How to use the Alcohol Outlet Availability Profiles & CRESH WebMap



Alcohol Focus Scotland has worked with the Centre for Research on Environment, Society and Health (CRESH) at the Universities of Edinburgh and Glasgow to provide further evidence of the links between alcohol availability and harm in Scotland. Information was gathered alcohol outlets, health harms and crime rates within neighbourhoods across the whole of Scotland. This is available in the Alcohol Outlet Availability and Harm Profiles, and the CRESH WebMap.

We are hopeful this data will support local stakeholders and communities to:

- Improve understanding of alcohol and its impacts
- Inform policy and decision making
- Encourage collaboration and dialogue
- Assist in monitoring systems and progress

This guide explains how to use the information within these resources to look at levels of alcohol outlet availability and harm in your local area. You may also find the Local Uses for the Alcohol Profiles and CRESH Web Map document useful.

For further help and information in addition to this guide, or if you have any questions, please contact <u>Nicola Merrin</u>, Senior Coordinator (Policy and Research) on 0141 572 6295.

Alcohol Outlet Availability and Harm Profiles

Researchers compared data zones (small areas representing neighbourhoods that have between 500 and 1000 residents) to see if there was a relationship between the number of alcohol outlets in a neighbourhood and the rates of alcohol-related deaths and hospitalisations, and for the first time, crime rates. The profiles also consider the relationships between alcohol outlet availability and income deprivation.

The findings for Scotland were as follows:



Useful statistics within the profiles

The local profiles provide **information on alcohol outlet availability** for both **neighbourhoods within the local authority** and for the **whole of Scotland.** This was measured by calculating the number of outlets within 800m (approximately a ten minute walk) of each data zone (neighbourhood)'s population centre. Please see page 9 of the <u>profiles</u> for a more in-depth explanation of this measure.

Instead of just looking at the number of outlets within a neighbourhood, this measure provides an **indication of how many outlets are within easy reach of the neighbourhood.** This means that the number of outlets counted for a neighbourhood **often includes outlets within neighbouring datazones.** The number of outlets gives an indication of alcohol availability within an area.

The profiles provide the following information:

- The number of alcohol outlets in the local authority, for both on-sales and off-sales, in 2016 (page 2)
- The <u>average number of outlets</u> found within 800m of the neighbourhood centre for the <u>local authority</u>, for total outlets, on-sales outlets and off-sales outlets (page 2).
- The average number of outlets found within 800m of the neighbourhood centre for the whole of Scotland (page 2).
- The proportion of <u>neighbourhoods</u> in the local authority that have outlet availability <u>higher than the Scottish neighbourhood</u> <u>average</u>. This helps show that even if the local authority is generally low in alcohol availability as compared to Scotland or other local authorities, there are pockets of high availability present (page 2).
- How the number of outlets within the local authority changed from 2012 to 2016, for total, on-sales and off-sales outlets (page 2)
- Alcohol-related health harm, crime and deprivation statistics for the local authority (page 4)
 - Alcohol-related death rate
 - o Alcohol-related hospitalisation rate
 - o Crime rate
 - Income deprivation rate (page 6)
- The statistically significant associations found between alcohol outlet availability and alcohol-related deaths, alcohol-related hospitalisations, crime and deprivation at the local authority level (pages 5-6).

Both the local authority and Scottish averages can be **used for comparison when looking at the numbers of outlets for individual neighbourhoods**, which can be found on and downloaded from the <u>CRESH WebMap</u> (see <u>page 8</u> of this guide).

The CRESH WebMap

Local statistics on alcohol availability and related harm at neighbourhood (data zone) level can be accessed using the WebMap available at <u>creshmap.com</u>. There are two ways to use this: the **map** itself and **downloading the data**.

Map home screen

The map home screen looks like this. You will be using the 'Map', 'Register to Download' and 'Download' tabs most often, as circled in red.

Alcohol and Tobacco Environments in Scotland Register to Downloa Map How to use Download Acknowledgements Description This application allows you to map the number of alcohol and tobacco outlets and related harm for + small neighbourhoods across Scotland. Further information is available from the 'About' and 'How to Use' tabs on the right hand side. Local Authorities 23 Enter an Area of Interest Enter Data Type: Alcohol Total Sales Year 2016 Typical Distance to Outlet (metres) 800 Rank Colour Options Compared to Scottish Average Lesflet | © OpenStreetMap © CartoDB, Map tiles by Stamen Design, CC BY 3.0 — Map data © O

Outlet Count Rank Highest Average Lowes

Using the map

Description

This application allows you to map the number of alcohol and tobacco outlets and related harm for small neighbourhoods across Scotland. Further information is available from the 'About' and 'How to Use' tabs on the right hand side.

Local Authorities		
Enter an Area of Interest	Enter	
Data Type: ┥		
Alcohol Total Sales		•
Year 🗲		
2016		•
Typical Distance to Outlet (metres) 🔨	
800		•
Rank Colour Options		
Compared to Scottish Aver	age	•
See the next page for an options' field	explanation of the 'Rank Colour	r

On the left hand side of the screen, you will see this box with a number of options for what the map will display.

The first option lets you select which of the 'Local Authorities' you want to view. You can either type in the box and then choose the relevant local authority, or click and use the drop down option.

The second box gives you the ability to search for a particular 'Area of Interest'. This may be an address, a postcode, or another point of interest.

The **'Data Type**' option lets you choose what type of alcohol outlets you want to see. This can be **total** outlets (both on-sales and off-sales), **on-sales** outlets, or **off-sales** outlets. Where outlets sell alcohol for consumption both on and off the premises, this is only counted in on-sales outlets.

The **'Year**' field gives you the option of either **2016 or 2012**. This is for when the data was collected (the most recent profiles relate to the 2016 data).

The 'Typical Distance to Outlet' field allows you to choose the size of the zone within which the availability is measured, from 400m to 5000m. This provides flexibility to viewing the availability of a particular area; for example, you may wish to view the availability within a larger distance for more rural areas, and a smaller distance for more urban areas. This could also be helpful if boards consider the number of premises within a particular distance of a licence application.

The last option ('Rank Colour Options') allows you to choose what average you want to compare to. The map will then be colour coded in relation to that particular comparator. Neighbourhoods that have higher than average availability coloured a shade of red, and those with lower than average availability coloured a shade of blue.

The available comparators are:

Scottish Average

- Compares each neighbourhood's availability to the average availability of all neighbourhoods across Scotland
- This can be a useful comparator. Remember however, that the Scottish average is elevated by the high rates of availability in the cities. It is often best to compare to the average of both the whole of Scotland and the local authority.

Local Authority Average

- Compares each neighbourhood's availability to the average availability of all neighbourhoods within the local authority
- This is a good comparator to use as it gives an indication of the areas of high availability <u>within</u> the local authority, rather than only comparing to the Scottish average.

Urban/Rural Average

- Compares each neighbourhood's availability to the average availability of all neighbourhoods with the same urban/rural status (see the <u>table on page 10</u> for further information on the urban/rural classification of neighbourhoods)
- This will be most helpful if a neighbourhood is particularly rural or urban and you want to see how this impacts on the availability rates. For example, you may wish to see how an urban area compares to other similarly urban areas.

Deprivation Average

- Compares each neighbourhood's availability to the average availability of all neighbourhoods with the same deprivation quintile.
- This will be most helpful if a neighbourhood is particularly deprived and you want to see how this impacts on the availability rates (page 6 of your local <u>profile</u> may tell you that there are more outlets in the most deprived areas). Where this is the case, it may be useful to know whether a deprived neighbourhood has higher than average availability than other similar areas.

When you have selected your options to view, you may wish to screen print the map to use as a visual representation of alcohol availability (press the 'print Scrn' button on your keyboard and this will copy the whole screen which you can then crop, giving the map as a picture).



Seeing individual neighbourhoods on the map

Another way to use the map is to **click on individual neighbourhoods to view key availability and harm statistics**, which are displayed for the option selected for 'Rank Colour Options' (i.e. compared against the average chosen from the list above).



For this example, Dundee City, 2016, Alcohol Off-Sales, 800m and Scottish Average were selected. Data zone 'City Centre – 05' is highlighted as the neighbourhood of interest.

The outlet count is the first statistic given; this is the availability measure. The comparison to the Scottish average shows that there were **18 outlets** within 800m of centre of this neighbourhood, which is **over three times (330% of) the Scottish average**. It also says whether the neighbourhood (data zone) is in the **top 10% of neighbourhoods** in Scotland for availability.

Under health, the alcohol-related hospitalisation rate ratio is noted as 251, which is in the top 10% of neighbourhoods in Scotland (see <u>table on page 10</u> for explanation of this variable). A range is given for the alcohol mortality (due to confidentiality reasons, specific numbers cannot be provided at such a local level). This neighbourhood's rate was between 180 and 587, which is also in the top 10% of neighbourhoods in Scotland.

The number of **recorded crimes committed within the data zone per 10,000 people** is provided last – this is **6787** for this neighbourhood, which is **2186% of the Scottish average** (over 20x the Scottish rate). It also includes whether it is in the **top 10% of neighbourhoods** in Scotland.

Lastly, you can click on the link at the bottom for more information on the data zone (statistics.gov website).

Downloading the data

The map is useful for looking at the stats for a single neighbourhood and seeing the general patterns of outlet availability in the surrounding area, but to look at the data in greater depth (such as to compare neighbourhoods), you can **download the data**. You can view and download all data for Scotland, local authorities, and down to data zone areas. You can select what data you would like to see via the options on the left hand side of the map.

Once you click on the '**Download**' tab, you will see the statistics available for all of the data zones within the area you selected. There are quite a few variables, and you will need to move the bar along the bottom of the screen to the right to see all of them. You can choose to

view these on the website, which is best for looking at particular neighbourhoods, or you can download the data into an Excel spreadsheet.



To do this, you must first '**Register to Download'**, by clicking on one of the tabs across the top of the map on the home screen. The information you provide is used by CRESH confidentially to find out how the data are being used. You are ready to click on the download tab once you've received **this notification**.

Map About How to use Register to Download Download Acknowledgements

ow[10 💌 entries							Search:	
	DZ_2011_code 0	DZ_2011_name 0	IZ_2011_code 0	IZ_2011_name ()	LA_code 0	LA_name (X800alcoholOn2016coun	X800alcoholOn2016density 0	TobMortSMR_2011
18	S01012236	Houston North - 04	\$02002290	Houston North	\$12000038	Renfrewshire		1.98943678864869	68.1,85
59	S01012177	Renfrew East - 04	S02002281	Renfrew East	S12000038	Renfrewshire	6	2.98415518297304	68.1,85
92	S01012210	Erskine West - 07	S02002285	Erskine West	\$12000038	Renfrewshire	3	1.49207759148652	68.1,85
60	S01012178	Renfrew East - 05	S02002281	Renfrew East	\$12000038	Renfrewshire	4	1.98943678864869	68.1,85
83	S01012201	Erskine Central - 05	S02002284	Erskine Central	\$12000038	Renfrewshire	3	1.49207759148652	68.1,85
61	S01012179	Renfrew East - 06	S02002281	Renfrew East	\$12000038	Renfrewshire	29	14.423416717703	68.1,85
3	S01012031	Renfrewshire Rural North and Langbank - 04	\$02002256	Renfrewshire Rural North and Langbank	S12000038	Renfrewshire	0	0	22.9,68.1
4	S01012032	Renfrewshire Rural North and Langbank - 05	\$02002256	Renfrewshire Rural North and Langbank	S12000038	Renfrewshire	0	0	22.9,68.1
5	S01012033	Kilbarchan - 01	S02002257	Kilbarchan	\$12000038	Renfrewshire	2	0.994718394324346	85,103
2	S01012040	Johnstone South West - 04	\$02002258	Johnstone South West	S12000038	Renfrewshire	1	0.497359197162173	85,103

If you know the name of a specific data zone or town that you are interested in, you can enter this in the **search** box at the top right hand corner.

You can also **sort how you view the data**, from highest to lowest (or alphabetically) by clicking on the arrows beside the variable names. The most useful way to view this is by the count of alcohol outlets, from highest to lowest.

To download this data into an Excel spreadsheet, click on the 'Download Filtered Data' button at the bottom left of the page.

showing 1 to 10 of 225 entries

Download Filtered Data

Using the downloaded data

After clicking '**Download Filtered Data**', an Excel spreadsheet will download and become available to view and save. This will be for the options you have selected (the local authority/area you have searched for, the distance from the neighbourhood centre, and the type of outlets). We recommend looking at **both on-sales and off-sales outlets, which means downloading these two sets of data separately**. When saving, you should change the document type from a 'CSV (comma delimited)' file to the usual 'Excel Workbook'.

All 14 variables available will download; the variable names will be the same as is on the screen. Please see the <u>table</u> on the next page for the full list of variables and what they all mean. It will also be helpful in deciding which variables you are interested in; to make the spreadsheet easier to view and use, we recommend that you delete the columns of the variables that you don't want to use.

The geography of the data

The data is provided for the smallest geographical unit of the data zone (or neighbourhood), with between 500 and 1000 residents. The advantages to having the data at such a local level include **being able to pinpoint particular areas of concern**, and **building up the data into larger areas**. If you are providing information to a licensing board, it is best to speak with them to **see which geographies they are interested in**; this could be multi-member wards, intermediate zones, health and social care partnership localities, etc. The data can then be used to build up a picture of alcohol harm for the particular area of interest.

The <u>Scottish Government Statistics website</u> allows you to see the different geographies within your local authority (data zones, intermediate zones, electoral wards, health board areas and Scottish Parliamentary constituencies).

Comparing to other data

This data is best used in conjunction with other local data; this is often only available for intermediate geographies, rather than at data zone level. Local stakeholders may be able to provide data; for example, the police may provide alcohol-related anti-social behaviour and criminal offences, and the local health team may provide alcohol-related A&E attendances. Data available nationally can also be used; e.g. the <u>ScotPHO online tool</u> provides the most recent alcohol-related hospitalisation data (indicator 9, within the Health & Wellbeing profile, selecting intermediate zone (2011)). For more information on how to best use evidence to support policy and decision-making, see Section 2 of the <u>AFS Licensing Resource Pack</u>.

To obtain a figure at intermediate zone level from the CRESH data, you can calculate the average for each variable for all of the data zones within that intermediate zone. If you are familiar with Excel, using a pivot table is the easiest way to do this. You will then be able to compare the average availability for each intermediate zone against the harm data you have from other sources.

To identify areas of concern, we recommend using the downloaded data to compare each data zone (or average for the intermediate zone) against the Scottish and local authority averages for availability and harm (these can be found within the local profiles – see page 3).

Data on alcohol availability and harm

The following data is **available to view** on the Download section of the web map, and to **download to an Excel spreadsheet**.

The table below provides an **explanation of each of these variables**, with further explanation of the most relevant and helpful variables (shaded in green) explored on the next page.

Туре	Column / Variable Name	Variable Description	Notes
	DZ_2011_code	Data zone 2011 codeA data zone is a small neighbourhood-level geographical unit, with populations between 500 and 1,000, used by the Scottish Government. Every data zone in Scotland is given a unique code and name. There are 6,976 datazones.	
	DZ_2011_name	Data zone 2011 name Some data zones are individually named, others use the same name as the intermediate zone but had a number attached (e.g. Hillhead – 01, Hillhead – 02, etc.).	
Geography	IZ_2011_code	Intermediate zone 2011 code Intermediate zones are a statistical geography that sit between data zones and local authorities.	
	IZ_2011_name	Intermediate zone 2011 nameAll intermediate zones are all individually named (e.g. Hillhead).	
	LA_code	Local authority code	
	LA_name	Local authority name	

Туре	Column / Variable Name	Variable Description	Notes
	'X800alcoholOff2016count' The name of this variable will depend upon the options chosen and is structured as follows: "X", Typical distance to outlet, data type and then count.	Count of alcohol outlets Number of outlets within the distance selected of each data zone's population centre. See page 9 of the profiles for a detailed explanation of this measure.	This is the most important variable to use – it provides the availability for each data zone, which can be compared to other data zones and to the Scottish and local authority averages (available on page 2 of the <u>local</u> <u>profiles</u> , for 800m).
Availability	'X800alcoholOff2016density' The name of this variable will depend upon the options chosen and is structured as follows: "X", Typical distance to outlet, data type and then density.	Density of alcohol outlets The number of outlets you would expect within a square kilometre, based on how many were counted within the distance from the population centre selected.	This is another way to represent the alcohol availability. This corresponds directly to the count. We would recommend using the count, as this is a simpler measure.
	TobMortSMR_2011_2015	Tobacco-related deaths	The website allows you to look at tobacco deaths if tobacco is under your remit.
Health	AlcMortSMR_2011_2015	Alcohol-related deaths – Standardised Mortality Rate Calculated by comparing the number of deaths in each data zone to the number that would have been expected based on the average rates for Scotland (by age group and sex), for 2011-2015. A range (a quintile) is provided instead of the specific number, due to confidentiality purposes (e.g. 22.9, 68.1 which means between 22.9 and 68.1). The available quintiles are: 0-59.6; 59.6-91.4; 91.4-131; 131,-180; 180-587. SMRs higher than 100 can be said to have a higher rate than the Scottish average, and those with SMRs less than 100 have a lower rate.	Comparing the ranges between data zones will give you an idea of the difference in alcohol-related deaths found at data zone level, especially in relation to the Scottish rate. This may be the only data available for alcohol mortality at data zone level. Intermediate level data is available currently on the ScotPHO online tool.
	SIMD_2016_AlcHosp	 Alcohol-related hospitalisations Compares the number of hospitalisations in each data zone to the number that would have been 'expected' based upon the average rates for Scotland (by age group and sex), for 2011-2015. A rate higher than 100 can be said to be higher than the Scottish average, and a rate less than 100 is lower. Taken from the Scottish Index of Multiple Deprivation (SIMD) 2016 Health Domain (alcohol indicator). 	As well as using this rate for the data zone to compare against the Scottish rate (100), you may wish to compare it against the average hospitalisation rate ratio for the local authority, which is available on page 4 of the <u>local profiles</u> .

Туре	Column / Variable Name	Variable Description	Notes
Rurality	UR6_2013_2014	Urban/Rural Classification The rurality of the area is classified as a number, from 1 to 6, as follows: 1. Large Urban Areas 2. Other Urban Areas 3. Accessible Small Towns 4. Remote Small Towns 5. Accessible Rural 6. Remote Rural Taken from the Scottish Government 6 Fold Urban-Rural Classification.	If you would like to see how a particular neighbourhood's availability compares to other neighbourhoods of the same urban/rural status, we would recommend using the map (using the urban/rural average in the 'Rank Colour Options' field).
Deprivation	SIMD_2016_income	Income Deprivation Percentage of people who are income deprived, divided into quintiles (fifths), where 1 = most deprived and 5 = least deprived. Taken from the Scottish Index of Multiple Deprivation (SIMD) 2016 Income Domain.	This may be helpful to see at a glance whether a neighbourhood with high availability is deprived, which can be further incentive to address high levels of availability (recent research shows those who are income deprived are disproportionately affected by high alcohol availability).
Crime	SIMD_2016_crime	 Crime rate Rate of crimes of violence, sexual offences, domestic house breaking, vandalism, drug offences and common assault recorded during 2014-15, per 10,000 population. This is not offences that have been recorded as 'alcohol-related'. Taken from the <u>Scottish Index of Multiple Deprivation (SIMD) 2016</u> Crime Domain. 	You can compare this against the average crime rate for the whole of Scotland (331.2) or the average crime rate for the local authority (which can be found on page 4 of the <u>local profiles</u>). This excludes some offences which are commonly associated with alcohol consumption, such as breach of the peace, or anti-social behaviour. You may wish to complement this with locally available data on such offences.