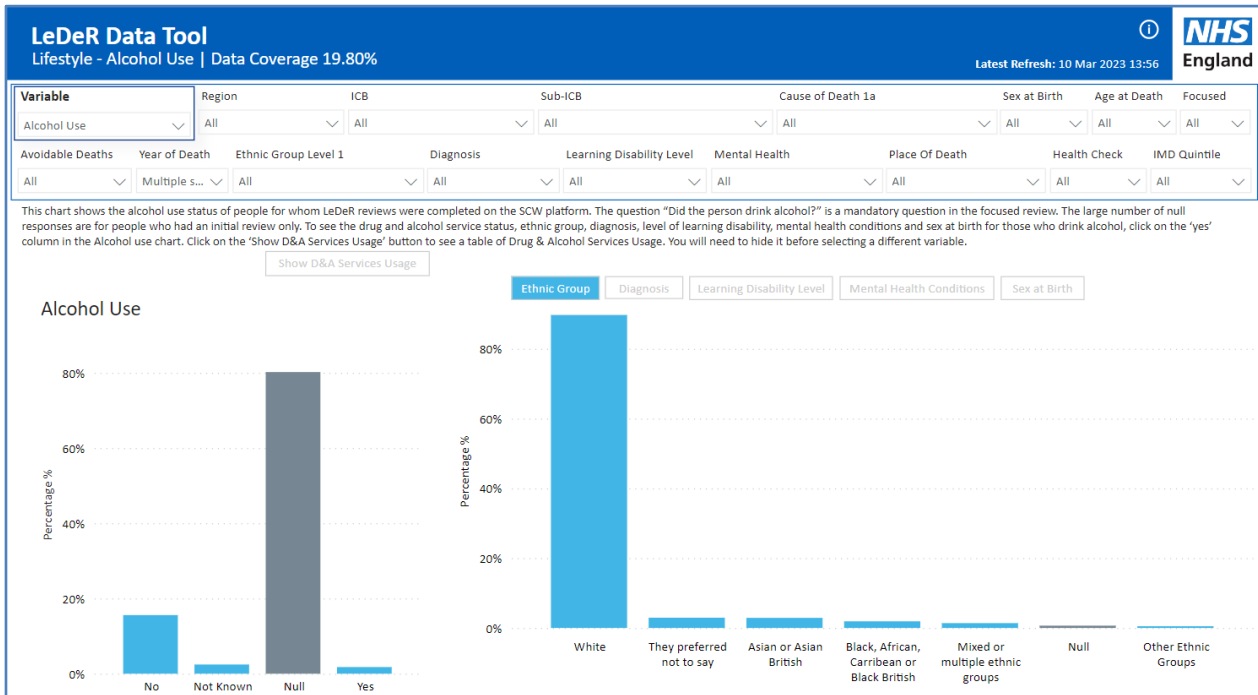
The levels in the tool show the different levels in the ICD10 hierarchy e.g. for someone who died from bacterial pneumonia the chart might show level 1 as diseases of the respiratory system, level 2 as Influenza and pneumonia and level 3 as pneumonia due to streptococcus pneumoniae.

For Genetic Syndrome or Birth Related Condition, Long Term Conditions, Mental Health and Physical Health Conditions, level 2 and level 3 show the same data, concatenating (combining) all the conditions for a person. E.g. where Level 1 is “Asthma/COPD”, level 2 and 3 will show all patients with an “Asthma/COPD” long term condition along with all their other conditions. Please note, Frailty does not have differing data for the 3 levels; the 3 levels display the same breakdown of the data. Please refer to, [“Drilling Down – Data Levels and Hierarchies”](#) in this guide.

For the stacked bar chart on the right, the data can be displayed by year, quarter and/or month using the chart arrows. Please refer to [“Drilling Down – Data Levels and Hierarchies”](#) in this guide. To expand a chart, hover over the top right of the chart and click on, “Focus mode”. Please refer to, [“Expanding charts to full screen”](#) in this guide for further information.

## Lifestyle

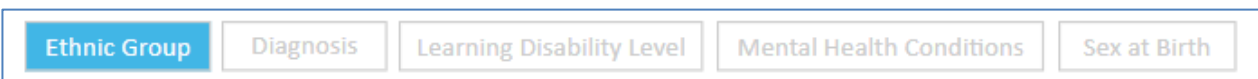
This page shows the number of people for whom LeDeR reviews have been completed on the SCW system and percentage splits by variables/questions relating to lifestyle such as, “Alcohol Use”, “Drug Use”.



Use the “Variable” filter to select which view of the data you would like to show. Please refer to the “Variables & Filters Mapping” page in the tool to see the full list of variables/LeDeR questions under Lifestyle.

Selecting an item on the bar chart will filter the data on the right bar chart. E.g. to view people with alcohol use, select the “Yes” bar to filter the data on the chart on the right. To deselect, click off the item.

For the bar chart on the right, use the buttons to select how you want the data broken down.

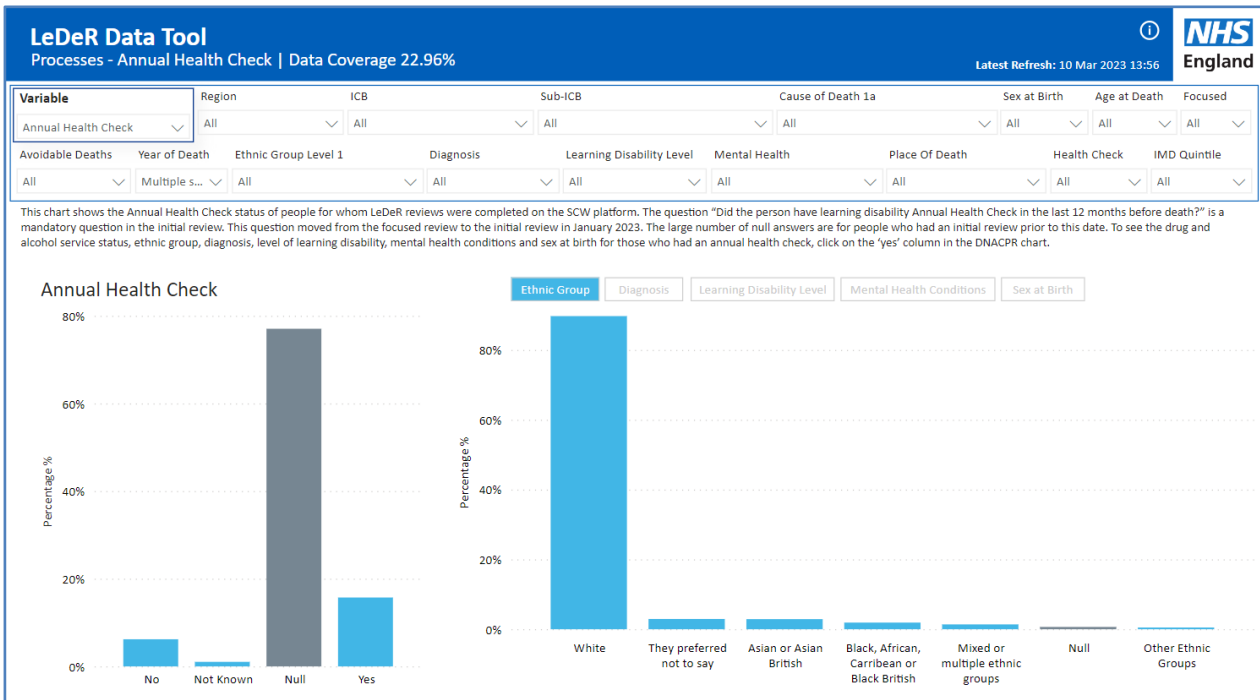


For Variable, “Alcohol Use” and “Drug Use” there is an option to “Show D&A Services Usage”. Use this to show a chart of Drug & Alcohol Services usage. Remember to hide it before selecting another Variable.



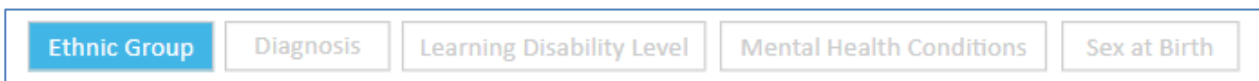
## Processes

This page shows the number of people for whom a LeDeR review has been completed on the SCW system and percentage splits by variables/questions relating to processes such as “Annual Health Check” and, “Criminal Justice Contact”.



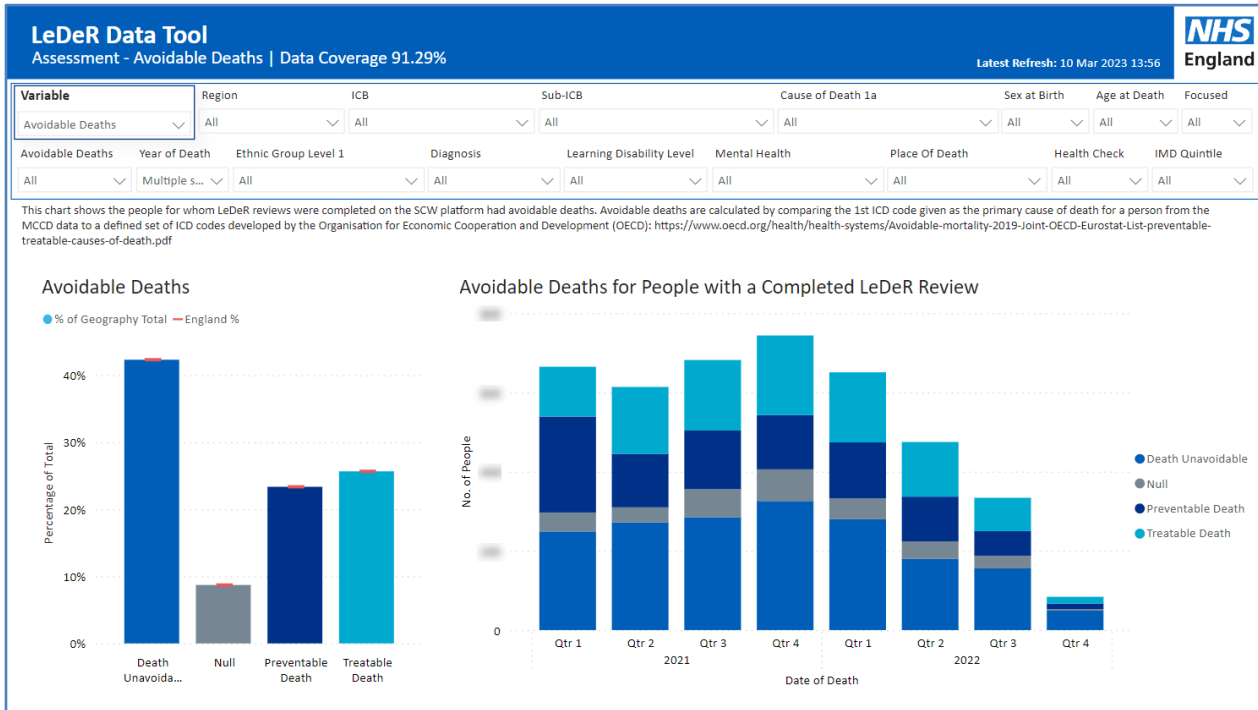
Use the “Variable” filter to select which view of the data you would like to show. Please refer to the “Variables & Filters Mapping” page in the tool to see the full list of variables/LeDeR questions under Processes.

For the bar chart on the right, use the buttons to select how you want the data broken down:



## Assessment

This page shows the number of people for whom a LeDeR review has been completed on the SCW system and percentage splits by variables/questions relating to assessments such as “Avoidable Deaths”, “Concerns” and “Grading of Care”.



Use the “Variable” filter to select which view of the data you would like to show. Please refer to the “Variables & Filters Mapping” page in the tool to see the full list of variables/LeDeR questions under Assessment.

For the stacked bar chart on the right, the data can be displayed by year, quarter and/or month using the chart arrows. Please refer to [“Drilling Down – Data Levels and Hierarchies”](#) in this guide.

## Variables & Filters Mapping

This shows the LeDeR questions that the variables and filters in this data tool map to. It also shows which the LeDeR questions that can be found on each of the pages. The form and mandatory columns will indicate why some of the data appears as, “null” e.g., if the question was not mandatory it may not have been completed. If a question is in the focused review, where a focused review was not completed, there will be no answer to the question and therefore it will be recorded as null.

LeDeR Data Tool Variables & Filters Mapping							NHS England
Section in LeDeR data tool	Variable/filter in LeDeR data tool	Question in LeDeR review form	Form	Section	Mandatory?	Notes	Data Levels (For left bar chart within Data Tool)
Demographics	Geography	Derived from GP address details	Notification	NHS details of the person who died	YES	All reviews were re-assigned to their new geographies when CCGs became ICBs in July 2022.	Level 1 - Region Level 2 - ICB Level 3 - Sub-ICB
Demographics	IMD Quintile	Derived from the person's postcode - the index of deprivation comes from identifying their lower super output area based on postcode. The 2019	Notification	What was the usual address of the person who died	YES	IMD deciles are combined so that deciles 1 & 2 become quintile 1, deciles 3 & 4 become quintile 2 etc. Decile and quintile 1 represent the most deprived areas.	All levels display the same split of data
Demographics	Learning disability level	What level of Learning Disability did the person who died have?	Initial	Detail of the person who died	YES	This question was moved from the focused review to the initial review in January 2023	All levels display the same split of data
Demographics	Learning disability register	Was the person on their GP's Learning Disability register?	Focused	Physical health main review, conditions, other	YES		All levels display the same split of data
Demographics	Living arrangements	What were the person's living arrangements?	Focused	Social and care, living arrangements	YES		All levels display the same split of data
Health	Cause of death	Imported from cause of death data taken directly from death certificate	N/A	N/A	N/A		Level 1 - ICD-10 Chapter Level 2 - ICD-10 Block Level 3 - ICD-10 Title
Health	Frailty	Was the person assessed as living with a frailty	Focused	Social and care, other	NO		All levels display the same split of data
Health	Genetic syndrome or birth related condition	Did the person have a genetic condition, syndrome or birth related condition linked to their learning disability?	Initial	Detail of the person who died	YES	This question was moved from the focused review to the initial review in January	Level 1 - Individual Genetic syndrome or birth related conditions Level 2 - Concatenations of conditions for each



## Working with Charts

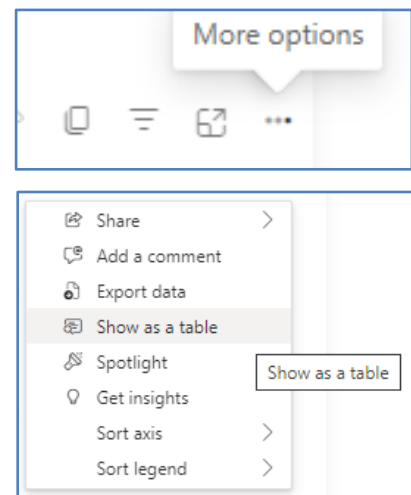
Each of the data pages within the LeDeR Data Tool contain interactive charts, which can be used to filter data selections. This section explains how to use these interactive charts.

Hovering the mouse pointer over an individual bar or data point in a chart will generate a tooltip box displaying the data for that chart element.

Clicking an item on a bar chart will filter the data on the right stacked bar chart. To select multiple items, hold CTRL + select the items you wish to view. To deselect, click off the items. Make sure to deselect items before moving to another Variable as filtering will still be applied.

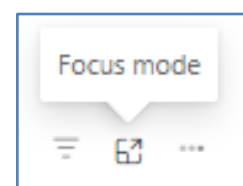
### View Charts as Data Tables

To view the charts as data tables, hover over the top right of a chart, click on “More options” (the 3 dots) and “Show as a table”. Clicking on this button will expand the chart to a full screen image with a data table below it. Clicking on the “back to report” button on the full screen image will revert the chart to its normal size and position.



### Expanding Charts to Full Screen

At the top right of each chart a “focus mode” button is available. Clicking on this button will expand the chart to a full screen image. Clicking on the “back to report” button on the full screen image will revert the chart to its normal size and position.

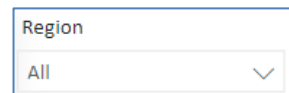


## Data selection and filtering

The data displayed within the LeDeR Data Tool reporting pages may be tailored as required by using the filters and selection options. The filtering process is common to all pages, so the information in this section will apply to all reporting pages:

### Selecting Filter Items

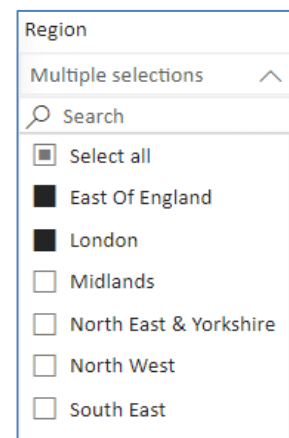
Filter selection boxes are positioned at the top of the page underneath the title bar. The filter title will be displayed, and the default selection is typically default to “All”, apart from, “Year of Death”. Click on the down arrow icon on the right to expand the filter list and display all available options.



### Selecting Multiple Items

To select multiple options within a filter hold CTRL + select the individual items; where an item is selected, checkboxes will be filled in. To deselect an item, click on the item again.

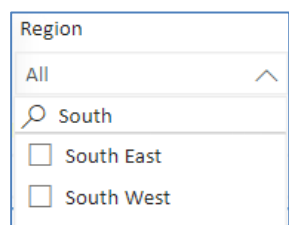
To toggle the bulk selection/deselection of all filter items, click the “Select All” box at the top of the list. When the required items have been selected, the report will update to show the selected results. Where there are more filter options than can fit in the filter window, a scroll bar will appear on the right. Select the required item(s) by clicking in the box(es).



### Searching Within Filters

Use the search box that appears at the top of the filter list to find a specific item.

As you begin typing into the search bar, the list will update to only display filter items matching the search criteria.



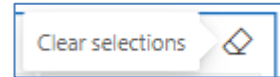
### Persistent Filters

**Important note:** The LeDeR Data Tool pages feature “persistent filters”. Filter selections made by the user will be maintained across the other pages, enabling the user to quickly switch between pages and view comparable data. For example, selecting the Region on the “Demographics” page to, “South West” will keep the region set to “South West” if the user switches to the “Health” page. The tool will remember any filters that have been applied so upon next login, you can pick up right where you left off last time.

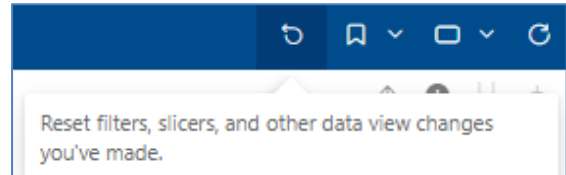
If you do not wish to use this comparison, ensure that you reset the filter settings to their defaults before switching pages. See the section, “Resetting Filters” below for further information.

## Resetting Filters

To reset an individual filter to the default settings, navigate to the filter drop-down menu, then click on the “Clear selections” button. This will reset the **individual** filter to the default setting.



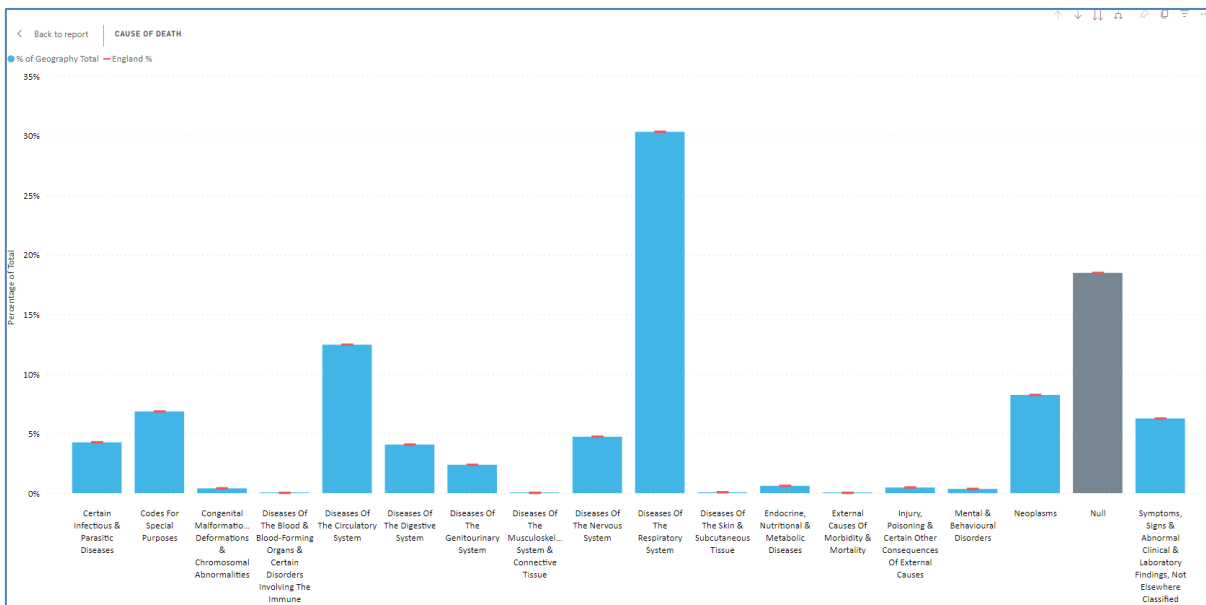
To reset **all** filters in the entire workbook, click on the “Reset filters...” button above the title bar. Use caution when selecting this option as this will reset **all** filters on **all** pages to their default setting.



A textbox is displayed just under the title bar. This details the selection status of all filters current selected on any page.

## Drilling Down – Data Levels and Hierarchies

Due to the large volume of data presented, many chart elements are in fact summaries of multiple subsets of data. For example, this chart displays the cause of death of people with a completed LeDeR review at Level 1 – ICD-10 chapter.



The Data Level menus allow the user to “drill down” to the level of detail required. From left to right the buttons are: “Drill Up”, “Drill Down”, “Next Level in hierarchy” and “Expand all down one level in hierarchy”.



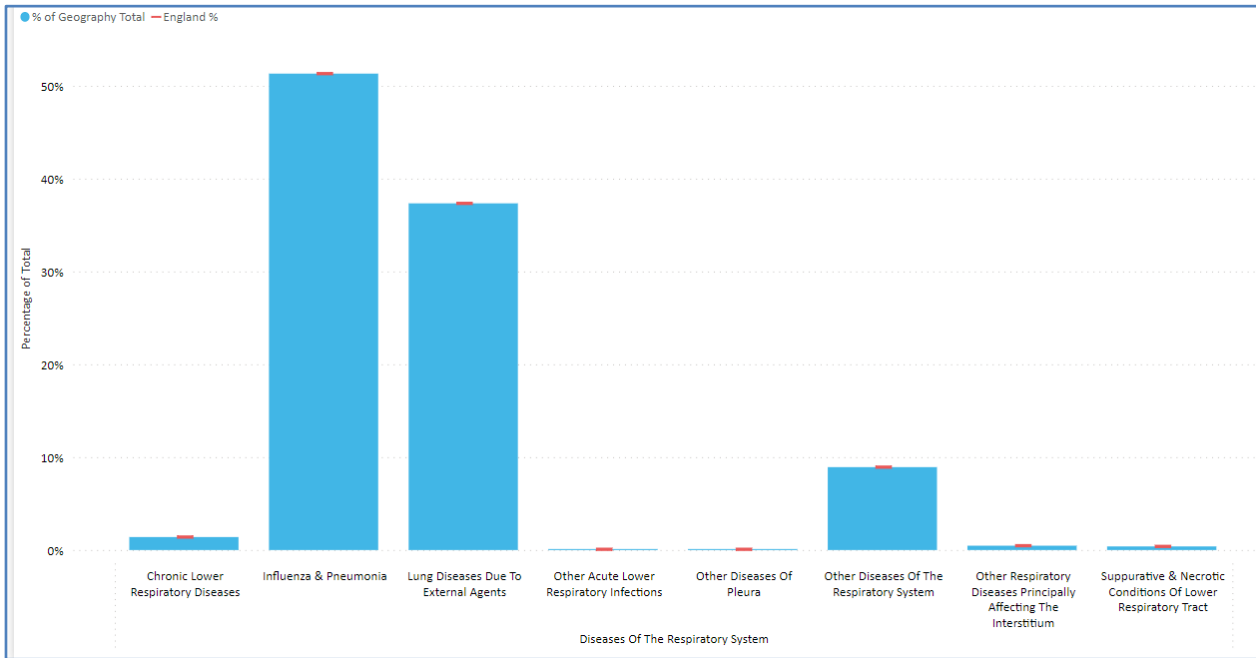
Clicking on the drilldown button will enable the “drilldown” function.

Selecting a single chart item, e.g. “Disease of the Respiratory System”

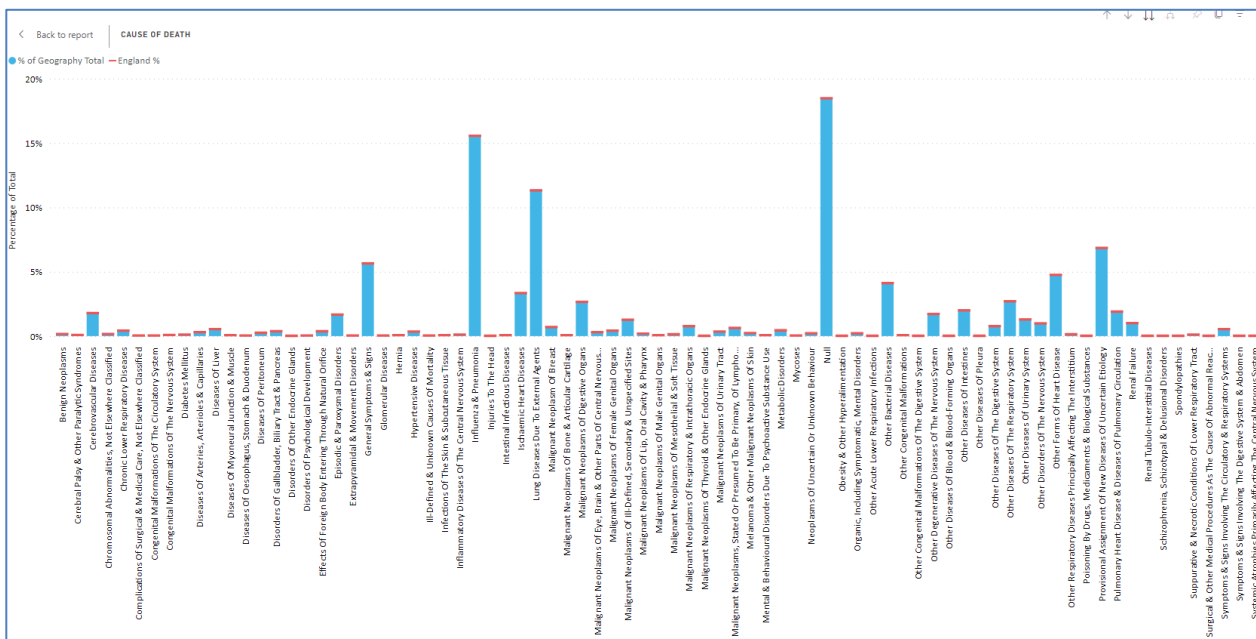
will “drill down” on that item to show the causes of death within chapter “Disease of the Respiratory System” only.



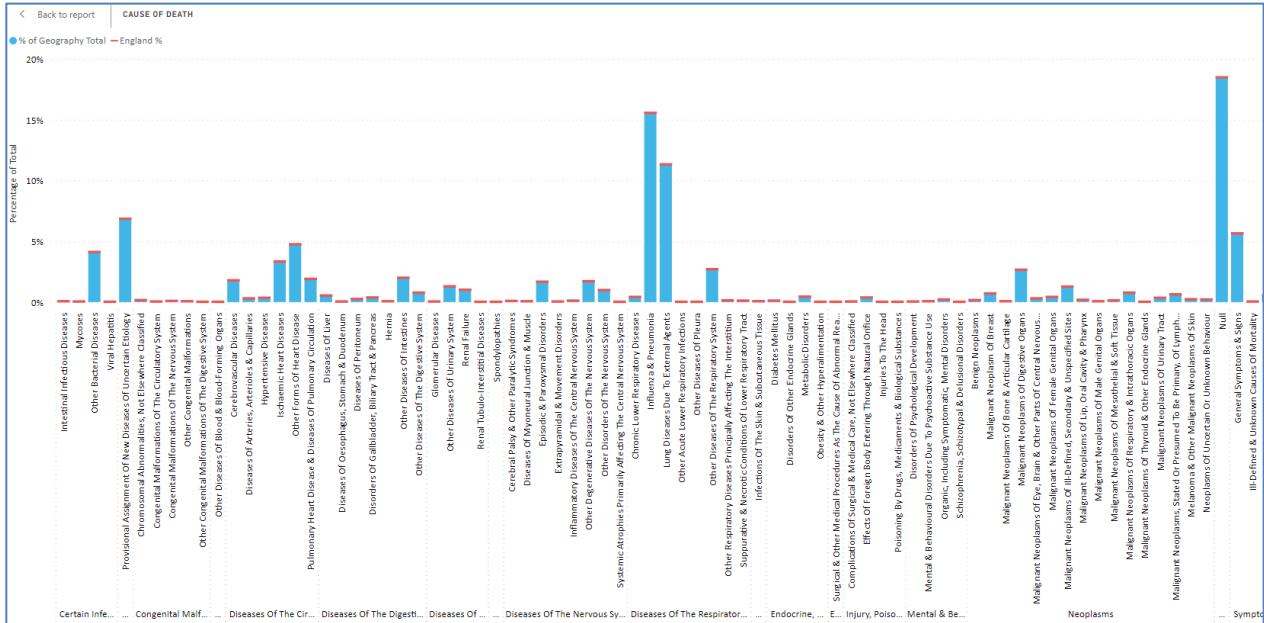
Clicking on “Influenza & Pneumonia” will further specifically drilldown on titles within “Influenza & Pneumonia” alone. Clicking on the Up Arrow will return the chart to the previous state.



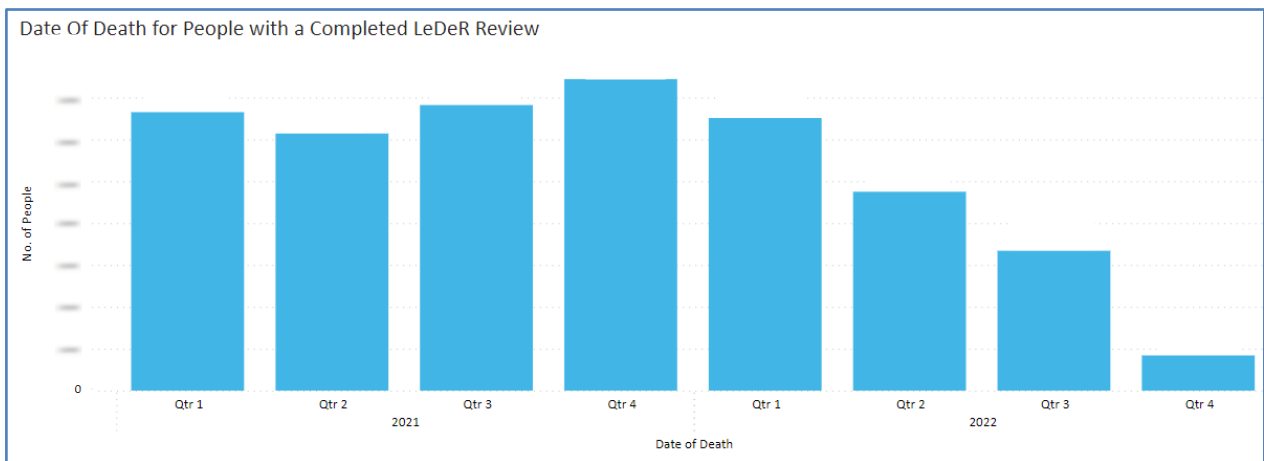
Clicking on the “Next Level in hierarchy” will show the data at level 2. Note this does not display the higher hierarchical cause of death.



Clicking on the "Expand all down one level in hierarchy" expands the chart to show the data by level 1 and level 2; the next hierarchy level whilst maintaining the previous hierarchy. Level 2 is grouped by the higher hierarchical cause of death.



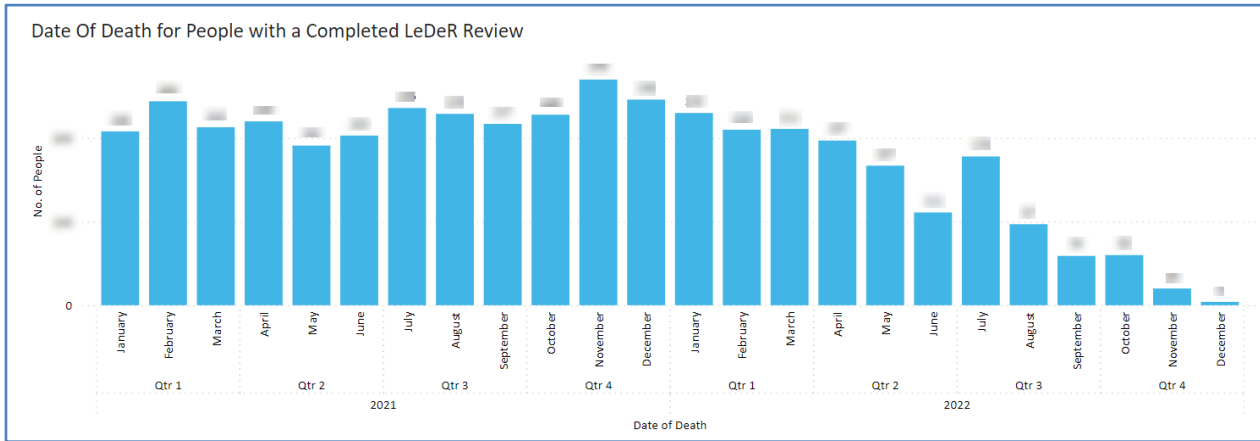
For charts with, "Date of Death", they can be displayed by year, quarter and/or month. The chart below shows the default view showing years and quarters.



By expanding all down one level in the hierarchy (the 3<sup>rd</sup> downward arrow), the breakdown is now shown by month, whilst remaining segmented by quarter and year on the x axis.

Clicking on the upward arrow instead, the chart will show the data by year. Use the "Drill Down" (first downward arrow; single arrow) to drilldown on a specific year or quarter.

Note that if multiple years of death are selected, it is not advised to use the "Next Level in hierarchy" (2 downward arrows) as this will collate all the data by quarter and month. E.g. if year 2021 and 2022 are selected and the "Next Level in hierarchy" is selected to display quarter, quarter 1 will include data from 2021 quarter 1 and 2022 quarter 2.



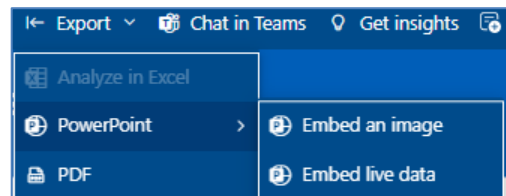
## Exporting Data

It is possible to export data from the LeDeR Data Tool, either as an entire report page or as a data export for individual charts on a page.

### Exporting an Entire Report Page

To export an entire page, select the Export menu button from the toolbar at the top of the page.

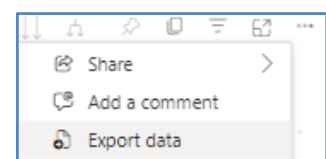
There are three options when exporting the entire report page:



1. PowerPoint – embed an image: This exports the report page as an image within a PowerPoint slide.
2. PowerPoint – embed live data: This option imbeds the report page with a live link to the data source. If the data is updated, the image will update automatically. **Note:** this will require a data connection to the Power BI app.
3. PDF: This option exports the report page as a PDF document.

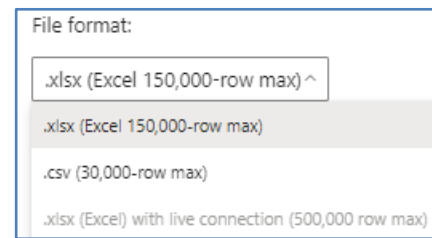
### Exporting Data from Specific Visuals from the Report

To export the data for a specific chart within a page, click on the three dots menu item at the top right of the chart, then select the “export data” option from the menu.



A data format window will appear with, “summarised data” selected as the default option.

The data may be exported in Microsoft Excel format or as a .CSV formatted file. Use the drop-down menu under the “file format” menu to select the required format.



## Feedback, Maintenance & Enhancements

Updates to the LeDeR Data Tool will be subject to a strict change control process and the updated version will be published upon formal test & subsequent sign off from the Product Owner.

Whilst all requests are considered, we cannot guarantee that requested changes will be made as there is a need to reflect the requirements of the majority of users and the funding available. Decisions on any updates will be made by the DI Gateway and Approval (DIGA) group after approval from the Product Owner. For any changes, please contact the Product Owner to discuss and submit the request on your behalf.