

Drug Related Deaths

National and Local findings from 2018

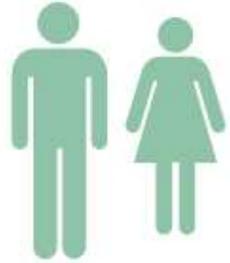
Mark Whitfield
Intelligence and Surveillance Manager
Public Health Institute, LJMU



Programme for the day

now	DRD figures from 2018 (national and local)	Mark Whitfield, PHI
10.30am	An overview of work around DRD in Blackpool	Jonathan Clegg, Lancashire Constabulary/ Emily Jane Davis, Blackpool Council
11.00am	Break	
11.15am	Sharing the evidence on DRD in Derbyshire over an 8 year period	Martin Smith, Derbyshire Healthcare NHS Foundation Trust
11.40am	Drug-related deaths in the North East	Tom Le Ruez, Public Health South Tees
12.05pm	COPD in Heroin Users	Becky Nightingale, Liverpool School of Tropical Medicine
12.30pm	Lunch	
1.30pm	Drug-Related deaths in the NW of England	Sue Barton-Johal, PHE
1.45pm	Discussion groups	
2.45pm	Return to main group for wider discussion	Sue Barton-Johal/Mark Whitfield
3.45pm	Closing remarks	Mark Whitfield

Drug related deaths across England and Wales, 2018



Drug related deaths in England and Wales, 2018



4,359

Number of drug related deaths in England and Wales in 2018



16%

Annual increase in drug related deaths from 2017



105.4

Male drug poisoning rate per million



47.5

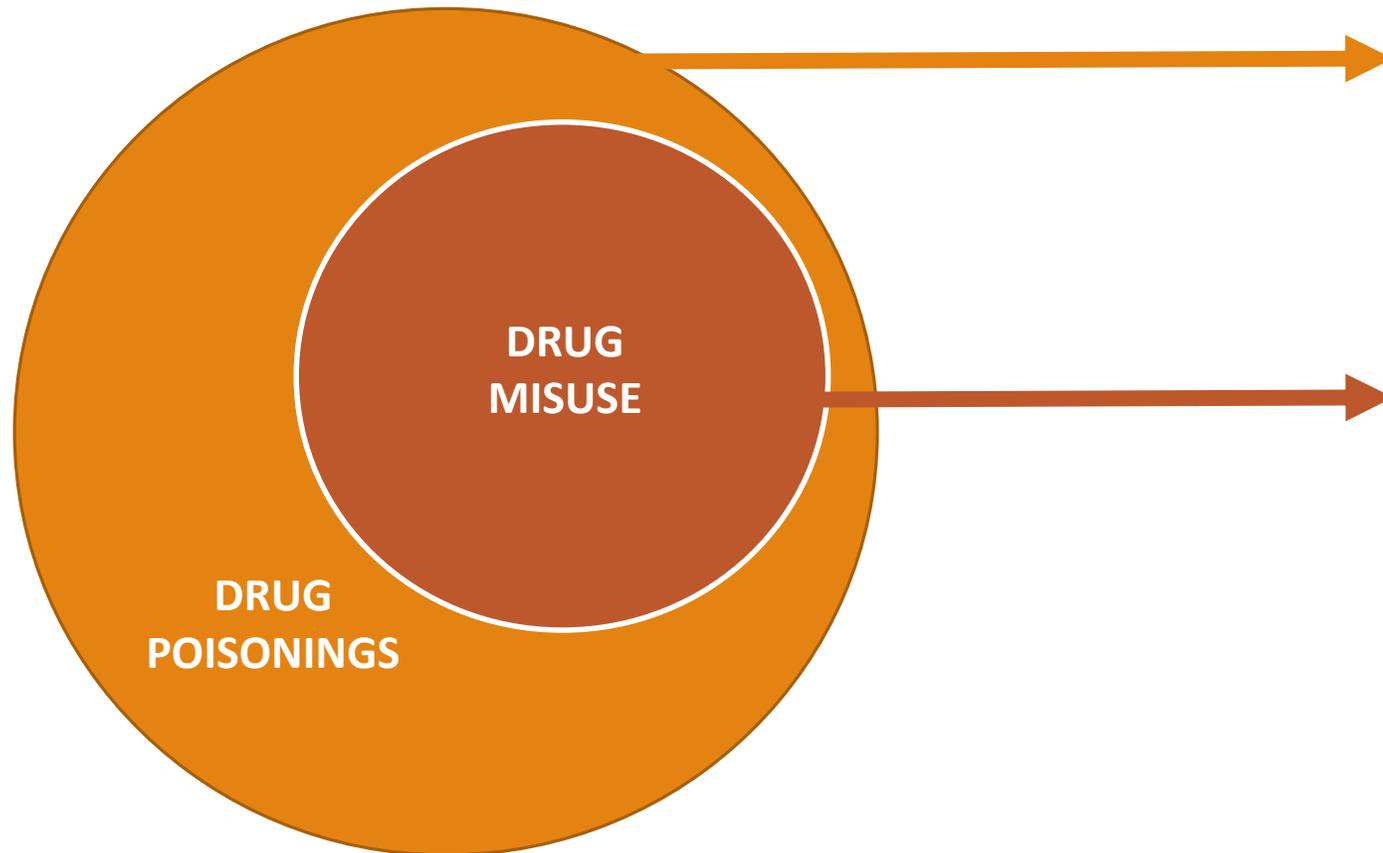
Female drug poisoning rate per million

- **Between 2017 and 2018**, there were increases in the number of deaths involving a wide range of substances, though opiates continued to be the most frequently mentioned type of drug.
- **Deaths involving cocaine doubled between 2015 and 2018** to their highest ever level, while the numbers involving **new psychoactive substances (NPS)** returned to their previous levels after halving in 2017.

[Deaths related to drug poisoning in England and Wales : 2018 registrations](#)



Drug related deaths across England and Wales, 2018



Drug Poisonings

Based on the ICD code assigned as the underlying cause of death –includes non-illicit substances

Drug misuse

Where either the underlying cause is drug abuse or drug dependence, or the underlying cause is drug poisoning and any of the substances controlled under the Misuse of Drugs Act 1971 are involved.

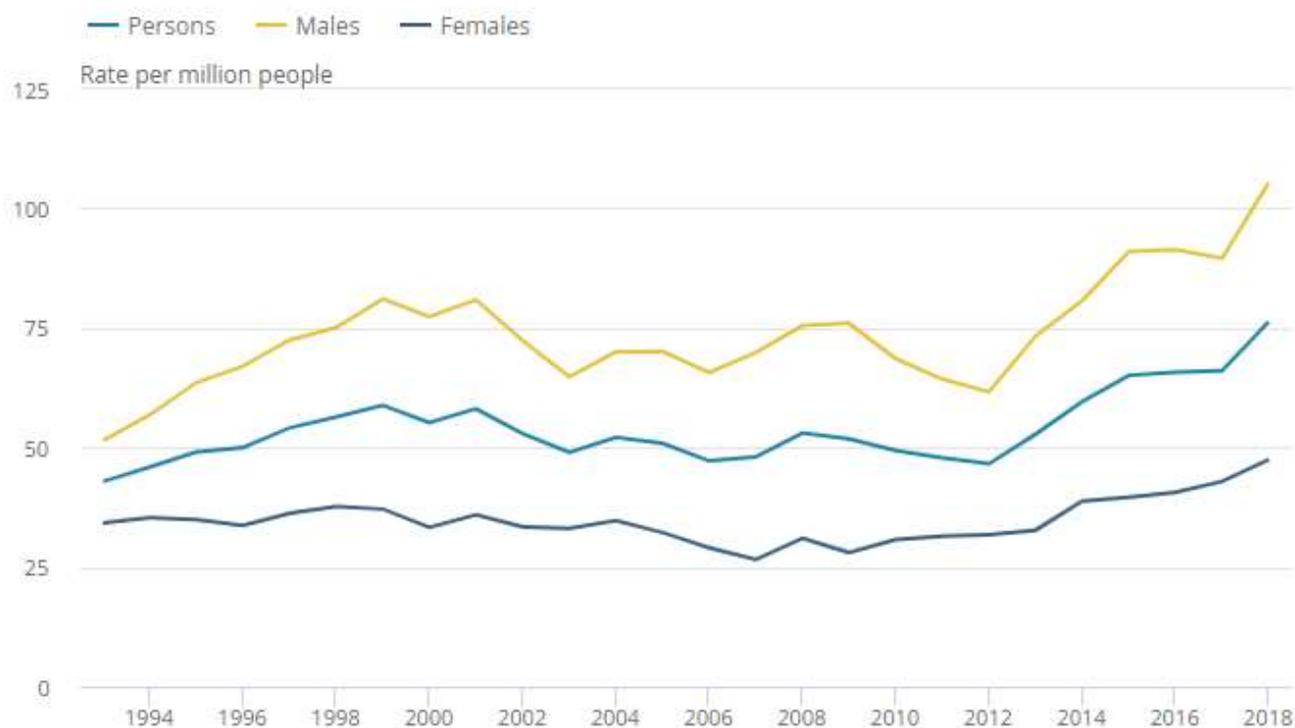
[Deaths related to drug poisoning in England and Wales : 2018 registrations](#)

 Office for
National Statistics

Drug related deaths across England and Wales, 2018

Figure 1: Rates of male deaths related to drug poisoning have doubled since 1993

Age-standardised mortality rates for deaths related to drug poisoning, by sex, England and Wales, registered between 1993 to 2018



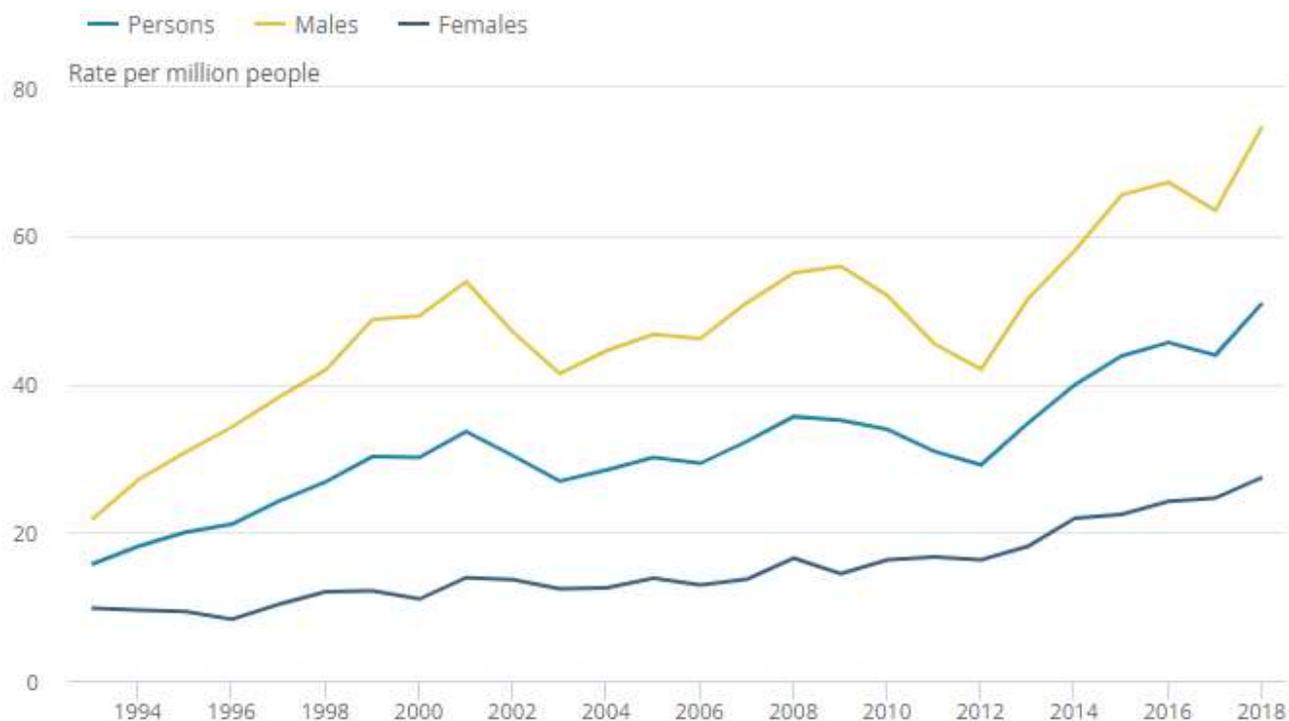
[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)



Drug related deaths across England and Wales, 2018

Figure 2: The rate of male drug misuse deaths is over two and a half times greater than the female rate

Age-standardised mortality rates for deaths related to drug misuse, by sex, England and Wales, registered between 1993 to 2018



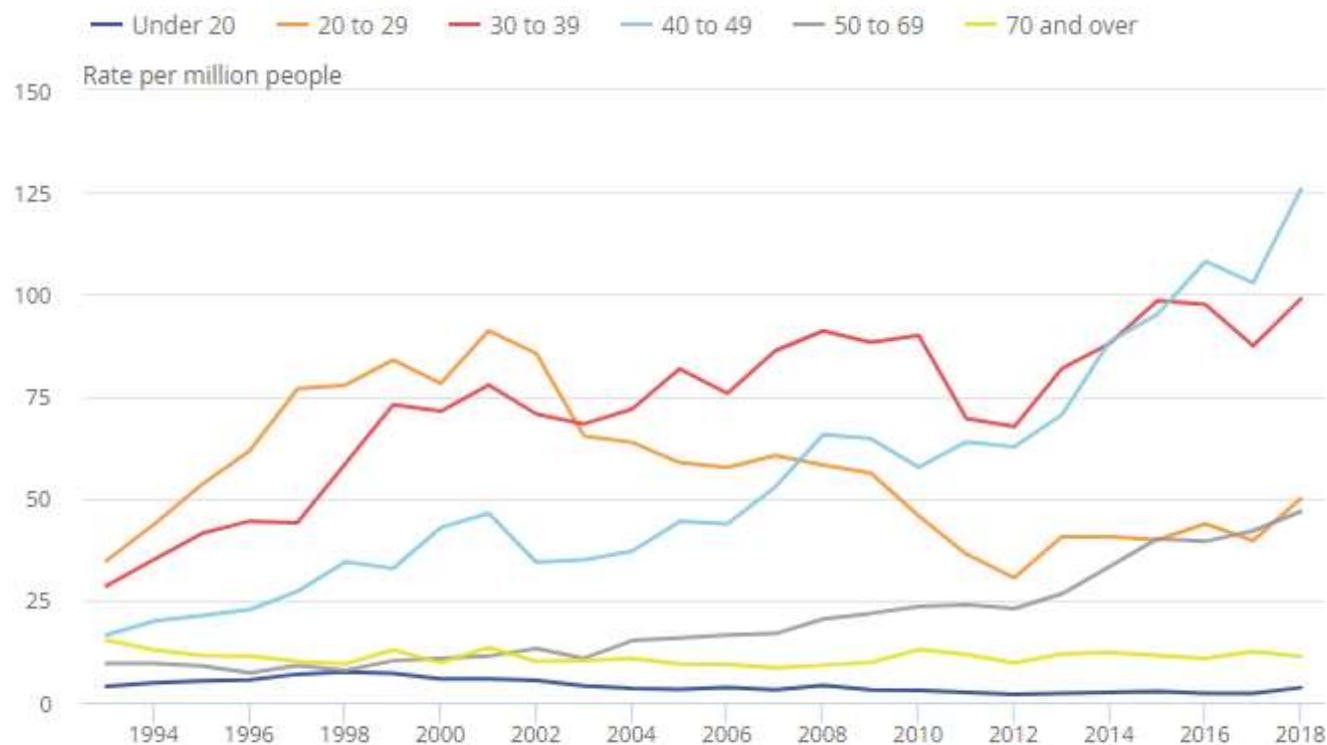
[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)



Drug related deaths across England and Wales, 2018

Figure 3: Over the past decade, those aged between 30 to 49 years have had the highest rate of drug misuse

Age-specific mortality rates for deaths related to drug misuse, by age group, England and Wales, registered between 1993 to 2018



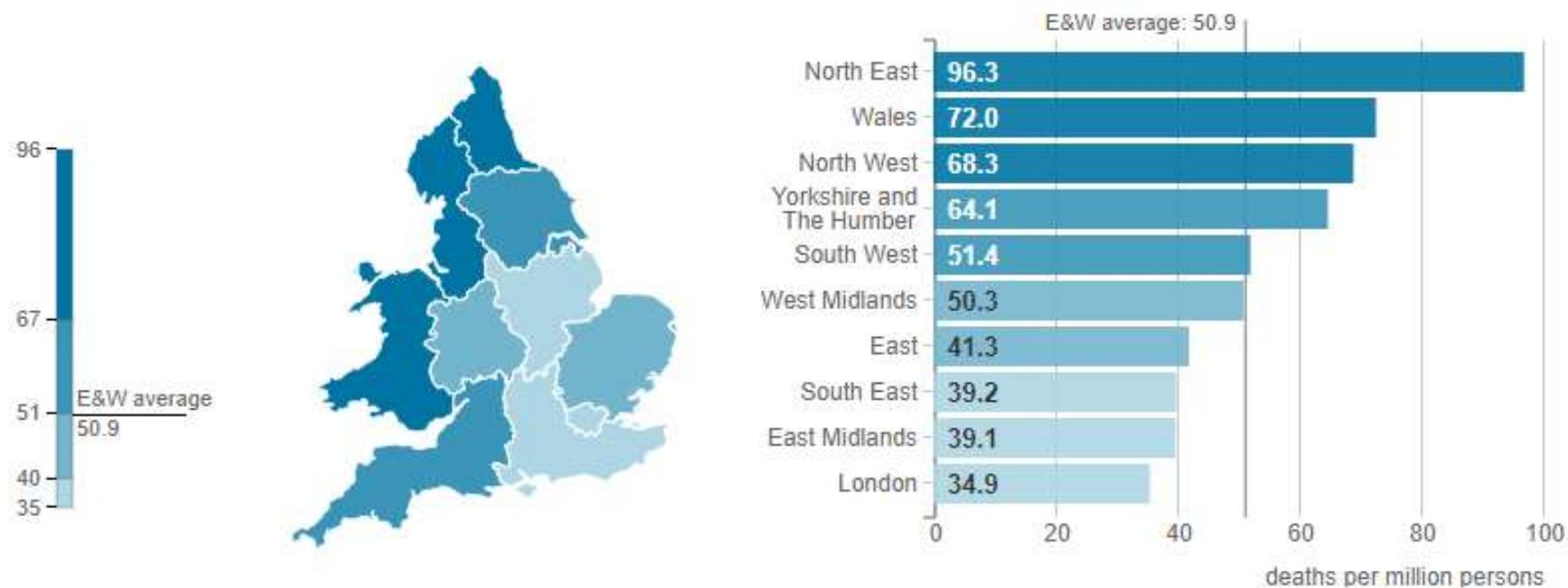
[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)



Drug related deaths across England and Wales, 2018

Figure 4: Drug misuse has a marked North-South divide

Age-standardised mortality rate for deaths related to drug misuse, by country and region, registered in 2018

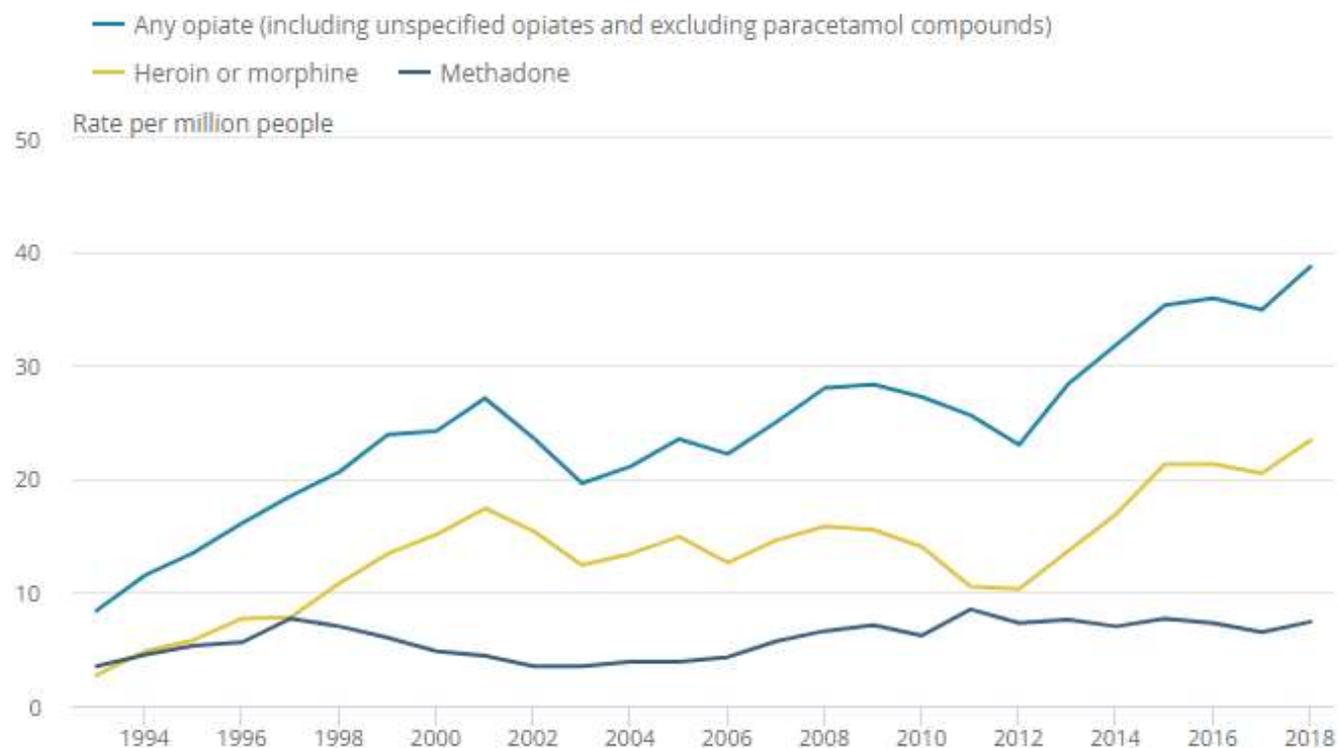


[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)

Drug related deaths across England and Wales, 2018

Figure 5: Deaths involving opiates increase to the highest ever rate

Age-standardised mortality rates for deaths by all opiates, heroin or morphine, and methadone, England and Wales, registered 1993 to 2018



[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)



Drug related deaths across England and Wales, 2018

Figure 6: Trends in drug poisoning deaths involving selected substances

Age-standardised mortality rates for selected substances, England and Wales, deaths registered between 1993 to 2018



[Deaths related to drug poisoning in England and Wales: 2018 registrations](#)



Drug related deaths – Cheshire and Merseyside system

- Drug related death monitoring – PHI commissioned to provide by LA public health.
- System began in Sefton in 2016.
- Operational in 8 of 9 Cheshire and Merseyside areas
- 14 panels met during 2019 so far
- Attendance at panels from housing, mental health services, hostels, hospices/palliative care, NHS England, Adult Social Care, Hospital Liaison Teams
- Annual summary reports for each area published in July 2019



Liverpool Drug and Alcohol Related Deaths Report 2018

Drug related deaths – C&M system definition

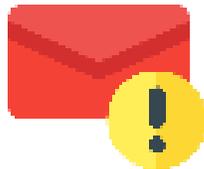
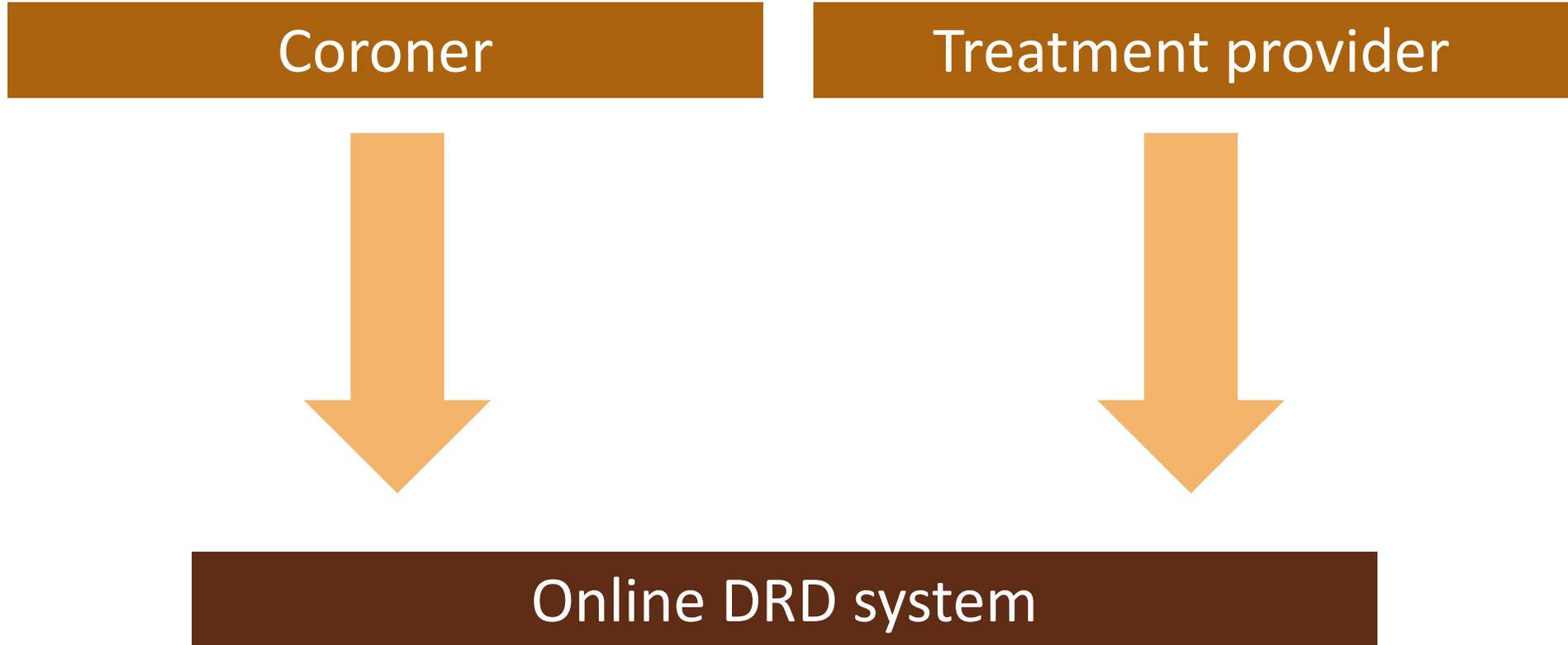
A drug related death follows the ONS definition: *“A death where the underlying cause is poisoning, drug abuse or drug dependence and where any of the substances controlled under the Misuse of Drugs Act (1971) are involved”* – also includes toxicity from prescribed substances, NPS or alcohol.

Reported by the Coroner.

However for the purposes of the monitoring system, all deaths in treatment are examined in order to establish whether a death might be considered to be drug *related* in a more general sense (effect of substance on mental or general physical health for instance). Alcohol is also included.

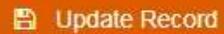
Reported by Treatment agencies (mainly).

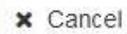
DRD reporting system



Commissioner and relevant personnel from the area notified

Drug Related Deaths





Requires action or updates



Main Details

Education & Housing

Details of Death

Health & Medical

Substance Misuse Service

Admin

Coroner Information

Substance Misuse Service

Date of last contact with substance misuse service

25/01/2018

Nature of last contact

Contact while on caseload

Additional detail of last contact

Last contact was with service nurse at an appoi

Substance/Alcohol use history (pre current NDTMS episode)

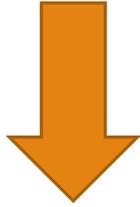
illicit heroin use prior to stating treatment with Mersey care NHS drug service in Liverpool on 17.08.2015.

Most recent alcohol AUDIT score

Drug detoxification in the past 12 months

No

Information from Drug and Alcohol Treatment Service



- Demographic information (age, postcode, etc.)
- Individual's occupation and employment status
- Any recent changes to accommodation
- Details of the death (if known)
- Mental health diagnosis at the time of death
- Contact with GP
- A&E admissions
- Details of contact with treatment service
- Overdoses or detoxes in recent years
- Care plan

Information from Coroner



- Demographic information (age, postcode, etc.)
- Details of death including if ambulance attended, persons present, attempt to resuscitate
- Toxicology
- Drugs implicated in death
- Had any drugs recently increased in dose
- Naloxone
- Recent change in circumstances
- Verdict



OTHER DATA SOURCES

- ✓ NDTMS records including any Treatment Outcome profiles
- ✓ NSP (Needle Exchange Programme) contacts
- ✓ Brief interventions from low threshold services
- ✓ DIP (Drug Intervention Programme) or criminal justice record
- ✓ Adult social care
- ✓ Housing services
- ✓ Other services involved in individual's care

Client: JE

Reporting Organisation Drug Service, NDTMS, IMS, Coroner



Main details

Sex: Male
Age at death: 44
Residential postcode: L10
Date of death: 01/04/2016
Date of registration of death: Unknown
Place of birth: Unknown

Demographic details

Relationship status: Separated
Number of children: Three
Living situation at time of death: Living alone
Ethnicity: White Other
Education level: Unknown
Employment status at time of death: Long term sick or disabled
Housing status at time of death: Council / housing association

Details of death

Place of death: Another person's home
Cause of death: Bronchopneumonia and Hepatitis C Infection
Post mortem or inquest: No
Reported to: Drug Service/Delphi medical administrators and prescribers, Drug Service area manager
History of prison/YOT in last 12 months: No

Medical/Health Service History

Medical conditions at time of death: COPD (date of diagnosis unknown)
Mental Health diagnosis at time of death: Depression, anxiety/phobia/panic disorder/OCD, drug dependence, drug misuse
GP details: Dr Smith, Concourse House, Kirkby
Medications prescribed at time of death: Methadone oral solution 80mls daily, Zopiclone 5 tablets per month; Mirtazapine; Pregabalin 225mgBD; Ranitidine

Substance Misuse Service History

Date of last contact with service: 14/03/2016
Nature of last contact: Contact while on caseload
Substance/Alcohol use history: Heroin (illicit), cocaine (freebase), methadone
Most recent AUDIT score: AUDIT = 0
Drug detox in last 12 months: No
Previous non-fatal overdose occurrence: Unknown
In receipt of prescribed substitute? Yes (unsupervised)
Date of last care plan review: 14/03/16
Other organisations involved in care: Referred by GP to Knowsley CMHT (Nov 2015)
Past psychiatric status: One or more previous contacts with mental health services (community only services) within a psychiatric speciality but not subject to CPA

NDTMS details

Episode start date: 01/10/2013
Discharge date: 01/04/2016
Last TOP date: 03/11/2015
Main substance (at last TOP): Opiates
Other substances (at last TOP): Crack cocaine
Injecting status (at last assessment): Previous

Coroner details

Place where drugs(s) used prior to death: Own home
Persons present at scene of overdose: No. Went to see his friend & told him he had recently injected heroin & crack cocaine.
Ambulance attendance: Yes
Recent significant events: Deceased & friend fell asleep when friend awoke deceased was unresponsive. Friend phoned for ambulance. Paramedics attended but could only verify that JE had passed away.
Coroner verdict: Narrative: 1a) Bronchopneumonia, 2) Hepatitis C Infection
Other medical history: Hepatitis C+, Anxiety with depression, chronic Gastritis
Heroin & other street drug abuse.

IMS contact

First intervention date: 03/11/2015
Last intervention date: 24/03/2016
Total number of interventions: 8
Intervention details: Brief interventions - engaged with mental health, improved self-esteem, OD awareness; NSP transactions
Agencies involved: Drug Service Knowsley South, Drug Service Knowsley North - SES, Goldbergs Pharmacy
Primary substance on assessment: Heroin illicit

DRD panel membership

Individual case level report generated quarterly for discussion around learning opportunities at panel



**Treatment
provider
representative**



**Clinician
(consultant
prescriber)**



**Local Authority
Public Health
commissioner**



**Social services
and other
relevant services**



**Relevant
specialist
guest(s)**



**PHI
chairperson**



Drug related deaths – Cheshire and Merseyside 2018

Main findings from 2018's data

- 295 deaths occurring in 2018 reported to the system
- Deaths are at their highest level locally since records/local surveillance system started, although in treatment deaths have risen at a slower rate
- Most deaths are individuals in treatment
- Individuals are dying later in treatment than out of it (for some groups)
- Alcohol appears in a significant number of toxicologies
- The number of deaths from cocaine toxicity and from alcohol toxicity are rising
- People are increasingly dying alone
- Injecting and continued use of illicit drugs is common

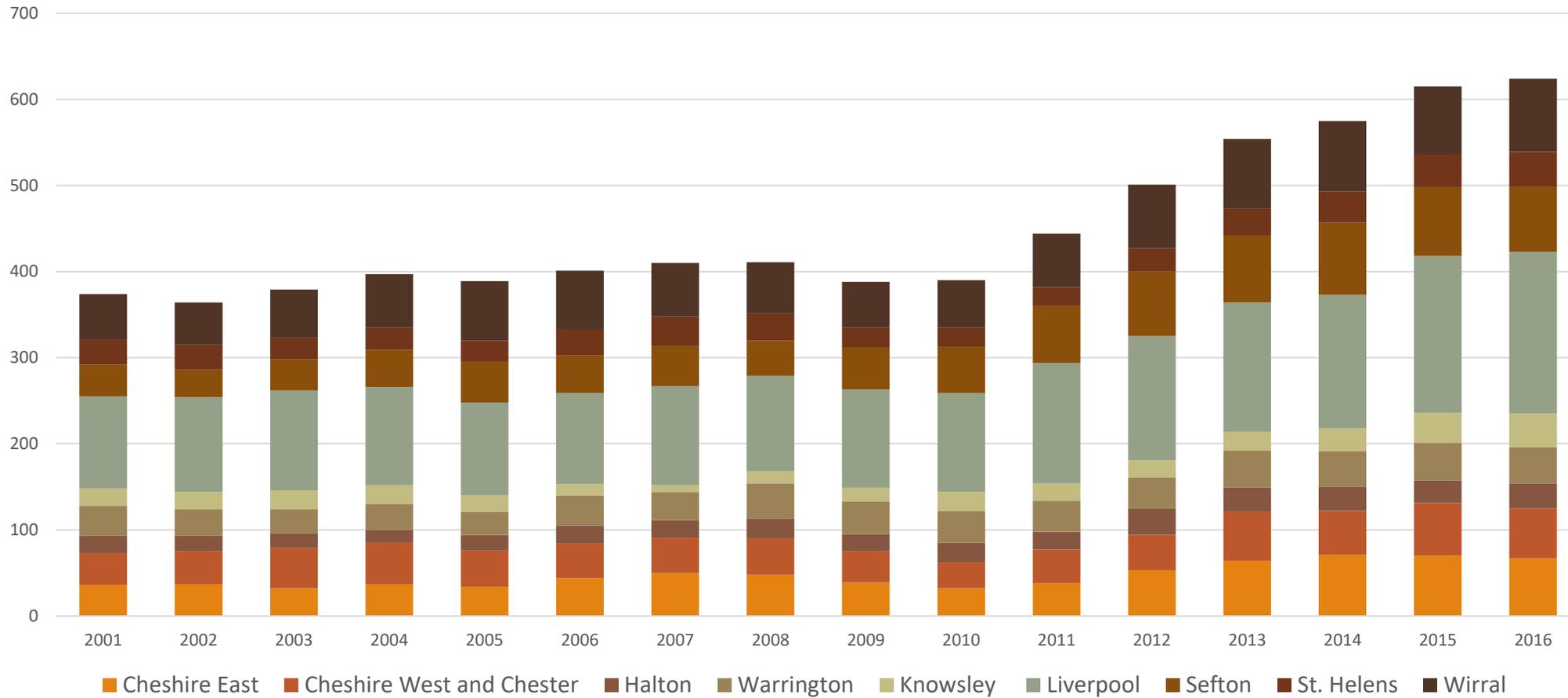
Drug related deaths – Cheshire and Merseyside 2018

Drug poisonings, age standardised mortality rate per 100,000



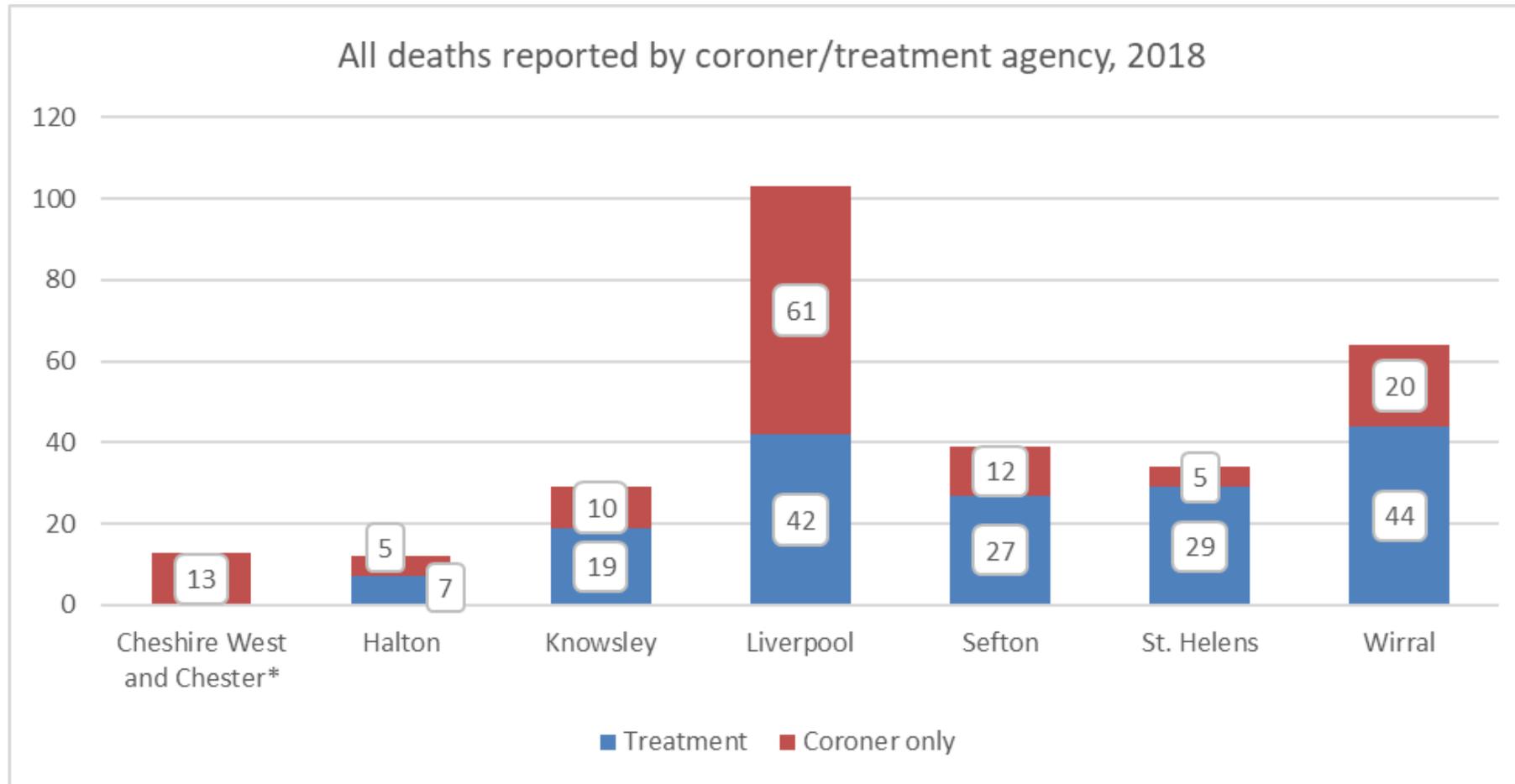
Drug related deaths – Cheshire and Merseyside 2018

Number of deaths by local authority, Cheshire and Merseyside, 2001-2018



Drug related deaths – Cheshire and Merseyside 2018

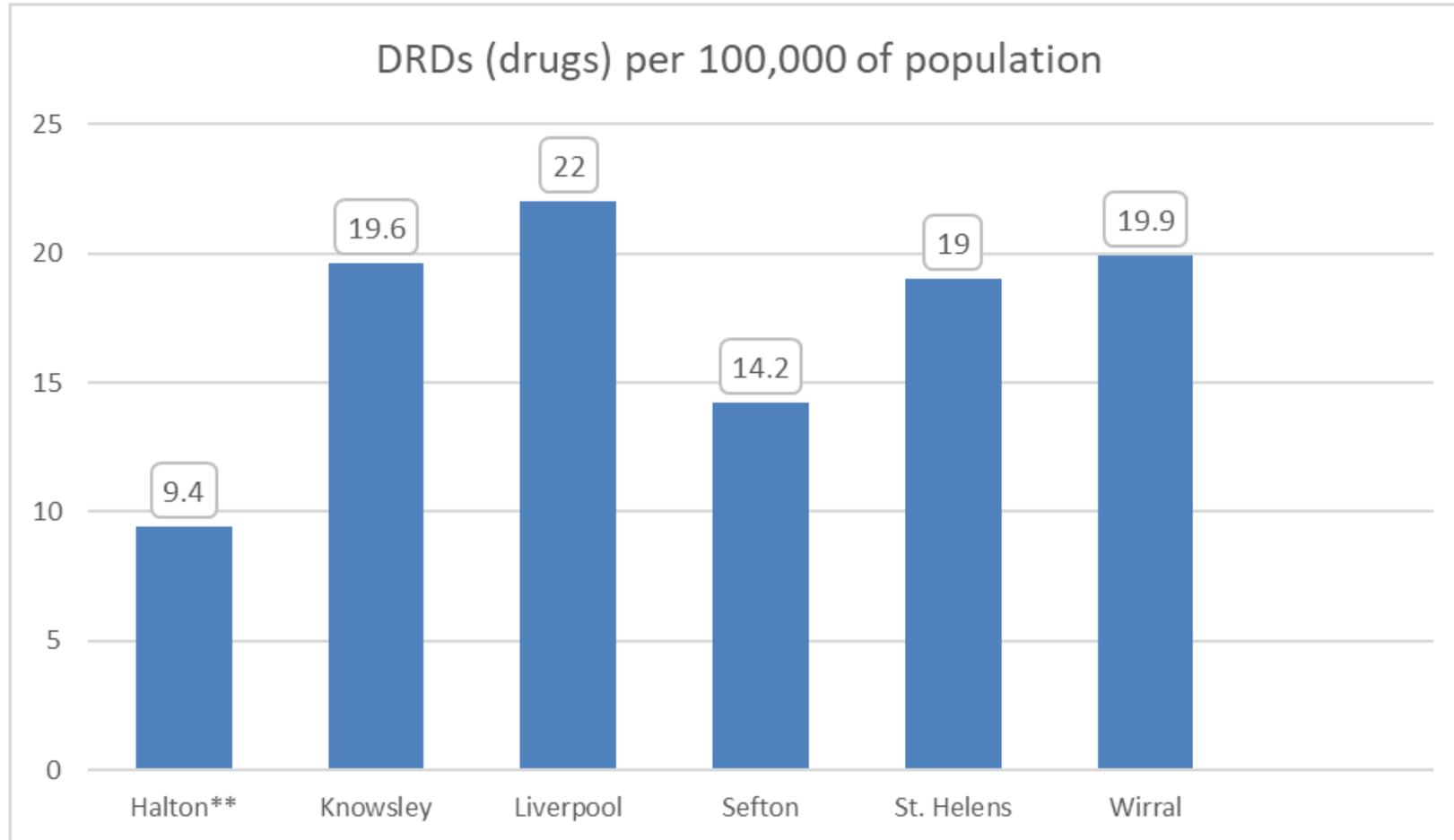
Number of deaths by local authority, coroner/treatment agency split, 2018



* Cheshire West and Chester data does not include in treatment deaths

Drug related deaths – Cheshire and Merseyside 2018

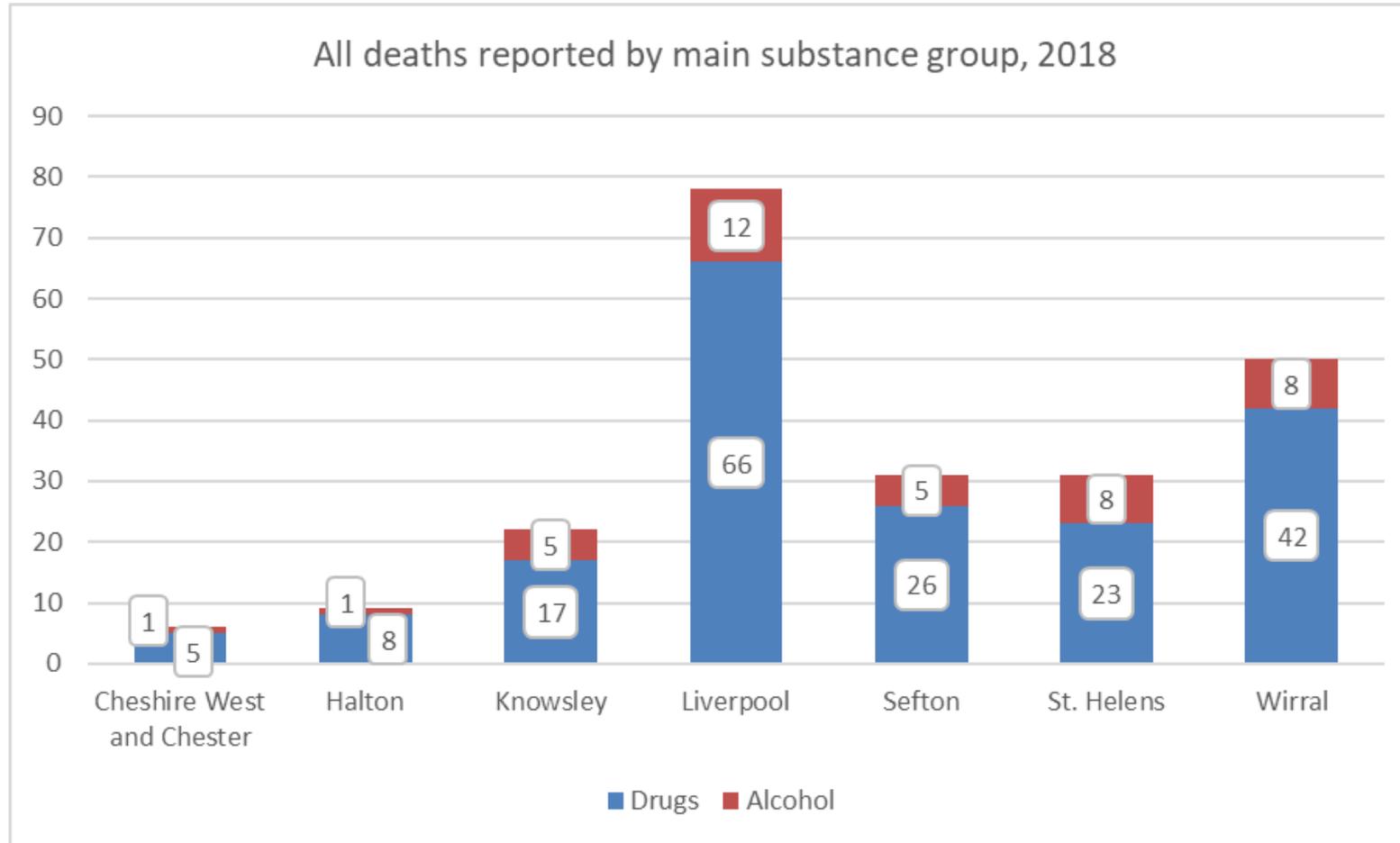
Number of deaths by local authority, per 100,000 of population, 2018



* Halton figure does not include coroner data for whole of 2018

Drug related deaths – Cheshire and Merseyside 2018

Number of deaths by local authority, drugs/alcohol split, 2018



* Cheshire West and Chester data does not include in treatment deaths

Drug related deaths – Cheshire and Merseyside 2018

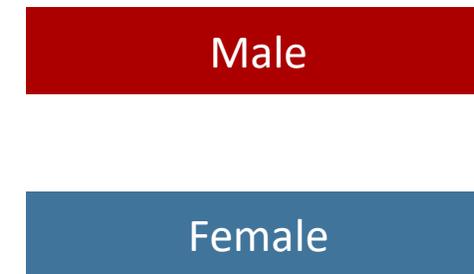
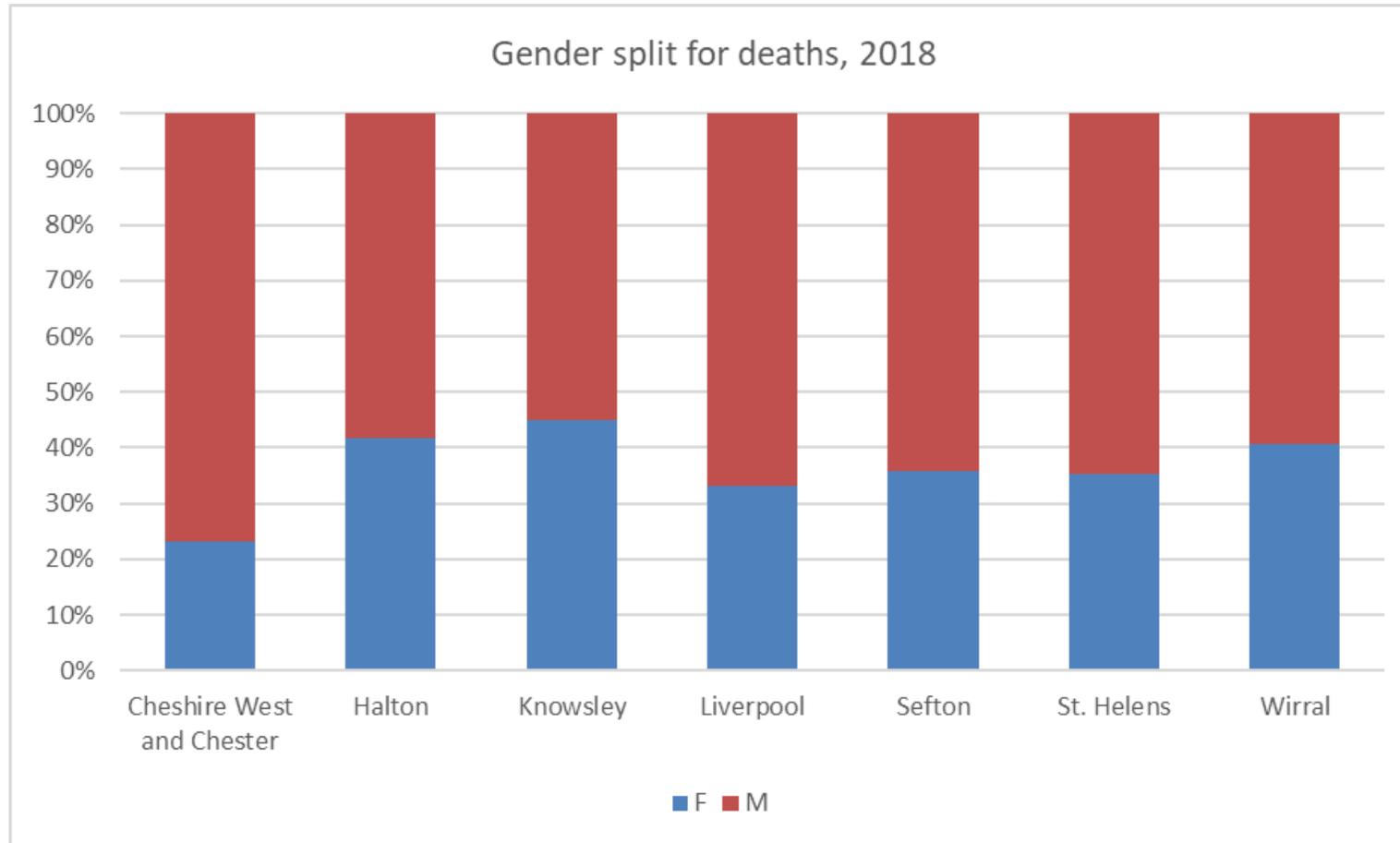
Average age of death by local authority, 2018

	Average age of death							
	Coroner only drugs		Coroner only alcohol		In treatment drugs		In treatment alcohol	
	Men	Women	Men	Women	Men	Women	Men	Women
Halton	45	61*			44	43	47*	36
Knowsley	49	41	55		51	48	52*	51
Liverpool	42	52	54	53	49	49	54	53
Sefton	39	29*	57*	47*	50	52	54	61
St. Helens	51	58		70*	50	48	48	55
Wirral	40	48	48	64*	50	48	50	46
Average	42	50	54	56	50	49	51	52

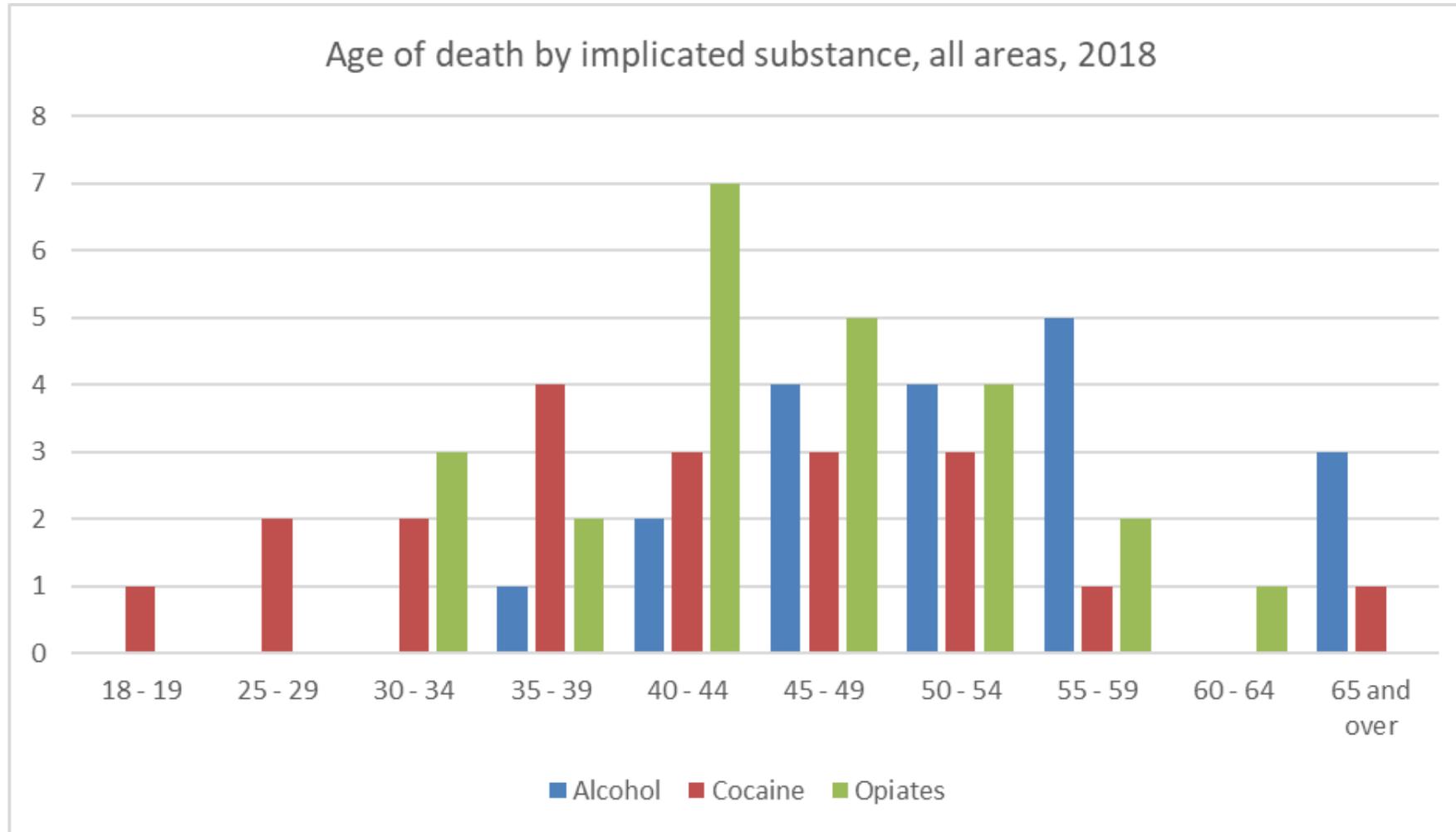
* denotes single case

Drug related deaths – Cheshire and Merseyside 2018

Gender split of deaths by local authority, 2018



Drug related deaths – Cheshire and Merseyside 2018



Age of death by implicated substance, all C&M areas, 2018

Drug related deaths – Cheshire and Merseyside 2018

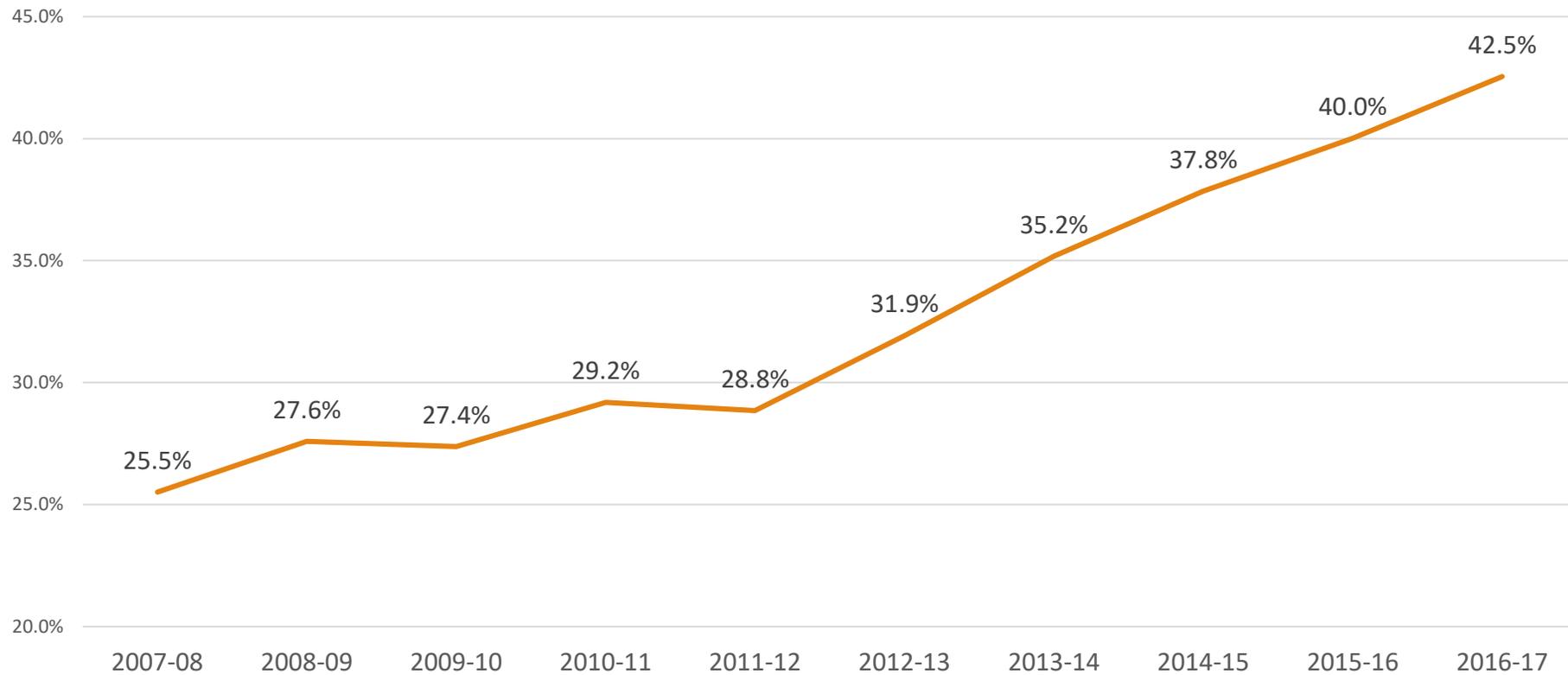
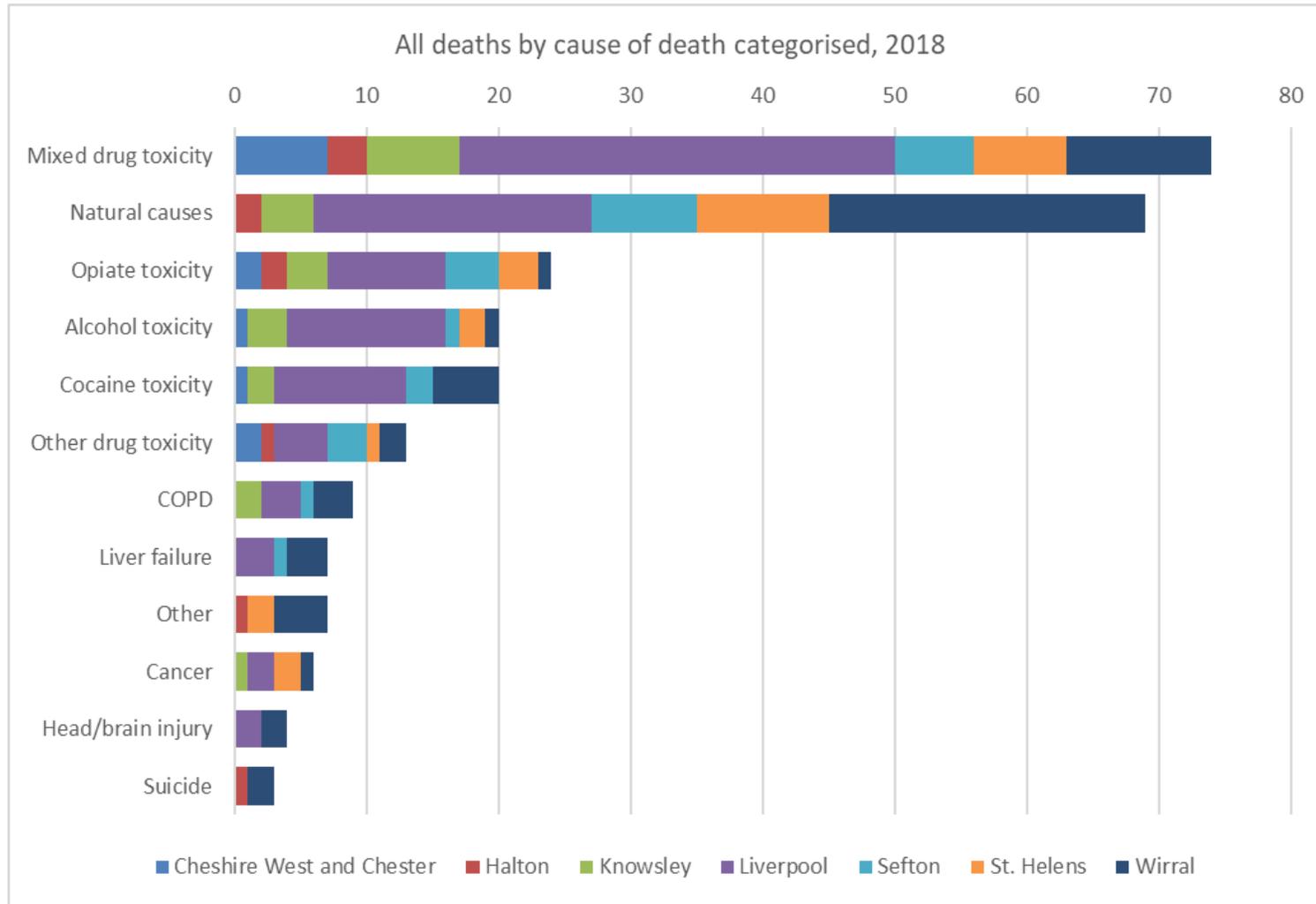


Figure 49 - Proportion of individuals in NSP cohorts aged 40 years or over

Drug related deaths – Cheshire and Merseyside 2018



All deaths by cause of death, 2018

Drug related deaths – Cheshire and Merseyside 2018

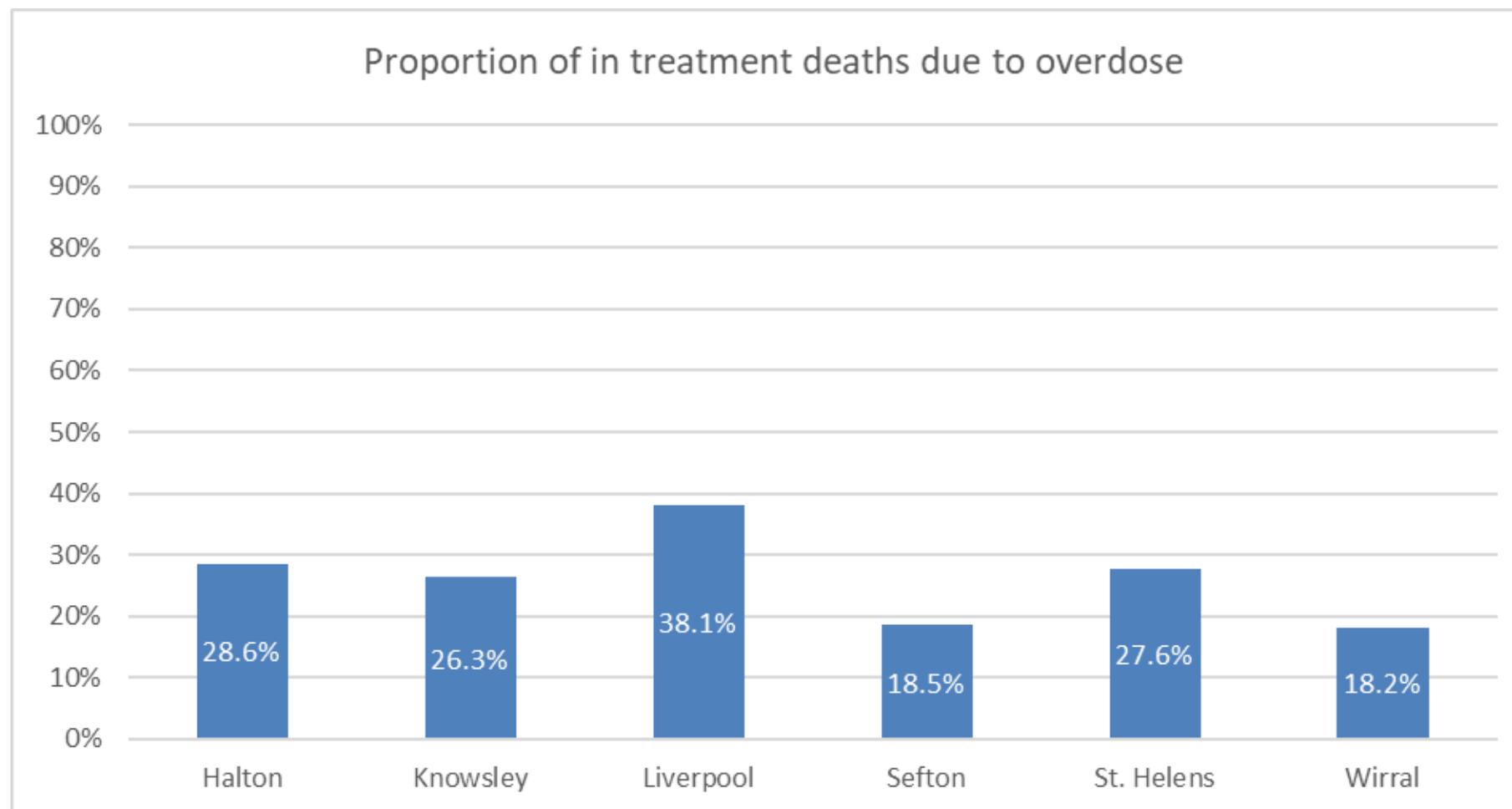
In treatment cause of death, Liverpool, 2018

Cause of death	Count
Natural causes	18
Mixed drug toxicity	12
Unknown	3
Opiate toxicity	2
COPD	2
Cancer	2
Alcohol toxicity	2
Head/brain injury	1

Coroner only cause of death, Liverpool, 2018

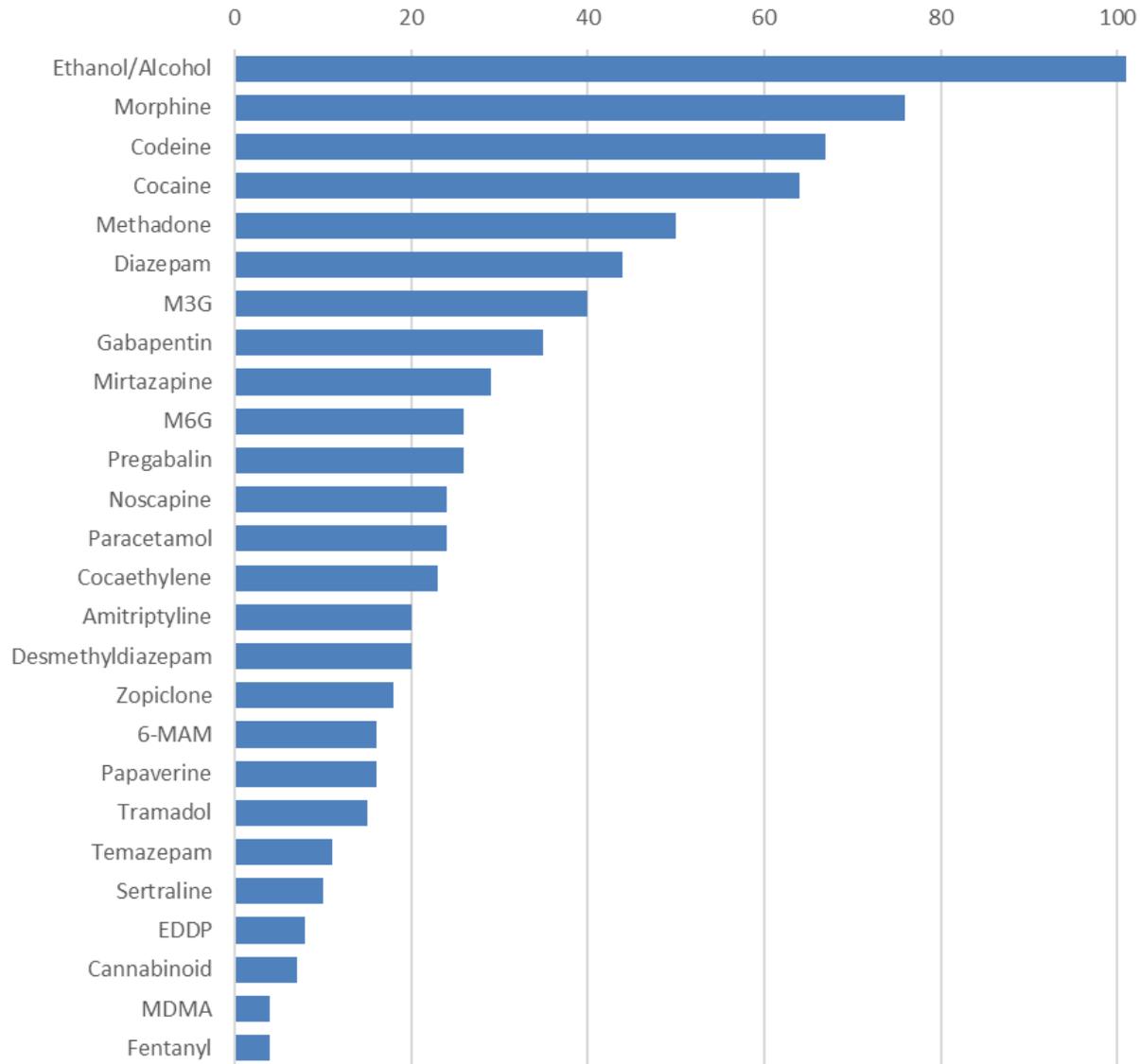
Cause of death	Count
Mixed drug toxicity	21
Cocaine toxicity	10
Alcohol toxicity	10
Opiate toxicity	7
Other drug toxicity	4
Natural causes	3
Liver failure	3
Head/brain injury	1
COPD	1
Other	1

Drug related deaths – Cheshire and Merseyside 2018



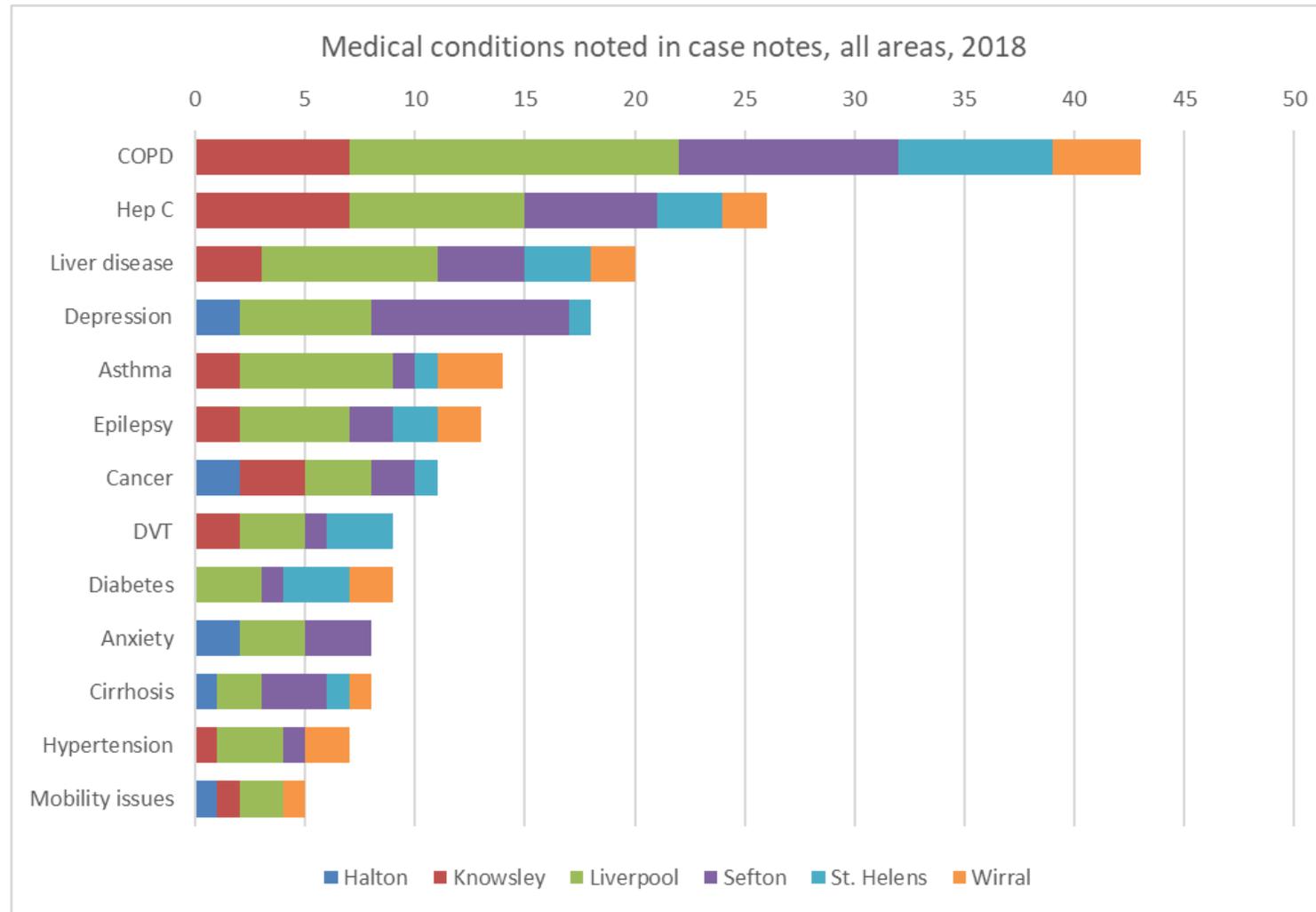
Proportion of deaths in treatment due to overdose, by local authority, 2018

Substances identified in toxicology, 2018



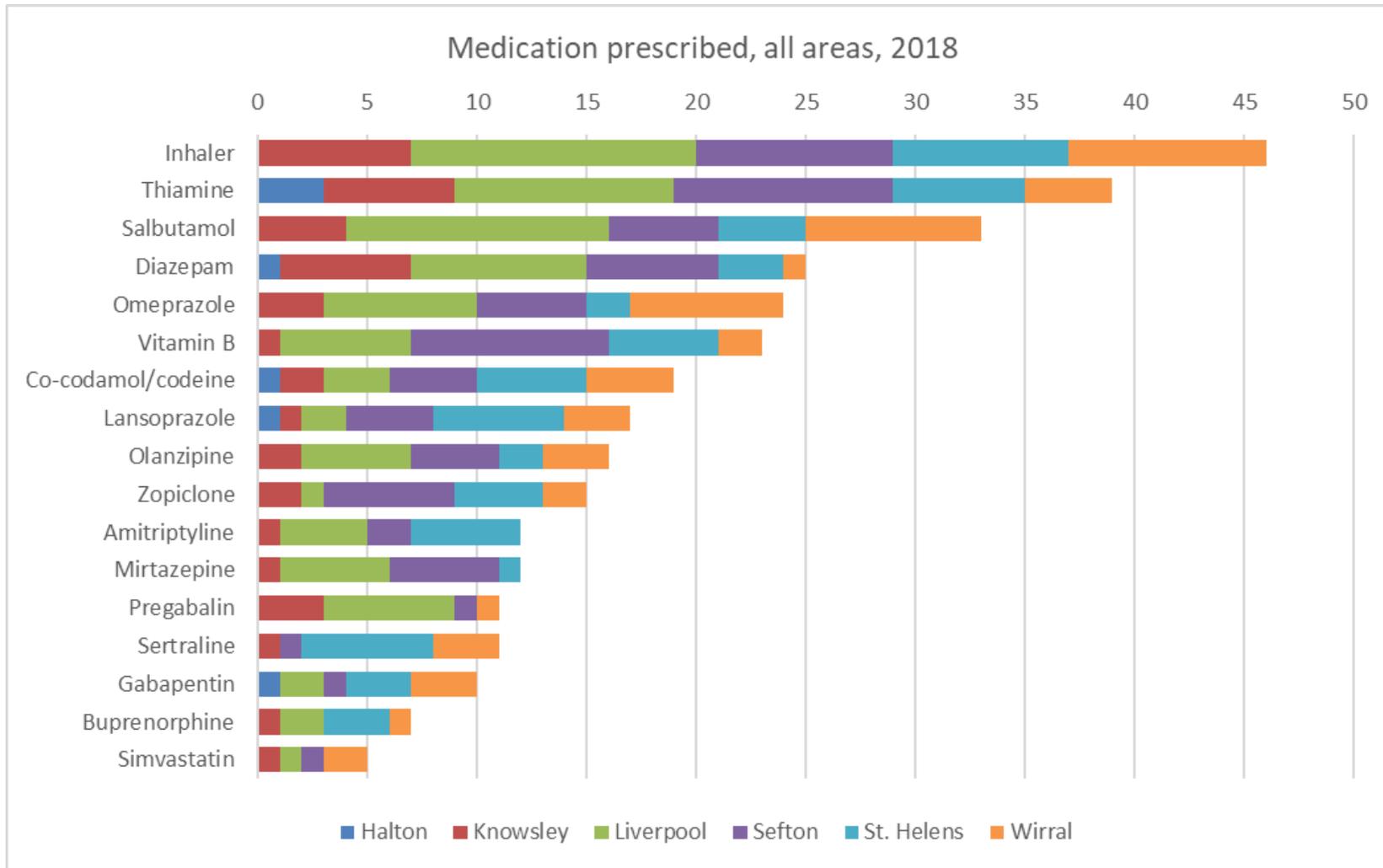
Substances identified in toxicology, all areas, 2018

Drug related deaths – Cheshire and Merseyside 2018



Medical conditions of deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



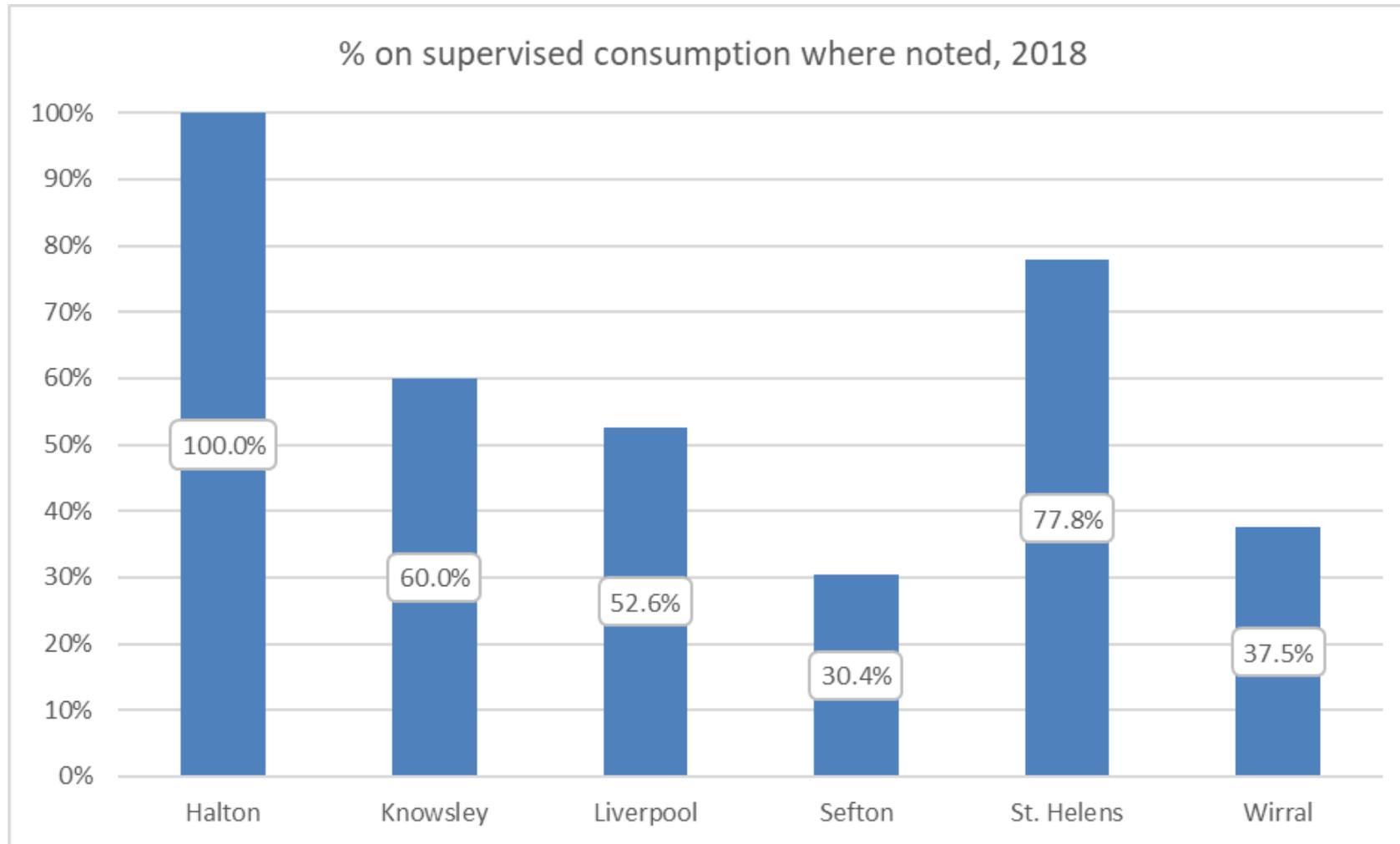
Medications prescribed prior to death for deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018

Number of medications prescribed, by local authority, 2018

Number of meds prescribed	Average	Low	High	% with 6 or more meds prescribed
Halton	4.2	2	8	40.0%
Knowsley	5.2	2	13	31.6%
Liverpool	6.5	1	17	52.9%
Sefton	6.3	1	12	45.8%
St. Helens	4.7	1	10	39.1%
Wirral	6	1	21	48.0%

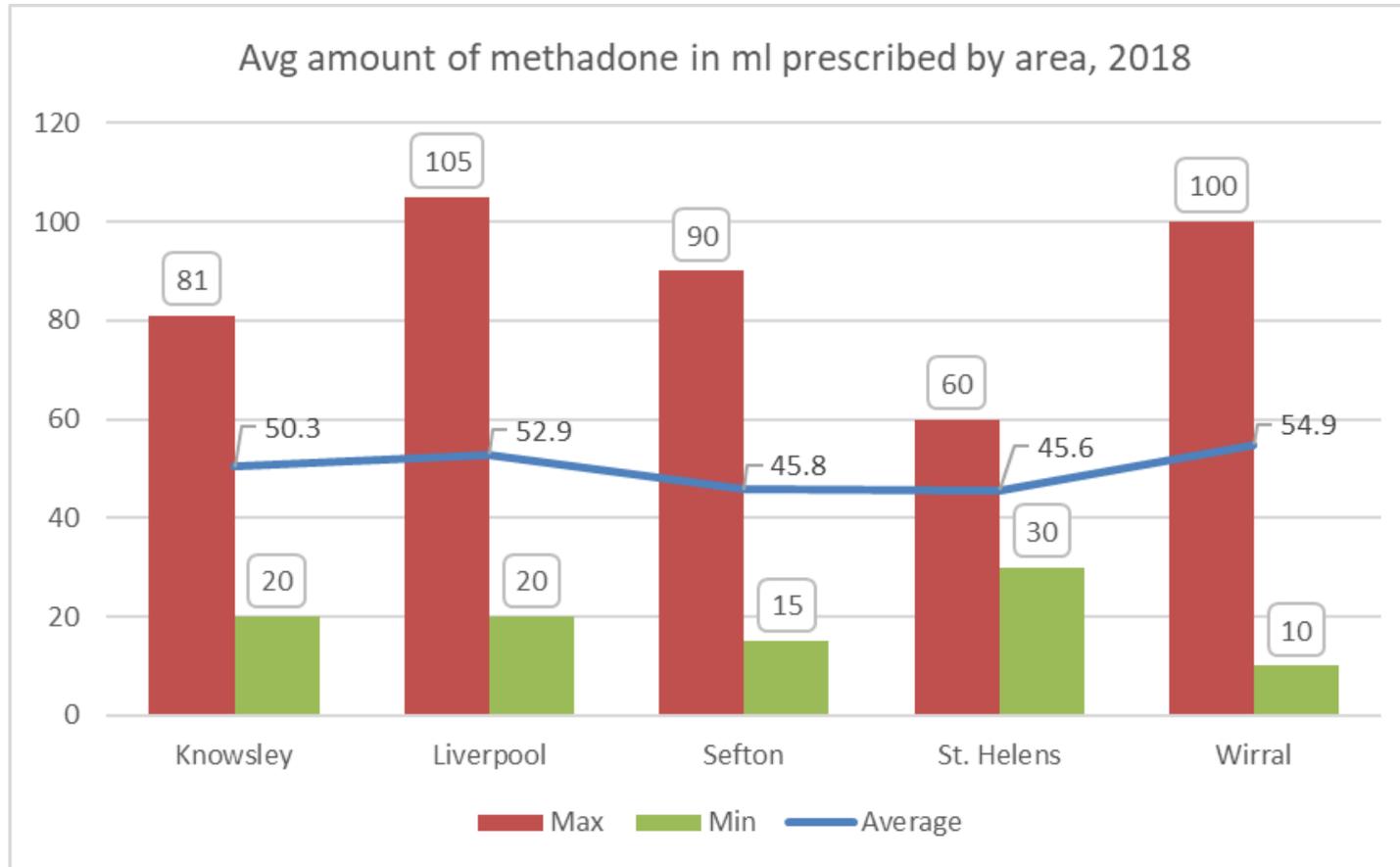
Drug related deaths – Cheshire and Merseyside 2018



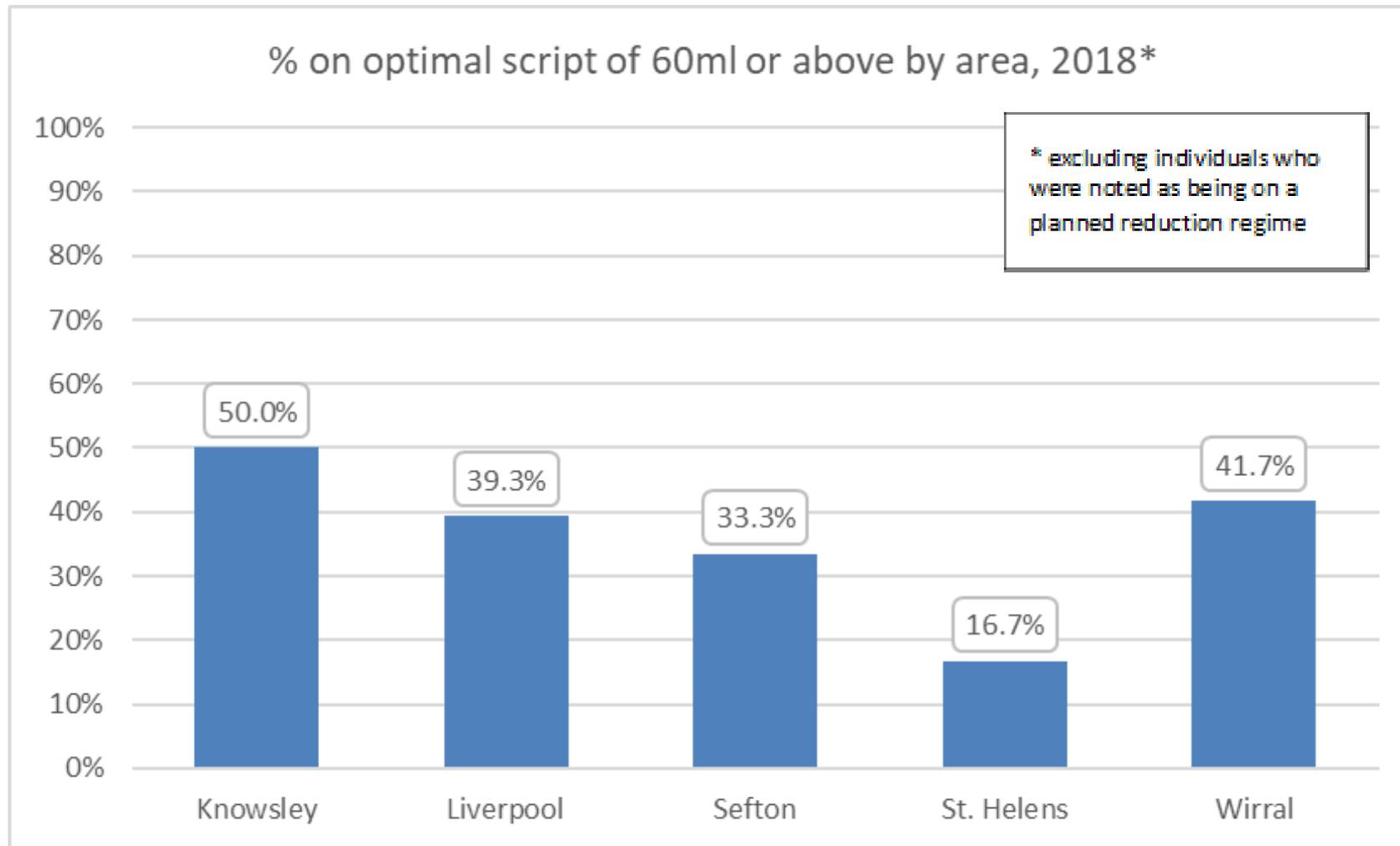
Percentage on supervised consumption, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018

Average amount of methadone prescribed in ml, by local authority, 2018

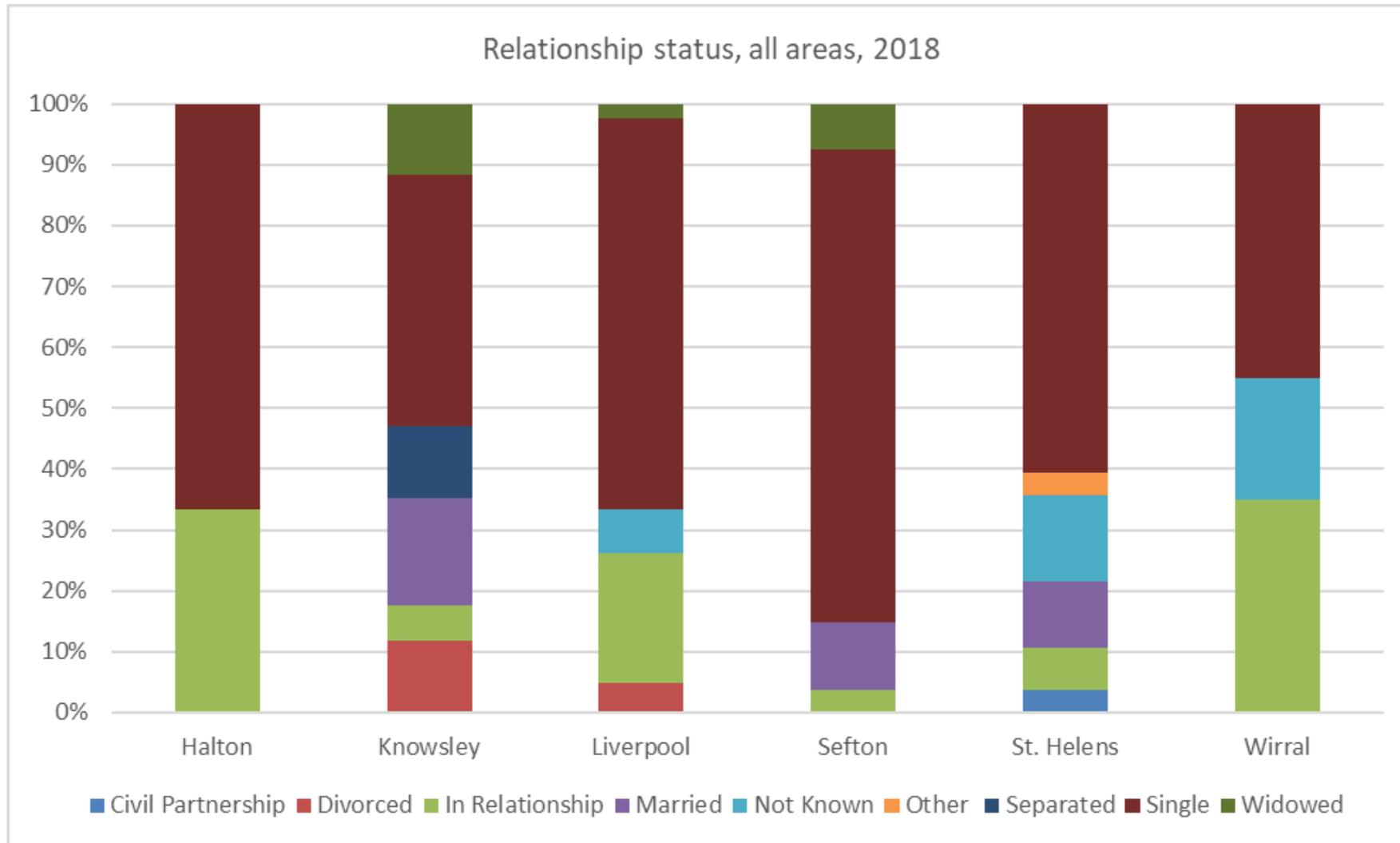


Drug related deaths – Cheshire and Merseyside 2018



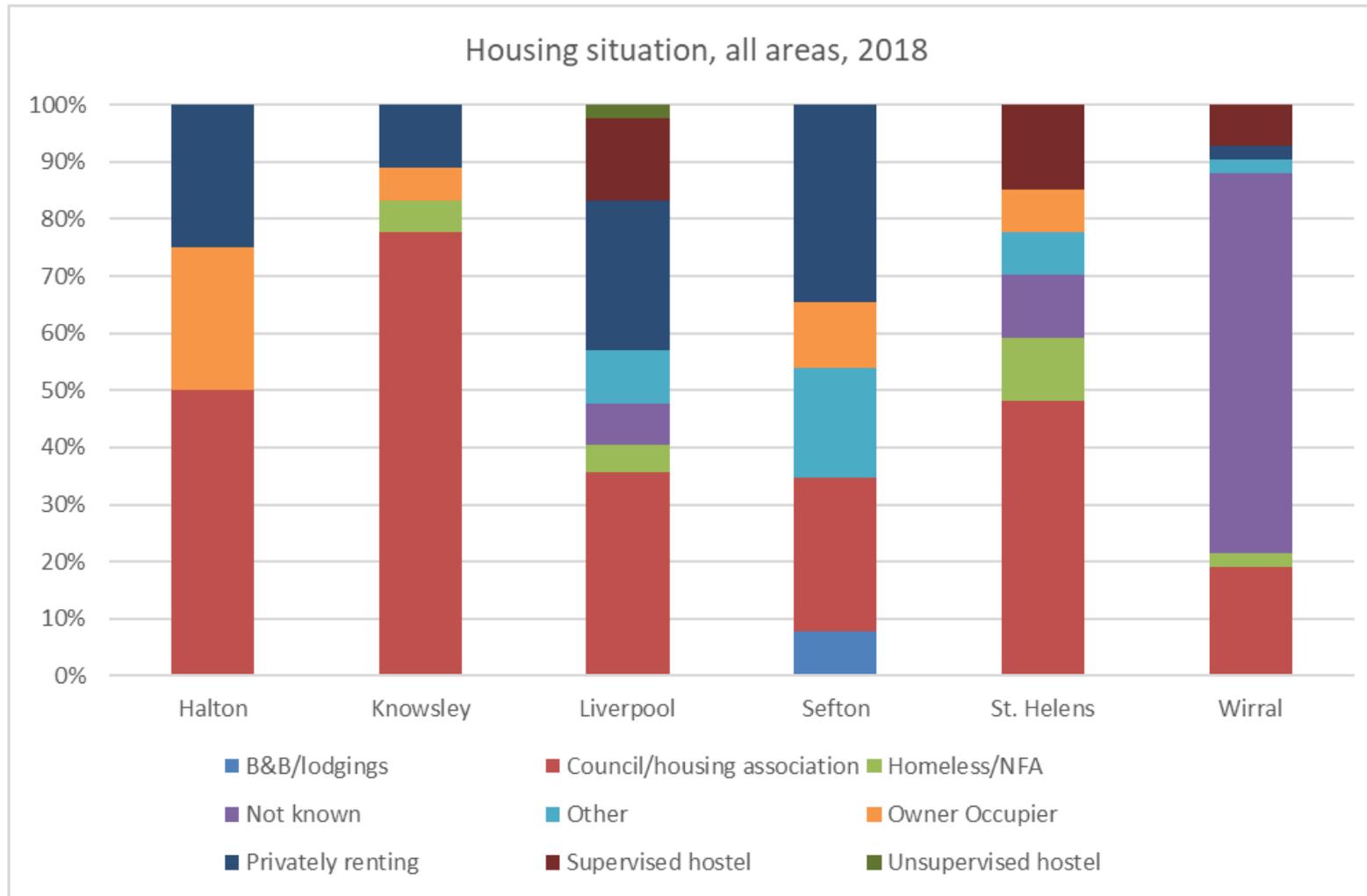
Percentage on optimal script of 60ml-120ml, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



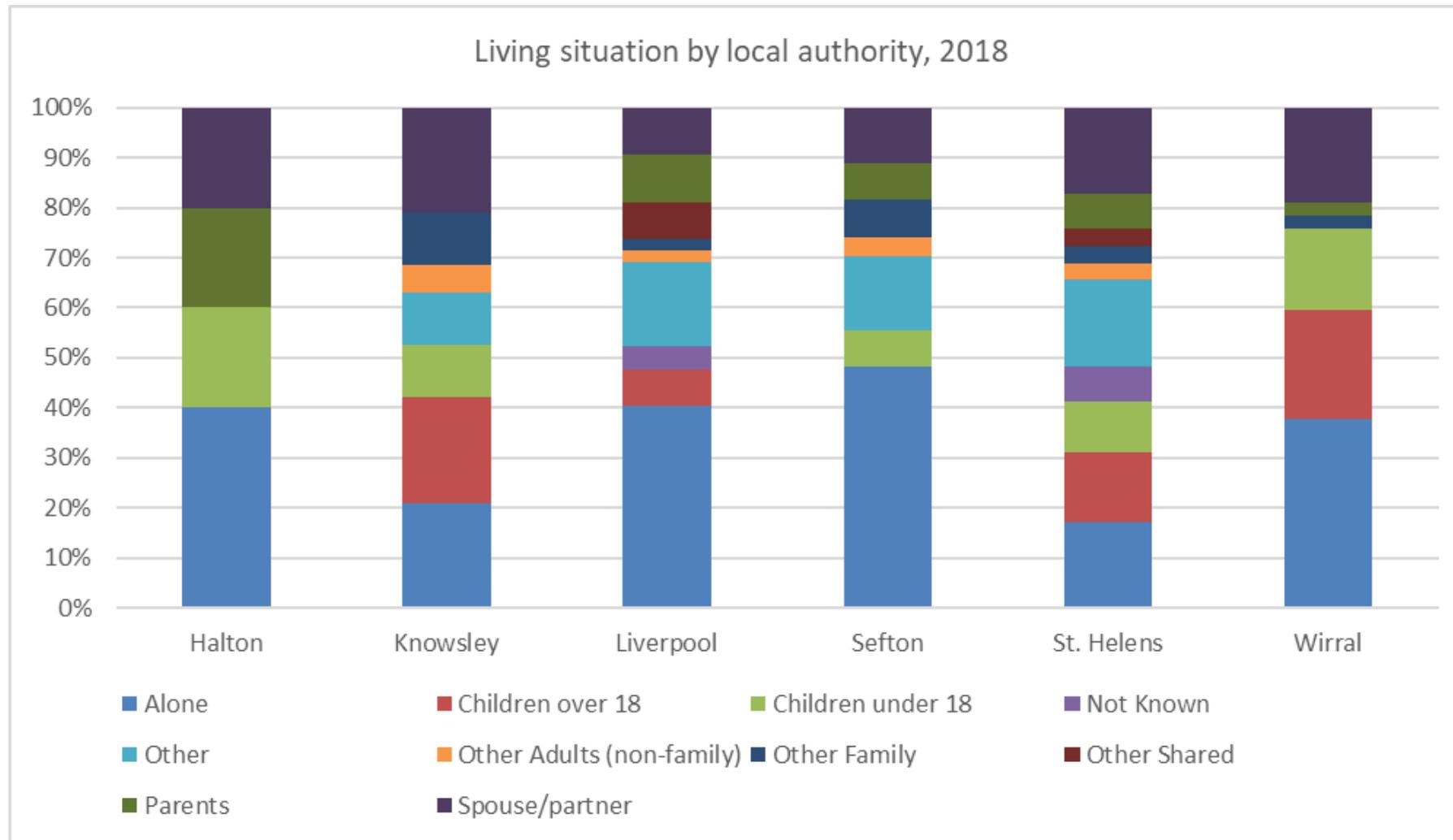
Relationship status of deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



Housing situation of deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



Living situation of deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside

Case Study 1: BV - 29 year old male, homeless

Upon entry into treatment service following prison release, BV was in a relationship and often stayed between his mother and girlfriend's address.

Heroin, 6 x £10 bags daily, 3 x £10 bags of Crack cocaine every 2 days both injected. Drinking 4 cans of 8% lager and 2 cans of 7.5% cider daily. Occasionally used Pregabalin.

Low mood following bereavement. Client withdrew from services and reported moving out of area but would not engage in telephone conversations to check on wellbeing.

Safety concerns following a physical attack by a group of youths. Mr V was found by the grounds keeper of a local Church. Emergency services were called. Police commenced CPR, carried on by paramedics. Mr V was taken to hospital but was dead on arrival. A tent was located in the church grounds as well as personal effects, blood stained jeans & a drugs wrap.

Verdict: Drug related death / Cerebral thrombosis / Complications of Heroin use



Drug related deaths – Cheshire and Merseyside

Case Study 2: JA - 44 year old male, lived in hostel

Had long history of polysubstance use and was seen in the YMCA treatment clinic to assist with methadone treatment. Client socially isolated and staff reported he spent long periods of time in his room - was challenging to engage with at times and would often miss his methadone doses as he was reluctant to take this when he had used heroin, which he had started to smoke heroin daily. Reduced IV use due to lack of access to IV sites.

Three way discussions between GP practice team and treatment provider's nurse prescriber as how best to support his engagement with treatment and declining health.

Had severely ulcerated legs and breathing difficulties from COPD in the months prior to his death - was given advice and information around the effects of smoking heroin on COPD. Prescribed 30mls of methadone but stopped presenting to treatment provider.

On day of death JA had taken crack cocaine earlier but a resident contacted YMCA staff to say that JA was struggling to breathe.

Verdict: Drug Related Death / Serious infection (SAB)/ injecting drug use/COPD

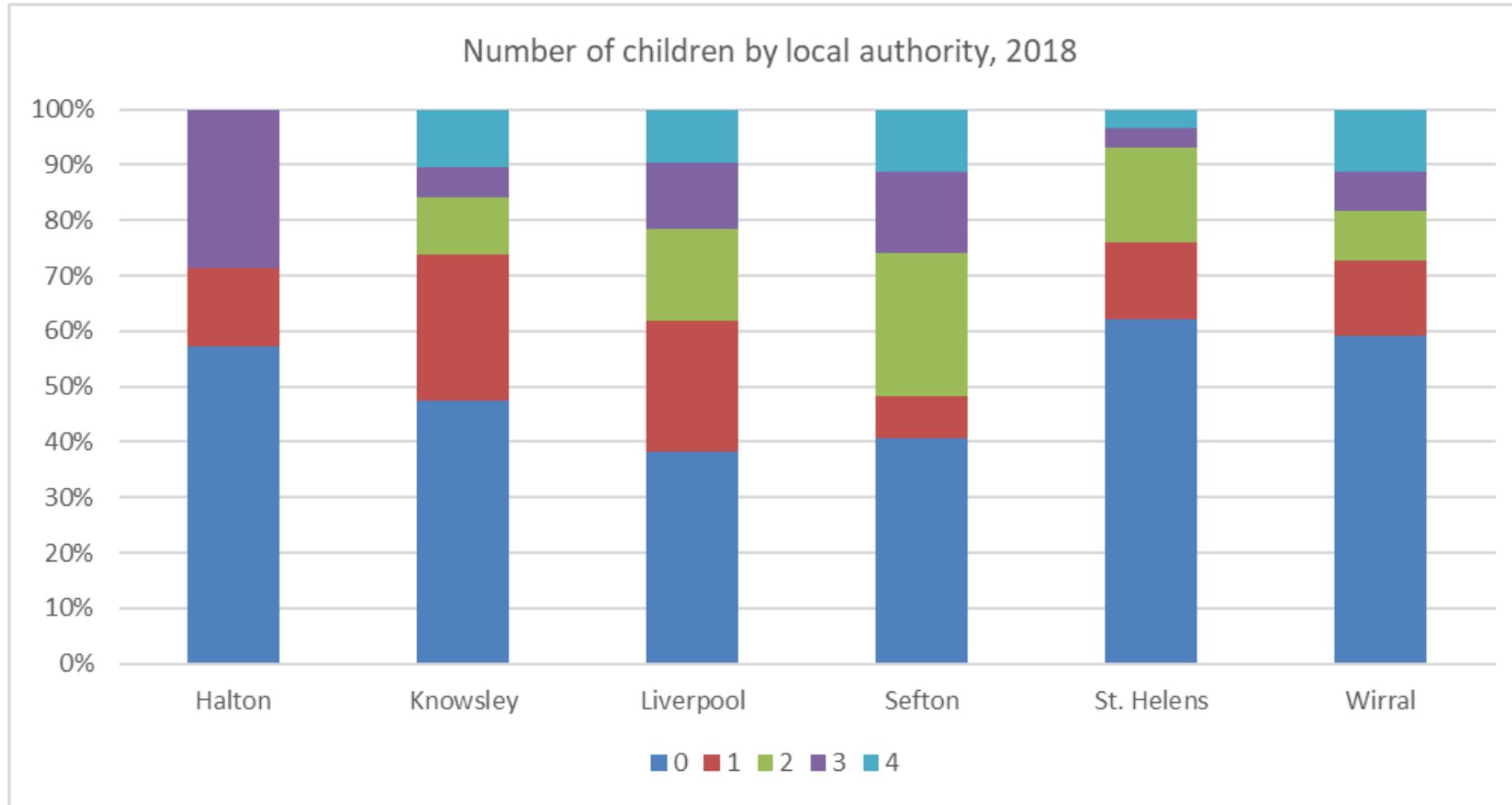


Drug related deaths – Cheshire and Merseyside 2018

Proportion with non-matching injecting status IMS/ NDTMS records, by local authority, 2018

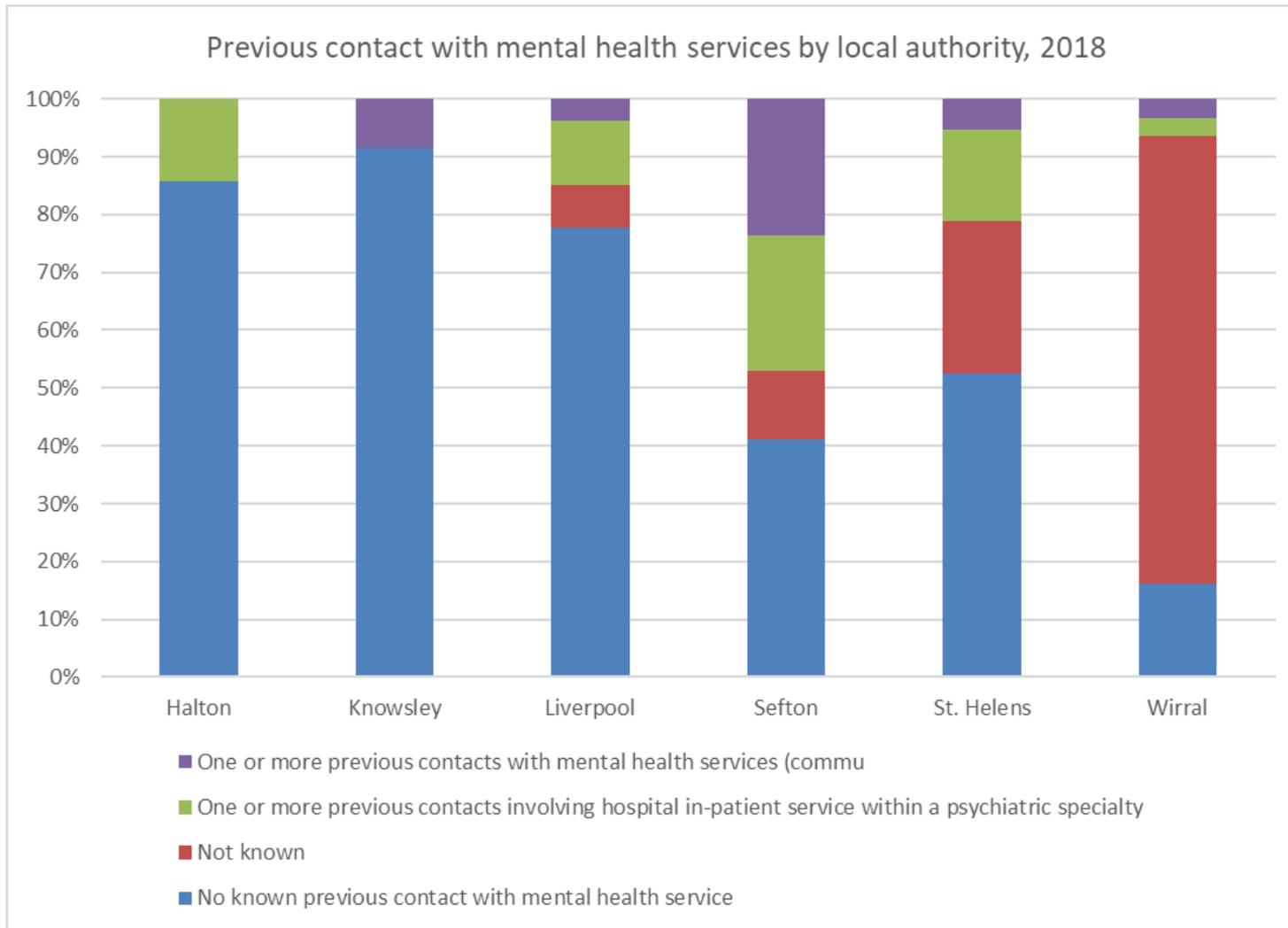
	Total DRDs	Proportion with IMS	IMS current / last year	Proportion with NDTMS	Proportion with Both	Match	Don't match
Cheshire West & Chester	14	36%	21%	0%	0%		
Halton	12	33%	8%	33%	8%	100%	0%
Knowsley	29	24%	10%	69%	21%	67%	33%
Liverpool	103	39%	12%	41%	25%	69%	31%
Sefton	39	31%	8%	67%	23%	56%	44%
St. Helens	34	35%	12%	71%	35%	67%	33%
Wirral	64	41%	8%	66%	28%	56%	44%
Total	295	36%	11%	54%	24%	64%	36%

Drug related deaths – Cheshire and Merseyside, 2018



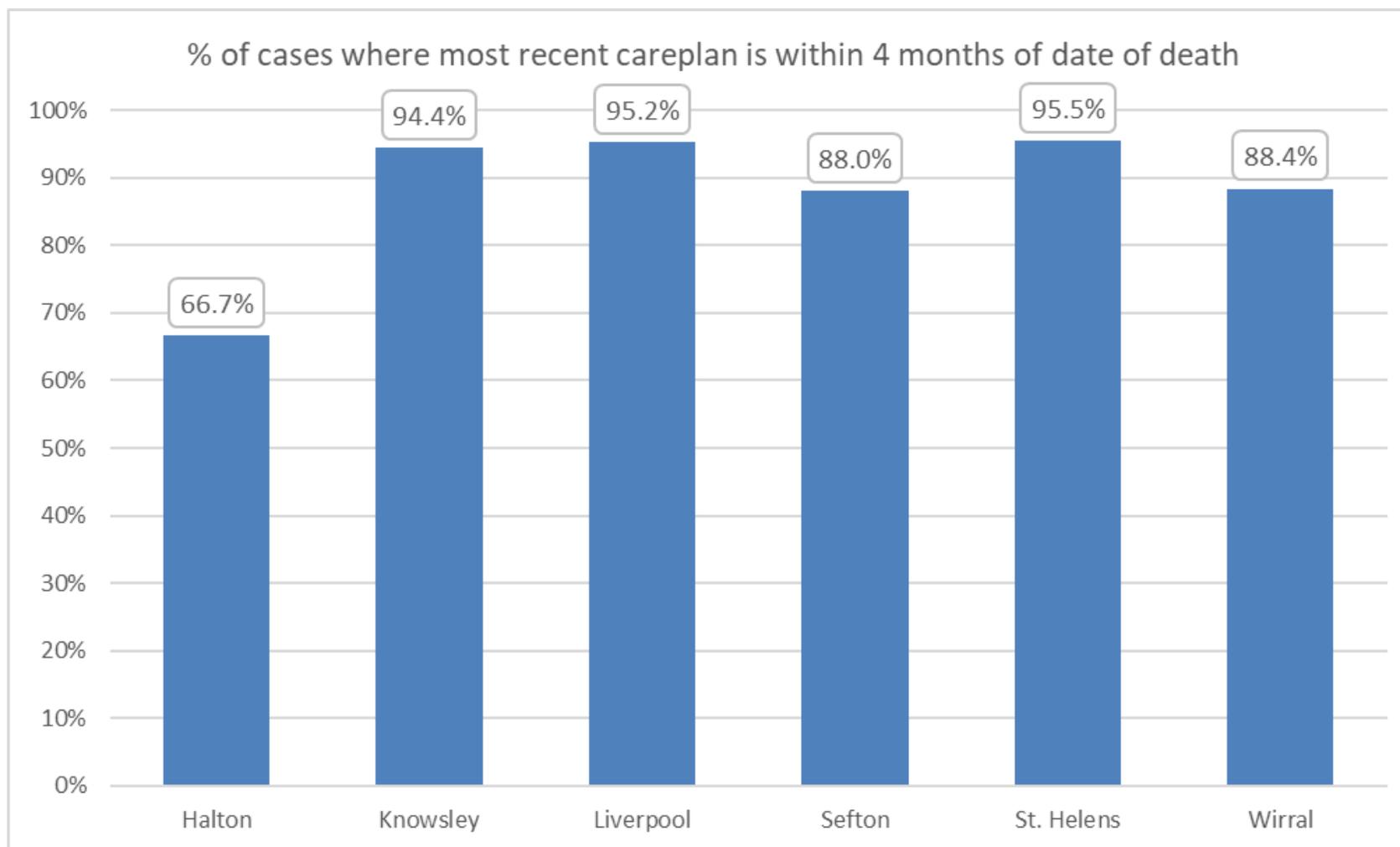
Number of children under 18 of deceased, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



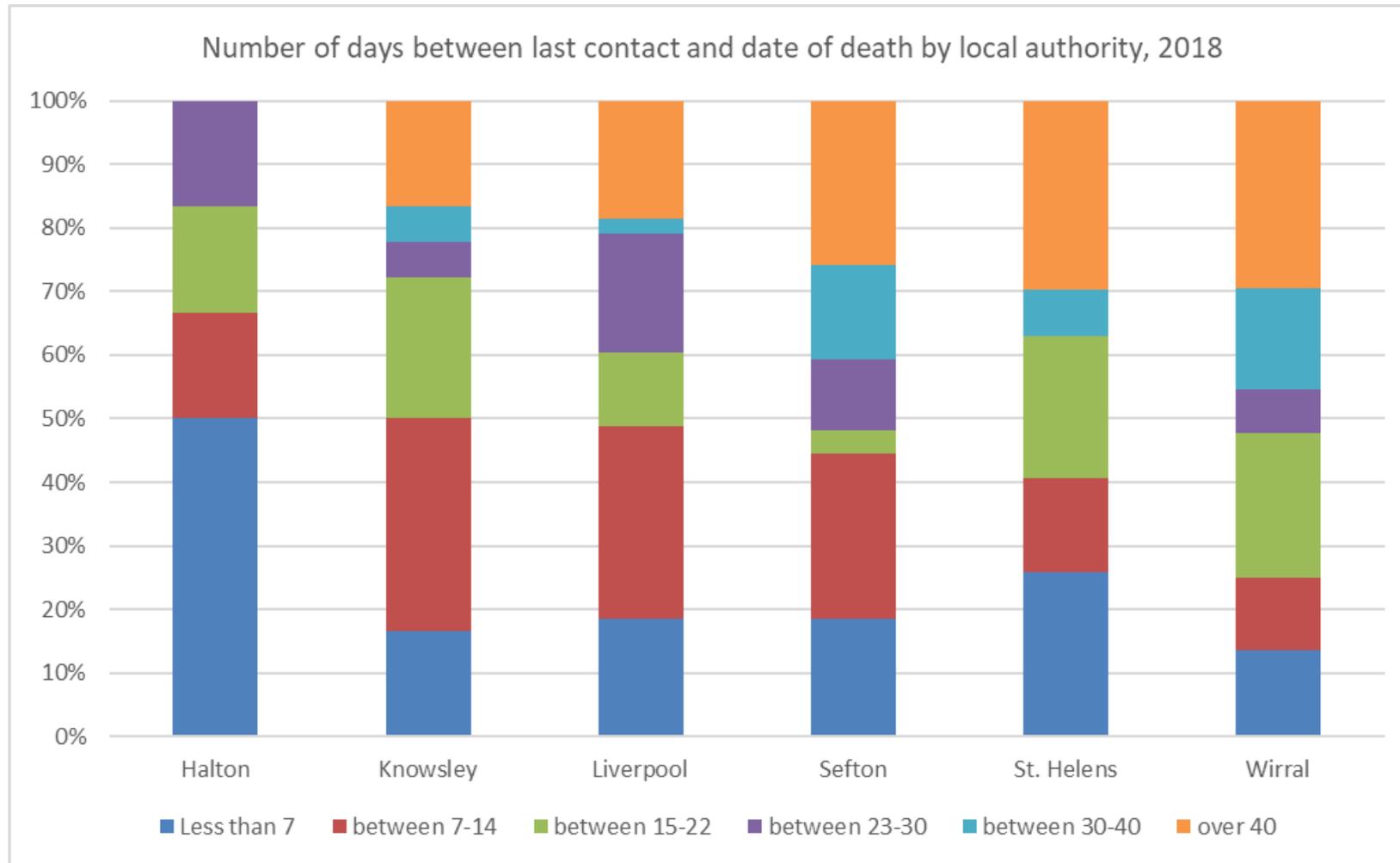
Previous contact with mental health services, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



Percentage of cases where most recent care-plan is within 4 months of date of death, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018



Number of days between last contact and date of death, by local authority, 2018

Drug related deaths – Cheshire and Merseyside 2018

Previous overdose, and A&E admissions within last 2 years, by local authority, 2018

Overdose	% of people with previous overdose	Average number of OD	Highest number of OD
Halton	28.6%	2	2
Knowsley	31.6%	2.3	4
Liverpool	16.7%	2.1	5
Sefton	51.9%	6.3	38
St. Helens	34.5%	1.6	6
Wirral	9.1%	1	1

A&E admissions	% of people with A&E attendance	Average number of admissions	Highest number of admissions
Halton	28.6%	1	1
Knowsley	47.4%	4	17
Liverpool	40.5%	1.6	5
Sefton	48.1%	4.7	19
St. Helens	65.5%	2.1	12
Wirral	36.4%	1.1	2

maps

Drug related deaths – Cheshire and Merseyside 2018

Data collection is good but some challenges with the system:

- Number of deaths sometimes difficult to cover in time available in panels
- Turning actions into evidenced change
- Coroners difficult to engage for panels
- Ability to link in other agencies is currently not utilised well
- Delay in inquest detail means sometimes deaths are reviewed twice

maps

Drug related deaths – Cheshire and Merseyside 2018

Main findings from 2018's data

- 295 deaths occurring in 2018 reported to the system
- Deaths are at their highest level locally since records/local surveillance system started, although in treatment deaths have risen at a slower rate
- Most deaths are individuals in treatment
- Individuals are dying later in treatment than out of it (for some groups)
- Alcohol appears in a significant number of toxicologies
- The number of deaths from cocaine toxicity and from alcohol toxicity are rising
- People are increasingly dying alone
- Injecting and continued use of illicit drugs is common