**FINAL DRAFT**

**HAZARDOUS AREA RESPONSE TEAM - HART**

**FORUM VISIT - DECEMBER 20TH 2018**

1. The role of HART is to provide rapid assessment and clinical care at the point of patient contact within the hot zone, maintaining a high level of care throughout their extrication (removal from area of risk) and/or decontamination.
2. HART **is a specialist ambulance service providing:**
* Improved initial response to all categories of incidents
* Triage and CABC interventions (clinical assessment)
* Advanced clinical interventions in hazardous environments
* Mass casualty equipment support
* Skills and equipment to deal with contaminated incidents
* Early Command and Control
1. **Response Triggers for HART**
* Mass Casualty incidents
* Incidents at height
* Flooding / water based response
* Confined space
* Urban ‘search and rescue’
* Explosion/fire – IED incidents (improved explosive device)
* CBRNe Incidents – including IDL (incident and decision log book)
* (CBRNe is ‘chemical, biological, radiological, nuclear and explosives)
* Firearms incidents
* Stand-by support to fire rescues services, police and other partnership agencies
1. **Within each HART Unit** there are paramedics specifically trained in

Urban search & rescue (USAR) (there are two HART units in London in the east and north west. This activities include:

* Assist LFB in the USAR environment
* Clinical care within confined space
* Patient removal from hazardous environments
* Safe Working at Height (all HART operatives)
1. **Comments from Patients Forum Members who visited HART on December 20th 2018**
2. **Mike Roberts**

I was impressed for the share of gender in the team, and the sheer amount of knowledge that members have in order to continually review and update their current knowledge sets. We know from other experiences with front line staff that the pressures on a team can be intense, especially regarding some high profile events, but the HART obviously treat these pressures as normal to them.

**Mike Roberts**

1. **Philip Ward**

It was great to be able to visit the LAS HART east London base. A most interesting and informative presentation was given about the role and service capabilities of HART, which was followed by a close look at the PPE and other equipment used by the HART members. The incidents they deal with include counter terrorism, water rescue, confined space rescues, etc. Thanks to all the Team for sparing time to give us this valuable insight in to the incredible role they fulfil within the LAS.

**Philip Ward**

1. **Mary Leung**

HART was very impressive on the whole: the complex and detailed training, the knowledge base, the dedication, especially the physical attainment required of the team members. After the visit, I will feel much safer when faced with "hazardous" situation in the future, knowing there will be specialists out there to help.

**Mary Leung**

1. **Paul Leonard**

Thanks for the opportunity to meet such a dedicated professional team.  At HART, a team member has already been in touch with me and asked if I can give a talk to the staff about my experiences as a Nuclear Inspector & my UK response work to the Chernobyl nuclear accident.

In terms of recommendations, funding will always be an issue in terms of providing training and suitable equipment. It would be useful to know how such issues are prioritised.

PHE is currently funded by BEIS to ascertain the availability & suitability of radiological monitoring equipment, which will also be relevant to emergency responders. (BEIS – British Energy and Industrial Strategy).

**Paul Leonard**

1. **Arthur Muwonge**

 The three stand-out issues for me were:

1. Training: How well trained the team were. They were prepared for anything.
2. Fitness Levels: Each team member was fully fit and able to carry the extraordinary weight of the equipment as required for any call out.
3. Staff support: Each member knew how to take care of themselves, their equipment and all other staff members.

**Arthur Muwonge**

1. **Colin Hill**

I thought the visit to HART was very worthwhile.  It was very interesting and

 informative.  I learnt a lot about this aspect of ambulance work.  Indeed, I also

 learnt something of the roles of the police and fire service in this field.

 The staff we met were very welcoming and friendly. They seemed to be

 pleased that lay people wanted to learn more about and took a serious

 interest in their work.  They seemed to get just as much out of the visit as we

 did. It was disappointing, if understandable, that two major types of HART

 vehicles were elsewhere on our visit, particularly the control vehicle.  Maybe a

 further visit, perhaps to the West HART, could be arranged at a future

 date.  Although of course, that wouldn’t guarantee the presence of the control

 and equipment vehicles.

I was impressed with the wide range of non-medical skills that HART personnel had.  But I do wonder how they maintain their core medical skills.  I believe one member of staff did comment that this was a concern.  South Central Ambulance HART personnel have scheduled ambulance response shifts as a part of their normal routine, whereas LAS HART personnel seem to undertake such duties on a more ad-hoc basis.

I was pleased to have the medical roles of the three services clarified.  Particularly, the role of what the media had described as Metropolitan Police ‘paramedics’. It would seem they are essentially medical first aiders with a particular emphasis on first aid care for trauma injuries, such as gunshot wounds.  They are trained by LAS.  It also seems that HART would not be restricted to the cold zone and would closely follow behind the police in marauding terrorist incidents.  In this regard, I was particularly interested in the HART ballistic jacket which was, as I understand it, identical to the one worn by police officers, except for colour.

Whilst not strictly within the scope of the visit it was interesting to learn a little of the London Fire Brigade role in CRBNE incidents.  It would seem they would have only a very secondary medical role and would only act as ordinary first aiders much as any other citizen would. I’m a bit confused about their role in determining the nature of a CRBNE attack.  Interestingly, the Royal Air Force also has a unit dedicated to this role.

I still not quite sure about the role of HART at fire incidents. I think they would only enter a fire zone after the fire itself had been extinguished.  They would then medically assist patients whilst they were been extracted from the premises that had been on fire, but were still smoke filled.

One shouldn’t forget it would normally be an ‘ordinary’ ambulance crew that would first arrive on the scene of a suspected CRBNE incident.  So, it was interesting learn how they would cope with the situation.  I didn’t know they carried special antidote EpiPens on all DCAs.  I wonder if SCAS DCAs do as well.

One of the crew on my rideout with a LAS crew was an Australian paramedic from Brisbane.  He told me that all Queensland ambulances carried a range of anti-venoms as a part of their standard equipment.  This was the only way to save the life of someone, who had been stung by the most venomous Australian creatures.

It was interesting to learn that the LAS HARTs were the busiest HARTs in the country.  It would be interesting to learn what percentage each reason for their call out was of the total.  The SCAS HART say it’s to road traffic incidents.  One area missing for LAS HART calls, which many other HARTs have, is incidents concerning the sea.

Water rescue is an interesting aspect of their work.  One would have thought by the time they could arrive at an incident the casualties would have already been rescued by other agencies, such as the fire service or RNLI.

**Colin Hill**

1. **Elaina Arkeooll**

Thank you for organising the visit to the HART Team who were very patient and willing to speak to us about their work and explain how they deploy the range of skills in such diverse emergency situations.

I have no professional experience or knowledge of the emergency services other than as a 'user', which thankfully has not been for anything catastrophically serious. What came across form David's slides and talk was the sheer range of everyday accidents that were waiting or planned to happen through acts of despair, such as suicides by suffocation, carbon monoxide poisoning, falls from heights, people trapped in confined spaces after poor DIY or refurbishments, vehicle accidents that involve spillages of chemicals, that ordinarily are safe if used correctly, become hazardous due to volume and exposure to the atmosphere.

I'd never considered how faults with equipment used for routine food processing or medical examinations that uses radioactive isotopes might malfunction in a way that would need a specialist team trained with CBRN skills or who gets the casualties out and away from areas full of toxic smoke.

I can only thank these dedicated paramedics for their passion and determination to succeed under pressure, dressed in clothing I cannot imagine being able to stand up in, let alone hold a pen and write my name; as for acting to save lives effectively , take commands, give feedback and be effective.

A huge thank you and a promise to do my best to be Health and Safety aware. I hope further action can be taken to follow up on some of the growing numbers of mainly men who either suffer life changing injury or are killed working in places such as HS2, Cross Rail, the Super Sewer or the thousands of construction sites  and 'dodgy' buildings all over London. Clearly regulatory frameworks need to be rebuilt to protect the victims of environment and actually, help limit where possible the risks these skilled brilliant people are called to.

**Elaina Arkeooll**

1. **Kye Gbangbola**

The HART visit was very interesting as an insight into the services purpose and operations.  Here are a few interesting points for the Forum to reflect upon:

-   Much of HART's work relates to CBRN (Chemical, Biological, Radiation, and Nuclear).  They also deal with terrorist and explosion events.

-    There were over 300 Carbon Monoxide (CO) incidents in London in 2017.  A significant portion of HARTs work is CO related, but the number of incidents is increasing. Building on the successes of the Defibrillator campaign lives could be saved if CO alarms were a requirement for all new homes and rented homes. Social marketing to spread awareness of CO and its risks and case studies, better training of Gas Safe operatives who themselves are an at risk group where operatives have died due to a lack of knowledge.

HART have built up a lot of CO expertise and initiated changes that are saving lives, LAS can support HART further to protect the public at risk by considering the following matters:

-    Collapses of house basement works are trapping more people as the

 incidence of basements extensions increases.

-   HART standard equipment includes DIM monitors that detect specific toxins and their levels in the atmosphere. These personal defence monitors have daily and weekly checks and calibrations. There are also regular independent checks and calibrations. The monitors protect both personnel, and risks to the public.  The HART team confirmed the monitors are both accurate and they had no adverse incidents or false alarms.

-   HART have 3 levels of protective outfits, the choice of what is worn relates to the nature of the incident and the risk posed to life.

-    HART lead on organising decontamination of emergency personnel, and evacuating the public following an incident.  Decontamination is also needed to be done for CO incidents.

-  The HART team have specialist equipment including all-terrain vehicles, RIBS, specialist communications and incident vehicles, and can deliver specialist treatments relative to the incident.

**Kye Gbangbola**

 QUESTIONS FOR THE LAS HART TEAM

1. How is funding for the HART team determined? Is funding from both the CCG commissioners or NHSE or the Department of Health?
2. How do members of the HART maintain their core medical skills?
3. What percentage of calls that HART respond to relate each category of the teams work?
4. What are the current areas of priority for the HART in terms of development and associated funding?
5. Does the LAS collaborate with PHE and BEIS ascertain the availability & suitability of radiological monitoring equipment.
6. Does the LAS currently have access to appropriate and adequate radiological monitoring equipment?
7. Is HART satisfied with the current level of training for staff, in relation to their wide range of tasks, and the diverse environments that the teams work in?
8. How does HART determine that the fitness levels of each team member is adequate to carry their wide range of tasks and bear the extraordinary weight of the equipment they are required to carry?
9. Do staff experience a significant number of musculo-skeletal and other injuries during the course of their work?
10. What method of training is being used to build the strong teams that are clearly evident in HART?
11. Does HART and the LAS work with the Health and Safety Executive, to share their experience of major incidents and agree action plans to reduce the number of major incidents, e.g. example incidents at HS2, Cross Rail, the Super Sewer and the thousands of construction sites and unsafe buildings across London?
12. Does HART believe that better regulatory frameworks are needed to protect the victims of unsafe work and domestic environments and to reduce incidents of harm suffered by emergency staff?
13. In view of the increasing number of CO incidents in London, does HART have a view on a requirement for the statutory installation of CO alarms in all new homes and rented homes?
14. Would HART support social marketing to spread awareness of CO and its risks, e.g. by using cases case studies of serious harm due to CO.
15. Should legislation be improved to improve the safety of building workers and others, who may suffer considerable harm as a result of the collapse of house basements during extension work?
16. Is the HART satisfied with the system used to decontaminate emergency personnel following a CO incident?