

### West Midlands Ambulance Service Major Trauma Report 2015/16

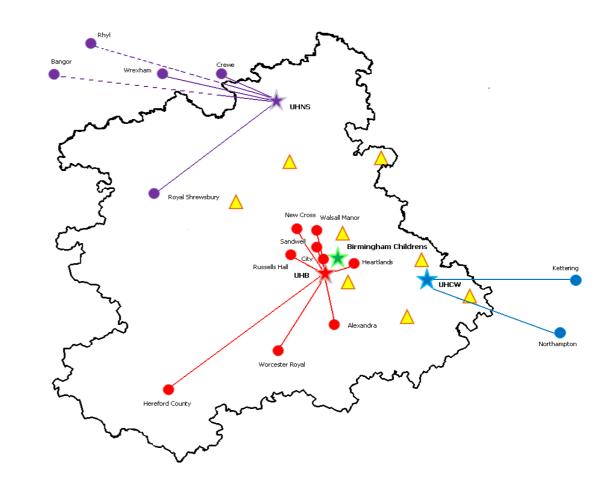
April-15

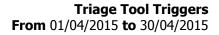
#### Page

- #1Index#2Total triage tool activations
- #3 Step 1 analysis
- #4 Step 2 analysis
- #5 Step 3 analysis
- #6 Step 4 analysis
- #7 Triage tool activations summary \*
- #8 Daily tool activations
- #9 Activity against contract weekly and monthly figures \*
- #10 Activity against contract chart \*
- #11 Activity trends\*
- #12 Conveyance charts \*
- #13 Average time distributions by division
- #14 Average conveyance times by destination
- #15 Map Activity by postcode area \*
- #16 Map Activity by postcode area and shift \*
- #17 Map Incident location by type of incident \*
- #18 Map Incident location by destination \*
- #19 Deceased patients \*
- #20 Out of area activity \*
- #21 Transfers \*
- #22-31 MERIT Report

Please note: (please refer to individual page notes where applicable)

- 1: Information correct on 5th May 2015
- \* Year to date figures are provided for these reports





Deceased patients and cases where crew discretion has triggered the tool will appear in the total figures but not within one of the Steps 1 - 4.

		Trauma Injury Type	Count
	Vital Signs	Falls	67
	(n=44) 21.5%	RTC	93
		Other	4
	Vital Ciana	Unknown	4
	Vital Signs (n=41)	Stabbing	16
	20.0%	Leisure Activity	4
<b>Total Triage Tool Triggers</b>		Assault	1
(n=205)	Vital Signs	Burns	8
	(n=69)	Industrial Injury	3
	33.7%	Other Transport Collision	4
		Shooting	1
	Vital Signs	Total:	205
	(n=37) 18.0%		





	Respiratory Rate <10 or >29 / min	Trauma Injury Type	Count
	(n=7)	Falls	18
	15.9%	RTC	16
		Unknown	2
	Systolic Blood Pressure <90 mmHg	Assault	1
Step 1 Vital Signs	(n=4)	Other	2
(n=44)	9.1%	Industrial Injury	3
		Leisure Activity	1
	Glasgow Coma Scale <14	Shooting	1
	(n=33)	Total:	44
	75.0%		



	Penetrating to Neck/ Chest/ Abdomen (n=14) 34.1%
	Suspected Fractured Pelvis (n=12) 29.3%
	2 or more Long Bone Fractures (n=7) 17.1%
Step 2 Anatomy of Injury (n=41)	Crushed/ De-gloved /Mangled Extremity (n=0) 0.0%
	Amputation Proximal to Wrist/Ankle (n=0) 0.0%
	Open or Depressed Skull Fracture (n=2) 4.9%
	Sensory or Motor Deficit (now onset) (n=6) 14.6%

West Midlands Ambulance Service NHS Foundation Trust

Trauma Injury Type	Count
Unknown	1
RTC	13
Stabbing	14
Leisure Activity	1
Falls	11
Other Transport Collision	1
Total:	41

**Triage Tool Triggers From** 01/04/2015 **to** 30/04/2015



		Trauma Injury Type	Count
	Fall > 6m / 2 storeys in Adult (n=7)	RTC	51
	10.1%	Falls	16
		Stabbing	1
	Fall > $3m / 2x$ height of Child		
	(n=9) 13.0%	Other Transport Collision	1
	13.0 /0	Total:	69
	Vehicle - Ejection (partial or complete)		
	(n=2)		
	2.9%		
	Vehicle - Intrusion >30cm at Patient Site		
	(n=4)		
	5.8%		
Step 3			
Mechanism of Injury	Vehicle - Death in same Compartment		
(n=69)	(n=0)		
	0.0%		
	Motorcycle Crash > 20 mph		
	(n=14)		
	20.3%		
	Pedestrian / Bicyclist vs Motor Vehicle		
	thrown/run over/ significant Impact		
	(n=32) 46.4%		
	Entrapment (n=1)		
	(n=1)		
	1.4%		



	Age> 55 (n=25) 67.6%	Trauma Injury Type	Count
	Children < 8 years old	Other	2
	(n=4)	RTC	4
	10.8%	Falls	20
	Pregnancy > 20 weeks	Burns	8
	(n=0) 0.0%	Leisure Activity	2
	Renal Dialysis Patients	Unknown	1
	(n=0) 0.0%	Total:	37
Step 4 Special Conditions (n=37)	Bleeding Disorders / Anticoagulants (n=0) 0.0%		
	Time Critial Extremity Injury (n=1) 2.7%		
	Burns: Circumferential or 20% (BSA) (n=7) 18.9%		
	Specialist Trauma Pathway (n=0) 0.0%		

Tree

Latal Tri

Deceased patients and cases where crew discretion has triggered the tool will appear in the total figures but not within one of the Steps 1 - 4

Total Triggers		Trauma Type						
Step 1: Vital Signs	44	RTC	93					
Step 2: Anatomy of Injury	41	Falls	67	1				
Step 3: Mechanism of Injury	69	Stabbing	16	1				
Step 4: Special Conditions	37	Burns	8	1				
Injuries Incompatible With Life -	14	Other	4	]				
Deceased		Unknown	4	]				
Total	205	Leisure Activity	4	1				
		Other Transport Collision	4	1				
		Industrial Injury	3					
		Assault	1	1				
		Shooting	1	1				
		Total	205	1				
Step 1 Breakdown		Step 2 Breakdown		-	Step 3 Breakdown		Step 4 Breakdown	
Glasgow Coma Scale <14	33	Penetrating to Neck/ Chest/ Abdomen		14	Pedestrian / Bicyclist vs Motor Vehicle thrown/run over/ significant Impact	32	Age> 55	25
Respiratory Rate <10 or >29 / min	7	Suspected Fractured Pelvis		12	Motorcycle Crash > 20 mph	14	Burns: Circumferential or 20% (BSA)	7
Systolic Blood Pressure <90 mmHg	4	2 or more Long Bone Fractures		7	Fall > 3m / 2x height of Child	9	Children < 8 years old	4
Total	44	Sensory or Motor Deficit (now onset)		6	Fall > 6m / 2 storeys in Adult	7	Time Critial Extremity Injury	1
		Open or Depressed Skull Fracture		2	Vehicle - Intrusion >30cm at Patient Site	4	Total	37
		Total		41	Vehicle - Ejection (partial or complete)	2		
					Entrapment	1		
					Total	69		
Step 1 - Trauma Type		Step 2 - Trauma Type			Step 3 - Trauma Type		Step 4 - Trauma Type	
Falls	18	Stabbing		14	RTC	51	Falls	20
RTC	16	RTC		13	Falls	16	Burns	8
Industrial Injury	3	Falls		11	Stabbing	1	RTC	4
Unknown	2	Unknown		1	Other Transport Collision	1	Other	2
Other	2	Leisure Activity		1	Total	69	Leisure Activity	2
Assault	1	Other Transport Collision		1			Unknown	1
Leisure Activity	1	Total		41			Total	37
Shooting	1							



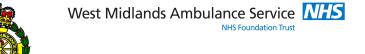
				No. of Patients Seen by Specialist Resources		Patient Initally Transported To:					Major Trauma Centre					
Date	No. of Tool Activations	Non- Conveyances	Cases That By Passed Their Nearest Hospital	Air Amb	<b>Day</b> Air Amb / ECT / MERIT	<b>Night</b> Air Amb / ECT / MERIT	<b>Voluntary</b> BASICS / MARS etc	МТС	Trauma Unit	LEH	Out of Area	Not Transported	UHB	BCH	RSUH	UHCW
01/04/2015	5	2	3		3		1	3				2	1	1		1
02/04/2015	9	1	4			1	1	6	2			1	2	2	2	
03/04/2015	7	0	2			2		2	4	1			2			
04/04/2015	7	0	3			3	1	4	2	1			4			
05/04/2015	2	0	0				1	2					1		1	
06/04/2015	6	1	2		1		1	3	2			1	2		1	
07/04/2015	6	1	3				1	3	2			1	1	1	1	
08/04/2015	3	0	1					1	2					1		
09/04/2015	7	0	3					6	1				4			2
10/04/2015	10	0	4			3		5	5				5			
11/04/2015	6	0	3		3			3	3				3			
12/04/2015	7	0	3	2			1	5	2				1		2	2
13/04/2015	9	1	3			1	1	6	2			1	4	2		
14/04/2015	7	2	5	3	1	1		5				2	1	1	3	
15/04/2015	2	0	1						2							
16/04/2015	8	0	2	1	1		1	4	4				1		2	1
17/04/2015	7	0	5	1				5	2				2		2	1
18/04/2015	8	0	4	1	1			5	3				2		2	1
19/04/2015	8	0	3		1	1		4	4				3	1		
20/04/2015	5	0	4	1	1			4	1				1	3		
21/04/2015	10	1	4	2	1	1		8	1			1	5		1	2
22/04/2015	1	0	1	1				1					1			
23/04/2015	4	0	3			1		3	1				1	2		
24/04/2015	8	1	5		1	1		6	1			1	4	1		1
25/04/2015	14	0	9			4	3	9	3	1	1		8	1		
26/04/2015	11	1	5	1	2	1	1	5	5			1	4			1
27/04/2015	9	1	6	3	2	2	1	8				1	5	1	2	
28/04/2015	7	1	2		1	2		4	2			1	2	1	1	
29/04/2015	6	1	4	1	2	1		4	1			1		3		1
30/04/2015	6	1	3		1	1		5				1	2	2		1
Total	205	15	100	17	22	26	14	129	57	3	1	15	72	23	20	14

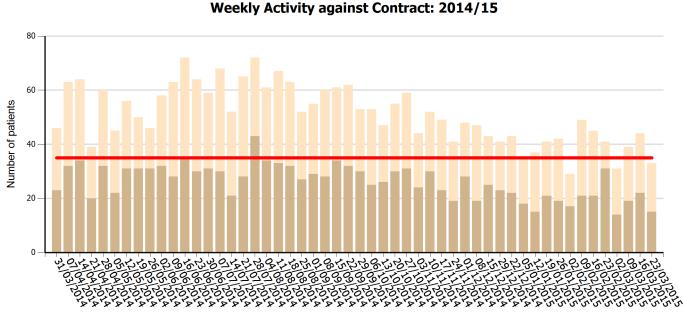




	A	В	С	D	E
riage ients rred major iment (i.e. d their bitals)	Month	No. of triage tool +ve patients	Non- Conveyances	Total no. of cases within Column B that were that MTCs natural DGH catchment (therefore not new activity shifts)	Additional triage tool +ve patients that transferred within their major trauma catchment population (i.e. that bypassed their nearest hospitals)
	April	177	11	81	85
	Overall Total	177	11	81	85

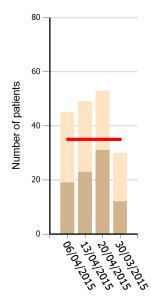
Α	В	С	D	E	
Week Commencing	No. of triage tool +ve patients	Non- Conveyances	Total no. of cases within Column B that were that MTCs natural DGH catchment (therefore not new activity shifts)	Additional triage tool +ve patients that transferred within their major trauma catchment population (i.e. that bypassed their nearest hospitals)	
06/04/2015	45	2	24	19	
13/04/2015	49	3	23	23	
20/04/2015	53	3	19	31	
30/03/2015	30	3	15	12	
<b>Overall Total</b>	177	11	81	85	





Week commencing

### Weekly Activity against Contract: 2015/16



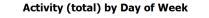
Weekly Contract (relates to 5 cases per day where the triage tool is triggered and the ambulance is required to bypass a hospital in order to reach the... Total Activity: Total number of triage triggers

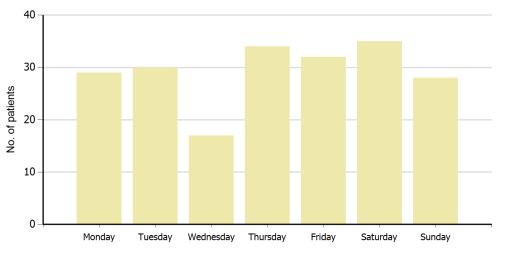
E Contract Activity: Triage tool triggers where we had to bypass the hospital in order to reach the Major Trauma Centre

Major Trauma - Activity Trends Year to Date Summary From 01/04/2015 to 30/04/2015 Report Ref: 186

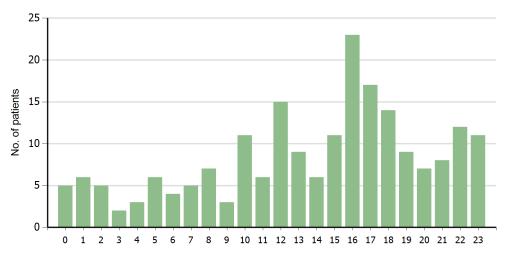






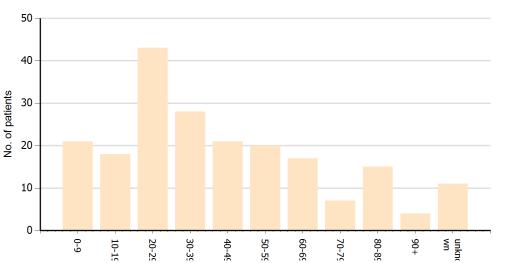


Activity (total) by Hour of Day



200 150 No. of patients 100 50 0 Male Unknown Female

Activity (total) by Patient's Gender



50-59

60-65

70-75

80-89

90+

<u>-0</u>

10-19

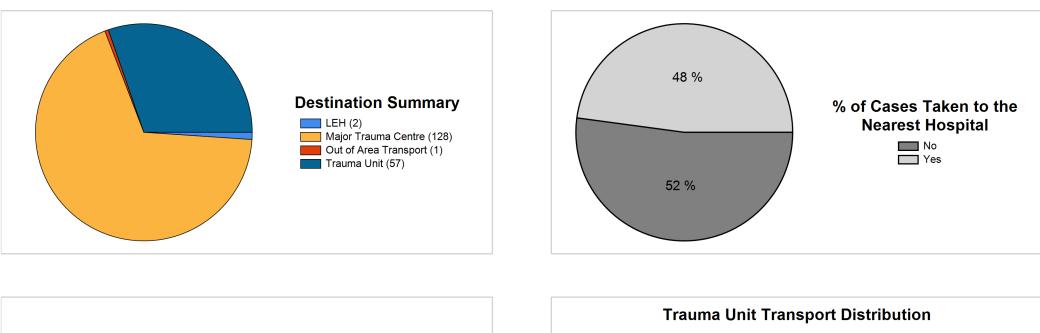
20-25

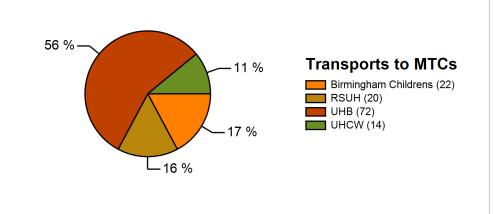
30-39

40-49

Activity (total) by Patient Age

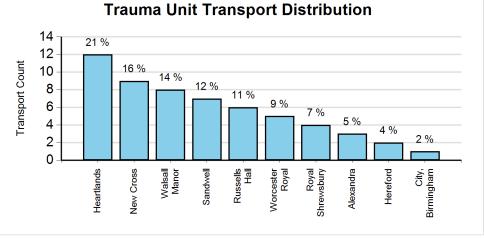
Major Trauma Conveyances Year to Date Summary From 01/04/2015 to 30/04/2015





West Midlands Ambulance Service **NHS** 

NHS Foundation Trust





#### Average Time Mobile to At Scene (hh:mm:ss)

Incident based. First mobile time to first on scene

LAND Crews only			AIR Crews only		
Division	Day	Night	Division	day	night
<b>Birmingham Division</b>	0:04:41	0:04:56	<b>Birmingham Division</b>	0:13:02	
Black Country Division	0:04:36	0:04:05	Black Country Division	0:11:20	
C&W Division	0:04:02	0:05:12	C&W Division	0:06:42	0:16:00
Staffordshire Division	0:06:03	0:05:07	Staffordshire Division	0:08:57	
West Mercia Division	0:06:47	0:04:40	West Mercia Division	0:12:28	
Total	0:05:14	0:04:40	Total	0:10:27	0:16:00

#### Average Time Spent on Scene (hh:mm:ss)

Incident based. First on scene to first left scene (where subsequently conveyed) Ambulances and Air Crews only. Entrapments and RSI on scene excluded (where known).

ALL Crews		
Division	day	night
<b>Birmingham Division</b>	0:37:31	0:35:36
Black Country Division	0:46:05	0:41:10
C&W Division	0:37:28	0:44:33
Staffordshire Division	0:51:18	0:40:22
West Mercia Division	0:48:32	0:33:18
Total	0:43:47	0:39:00

Average Travel Time to Hospital (hh:mm:ss) Response based. Time left scene to time at hospital

LAND Crews only			AIR Crews only	
Division	day night		Division	day
<b>Birmingham Division</b>	0:14:41	0:10:32	Birmingham Division	0:10:39
Black Country Division	0:18:52	0:14:52	Black Country Division	0:04:43
C&W Division	0:25:54	0:20:17	C&W Division	0:08:17
Staffordshire Division	0:26:15	0:15:06	Staffordshire Division	0:10:15
West Mercia Division	0:23:23	0:33:01	West Mercia Division	0:12:57
Total	0:19:42	0:15:36	Total	0:10:37

Average Total Time spent on Cases (hh:mm:ss) Incident based. First allocated time to latest time clear

ALL Crews		
Division	day	night
Birmingham Division	1:39:18	1:31:55
Black Country Division	1:43:08	1:31:02
C&W Division	1:39:52	1:56:14
Staffordshire Division	1:58:10	1:36:47
West Mercia Division	1:54:40	1:54:03
Total	1:46:16	1:36:44

This data does not include cases where the crews are not contacting the Regional Trauma Desk, any trauma transfers or cases which are responded to by out of area resources. The 'division' is based on the location of incident. Excluding defib responses



#### Average Travel Time to Hospital (hh:mm:ss)

Response based. Time left scene to time at hospital

LAND Crews only	тм	°Cs		
Hospital Attended	day	night		
Birmingham Childrens	0:25:57	0:23:02		
UHB	0:17:34	0:14:08		
UHCW	0:22:00	0:17:04		
Total	0:20:45	0:15:14		

LAND Crews only	Other De	stinations
Hospital Attended	day	night
Alexandra	0:22:18	0:22:49
City (Birmingham)	0:16:32	
County Hospital (Stafford)	0:54:26	
George Elliot		0:24:37
Heartlands	0:12:14	0:11:30
Hereford County	0:28:20	0:25:21
New Cross	0:11:52	0:08:55
Princess Royal	0:29:03	0:46:46
Royal Shrewsbury	0:12:09	
Royal Stoke Univ Hosp	0:20:01	0:18:12
Russells Hall	0:18:53	0:09:24
Sandwell	0:11:29	0:05:14
Unspecified Location	0:57:18	
Walsall Manor	0:17:17	0:13:47
Warwick		0:11:03
Worcestershire Royal	0:24:50	0:26:03
Total	0:18:20	0:15:58

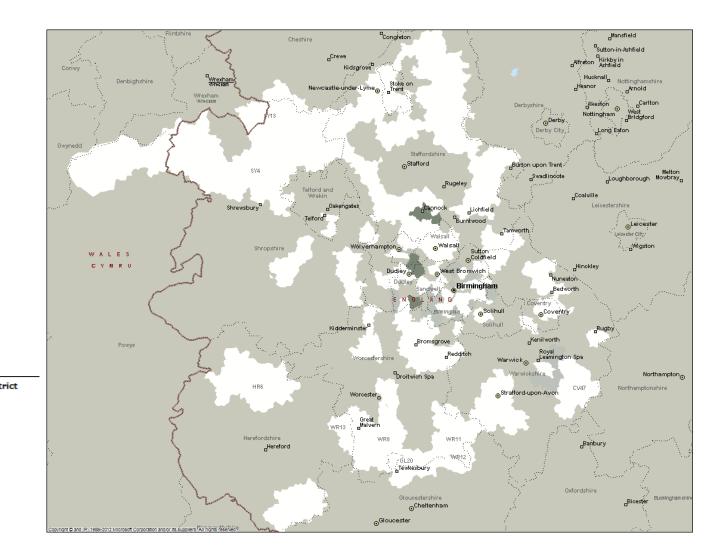
AIR Crews only	MTCs
Hospital Attended	day
Birmingham Childrens	0:07:59
UHB	0:09:54
UHCW	0:09:04
Total	0:09:25

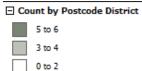
AIR Crews only	Other Destinations
Hospital Attended	day
Royal Stoke Univ Hosp	0:13:13
Total	0:13:13



Major Trauma Activity by Postcode Area

April 2015



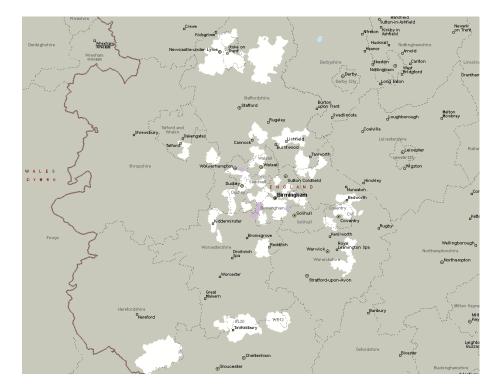


Major Trauma Activity by Postcode Area and Shift April 2015

DAY Shift (07:00 – 18:59)

#### Conv Duckgenters D

### NIGHT Shift (19:00 – 06:59)

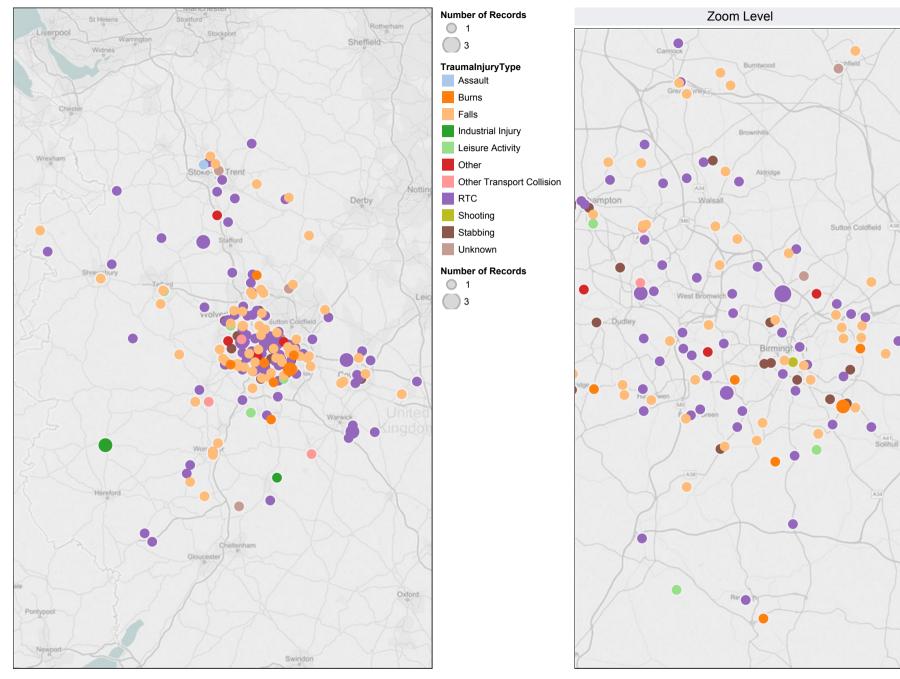


#### Count by Postcode District



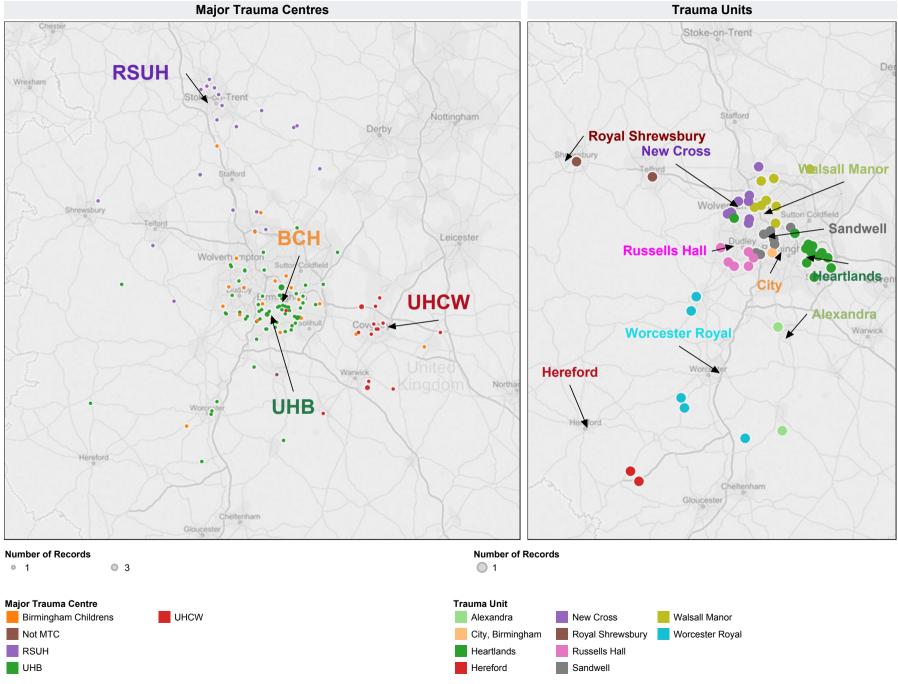
Count by Postcode Distric	t
5 to 6	
3 to 4	
1 to 2	

## Incident Location of Major Trauma Patients by Type of Incident 2015/16



This data does not include cases where the crews are not contacting the Regional Trauma Desk, any trauma transfers or cases which are responded to by out of area resources.

## Incident Location of Patients Conveyed to MTCs and TUs 2015/16





	April	Мау	June	July	August	September	October	November	December	January	February	March	No Value	YTD
No. of deceased patients	16													16

Trauma Injury Type	General Area	Deceased Notes
RTC	Whitchurch	RTC, fm i 60s. Witnesses state pts vehicle swereved accross central reservation ?why and had head on collision with another car. Significant deformity to front end. Pt steering wheel bent +++. PT unresponsive with bystanders, dragged out of car and CPR commenced. ASO/RRV/DMA i/a. Pt PEA arrest, Intubated and IO access; ALS. O/A HMED; Still PEA, Pt given IV in
Other Transport Collision	TIPTON	HIT BY TRAIN
Other Transport Collision	SUMMERFIELD	HIT BY TRAIN
Falls	Telford	
RTC	Tamworth	CAR v HGV. 1 x female fatale in the car. 2nd patient minor injury
Falls		male 28 fallen 30ft from tree believed to be intoxicated, obvious spinal shock, leading to respirtory arrest
RTC	Stone	M/60 come off moped immediately into cardiac arrest. Resuscitation efforts ceased as pt has a traumatic head injury incompatible with life. HMED03 responded but stood down over head
RTC	Stoke	
RTC	Wythall	Car left the road and was down an embankment. Pt was inaccesible by road crews and in cardiac arrest from traumatic injuries. Pt had possibly been there all night. Pt extricated once fire were inattendance and was in asystole with ?rigor mortis. RIP
RTC	A41, Albrighton	
Stabbing	Wolverhampton	Multiple stab wounds, PH Thoracotomy carried out, ROLE
RTC	Bedworth	Pt jogging down the road and was hit by a car. Massive frontal damage to the car with bullseye and damage to the A post. Head injury incompatable with life. ROLE on scene.
RTC	Dudley Port	
RTC	Leek	Ped vs HGV.
RTC	BIRMINGHAM CITY	Several notes of traumatic cardiac arrest motorbike vs car , helmet removed on impact. Significant head injuries deemed incompatable with life by hmed03
RTC	Bournville	

Total 16



	April	Мау	June	July	August	September	October	November	December	January	February	March	YTD
No. of Out of Area Cases	3												3

**Patient Destination** 

Case Origin	
Other / Unknown	1
NWAS	1
South Central	1
Total	3
Tool Triggered By	
Step 1: Vital Signs	1
Step 2: Anatomy of Injury	2
Total	3
Trauma Injury Type	
Falls	1
RTC	2
Total	3

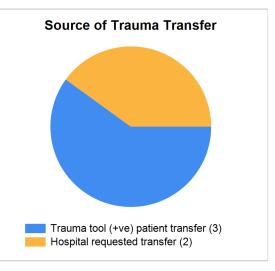




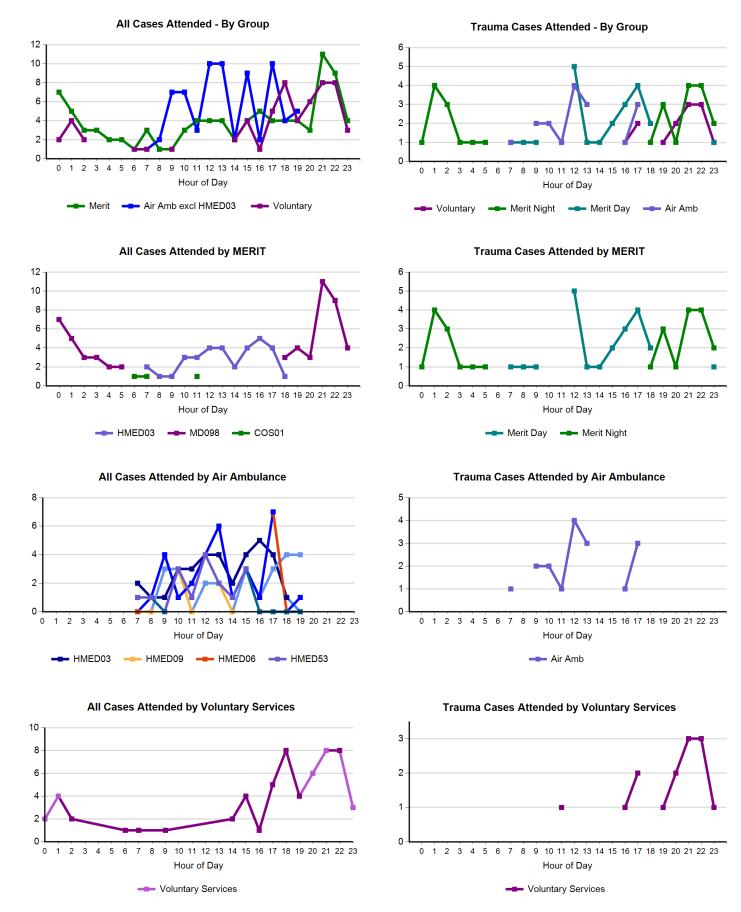
Data includes out of area transfers

	April	Мау	June	July	August	September	October	November	December	January	February	March	YTD
No. of Transfers	5												5

		Transfer To					
Transfer From	Birmingham Childrens	Not MTC	UHB	UHCW	Total		
City, Birmingham	1	0	0	0	1		
LEH	0	0	0	1	1		
Russells Hall	0	0	1	0	1		
UHB	0	1	0	0	1		
Walsall Manor	1	0	0	0	1		
Total	2	1	1	1	5		







\* Please note the scales on the charts above are not the same



#### Responses at scene by Chief Complaint (All Cases)

#### Responses at scene by Injury Type (Trauma Cases)

	Total	Air Amb excl HMED03	Merit	Voluntary
Falls	35	19	11	5
Unconscious	26	7	12	7
RTC	25	7	13	5
RTC EntrapmentEjection Rollover	20	6	8	6
Trauma	18	9	8	1
Cardiac Arrest	15	4	6	5
Stabbing	15		10	5
Life Threatening Situation	12	1	5	6
Chest Pain	10	5	5	
RTC Multiple Patients	7	1	1	5
Convulsions	6		3	3
Assaults	5		3	2
Red 2	5	4	1	
Psychiatric or Suicide	3		2	1
Burn	3		2	1
Passing Call	3	1	1	1
Green 2	3	3		
Generally III	2	1		1
Head Pain	1		1	
Traumatic Inj	1	1		
Breathing Problems	1	1		
Chokings	1			1
Fall	1	1		
Running Call	1			1
Stroke	1	1		
Animal	1			1
Pregnancy	1		1	
Sick	1			1
Generally III Call From Agency	1			1
Unknown Problem	1			1
Total	225	72	93	60

	Total	Air Amb	Merit Day	Merit Night	Voluntary
RTC	37	9	13	7	8
Falls	17	5	4	7	1
Stabbing	7	1		6	
Burns	5			3	2
Industrial Injury	4	1	3		
Unknown	3		1	1	1
Other Transport Collision	3	1		2	
Other	2		1		1
Assault	1				1
Leisure Activity					
Shooting					
Total	79	17	22	26	14



#### Transports by Destination (All Cases)

	Total	Air Amb excl HMED03	Merit	Voluntary
Royal Stoke Univ Hosp	21	9	9	3
Uni Hospital Cov & War	15	14		1
New Queen Elizabeth Hosp	14	4	10	
Birmingham Childrens	6	4	2	
Worcestershire Royal	4	2	2	
Hereford County	3	3		
Royal Shrewsbury	3	1	2	
Alexandra	3	3		
Sandwell	2		2	
City (Birmingham)	2			2
Heartlands	2		1	1
Walsall Manor	2		1	1
Gloucester Dialysis Unit	1	1		
Robert Jones	1	1		
County Hospital (Stafford)	1			1
New Cross	1		1	
ROYAL DERBY HOSPITAL	1	1		
Russells Hall	1		1	
Unspecified Hospital	1	1		
Total	84	44	31	9

#### Transports by Destination (Trauma Cases)

	Total	Air Amb	Merit	Voluntary
Birmingham Childrens	3	1	2	
UHB	11	4	7	
Royal Stoke Univ Hosp	9	3	5	1
Russells Hall	1		1	
UHCW	3	3		
Walsall Manor	1		1	
Worcestershire Royal	1		1	
Total	29	11	17	1

#### Average time on scene per response (All Cases)

	Total	Air Amb excl HMED03	Merit	Voluntary
Average	0:32:21	0:30:13	0:33:13	0:33:32

#### Average time on scene per response \* (Trauma Cases)

	Total	Air Amb	Merit	Voluntary
Average	0:41:57	0:40:20	0:38:44	1:14:08

\* For Trauma cases where the callsigns are in the specified list

Merit = COS01,HMED03,MD098

Air Amb = HMED06, HMED09, HMED53

Voluntary = MD callsigns excluding MD098 and MD099 Entrapments and RSI on scene are excluded (where known).

#### Average time on scene per response \* (Trauma Cases where RSI was undertaken)

	Total	Merit	Voluntary
Average	0:56:19	0:58:29	0:52:40

\* For Trauma cases where the callsigns are in the specified list Merit = COS01,HMED03,MD098

Air Amb = HMED06, HMED09, HMED53 Voluntary = MD callsigns excluding MD098 and MD099 Entrapments are excluded (where known).

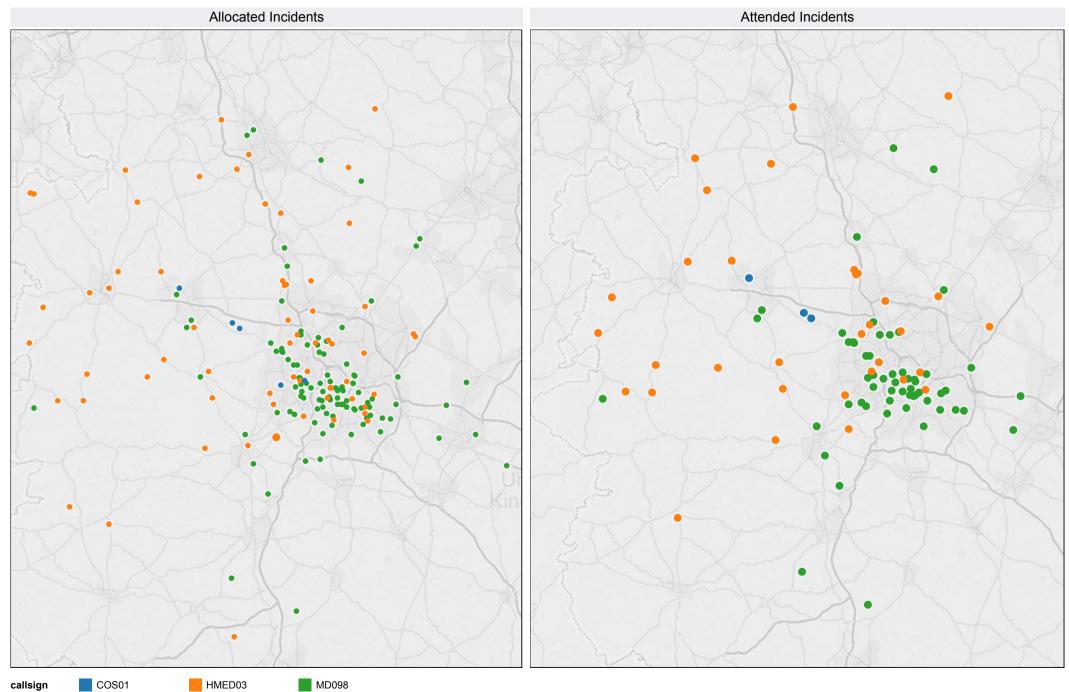


#### Incident Job Cycle Time for Transfers to MTC undertaken by MERIT (All Cases)

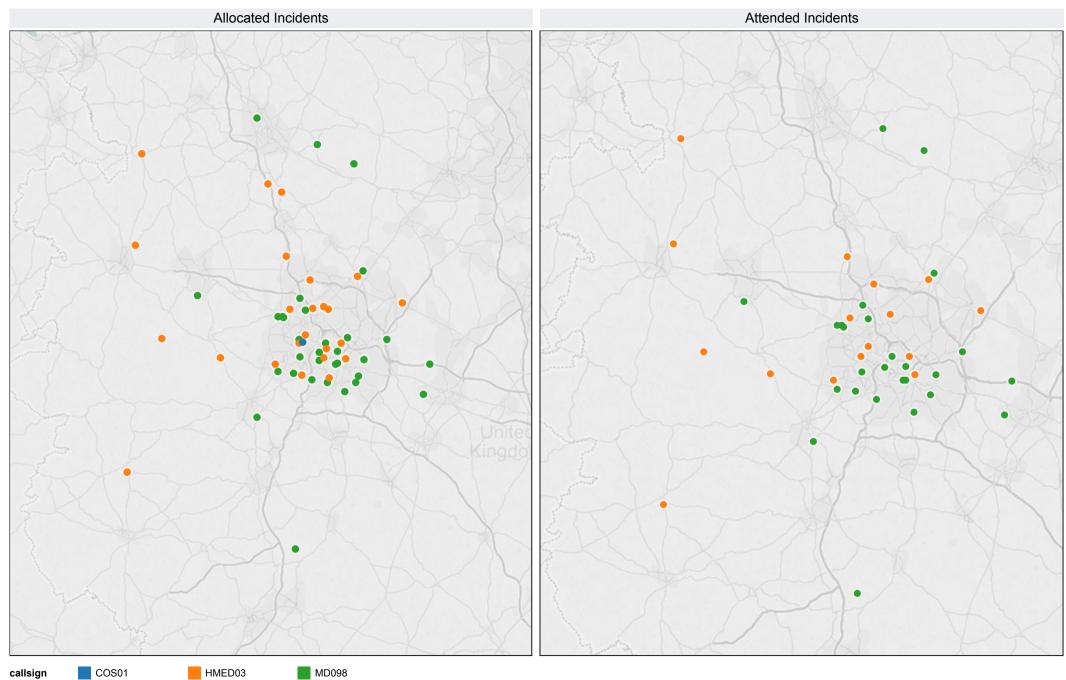
Case Nr	Date	Call Sign	Transfer From	Transfer To (MTC)	Time Call Connected	Max Clear	Job Cycle
0	0 Cases		Average Incident Job Cycle (Call Connect to maximum clear time			0:00:00	

Data shows transfers from a WMAS hospital (TU / LEH) to an MTC undertaken by MERIT (call signs HMED03, COS01 or MD098).

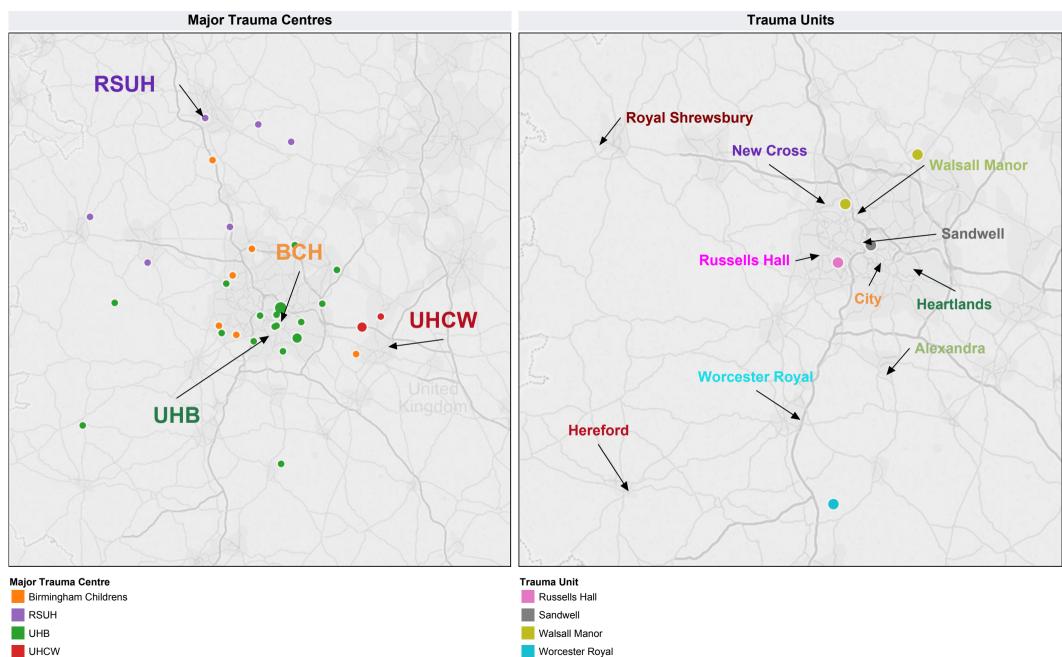
## MERIT Activity (All cases from CAD) 2015/16



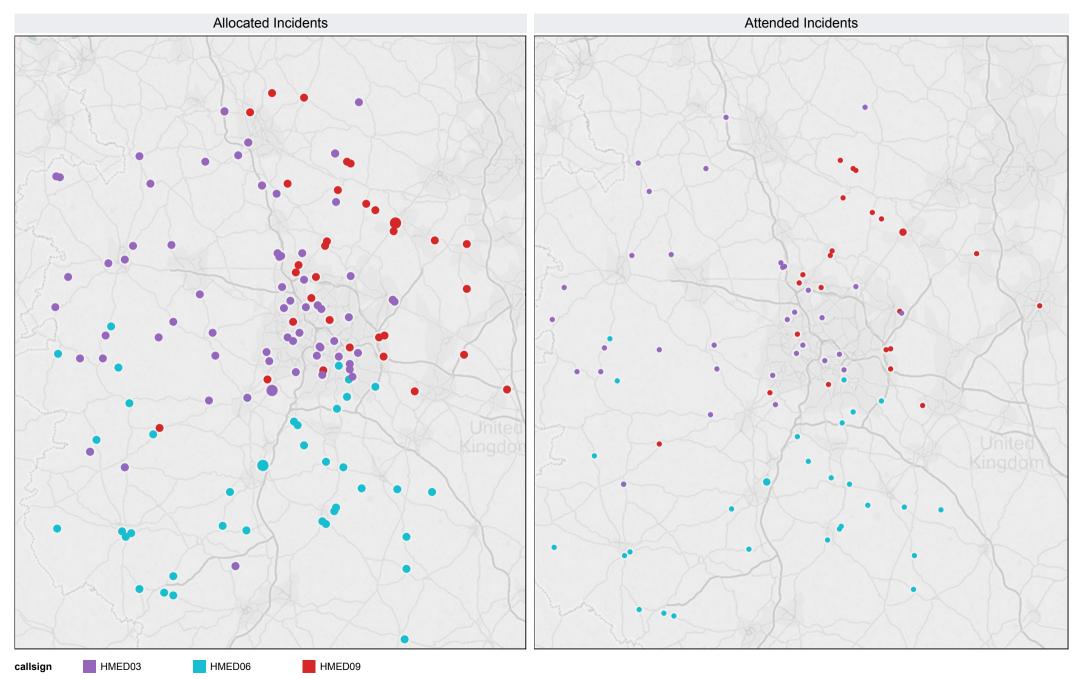
# MERIT Activity (Trauma +ve cases only) 2015/16



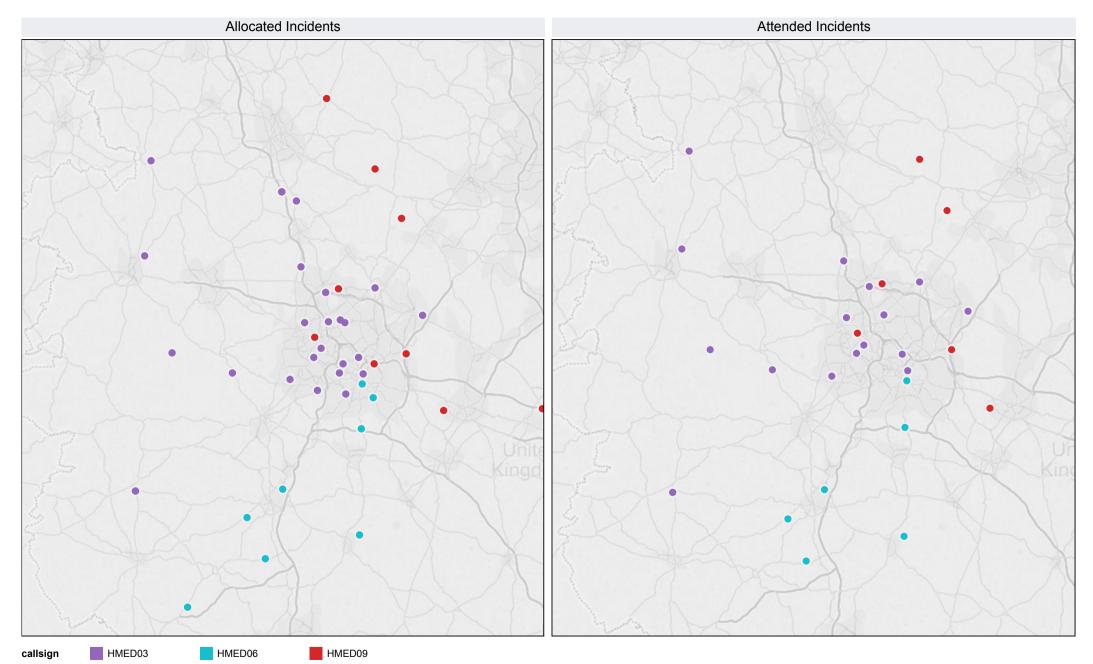
### Incident Location of Trauma +ve Patients Conveyed to MTCs and TUs by MERIT 2015/16



# Air Ambulance Activity (All cases from CAD) 2015/16



# Air Ambulance Activity (Trauma +ve cases only) 2015/16



## Incident Location of Trauma +ve Patients Conveyed to MTCs and TUs by Air Ambulance 2015/16

