



# Routes to diagnosis 2015 update: children, teenagers and young adults

## National Cancer Intelligence Network Short Report

### Introduction

The Routes to Diagnosis (RtD) study has been updated to include all patients diagnosed between 2006 and 2013, covering 2 million newly diagnosed tumours/patients. The methodology has remained the same as in previous RtD publications. Results have been published for 57 cancer sites [www.ncin.org.uk/publications/routes\\_to\\_diagnosis](http://www.ncin.org.uk/publications/routes_to_diagnosis).

This briefing describes the national RtD results for all cancers combined (excl. NMSC) and those that are commonest among children (0-14 years old), teenagers and young adults (15-24 years old).

Some emergency presentations among this age group, particularly for those presenting to paediatric services, may be patients seen on the day of referral by a GP. This practice is widespread within paediatrics for children with 'red flag' symptoms.

### Route breakdowns for all cancers combined, 2006 to 2013

More than half (53%) of all cancers diagnosed in children presented as emergencies. Teenagers and younger adults were more likely to be diagnosed through a GP referral or TWW. However, 26% were still diagnosed through an emergency presentation.

### Key messages

New data published for children, teenagers and young adults.

By cancer there is variation in the route to diagnosis.

For all cancers combined, emergency presentation was commonest in children, while GP and two week wait referrals were commonest in teenagers and young adults.

	Screen detected	Two Week Wait	GP referral	Other Outpatient	Inpatient Elective	Emergency presentation	Unknown	Number of cases
Children (0-14 yrs)	0%	2%	17%	16%	9%	53%	3%	10,000
TYA (15-24 yrs)	1%	22%	28%	13%	4%	26%	6%	13,652

### Route breakdowns for brain tumours, 2006 to 2013

More than half of brain tumours diagnosed in children and 47% in teenagers and young adults were through emergency presentation.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	0%		17%		16%		5%		58%		3%		
	0%	1%	16%	19%	15%	18%	5%	7%	56%	60%	2%	4%	
TYA (15-24 yrs)	1%		21%		23%		4%		47%		4%		1,225
	0%	1%	19%	24%	21%	26%	3%	5%	44%	50%	3%	5%	

### Route breakdowns for Hodgkin lymphoma, 2006 to 2013

GP referral was the commonest route for children, teenagers and young adults and 32% of cancer in teenagers and young adults were also diagnosed through two week wait (TWW), however, a quarter of diagnosed children are emergency presentations.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	8%		39%		18%		7%		25%		3%		
	6%	11%	35%	43%	15%	22%	5%	9%	22%	29%	2%	5%	
TYA (15-24 yrs)	32%		34%		10%		3%		16%		5%		2,135
	31%	34%	32%	36%	9%	12%	2%	3%	15%	18%	4%	6%	

### Route breakdowns for leukaemia: acute myeloid, 2006 to 2013

Two thirds or more of acute myeloid leukaemias in children teenagers and young adults were diagnosed through emergency presentation.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	1%		10%		14%		8%		65%		2%		
	0%	2%	8%	13%	11%	17%	6%	11%	61%	69%	1%	4%	
TYA (15-24 yrs)	0%		7%		8%		9%		71%		6%		466
	0%	1%	5%	9%	6%	11%	6%	12%	67%	75%	4%	9%	

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### Route breakdowns for leukaemia: acute lymphoblastic, 2006 to 2013

Around two thirds of children, teenagers and young adults were diagnosed through emergency presentation.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	1%		9%		10%		9%		69%		3%		
	0%	1%	8%	10%	9%	11%	8%	10%	67%	71%	2%	4%	
TYA (15-24 yrs)	1%		9%		8%		9%		66%		7%		519
	1%	3%	7%	11%	6%	10%	7%	12%	62%	70%	5%	9%	

### Route breakdowns for non-Hodgkin lymphoma, 2006 to 2013

More than half of children diagnosed presented as an emergency. Emergency presentation was also commonest among teenagers and young adults at 37%, however, 27% were also diagnosed through GP referral.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	1%		19%		14%		6%		56%		3%		
	1%	2%	16%	23%	12%	17%	4%	8%	53%	60%	2%	5%	
TYA (15-24 yrs)	13%		27%		13%		3%		37%		6%		893
	11%	15%	24%	30%	11%	16%	2%	5%	34%	41%	5%	8%	

### Route breakdowns for sarcoma: connective and soft tissue, 2006 to 2013

Diagnoses through GP referral were commonest among teenagers and young adults, however, 39% of children and 23% of teenagers and young adults were diagnosed through an emergency route.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	2%		27%		18%		11%		39%		3%		
	1%	4%	23%	31%	15%	21%	9%	15%	34%	43%	2%	6%	
TYA (15-24 yrs)	12%		35%		18%		2%		23%		9%		449
	10%	16%	31%	39%	15%	22%	1%	4%	20%	28%	6%	12%	

### Route breakdowns for kidney cancer in children, 2006 to 2013

Nearly half of all kidney cancers in children were diagnosed through emergency presentation.

	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases
Children (0-14 yrs)	2%		13%		21%		14%		48%		3%		
	1%	3%	10%	16%	18%	25%	12%	17%	44%	52%	2%	4%	

### Route breakdowns for cancers specific to teenagers and young adults, 2006 to 2013

More than two thirds of colorectal cancers diagnosed in this age group were through emergency presentation. All other cancers are mostly diagnosed through a TWW or GP referral, however, 36% of cancers of the meninges, 45% of chronic myeloid leukaemias and 30% of cancers of the ovary were diagnosed through emergency presentation.

	Screen detected	Two Week Wait		GP referral		Other Outpatient		Inpatient Elective		Emergency presentation		Unknown		Number of cases								
Meninges				24%		30%		9%		36%		1%			119							
				17%	32%	23%	39%	5%	16%	28%	45%	0%	5%									
Cervix	23%	12%	36%	13%	3%	9%	3%	19%	27%	10%	16%	32%	41%	10%	17%	2%	5%	7%	12%	2%	6%	422
Cervix (in-situ)	9%	0%	60%	21%	5%	1%	5%	9%	9%	0%	0%	59%	60%	20%	21%	5%	5%	1%	1%	5%	5%	14,031
Colorectal		2%		14%		7%		4%		68%		4%		610								
		1%	4%	12%	17%	5%	9%	3%	6%	64%	72%	3%	6%									
Female breast cancer		56%		30%		8%				4%		3%		224								
		49%	62%	25%	37%	5%	12%			2%	7%	1%	6%									
Head and neck - Thyroid		17%		56%		16%		2%		3%		6%		799								
		15%	20%	53%	60%	14%	19%	1%	3%	2%	4%	5%	8%									
Leukaemia: chronic myeloid		8%		23%		11%		10%		45%		3%		146								
		4%	13%	17%	30%	7%	17%	6%	16%	37%	53%	2%	8%									
Melanoma		44%		36%		5%		1%		2%		12%		1,413								
		41%	47%	34%	39%	4%	6%	0%	1%	1%	3%	11%	14%									
Ovary		11%		32%		18%		5%		30%		4%		678								
		9%	14%	29%	36%	15%	21%	4%	7%	27%	33%	3%	5%									
Testis		51%		15%		10%		4%		14%		5%		1,849								
		49%	53%	14%	17%	9%	12%	3%	5%	13%	16%	4%	7%									

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**Find out more:**

This report forms part of a suite of publications from NCIN's Routes to Diagnosis project: [www.ncin.org.uk/publications/routes\\_to\\_diagnosis](http://www.ncin.org.uk/publications/routes_to_diagnosis)

**Other useful resources within the NCIN partnership:**

What cancer statistics are available and where can I find them?

[www.ncin.org.uk/publications/reports/](http://www.ncin.org.uk/publications/reports/)

Public Health England's National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in cancer awareness, prevention, diagnosis and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.

[www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)

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