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MOUNTAIN RESCUE TEAM PLANS FOR MAJOR TRAINING BASE

GLOBAL COVID-19 APPEAL BY IRISH EMERGENCY ALLIANCE TELEMEDICINE TAPS INTO NEW DIGITAL AGE IN PATIENT CARE

'RESPOND 2020' TO GO VIRTUAL ON 24 OCTOBER

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Six of Ireland's leading international aid charities have formed the Irish Emergency Alliance, in response to the Covid-19 pandemic, to save lives in some of the poorest countries in the world.



The Dublin and Wicklow Mountain Rescue Team (DWMRT) has big plans in place to future proof the service it provides over the next few decades. The team submitted a planning application to Wicklow County Council for a proposed new 6,000 square foot two-storey mountain rescue centre and training facility.



Following the postponement of 'Respond 2020' in April and the cancellation of the rescheduled event due to the Covid-19 pandemic, CFR Ireland will now host a 'Virtual Respond' on Saturday 24 October instead.



Gardaí, fire and ambulance service personnel, community first responders and members from other frontline services who participated in the Charity Relay Walk 'Frontline to Finishline' in June raised up to €15,000 in total in aid of Pieta House and ALONE.





A new book 'Shadow Warriors: The Irish Army Ranger Wing' is an authoritative account of this special forces unit that looks at their inception, advanced training and operations at home and overseas, without breaching operational procedures or tactics.



The Irish Air Corps' Helicopter Wing, initially formed to focus on Search-And-Rescue (SAR) operations during the 'Big Freeze' in 1963-64, has developed over the years to provide both air medical and support roles to protect and serve communities throughout the country, this small force one of the most modern institutions of its kind in the world.

41 TRAUMA COUNSELLING

'Emergency services at scene of accident' is a regular headline in the media. However, what about people at the frontline who respond to such horrific scenes time and time again, what effect does it have on them and who can they themselves turn to when they need help?

46 EENA CONFERENCE

As countries across the world continue to face the challenges of the pandemic, the EENA Conference and Exhibition has been deferred until next spring. '*Emergency Services Ireland*' will be a media partner of the event, which will now take place on 28-30 April 2021 in the Latvian capital of Riga.



Despite the Covid-19 pandemic, a steady stream of donations and virtual fundraisers has enabled Ireland's first charity air ambulance service return to a seven-day operation, and the Helicopter Emergency Medical Service can now continue its mission to save lives.



With the highly infectious coronavirus having propelled Irish healthcare into the digital age, telemedicine may now well become part of the 'new norm', and there's now an increasing appetite to use video solutions for medical consultations that may well continue for the foreseeable.

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The cardiology team at Galway University Hospitals (GUH) has carried out a first-in-man clinical trial for a sensor, which detects changes in the health of patients with heart failure and securely transmits the information to the care team for review, to hopefully avoid hospitalisation.



Dr Lisa Guthrie and her husband, Bernard took on new roles within the Order of Malta Ambulance Corps in January and within the space of two months they found themselves in the middle of a pandemic. Based in Ballina, Co. Mayo, the couple have been at the heart of the national response to the pandemic.





A new free text-based mental health service funded by the HSE is the first of its kind for Ireland to provide support for people going through a mental health or emotional crisis. It is expected that '50808' will support over 50,000 people each year once it is fully operational.





There is a growing use of healthcare apps, wearable sensors and electronic healthcare records, with the HSE's National Ambulance Service adapting technology to improve the services it offers, while allied health professionals have expanded their scope of practice and are providing a safe highquality service.

80 EMERGENGY PREPAREDNESS

The Covid-19 pandemic has demonstrated that effective coordinated emergency planning and preparedness is crucial in minimising casualty and fatality numbers, while public health requirements and ethical treatment must be upheld during the fatality-handling process.



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A retired US Army General has compared Covid-19 to a terrorist threat, due to its rapid growth and deadly impact. Addressing an international webinar Stanley A. McChrystal says the lessons learned during his high-profile career with the US Armed Forces are still vital today.



There's a huge appetite for a serious debate on Ireland's future security needs, demonstrated by the wide range of presentations from all sectors of the emergency services at the inaugural National Security Summit.

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Humanitarian aid agency Concern Worldwide is calling for a greater global response to both the health and economic impacts of Covid-19 in the developing world, amid fears that the pandemic will leave over one billion people without sufficient food.



Latest research carried out by the Italian Fire and Rescue Service shows that EU-funded study projects have improved how the emergency services are working together during the Covid-19 pandemic, despite location, language and technological barriers.



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CAMPAIGN PETITIONS TO 'UPLIFT' IRELAND'S MENTAL HEALTH SERVICES

petition signed by over 45,000 people calling for a 24/7 emergency department to offer better mental health services was recently handed to the Minister of State for Health Mary Butler TD, as part of a campaign by community group Uplift*.

Stacey Quinn, Uplift member, who started the petition on 'MyUplift' said that with more and more lives taken daily around the country by suicide, the only way forward is to engage with the people who have mental health illnesses and listen to their needs.

"Mental health care needs to be separate from general hospitals and treated as equal to physical health. The new campaign is calling for people to stand together to fight for better mental health services and to demand and a 24/7 emergency department service.

"As someone who suffered with mental health in the past and who is also beavered several times by suicide, each suicide loss is a lesson learned. We need services – a 24/7 emergency department service can save lives," she added.

Uplift campaigner Michelle Byrne said that over 45,000 Uplift members understand the serious need for better mental services in Ireland. "The government has failed to act for too long. Accepting this petition is the first step. We hope to see action taken by the Minister in Budget 2021 in October. But Uplift members will keep pushing until we see 24/7 emergency services rolled out across the country." The petition was handed to Mary Butler TD, Minister of State for Health, with responsibility for Mental Health and Older People, in her own constituency of Waterford on 19 September. Link to petition: https://my.uplift.ie/petitions/ better-mental-health-services-1

*Uplift is a community of over 280,000 people, who take action together on signing petitions or contacting their TDs, in a bid to build a more equal and sustainable Ireland.



Uplift campaigner Michelle Byrne rolls out the petition signed by 45,000 people to date, calling for a 24/7 emergency department for mental health services.

NEW DIGITAL PLATFORM IS PASSPORT TO AID INCREASED COVID-19 TESTING

he pilot launch of Health Passport Ireland - a world-first digital platform designed to facilitate increased Covid-19 testing for businesses and the public – was recently announced by Irish-based ROQU Group.

Engineered in Ireland, the platform combines the latest digital technologies with accurate and validated Covid-19 testing solutions, which can deliver results in as little as 15 minutes



Robert Quirke, President and CEO of ROQU Group, pictured at the pilot launch.

The digital platform is a big step towards helping businesses and individuals to quickly minimise risks related to Covid-19 and ensure they can continue daily activities. The system has been designed to work will all official Covid-19 test types.

The pilot trial will involve a select range of national participants including Tallaght University Hospital and Oaklodge Nursing Home. "Health Passport Ireland is designed to put a safety net in place where none currently exists, allowing our economy to recover and thrive in a more safely controlled environment. The game changer has finally arrived," noted Robert Quirke, President and CEO of ROQU Group, at the pilot launch in late August.

Health Passport Ireland has been developed specifically to work in harmony with all official Covid-19 tests, including HSE tests, laboratory swab and blood tests, and the very latest rapid testing solutions soon to be launched.

"We're not favouring one type of test over another. However, as testing and research continues to improve, we want to ensure that Irish society and economy can easily access testing solutions that offer the highest levels of clinical validation, whilst utilising the latest mobile technologies," according to Quirke.

ROQU Group has announced that, in addition to Ireland, the Health Passport platform will be launched in the US, UK, Italy, Kenya and Germany, with other locations to follow. For further information visit **www.healthpassportireland.ie**

EMERGENCY SERVICES IRELAND



EMERGENCY CARD SCHEME FOR FAMILY CARERS

amily Carers Ireland (FCI), in partnership with An Garda Síochána, the National Ambulance Service Community First Responder Schemes, the Irish Red Cross and the Order of Malta has developed a new Emergency Card Scheme for family carers.

When a family carer has an unplanned hospital admission there is a risk that the person who needs their care and support could be left at home alone and uncared for. The Emergency Card Scheme is intended to give peace of mind to family carers as well as ensuring that the person they care for remains safe in such emergencies.

Four steps of the new scheme:

Step 1: The Family Carer completes the FCI Emergency Care Plan with or for their loved one outlining their care needs, likes, dislikes, medication requirements etc.

Step 2: The Family Carer nominates two people who will step into their caring role in the event of an emergency and provide FCI with these details as part of their plan.

Step 3: The completed Emergency Care Plan is sent to FCI and the family carer receives their emergency card, which includes a freephone emergency helpline number.

Step 4: In an emergency, and where a person's named contacts are unavailable, FCI will determine the person's needs and mobile either a red or green response.

A red response is for those who need a high level of support, where a Garda will visit the person and decide if he/she requires transportation to the emergency department as a place of safety. A green response will include contacting a pair of volunteers from the National Ambulance Service Community First Responder (CFR) Schemes, the Irish Red Cross or the Order of Malta to sit with and support the person until a home care package can be organised. During this period FCI may also provide up to 72 hours of in-home emergency support where appropriate.

With over 355,000 family carers in Ireland, Family Carers Ireland noted: "Family carers make extraordinary sacrifices and work extremely hard, sometimes 24/7 to provide care for children and adults with intellectual or physical disability, frail older people, people with palliative care needs or those living with mental health, chronic illness or addiction issues. Their unpaid work saves the State a staggering €10bn each year."



Moira Skelly, a family carer who will be the first to sign up to the new scheme, is pictured with Taoiseach Micheál Martin TD at Government Buildings to launch the initiative.

DUBLIN LORD MAYOR'S AWARDS – TIME TO NOMINATE YOUR HERO!

he Lord Mayor's Awards, which usually take place annually, will take place monthly until April 2021, to honour and thank those who have worked tirelessly on the frontline during the Covid-19 pandemic.

Each month members of the public will be invited to nominate either a frontline person or organisation that they think has gone above and beyond during Covid-19. At the end of each month the Lord Mayor Hazel Chu will decide the winner and present them with their prize, a piece of speciallycommissioned sculpture and a gift voucher worth €1,000.

"Since March we've witnessed the Trojan effort frontline workers have given to keep our communities going. This is a chance for the people of Dublin to thank someone who has made a real difference in their life during Covid," said the Lord Mayor. The nominations will be held over seven months in the following categories:

- October: Nursing Homes
- November: Transport
- December: Hospital Services StaffJanuary: Retail
- January: Retail
- February: Emergency ServicesMarch: Hospital Medical Staff
- April: Community
- April. Continuutity

Nominations for October will begin on 1 October and close on 16 October. So if you know someone who deserves a special mention, you can nominate online at: www.dublincity.ie/lordmayorsawards.



Dublin's Lord Mayor Hazel Chu hopes before next summer she will be able to thank all of the monthly winners at a reception in the Mansion House on behalf of the city.

FRONTLINE WORKERS CALLED ON TO SHARE THEIR PPE EXPERIENCES FOR DCU SURVEY

team of researchers from Dublin City University (DCU) is calling on frontline workers to share their experiences to date as part of a new survey to appraise the quality and design of Personal Protective Equipment (PPE) they use, and to identify areas for improvement.



To take part in the survey click on link https://bit.ly/36e76dQ

Led by Dr Róisín Lyons, Assistant Professor of Entrepreneurship in DCU Business School, and Prof Dermot Brabazon in the I-Form Research Centre, the study will also examine the role that open-source innovation has played in the rapid ideation and manufacturing process.

DCU hopes that the survey's findings will allow agencies to improve national and international strategies in their efforts to fight the ongoing pandemic, and future crises that may require rapid ideation and manufacturing.

Dr Roisin Lyons said: "We were struck by how many companies, individuals, hobbyists and school students came together over the last few months to produce shields, gowns and other materials to supply and protect frontline staff. We want to hear from all those who were involved in the open-source ideation, production and use of these materials."

Within DCU, the I-Form Advanced Manufacturing Research Centre and DCU's School of Mechanical & Manufacturing Engineering pooled resources and opened laboratories. "They began to produce emergency supplies, working closely with hospitals, voluntary groups and online innovation communities to attain feedback and novel ideas to improve design and manufacture," she added.

Dr Lyons said that feedback on PPE usage during the Covid-19 pandemic or from anyone who has participated in an Open Source Innovation community would help the team get a clearer picture about the products used, and recommend improvements for future national and international strategies to fight the ongoing pandemic or future crises.

CRITICAL HEALTHCARE INVESTS OVER €500K IN OFFALY HEADQUARTERS

n Irish specialist provider of frontline medical and healthcare products to the global emergency services market is marking its 20th anniversary this year, with an investment of over €500,000 in the expansion of its headquarters in Co. Offaly.

In addition to the 30,000 sq ft expansion of its location in Tullamore, Critical Healthcare has also increased its workforce to over 30 employees. With a diverse customer base, ranging from the emergency services, armed forces and local authorities across eight European countries, further expansion is planned.

An approved HSE and NHS supplier, Critical Healthcare works with emergency service providers across Ireland, UK, Germany, Denmark, Sweden, France, Spain and Poland, ensuring that healthcare professionals have all of the essential medical products they require to diagnose, resuscitate and rehabilitate a patient. Critical Healthcare is also a key government supplier of the PPE and infection control items that have now become common-place in a 'Covid-aware' world.

Dr Anne Cusack, CEO of Critical Healthcare, says the new facility in Offaly, which consists of two warehouses and extensive office facilities, will provide considerable breathing space for the rapidly expanding business.

"The demand we're seeing for essential products remains high. Critical Healthcare has been at the forefront of the fight against Covid-19 by supporting emergency services providers across Europe, so we fully understand the demands faced by these professionals." And significantly, the company has sole responsibility for ensuring that the



Seamus Reilly and Dr Anne Cusack, founders of Critical Healthcare, pictured in the warehouse at the new facility.

national ambulance services in both Ireland and Denmark have remained fully operational with essential supplies during these unprecedented times.

This expansion is due to recent innovations in Critical Healthcare's Medlogistix on-line procurement software. This pre-authorised system allows customers to order products 24/7 and can be accessed remotely, allowing for a seamless and standardised supply chain which is essential in a highly pressurised emergency services environment.

The company's product range includes disposable linen, surgical masks, oxygen masks, temperature and blood pressure monitors, syringes and needles, Duramedic range-vacuum splints, sanitiser, gowns and a 3-in-1 blood glucometer that measures ketone.



PANDEMIC HIGHLIGHTS NEED FOR MORE MEDICAL SCIENTISTS IN HOSPITALS

here is an urgent need for more medical scientists to work in hospitals, as all hospital labs face serious recruitment and retention challenges, while there's also a need to progress a long-awaited single Laboratory Information System and National Individual Health Identifier.

Speaking at the Academy of Clinical Science and Laboratory Medicine's AGM, President Dr Brigid Lucey highlighted the need to invest in medical scientists and hospital laboratory infrastructure.

With up to 2,500 medical scientists employed in public hospital labs and private hospitals in Ireland, she claimed that laboratories are constantly fire-fighting and the demands of Covid-19 demonstrated the lack of investment.

"The pandemic shows that the required expertise is available in medical scientists, but capacity and infrastructure are sadly lacking. Laboratories account for 5% of the hospital budget, yet laboratory results inform 70% of clinical decisions.

"Medical scientists must be part of an immediate

planning process with the HSE and should have a formal link and access to the National Public Health Emergency Team (NPHET). They understand the entire testing pathway and the need for quality management across the continuum of patient care."

The calls were also made as part of a joint submission to the Oireachtas Special Committee on COVID-19 by the Academy of Clinical Science and Laboratory Medicine (Academy) and the Medical Laboratory Scientists Association (MLSA).

Dr Lucey also said that the lack of IT connectivity in terms of laboratory diagnostics must be addressed. "Ireland needs investment in health system IT connectivity to fast-track ordering of tests, return of results and integrated patient care.

Delivery of a long-awaited single Laboratory Information System is key to improved co-ordination of testing, integration of patient care and collation of statistical and epidemiological information," she conlcuded.

HSE WINTER PLAN PUTS EXTRA €600M INTO PATIENT CARE IN HOSPITALS AND COMMUNITIES

range of initiatives will be undertaken to support the HSE's Winter Plan, supported by an additional €600m for improved patient care in hospitals and in the community, while keeping healthcare staff and the general public safe during this global pandemic.

Key initiatives include additional acute bed capacity, home support packages, HSE procured private bed capacity, intermediate care beds, proposals for acute hospital egress; and additional Community Healthcare Networks and Community Specialist Teams (Older Persons and Chronic Disease).

and Chronic Disease). Paul Reid, CEO of the HSE, said: "This winter is going to be more difficult than any we've ever faced before. We are living with Covid-19, we are living differently, however we have planned differently and we have to take confidence in our Winter Plan.

"By ensuring innovative healthcare measures, we can prioritise the health and wellbeing of our staff and the public, through the provision of healthcare pathways in the community and in our hospitals."

The HSE chief said that the worst thing was to get complacent. "I am also asking those within the priority groups to ensure they get the flu vaccine and give themselves the best opportunity to stay well this winter."

Anne O Connor, HSE's Chief Operations Officer said: "For the forthcoming winter period, we are focusing on the resumption of health services, while preparing for the expected pressures associated with winter and delivering services in the context of the continuing presence of COVID-19. Guidance, new processes, and infrastructure will be critical to supporting the resumption of service delivery.

"In addition, a Community First approach to the delivery of care will be central to delivering safe, efficient and effective services through winter and beyond. Service delivery will be re-oriented towards general practice, primary care and community-based services."



To download the HSE Winter Plan 20/21 click on link https://bit.ly/2Ew4WuL



IRISH CHARITIES LAUNCH GLOBAL CORONAVIRUS APPEAL

Six of Ireland's leading international aid charities have joined forces to form the Irish Emergency Alliance, in response to the worsening global Covid-19 pandemic and in a bid to save lives in some of the poorest countries in the world.



The Irish Emergency Alliance is made up of ActionAid, Christian Aid, Plan International, Self Help Africa, Tearfund and World Vision, and between them the aid agencies have programmes in 85 different countries.

he Irish Emergency Alliance aims to raise money from the Irish public and respond in countries facing rising coronavirus cases and struggling to cope with the impact of conflict and displacement, widespread poverty, increased rates of hunger and poor health care.

The coronavirus appeal will focus on vulnerable communities in Afghanistan, Democratic Republic of Congo and South Sudan, all coping with the impact of widescale conflict, as well as Ethiopia, Kenya, Lebanon and the Rohingya refugee camps of Cox's Bazar in Bangladesh.

"These seven countries are home to more than 17 million refugees and displaced people. For people living in refugee camps or slums it is nearly impossible to practice physical distancing, while a lack of soap and water in many homes makes it harder to prevent the spread of coronavirus," noted Helen Keogh, Chair of the Irish Emergency Alliance.

Money raised by the Irish Emergency Alliance's coronavirus appeal will go towards food, water and medical care as well as providing soap, masks and vital information to prevent the spread of the virus.

ALLIANCE OF SIX AID AGENCIES

The Alliance is made up of ActionAid, Christian Aid, Plan International, Self Help Africa, Tearfund and World Vision. Between them the aid agencies have programmes in 85 different countries, giving them the global presence, expertise and experience required to respond quickly to this and future crises.

Helen Keogh noted that the unprecedented scale of the global coronavirus pandemic motivated the charities to join forces and help those most in need. "We have all seen the devastating impact of the coronavirus crisis in Ireland, so you can imagine how much harder it is for people living in countries without enough doctors or nurses let alone enough ICU beds or ventilators.

"The situation is even more critical in countries already struggling with the impact of conflict and buckling under the strain of massive refugee and displacement crises," she said.

TIP OF THE ICEBERG

"A lack of widespread testing in many



The unprecedented scale of the pandemic motivated the charities to join forces, noted Helen Keogh, Chair of Irish Emergency Alliance

developing countries suggests that we may only be seeing the tip of the iceberg of the true scale of the global coronavirus crisis. What is clear is that some of the world's poorest people are being pushed even further into poverty and disruptions to farming and supply chains risk severe food shortages.

"By working together, the Alliance will reach some of the world's most vulnerable people, giving them the supplies and information needed to keep safe from the virus."

Minister of State for Overseas Development Aid and Diaspora, Colm Brophy TD, said that through the Irish Aid programme, his department has already provided over €16m to the the member agencies of the Irish Emergency Alliance for this year to provide humanitarian and development assistance to the world's most vulnerable communities.

The Irish Emergency Alliance is modelled on similar joint appeal coalitions that operate successfully in the UK and across many European countries. By working together, the Alliance aims to reduce fundraising costs to make donations stretch even further and has pledged to work together in response to future humanitarian crises across the globe.

Donations can be made on **www.irishemergencyalliance.org**, by calling **1800-939-979** or by texting IEA to 50300 to give €4.

EMERGENCY SERVICES IRELAND 11



MOUNTAIN RESCUE TEAM PLANS CENTRE AROUND NEW TRAINING BASE

Dublin and Wicklow Mountain Rescue Team (DWMRT) has big plans in place to future proof the service it provides over the next few decades. The team recently submitted a planning application to Wicklow County Council for a proposed new 6,000 square foot twostorey mountain rescue centre and training facility. Report by Deirdre O'Flynn.



 Image: the suggested site plan of the proposed development includes training and breakout rooms, operational facilities, storage for

equipment and drying and maintenance, including a garage to house emergency vehicles, according to Mark Flynn, DWMRT's Deputy Team Leader and a member of the development committee.

"We purchased a site from Coillte at Sraghmore in Roundwood and the plan is to build early in 2021 and be ready in early 2022. We learned from bases in the UK to build big and future proof the building so that add-ons are not needed later," Mark told *'Emergency Services Ireland'*.

Once planning permission is received, it is hoped to submit a LEADER application to help fund the estimated €800,000 cost of the facility, with the remainder to be raised through fundraising.

DWMRT is part-funded by the Irish Government, but the team's operational costs far exceed the government funding it receives. The rest of its operational costs are met by donations, grants and fundraising events.

DWMRT is manned by 60 volunteers and responds to emergencies in upland areas of Dublin, Wicklow, and Louth. The team has been based in Roundwood, Co Wicklow since its foundation in 1984. Two



DWMRT is manned by 60 volunteers and responds to emergencies in upland areas of Dublin, Wicklow, and Louth. (Photo courtesy of National Lottery)



mountain rescue emergency vehicles are parked at Cheeverstown House in Templeogue, in South Dublin, to facilitate quicker access to the Dublin mountains and West Wicklow. In Louth, the team covers emergencies on Cooley Mountain on the Cooley Peninsula. "We have a great relationship with the Coast Guard unit in Greenore and have teamed up with them on call-outs," noted John Kavanagh, PRO of DWMRT.

CLOSE INTERAGENCY COLLABORATION

The team also works closely with the National Ambulance Service, the Irish Coast Guard, the Irish Defence Forces, Dublin Fire Brigade, Wicklow Fire Service, Civil Defence, and other voluntary emergency services.

In Roundwood, the team currently operates out of a two-storey building in the village and still has access to a room next to the Garda Station. "In order to help us provide the best service we can, we hope to provide a permanent base for the team," John told *'Emergency Services Ireland'*. "This will allow for better training of the team, better management of mountain rescues, and indoor housing of two vehicles."

It will also allow for better operational management of incidents. "Most incidents are controlled from the forest car park or the side of the road near the incident. For longer-duration incidents, say two or three days, we need to move inside to properly manage the incident. An operation area in the new facility would allow us to do that. "Indoor and outdoor training facilities are also important to upskill the team."

While the main role of mountain rescue teams still involves helping people who are lost or injured in the hills, it also involves searching for missing persons, severe weather response, and body recovery from remote locations. To perform these





ABOUT MOUNTAIN RESCUE IRELAND

Any request for emergency assistance in the upland and mountainous areas on the island of Ireland is met by a volunteer response from one of the 11 mountain rescue teams that comprise Mountain Rescue Ireland (MRI).

MRI represents Donegal Mountain Rescue Team, Dublin & Wicklow Mountain Rescue Team, Galway Mountain Rescue Team, Glen of Imaal Mountain Rescue Team, Kerry Mountain Rescue Team, Mayo Mountain Rescue Team, Mourne Mountain Rescue Team, North West

Mountain Rescue Team, Search and Rescue Dog Association of Ireland, Sligo, Leitrim Mountain Rescue Team, and the South Eastern Mountain Rescue Association.

Whilst the number of call-outs nationally fell during the first and second quarters of 2020 due to the Covid-19 lockdown (61 and 57 respectively), increases were noted for the rest of the year. Whilst the figures for Q3 were not available at the time of print, "we know from the individual teams of increased call outs and we can correlate those with the lifting of restrictions on movement", said Ruth Cunniffe, PRO of MRI.

What has also increased is the challenge of fundraising. Mountain rescue is a service maintained entirely through volunteer efforts, and each volunteer absorbs the cost of their own contribution in terms of time, sustenance, and other costs such as transportation.

Rescue teams also have to fundraise in a bid to maintain the service they provide. "Each team has an annual calendar of fundraising events, but none of those are happening this year, so fundraising is down hugely," she noted.

duties safely, team members are trained in areas such as low-visibility navigation, search skills, search management, communications, pre-hospital emergency medicine, helicopter operations, crag and rope rescue, and swift-water rescue.

SKILLS AND QUALIFICATIONS

DWMRT is recognised by the Pre-Hospital Emergency Care Council (PHECC) and its members have first aid responder qualifications. "Most team members are emergency first responders, while a number are emergency medical technicians, or doctors."

DWMRT recruits new team members every year to 18 months. New-member training usually takes six to nine months and covers all of the basic skills required of a mountain rescue team member. These include stretcher packaging, basic crag skills, search skills, poorvisibility navigation, communications, and helicopter safety. Each aspiring team member must pass a number of assessments before being accepted as rescue team members.

The need for a permanent base for the team – and welfare facilities for rescued people – is evidenced by the increase in call-outs over the last number of years. Whilst there was a fall-off in call-outs during the lockdown, the team had already recorded 81 call-outs by early September.



MAYO MOUNTA RESCUE TEAM

DWMRT purchased the site from Coillte at Sraghmore in Roundwood and the plan is to build early in 2021 and be ready in early 2022. "





MOST COMMON INCIDENTS

"There were 25 call-outs in August alone. As Covid-19 eased, we became busier as people were coming out to the hills more often. We would average about 100 calls a year – 113 in one year is our record – and we've had four simultaneous incidents in different corners of Wicklow. That can be difficult to manage which is why a dedicated facility is so important," according to DWMRT's PRO.

The most common incidents remain lower leg injuries, including broken ankles, sprains, and lacerations. Others include people getting lost due to loss of mobile phone coverage while navigating the hills, or getting caught when clouds or mists roll in. The team is also called on for missing person searches and body recovery.

In a significant development, DWMRT is the first mountain rescue team in Ireland and the UK to secure a clothing partnership with Norwegian gear manufacturer Helly Hansen.

"We have secured a five-year sponsorship deal and will help Helly Hansen to develop clothing for mountain rescue teams to be used throughout Europe," noted DWMRT's Mark Flynn, who was instrumental in brokering the deal.

"Helly Hansen are keen to work with professionals on their workwear and to use tried and tested gear in the allweather environment that we work in. They will provide us with some key pieces of work kit and we are delighted with that."

For further information:

Dublin Wicklow Mountain Rescue Team: www.dwmrt.ie Mountain Rescue Ireland: www.mountainrescue.ie

AMBULANCE SERVICE TAKES SARCALL RESPONSE SYSTEM ON BOARD

A single platform that allows agencies to call out mountain rescue teams is being used to great effect by An Garda Síochána to task specific mountain rescue teams of an incident in their area. Significantly Sarcall is now being taken on board by the National Ambulance Service, thereby allowing that service to also task mountain rescue teams.

First developed in the UK, Sarcall is a software package that enables mountain rescue teams to locate incidents, record incident data, and capture debriefing data. Developed by mountain rescue personnel, Sarcall has now been adopted by teams in Ireland.

In Ireland, Donal McNamara and Pat Holland are Sarcall's Administrator and Development Officer for Mountain Rescue Ireland (MRI) respectively. "Sarcall has been live for over a year and was introduced as a callout mechanism, issuing texts to activate teams," said Pat, who is a member of the South Eastern Mountain Rescue Association (SEMRA).

"The use of Sarcall is growing, with a live log being established by the call-out officer, making it an incident command system. And, we're seeing interactions between An Garda Síochána and the National Ambulance Service, so the use is developing organically.

"The system increases situation awareness – for instance, if I'm driving to an incident, I can stop, read Sarcall, and then I'm fully briefed when I get there. So, Sarcall reduces the time spent briefing individuals."

A robust logged system for calling out teams, maintaining incident logs, and informing all involved



agencies, Sarcall is proving popular with teams on the ground.

"We would always notify An Garda Síochána as to what we are doing, but Sarcall allows them to see what is going on," noted DWMRT's John Kavanagh. "In our case, we operate as a virtual team on Sarcall with the Glen of Imaal Mountain Rescue Team. So, when the two teams are tasked, the notification comes in via Sarcall.

"Then, team members respond as to who is available, so that the team leader can assess the available manpower for the incident. The call-out officer takes it from there, and the deputy team leader agrees a response to the incident using the information from Sarcall."

'VIRTUAL RESPOND' COMES TO CFR IRELAND'S RESCUE!

Following the postponement of 'Respond 2020' in April and cancellation of the rescheduled event due to the Covid-19 pandemic, CFR Ireland has decided to host a 'Virtual Respond' on Saturday 24 October instead, which will be livestreamed on its Facebook Page.

n recent correspondence to the network of community first responders (CFRs) around the country, CFR Ireland said that a phenomenal amount of work had been done for what would have been the 7th Respond Conference.

"However, Covid-19 put a halt to our plans. The decision was made as we believe it would be unsafe to run such a large event and very difficult to maintain social distancing. We feel the combination of the large numbers and with the involvement of our National Ambulance Service, healthcare staff and volunteers that it would be unfair to ask anybody to undertake the unnecessary risk," it noted.

CFR Ireland – the umbrella organisation for community first responders – has decided to organise 'Virtual Respond' on Saturday 24 October, which will be livestreamed on its Facebook Page from 10am with presentations from the National Ambulance Service, Irish Heart Foundation, Irish



CFR Ireland wants to create a collage of CFR activities and will present them online, with a musical backdrop, to 'Virtual Respond 2020'. The committee is on the look-out for photos of CFR groups in action, Covid-19 related or pre-Covid-19 images. All group, training or comical images should be emailed to **pictures@cfr.ie**



Coast Guard, and other contributions including some from $\ensuremath{\mathsf{CFRs}}$.

The annual conference and exhibition had originally been due to take place on 25 April, before it was rescheduled for later in the year. And with the ongoing pandemic, the final decision was taken by CFR Ireland's Organising Committee to put it back to 6 March 2021.

For those CFRs who had booked their tickets for 'Respond 2020' CFR Ireland said it will transfer bookings directly to the new date, and will also ensure delegates get their selected workshops. So, except for the new date, nothing else has changed with the event.

Tickets for next year's live event go on sale in January 2021. For details email **info@cfr.ie** visit CFR Ireland's website **www.cfr.ie** or **www.facebook.com/cfrireland**

TIME TO SUBMIT ENTRIES FOR GEOFF KING AWARD

The Geoff King Award, presented each year in memory of the late Dr King, Director of the Pre-Hospital Emergency Care Council (PHECC) is in recognition of a person, a community, group or organisation whose contribution in the area of community first response is making or has made a real difference. A selected panel of judges, who are independent of CFR Ireland, will decide the overall

award winner. To enter this year's award provide the name, address, telephone number of your nominee and include 400 words why he/ she should receive the accolade. Email completed applications to kingaward@ cfr.ie on or before Friday 16 October.



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'FRONTLINE TO FINISHLINE' RELAY RAISES €15K FOR TWO CHARITIES

Gardaí, fire and ambulance service personnel, community first responders and members from other frontline services who participated in the Charity Relay Walk 'Frontline to Finishline' in June raised up to €15,000 in total in aid of Pieta House and ALONE.

escue Organisation Ireland rolled out the 'Frontline to Finishline' Charity Relay Walk on 22 June with the main aim of creating awareness and raising much-needed funds for both Pieta House and ALONE (a charity founded by Dublin Firefighter Willie Bermingham).

The charity event was launched at DFB's HQ on Tara Street by Anthony Byrne, Vice-Chair of Rescue Organisation Ireland; Dennis Keeley, DFB's Chief Fire Officer; Sean Moynihan from ALONE and Brian McEvoy from Pieta House.

The launch was attended by representatives from Dublin Fire



Anthony Byrne, Vice-Chair of Rescue Organisation Ireland, pictured with Dublin Fire Brigade's Chief Fire Officer Dennis Keeley before the start of the 'Frontline to Finishline' Charity Relay Walk at DFB's HQ at Tara Street on 22 June.



27 FRONTLINE SERVICES PARTICIPATED IN 'FRONTLINE TO FINISHLINE'

- 1. An Garda Síochána
- 2. Baltinglass Community First Responder Group
- 3. Carlow County Fire & Rescue Service
- 4. Dublin Airport Fire & Rescue Service
- 5. Dublin Civil Defence
- 6. Dublin Fire Brigade

- 7. Dunlavin Community First Responder Groups
- 8. HPMP
- 9. Irish Air Corps
- 10. Irish Coast Guard
- 11. Irish Red Cross
- 12. Kildare Fire Service
- 13. Kildare Civil Defence
- 14. Kilkenny Civil Defence
- 15. Kilkenny County Fire & Rescue Service
- 16. Laois County Fire & Rescue Service
- 17. Laois Civil Defence
- 18. National Ambulance Service
- 19. Order of Malta Carlow
- 20. Order of Malta Brav
- 21. RNLI
- 22. Wexford Civil Defence
- 23. Wexford County Fire & Rescue Service
- 24. Wicklow Civil Defence
- 25. Text BoxWicklow County Fire & Rescue Service
- 26. Waterford City/ County Fire & Rescue Service
- 27. Waterford Civil Defence





Brigade, Dublin Civil Defence, An Garda Síochána, the National Ambulance Service and Dublin Airport Fire & Rescue Service. A minute's silence was also held as a mark of respect for Detective Garda Colm Horkan, who had died in the line of duty on 17 June in Castlerea, Co. Roscommon.

SIX COUNTIES IN SIX DAYS

Shortly after the launch proceedings, representatives from both the state and voluntary emergency services started the relay walk from Dublin Fire Brigade's HQ on Tara Street in Dublin. And over the next six days they travelled through Kildare, Laois, Carlow, Kilkenny and Wexford before reaching the finish line in Bray on 27 June.

"They walked in pairs in single file wearing their uniform or turn-out kit holding a 2m-social distancing sign. The walk took account of government restrictions and the guidelines under the Roadmap for Reopening for both society and business," according to Anthony Byrne, Vice-Chair of Rescue Organisation Ireland (ROI).

"All those who participated were local, passing the 2m baton along the route. No bucket collections were used as a precaution to avoid any cross-contamination and counting of monies by our volunteers," he added.

A total of \leq 15,000 was raised – \leq 11,000 on the fundraising page www.idonate.ie/ROIFrontlineToFinishline with an additional \leq 4,000 through a number of individual donations.

During the final day of 'Frontline to Finishline' a separate walk also took place in Waterford City in support of the charity walk by members who could not travel outside the 20km restriction. "This fantastic support was given by Waterford City and County Fire Service and Waterford Civil Defence," noted the Vice-Chair of ROI.

"Rescue Organisation Ireland wishes to thank all participating walkers, runners and especially our supporters throughout 'Frontline to Finishline'. In 2021 we may return with another event," Byrne concluded.

For further information and updates: https://twitter.com/RescueOrglre https://www.instagram.com/rescue_org_irl/ https://www.facebook.com/RescueOrglre/

RELAY WALK IS THE TALK OF THE TOWNS!

Day 1: Starting off from Dublin Fire Brigade HQ on Tara Street, members walked through Dublin city passing the baton to colleagues along the way to Tallaght. After a short break more ROI members continued the relay to Naas Fire Station via Blessington, Co. Wicklow.

Day 2: Moving from Naas to Newbridge Fire Station the baton was then handed over for the next leg through Kilcullen and Dunlavin onto Baltinglass over the Kildare/Wicklow border.

Day 3: An early start from Castlecomer, Co. Kilkenny, through Kilshen, Co. Laois into Carlow town; while a a second group started in Tullow, Co. Carlow to meet relay walkers from the Castlecomer/Carlow route in Ballon. Following a short break the relay then continued through Kildavin to Bunclody, Co. Wexford.

Day 4: Starting in Bunclody, following a route through Enniscorthy to Wexford Town, the walkers received a 'sunny Wexford welcome' upon arrival along Wexford Quays.

Day 5: The walkers started out the next day from Gorey before winding their way through the countryside to a reception in Arklow Town, Co. Wicklow.

Day 6: Following an early start in Arklow, they followed the route to Jack White's Inn, handing over the baton to members who then ran the relay to Wicklow Town. The next leg to Greystones was followed by a reception in Greystones Fire Station, and from Greystones the final leg of the relay charity walk led to a celebratory finale in Bray Fire Station on 27 June.





SHADOW WARRIORS' LIFTS THE LID ON IRELAND'S SPECIAL FORCES



ARW member of the Special Operations Maritime Task Unit (SOMTU) pictured during a training exercise (2016).

A new book 'Shadow Warriors: The Irish Army Ranger Wing' is the first and only authoritative account of this secretive special forces unit that looks at their inception, advanced training and operations at home and overseas, without breaching operational procedures or tactics, which still remain a secret, writes co-author Sgt Wayne Fitzgerald.

his year marks the 40th anniversary since the Army Ranger Wing (ARW) was established by the Irish Defence Forces' in March 1980.

The ARW was officially designated as 'Sciathán Fianóglach an Airm', and as there is no English translation of 'Fianóglach' the internationally recognised designation of 'Ranger' is used.

The word 'Fianóglach' links the traditions of the ARW to 'Na Fianna', the legendary Irish warriors, and also with Óglaigh na hÉireann (Irish Defence Forces).

The ARW's roles are divided

into conventional warfare, such as offensive operations behind enemy lines, like long-range patrols (LRP), raids, ambushes, sabotage, counterinsurgency, and other tasks.

The ARW is also a specialist aid to the civil power (ATCP) in anti-terrorist taskings including anti-hijack, hostage rescue, airborne and seaborne interventions, close protection of VIPs and counter terrorist/subversive threats, amongst others.

MODULAR TRAINING COURSE

The Army Ranger Wing's Special Operations Force Qualification (SOFQ) Course is open to all serving members



ARW team conduct counter-terrorism assault training on a ferry in the Irish Sea (2011).

of the Defence Forces, serving in the Army, Naval Service or Air Corps, both male and female. The SOFQ is a 36-week modular training course that requires a high level of physical fitness and mental fitness.

The SOFQ syllabus is designed to test and assess all aspects of the candidate's character, military skills, ability and general suitability to become a member of the ARW. Successful completion provides the potential unit member with all the skills and knowledge necessary to function in the role of a Special Operations Force (SOF) assault team operator.

The failure rate is very high, with only a small percentage making the cut to be the 'best of the best'. The Army Ranger Wing train hard and continuously work on their SOF tactics, techniques and procedures, where they use the unit's 40 years of evolving knowledge and experience of operating at home and overseas, along with their co-operation with other security services and foreign special force units.

ARW assault team operators are held in a state of readiness 24/7, 365 days of the year, where operators are on-call to their command centre in the Curragh Camp, Co. Kildare. Operators are allocated into platoons and teams as per their skill sets.

They are constantly training and upskilling in all different types of special forces tactics like HALO parachuting, amphibious assault craft, fast-roping from a helicopter, sniping and assaulting in their Ford F-350 Special



ARW Special Operations Maritime Task Unit (SOMTU) conducting boarding drills in the Naval Base, Haulbowline (2016).







Reconnaissance Vehicles (SRV), which other members of the Defence Forces can only hope of doing, someday, if they pass SOFQ.

WIDE RANGE OF OPERATIONAL DUTIES

The ARW started out in the early 1980s during the Troubles, conducting patrols and manning Observation Posts (OPs) while watching subversive activities along the Border area with Northern Ireland, right up until the Good Friday Agreement in 1998.

They are also on hand for ATCP duties with An Garda Síochána, such as the operation involved in the kidnapping of Don Tidy in 1983. Most recently they would have provided snipers in air support and on the ground as Close Protection to VIP visits such as HM Queen Elizabeth II and other royals and visiting heads of state like US President Donald Trump and US Vice President Michael Pence in June and September 2019 respectively.

As some might know, the Defence Forces have an unbroken record of 62 years of peacekeeping service with the UN since 1958.

Individual members of the ARW will have served overseas during the unit's 40-years of operations, but they cut their teeth as a unit in Somalia in September 1993 just before the Black Hawk Down incident in October 1993, where 18 US Rangers, operating independently of the UN, were killed.

From there, the ARW has served as an initial entry force to missions such as East Timor (1999), Liberia (2003), Chad (2008), right up to their present mission in Mali since September 2019. Two ARW teams were deployed in a response to an upsurge in violence in northern Mali, which is led by Al Qaeda affiliated militant groups.

The ARW teams are conducting long-



tells the story behind the creation of the Army Ranger Wing from its origins in the 1960s and 70s to its formation in 1980 and subsequent history. Priced at €12.99 the book is available from

www.mercierpress.ie/irish-books/shadow-warriors-book/





range reconnaissance patrols, with direct action. This requires speed, mobility and flexibility and the ARW has continuously trained for these types of mission.

EU BATTLEGROUP TRAINING

The UN's MINUSMA mission is considered by security experts as the most dangerous one. Since July 2013, 216 MINUSMA peacekeepers and law enforcement personnel have been killed, while over 360 have been seriously injured (as of May 2020).

In February 2020, three Irish ARW SOF operators suffered minor injuries when an improvised explosive device (IED) detonated near their vehicle while conducting a patrol in eastern Mali.

More ARW operatives are currently training for the UN approved Germanled EU Battlegroup, which is due to go on operational standby for six months soon. If the Battlegroup were to be called into action the Irish contingent would only be deployed with the Irish government's 'triple-lock' authorisation. To date, no EU Battlegroup has been

ABOUT THE AUTHORS

Paul O'Brien, a military historian, works for the Office of Public Works at the Royal Hospital, Kilmainham. An author of 16 books, Paul has written extensively on the military strategy of the 1916 Rising, as well as the British Army in Ireland. Two of his books, Blood on the Streets and Crossfire, were turned into the critically acclaimed drama-documentary A Terrible Beauty. He lives in Santry, Dublin with his wife, daughter and two cats.

Sergeant Wayne Fitzgerald joined the Defence Forces in 1990, serving initially with the 5 Inf Bn. During his 30-year career he has worked in a number of roles within the Army and Air Corps. In 2011 he was detached to Defence Forces HQ to work on www.military.ie and in May 2011 he was appointed editor of An Cosantóir (The Defender) The Defence Forces Magazine, until May 2020. Wayne has served overseas as a peacekeeper with the UN, EU and NATO PfP in Lebanon (1991), Kosovo (2002, 2010) and Bosnia (2008).



Pictured (I-r): Sgt Wayne Fitzgerald and Paul O'Brien were presented with the European Military Press Association (EMPA) Award for Best Article in 2013.



ARW student receiving his Fianóglach (Ranger) tab on passing Special Operations Force Qualification (SOFQ) Course Module 3 (2013).

deployed.

The ARW missions and operations are not well known or regularly discussed within the media, nor are the identities of ARW operatives, who remain in the shadows in order to protect themselves and that of the unit. Thus, the unit and its members are shrouded in secrecy both within the Defence Forces and to the public.

IRISH AIR CORPS OPERATIONS WING WATCHFUL AND LOYAL

The Irish Air Corps' Helicopter Wing, initially formed to focus mainly on Search-And-Rescue (SAR) operations during the 'Big Freeze' in 1963-64, has since developed to provide both air medical and support roles to protect and serve communities throughout the country, making this small force one of the most modern institutions of its kind in the world, writes Lukasz Gancarz.

reland is well known for its mild climate and evergreen fields, but the weather here can change in an instant. It is so common to experience all four seasons within a single day that an oft-repeated refrain

single day that an oft-repeated refrain goes "If you can fly in Ireland, you can fly anywhere". It was the gnarly winter of 1963-64, remembered woofully as the 'Big

64, remembered woefully as the 'Big Freeze' that proved this saying correct and demonstrated both the need for and utility of rotorcraft in the Irish Air Corps. It had not been as cold over the last 200 years with ponds, lakes and rivers freezing solid, as towns and villages were cut off with supplies running very low. People in need of urgent medical care were put in a life-threatening situation with no means of transportation.

Families were stranded in their own homes with local emergency services battling through the snow to gain any access to those in need. Ireland's Defence Forces deployed troops to provide rations and evacuate those people worst affected countrywide.

HELICOPTER WING TAKES OFF Irish Air Corps crews did their best to drop food where possible, but it was barely enough, with high winds and low visibility jeopardising all relief efforts. And it soon became painfully obvious that the State needed its own

dedicated rotary division.

The decision was made to form the Helicopter Wing of the Air Corps, which would focus mainly on Search-And-Rescue (SAR) operations.

After long consideration, the Irish Government placed an order for three Aérospatiale Alouette III helicopters. The first two were delivered in 1963 and the third helicopter followed in 1964.

The Alouette III is a light, multirole, single engine helicopter developed by the French Sud Aviation, which had seen service across the globe. A total of eight Alouette III helicopters saw service in Ireland between 1963 and 2007, initially with the Irish Air Ambulance Service.

Irish Air Corps helicopters were regularly deployed on SAR missions, troop transport and explosive ordnance disposal operations. The rising number of tasks and an outstanding success rate of helicopter





SAR operations was an indication that a new type of aircraft was needed to meet public demand.

The Aérospatiale SA 330 Puma was leased from its manufacturer to fill in the role of a heavy-duty workhorse. It was only in 1982 when the Aérospatiale SA 365 Dauphin II (now the Airbus AS365 Dauphin) was chosen to fill the SAR role.

The Aérospatiale SA342L Gazelle was purchased to work as a training aircraft for the pilots who wanted to move onto the Dauphin. It was the first aircraft with a full glass cockpit introduced to Ireland's fleet. However, it soon became clear that the Dauphin was not well suited for SAR operations, especially in bad weather.

CREW RESOURCE MANAGEMENT

Another leap forward was marked by the introduction of the Crew Resource Management (CRM) system, known well in civil aviation circles. It was designed to include all staff working both on the ground and in the air.

This project continues to be managed by Lt Col Phillip Bonner, who until recently was the Commanding Officer of No. 3 Operations Wing. The main idea was to give everyone involved with the Air Corps – from flight attendants, engineers and flight crews all the way to janitorial staff - responsibility for the safety and performance of its operations.

With new training standards in place, CRM was introduced to the Garda Air Support Unit (GASU). The Air Corps provided both the pilots and a Eurocopter (now Airbus) AS355N Twin Squirrel for An Garda Síochána, beginning in September 1997.

In January 2008, a Eurocopter EC135 T2 was purchased. From 2005 to 2008, both aircraft contributed to over 1,300 arrests and located 14 missing persons during SAR details.

The Irish Air Corps provided the pilots, whilst the Gardaí provided two more crew positions: the mission commander seated in the back of the aircraft and a second crew member sitting beside the pilot. Again, all crew members are fully CRM trained and they can assist the single pilot in a variety of tasks, such as verifying checklist items or assistance during an emergency operation.

The AS355N was replaced in 2007 by a second EC135 T2+. After nearly 20 years of co-operation, both the Air Corps and An Garda Síochána have developed a perfectly balanced service to the public, operating on a 24-hour basis.



The Alouette III pictured on a 'Big Freeze' mission during the winter of 1963-64, which highlighted a need for the State's own dedicated rotary division, and resulted in the formation of the Air Corps' Helicopter Wing to focus mainly on Search-And-Rescue (SAR) operations.





HEMS COMES ON BOARD

Each pilot attached to the No. 3 Wing works under orders from their commanding officer. In GASU, the pilot in command (PIC) makes the

final call on whether the mission tasked by the dispatcher is flyable or not. CRM shines when there could be significant pressure involved in the decision-making process – especially with high-risk arrests, or the pursuit of armed criminals.

The EC135 had proven itself to be such an effective tool for allweather operations that two more aircraft were fielded by the Irish Air Corps in 2004. Soon after, a search commenced for a complete SAR and helicopter emergency medical services (HEMS) capable platform, which can also fill some traditionally military roles.

The AgustaWestland (now Leonardo) AW139 was chosen to replace a veteran fleet of Dauphins, capable of undertaking a full spectrum of missions including HEMS, firefighting, troop insertion and patient transport. Floor sections of the aircraft can be modified for carriage of not only a specialised stretcher base but also an advanced neonatal unit.

Additionally, all of the AW139 pilots had extensive EC135 experience. With a very intense training regime, the Air Corps prepares each pilot for their



Advanced paramedic David Irwin receives information electronically about a casualty while Corporal Dermot Corcoran checks the route for obstacles and alternative approaches before landing.







future roles. The training programme is tailored to prepare the cadets to operate on multiple aircraft types in all weather conditions.

PILOT TRAINING REGIME

The first step in becoming a fully qualified pilot with the Irish Air Corps is passing a seven-month period of basic military training. Next comes fixed-wing ground school, during which CRM is imprinted into the recruits' minds after which crews are familiarised with the Pilatus PC-9M.

The cadets accrue 130-150 flight hours and approximately 20-50 simulator hours and upon completion of flight training they then proceed to their advanced flight training on the Pilatus PC-12, CASA CN235 or EC135.

After passing the year-long

Helicopter Conversion Course, pilots are trained on the EC135 to perform air ambulance missions. They then proceed to the AW139 to complete a period as co-pilots on the aircraft, which includes time on EAS, before being dispatched to GASU. After three to five years spent with GASU, pilots are sent back to No. 3 Helicopter Wing where they continue to operate and train on the AW139 as needed.

Probably the most vital task of the No. 3 Helicopter Wing is the provision of emergency medical services. In 2011 a 12-month pilot project was launched to test possible advantages of having a helicopter with a full crew on standby to provide daytime HEMS flying under visual flight rules. CRM was a defining element of the programme, which Lt Col Bonner helped to launch.

One of the unique challenges at the beginning of joint operations was integrating two very different operational cultures. Pilots and aircrew used jargon unfamiliar to medical personnel, while paramedics used medical terminology previously unheard by the aviators. CRM training was again modified to educate military staff on medical phraseology, with one of the Air Corps crew members trained as a medical technician, capable of assisting with casualty care.

The same approach went towards the medical staff who were introduced to the Air Corps procedures and operations, making them permanent members of the HEMS team. EAS flights were initially performed with an EC135 before the larger and more capable AW139 was brought online.

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The service significantly reduced transit times for the patients and in 2013 it became permanent. Another big step forward was to include the dispatcher's offices, which are located over 100 miles (160km) from Athlone, by installing a set of cameras in the HEMS briefing room. This allowed the dispatcher to see and hear the pre- and post-action briefings, fully incorporating them into the advanced CRM system in place.

STANDARD DAY FOR CREW

A standard day for a HEMS crew starts with an operations briefing carried out by the commanding officer (CO). This includes a weather summary prepared by the first officer and a technical report by the engineers. While the first officer reviews the pre-designated landing sites and reports from previous duties, the commanding officer carries out a thorough pre-flight inspection of the aircraft, after which the helicopter is set up for a quick start-up.

Training flights are planned as required for the day, depending on weather conditions. Once a call comes in from the dispatch center, it is considered by the advanced paramedic. If it qualifies for a HEMS After over 20 years of co-operation, both the Irish Air Corps and An Garda Síochána have developed a perfectly balanced service to the public, operating on a 24-hour basis.

response, a mission is initiated, and the commander starts up the helicopter. At the same time, the first officer checks the location of an incident and assigns a pre-designated landing site or creates a new one if needed.

With location and route planned, the remainder of the crew boards the helicopter for an immediate departure. When airborne, the paramedic receives constant operational updates from the dispatch center. In many cases an ambulance team will be on the scene first and can confirm if HEMS response is needed.

Upon arrival, the crew surveys the landing site, looking for any obstacles which could put the aircraft in danger. Several tight turns are made while every crew member checks the landing zone.

BECOMING THE EYES AND EARS

With transition into hover and imminent landing, the Air Corps crewman becomes eyes and ears for the pilots. They will verbally confirm the aircraft's distance from the ground, possible debris and finally, contact with the ground.

Immediately upon touchdown both a paramedic and an Air Corps medical technician will meet up with the ambulance team on the ground to assess the casualty. Within minutes of landing, usually with the aircraft on stand-by with engines idling, the medical crew returns to the helicopter, which then takes off and heads for the nearest and most appropriate hospital.

Sometimes, when more specialised assistance is needed (such as for neonatal care) the Air Corps' fixed-wing aircraft will fuel up to help out. With the component's CASA CN-235 ready at Casement Aerodrome, a young patient can be immediately transferred and transported to an advanced care unit in the UK.

With full co-operation from all emergency services involved, the Athlone-based HEMS unit has proven itself to be a major addition to the general public in Ireland. Today, the



No. 3 Helicopter Wing provides three major services – Garda Air Support, emergency medical services and air mobility.

GLOBAL PEACEKEEPING MISSIONS

The Irish Defence Forces have actively taken part in global peacekeeping efforts since 1958 – from Central America to Africa and Asia and when called upon by partner nations and allies.

Apart from its local aid to the general public, the No. 3 Operations Wing was deployed to Northern Ireland in 2018 to assist with extinguishing brush fires.

Two AW139s, each equipped with a 1,200-litre (317-US gallon) Bambi Bucket, worked directly over the affected areas and an EC135 was used as an observation platform. While the Irish Air Corps has previously been used in cross-border operations, this was the first time the helicopters were used to directly tackle fires.

The Irish Air Corps' Helicopter Wing continues to develop and adjust its innovative training and staff retention programmes, making this small force one of the most modern institutions of its kind in the world.

While a pilot and staff shortage continues to be a global issue, in Ireland training is being adapted to attract not only new recruits and engineers, but most importantly to ensure that staff remain in service until retirement. The Irish Air Corps constantly adapts to remain one step ahead of global aviation trends.

Since its foundation, no less than 14 Distinguished Service Medals were awarded to the members of the Helicopter Wing, who proudly adopted the international SAR motto: 'That Others Might Live' ('Go Mairidis Beo') This article originally appeared in the Spring 2020 issue of 'Vertical Valor' magazine (turn to pages 110-116). https://bit.ly/2DohXFG



ABOUT THE AUTHOR

Lukasz Gancarz is a private pilot, photographer and soldier. He works full-time as Flight Lead Officer with Aer Lingus. Lukasz focuses on military helicopter photography while serving with the Irish Army Reserves and working for 'An Cosantoir' military magazine. He is also a freelance writer for the Canadian 'Vertical Valor' magazine.



All crews regularly undergo NVG (night-vision goggle) training in the Curragh for all night-time operations.



WHO SUPPORTS FRONTLINE EMERGENCY RESPONSE WORKERS?

'Emergency services at scene of accident' are regular headlines in the media. However, what about those people at the frontline who respond to such horrific scenes time and time again? What effect does it have on them and who can they themselves turn to when they need help? Report by Peigín Doyle.

cross all sectors of the emergency services there is an intervention programme in place to investigate and deal with the effects of traumatic events through peer support networks, where individuals support their colleagues who may be struggling with stress and trauma.

The programme, offered by the Critical Incident Stress Management (CISM) network, which is sometimes called 'psychological first aid', allows people to share their experiences and their emotional reactions, learn about stress and its effects and find referral to further psychological counselling if needed.

In each emergency service the CISM network programme is structured differently but all follow an international programme called Critical Incident Stress Management, developed by the founders of the International Critical Incident Stress Foundation (ICISF).

BRAVADO CULTURE

"In the old days people would just say they were fine, and up to the 1990s there was this 'bravado culture'. However, we have worked to introduce new measures and change the culture. Now it is normal for a person to say to their peers 'I am not OK," according to Hillery Collins, a paramedic who works with the HSE National Ambulance Service (NAS) in the Midlands.

Collins is joint chair of the NAS Critical Incident Stress Management team, a committee set up jointly in 1997 by SIPTU trade union and the management of the HSE National Ambulance Service to support the mental health and wellbeing of workers, in the wake of a crisis.

In the National Ambulance Service, the CISM team brings together union and ambulance service management, HSE human resources, psychologists, external clinical psychologists, control centre staff, ambulance staff, peer support workers and their co-ordinators.

The aim is to have a peer support worker in each ambulance station but if that is not possible, then a worker in the control room will refer a stressed colleague to their regional peer support co-ordinator who may, in turn, refer on to another service for further help. The process is confidential and designed to support the person to stay in work whilst receiving help wherever possible.

PSYCHOLOGICAL PERSPECTIVES

Trish Ryan, clinical psychologist and advisor to the CISM network for the ambulance service, gives the clinical psychological perspective to the team's work and decisions. She may also counsel people experiencing



"Every ambulance service employee has independent and confidential access to the HSE's Employee Assistance Service," according to Trish Ryan.

TRAUMA COUNSELLING

more complex or deep-seated trauma and who may not have benefited from peer support and/ or HSE employee assistance service counselling supports.

"Most people are supported through the CISM peer support network within the ambulance service. This is great because it is someone that they know, who knows what they are going through and is aware of the incident, so it is a fantastic service. Every ambulance service employee also has independent and confidential access to the HSE's Employee Assistance Service," she said.

Some people with more significant stress or complex trauma may need more in-depth treatment and their peer support co-ordinator or line manager may refer them to either the HSE's Employee Assistance Service or to Trish Ryan.

"There is a variety of reasons why someone may be referred on. Most individuals will spontaneously process



"In the old days people would just say they were fine, and up to the 1990s there was this 'bravado culture'... it's now normal for a person to say they are not ok" – Hillery Collins, paramedic who works with the HSE National Ambulance Service (NAS) in the Midlands.



The confidential Employee Assistance Service helps Garda members deal with personal and work-related difficulties at an early stage.

a traumatic event within three to four weeks and their initial symptoms will be reduced.

DEVELOPING RESILIENCE

"Frontline workers may also develop a degree of resilience to some events non-emergency personnel would find somewhat traumatising. In some cases, however, an incident may be extremely traumatic, it may hit a very personal chord, happen at a particularly vulnerable time, or there may be a chronic level of built-up stress.

"When you can process something that is traumatic you can keep it as a memory without being constantly re-traumatised, but there can be cases of incidents not being processed fully. And relatively minor incidents can trigger a trauma response.

"For example, an incident may connect with a person's history, something that has significance in the past that has not been resolved. The nature of the work regularly brings people into potentially traumatic situations, and it is important to monitor for signs of stress," she said.



GARDA PEER SUPPORTS

There are currently 912 peer supporters within An Garda Síochána who work in conjunction with local employee assistance officers and management. They are activated at local level in the wake of a traumatic event.

If necessary, a peer supporter will refer a colleague to the Employee Assistance Service whose officers are trained in critical incident stress management and can facilitate intervention after an incident. The techniques used may include de-fusing, debriefing, group intervention and oneto-one intervention. The confidential Employee Assistance Service helps Garda members deal with personal and workrelated difficulties at an early stage.

There is a 24/7 independent helpline and counselling service in place for a work, health and personal issues. The response from a peer supporter will have a huge effect in helping colleagues after a traumatic occurrence, a Garda spokesperson noted.

INTER-AGENCY CO-OPERATION

In Ireland the Critical Incident Stress Management (CISM) Network co-ordinates the operation of the programme across all of the emergency services, including fire, ambulance, Gardaí, prisons, coastguard and voluntary bodies like the Order of Malta.

A national steering committee manages the CISM Network by bringing together representatives from all the statutory and voluntary emergency service bodies from the north and south of Ireland.

"People will ask themselves, 'what did I do wrong?', 'could I have done something else?' whereas a peer supporter will ask, 'how do you feel about what happened?'. It is not about the mechanics of what happened but the emotions," Hillery Collins said.

"A lot of CISM work is very quiet; it is all the conversations that say 'I know how you are feeling and, yes, it's OK not to be OK. I know it is a bad day but there is tomorrow."

MAIN STRESS SIGNALS TO WATCH OUT FOR

When a person experiences a severe stress response to trauma, the following responses are recommended by clinical psychologist Trish Ryan:

1: Re-experiencing the event

Remembering the incident; recurring thoughts, nightmares, being uncomfortable with something that seems to be linked to the original experience; acting or feeling as if the event were re-occurring (flashbacks); small things, like a certain smell, can make you reexperience the event or memory of it. **Be aware of this in yourself; it can be hard for colleagues to see it.**

2: Avoidance and emotional numbing

Avoiding, or wanting to avoid things that act as reminders of the traumatic incident; e.g. avoiding shifts with members of the team who were with you when the traumatic event occurred; avoiding a call-out that goes through a particular place if it is in the area associated with the trauma; avoiding thoughts, feelings or conversations about the incident or of people who have been involved in it with you. **Be aware of this in yourself and your colleagues.**

3: Negative changes to thinking and feeling

Feeling irritable, depressed or lethargic; expressing guilt or shame; feeling detached from other people. To colleagues the person may seem dismissive and look like they don't care, which can be alienating but it is a sign of distress. It may be a good time to tell your colleague they are being 'a bit distant' and ask if they are OK, help them ventilate some of the energy built up by the trauma and process it outside of themselves.

4: Increased agitation/irritability

Being easily irritated, agitated or hyper-alert, which can be wearing; easily startled and annoyed when startled; difficulty sleeping can increase irritability. When a person who is easy-going becomes easily upset, it can be a giveaway that they are really strained, perhaps due to deep trauma.

Be aware of this in yourself and your colleagues.





EENA CONFERENCE DEFERRED UNTIL 2021

As countries across the world continue to face the challenges of the COVID-19 pandemic, the EENA Conference and Exhibition has been deferred until next spring. 'Emergency Services Ireland' will be a media partner of the event, which is now scheduled to take place on 28-30 April 2021 in the Latvian capital of Riga.

rofessionals across the public safety sector, from researchers and emergency services experts to solution-providers from more than 60 countries must wait until 28-30 April 2021 for the EENA Conference, which has been deferred due to the Coronavirus.

However, the European Emergency Number Association (EENA) promises the event will be another action-packed three days of information sharing, inspiring discussions and debates across the emergency services sector.



Developments on public warning systems, Advanced Mobile Location in Europe, Next Generation 112, eCall technology, cybersecurity, artificial intelligence and prevention of violence against the emergency services will be on the agenda at the 2021 event.

There will be a panel discussion on Tackling Online Terrorism, with representatives from Twitter, Facebook and the Tech Against Terrorism organisation addressing the benefits and challenges of new information and communication technologies.

In addition, a discussion panel will address the privacy



Click on https://eenaconference.org/programme/ for the full EENA Conference programme.

laws and the importance of the General Data Protection Regulation (GDPR) for the emergency services.

HOT TOPICS

1: Countdown to AML implementation: December 2020 marks the deadline for Advanced Mobile Location (AML) implementation across Europe.

'112 AWARDS' TO CELEBRATE THE HEROES

On the first day of EENA Conference (Wednesday 28 April 2021), the 112 Awards will be presented in three categories:

- Extraordinary Call Taker/Dispatcher
- Emergency Control Room Achievement
- Open Category

The awards will be presented for incredible rescues and inspirational acts by citizens and emergency services, public safety innovations and the use of technology in contributing to public safety.



The 'Outstanding Call-Taker' award was won in 2012 by Ireland's Will Carolan, HSE National Ambulance Service, pictured receiving the award from Dieter Nuessler, vice-chair of the EENA Advisory Board, at the Awards Ceremony in Riga, Latvia.





2: Next Generation 112 (NG112): New technologies are the solution to enable emergency communications to deliver a more efficient, accessible and effective emergency response; with updates on implementation of NG112 and the results of the EENA latest project.

3: Strong strategy for public warning: Understanding the practicalities and different factors at play is the first step for a solid and effective public warning system.

4: Accessible emergency services: Up to 80 million people who live with a disability in Europe are at risk of being

unable to contact emergency services, who up to now almost exclusively rely on voice calls. The conference will look at success stories paving the way for accessibility for all, with new technologies and legislation coming on board.

5: Checking cybersecurity: As

cyberattacks become more frequent, the key in rising up to this challenge lies in preparation and education. Learn how emergency services are preventing and preparing for this challenge from the experts.

6: Data protection compliance: The

impact of privacy and data protection for emergency services and what are the opportunities and changes brought by legislation.

7: Challenges in critical communications:

The development, implications and challenges for broadband critical communications and control room integration will be analysed.

8: Be part of the change: The EENA's



biggest resolution this year is to continue bringing together the people looking for solutions and making them happen.

The results of the first outcomes of the pilot project launched by the EENA, towards the implementation of Next Generation 112 will be revealed at next year's event, with examples from Europe and beyond on how technology is changing emergency services.

The venue will remain at the Radisson Blu Latvija Conference & Spa Hotel in Riga, Latvia, and in the meantime the EENA will update its website to provide updates on the programme, practical information...and much more!



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NEW PRODUCT PORTFOLIO SETS THE PACE IN PATIENT CARE

With over 40 years supporting the Irish healthcare sector, Oxygen Care has signed a new partnership agreement with German company, GS Medical to offer industry-leading robust, lightweight and innovative defibrillation and resuscitation products that are intuitive to use and clinically advanced.

xygen Care's new partnership with Germany's GS Medical has provided the Irish emergency and healthcare supplies company with an ideal opportunity to bring the internationally renowned corpuls portfolio of defibrillators, patient monitoring systems and chest compression devices to the Irish market.

The legendary, yet still unique modular concept of the corpuls3 comprises a defibrillator/pacer, a multi-parameter monitoring unit and patient box, which can be separated as and when required - without the hassle of cables getting in the way of patient access.

Corpuls also produces the small, light and highly featured corpuls1 defibrillator/patient monitor and the robust corpuls aed.

The continuous development and synergy of the corpuls product world is crucial with new products and solutions announced annually at their innovation summits.

Emergency and intensive care medicine professionals around the world look to these annual events and for innovation, 2020 is a very special year.

Corpuls³ allows for wireless synchronisation between Corpuls³ and Corpuls cpr and the introduction of the 22-lead ECG into the emergency services.

TOUCHSCREEN TECHNOLOGY

Never before have so many innovations been brought to the market at one time, such as touchscreen technology for the corpuls³, wireless synchronisation between corpuls3 and corpuls cpr, the introduction of the 22-lead ECG into the emergency services as well as telemetry with optional 4G and advanced data management solutions.

The next generation of corpuls3 is now here, following the recent launch of **corpuls3T**, which offers a range of new features and software

innovations touchscreen and new design. The corpuls3T is now a

complete resuscitation system. Providers can remotely control alarms, take BP readings, transmit live streaming data and fully control

CPR with the **corpuls** cpr mechanical chest compression system - safely up to 10 metres from the patient when needed

These lifesaving devices are a welcome addition to Oxygen Care's expanding portfolio backed by industry renowned product support. This makes Oxygen Care and corpuls a very attractive solutions partner for all emergency medical services throughout Ireland.

For further information visit www.oxygen-care.com; email sales@oxygen-care.ie or call 01-2769700.



Corpuls has also produced the small, light and highly featured corpuls1 defib/patient monitor to complete the package.









AIR AMBULANCE RETURNS TO SEVEN-DAY OPERATION



Despite the Covid-19 pandemic, a steady stream of donations and virtual fundraisers has enabled Ireland's first charity air ambulance service return to a seven-day operation, and the Helicopter Emergency Medical Service can now continue its mission to save lives.

he unwavering public support during the Covid-19 pandemic has ensured that the air ambulance service return to a seven-operation from 1 June, to save lives in need, according to Donna O'Regan, Project Manager of the Irish Community Rapid Response (ICRR), which operates the service.

"The Air Ambulance had operated a five-day only service due to costsaving measures put in place earlier this year, after the unprecedented number of missions and Covid-19 put financial pressure on our service," she noted.

O'Regan said that a return to the seven-day service has been a huge focus for the ICRR team. "We are thrilled to finally see this criticallyneeded air ambulance where it should be – in the air when we need it most. However, the ongoing challenge of keeping it there is our priority and continued support from those than can give is vital. Every mission counts, so every donation counts too." Since commencing operations in July 2019, nearly 520 missions have been flown within the past year. Recently the service was tasked to a serious medical emergency in rural Adrigole on Beara Peninsula in Co. Cork, where a family member suffered anaphylaxis (a severe allergic reaction) and needed immediate lifesaving care.

INNOVATIVE FUNDRAISERS

To express their gratitude to the ICRR Air Ambulance crew, the O'Neill family from the Beara Peninsula set up a 'Go



"Every mission counts, so every donation counts too" – Donna O'Regan, ICRR Project Manager.

Fund Me' page to raise vital funds to help others in their time of need, and over €12,000 was donated to the page.

Mrs O'Neill said: "I'm so grateful to ICRR for saving my life. Without the Irish Community Air Ambulance and the local ambulance service we, as a family, could have had a vastly different outcome that day. We want to raise awareness about the importance of maintaining this vital service. My husband and I are overwhelmed by the generosity of our family, friends and the public."

Innovative fundraising in the face of the pandemic restrictions has been a huge lifeline for the service, with recent fundraising ideas like 'Duhallow's Fittest Club' – pitting 23 GAA clubs in the North Cork area of Duhallow against each other in a bid to raise funds for local charities including the ICRR Air Ambulance. The fundraiser raised almost €35,000 on their Go Fund Me page.

Organiser, Sean Linehan said: "We chose the Irish Community Air Ambulance as we see it as a vital service, not only for the Duhallow area, but for the entire Munster region. Participants were delighted to get some fun exercise in whilst also help raise vital funds. Some age-old rivalries also surfaced of course, but it was all very much well natured!"

SUPPORT AND DONATIONS

O'Regan also said: "From myself and all the air ambulance crew, we are so grateful for the outpouring of support and donations from people across Ireland. We sincerely thank each and every person who answered our call.

The online community spirit, by way of donations and showing support with beautifully-drawn pictures being posted to our crews, has made this difficult time an easier journey.

"It's been overwhelming and incredibly uplifting to see so many people understand the necessity of this service for our communities. The O'Neill family fundraiser is just one of many fundraisers that have ensured the air ambulance can continue to respond to the most serious emergencies."

The Irish Community Air Ambulance is part of the ICRR charity, which also has a network of volunteer doctors responding to serious medical emergencies and fighting the COVID-19 pandemic on the frontlines.



As reported in a previous issue of 'Emergency Services Ireland', pictured at the official lift-off of new air ambulance from Rathcoole Aerodrome in North County Cork on 2 September 2019 were (I-r): Martin Dunne, Director of the National Ambulance Service, John Kearney, ICRR Founder CEO, the then Tánaiste and Minister for Foreign Affairs and Trade Simon Coveney, John Daly, the then Minister of State, Department of Health, and John Murray, Captain of the charity chopper.

The ICRR Air Ambulance is tasked through the HSE National Ambulance Service (NAS) National Emergency Operations Centre via 999/112 calls, while the Advanced Paramedics and EMTs aboard the helicopter are NAS staff members. Each mission on average costs €3,500.

CELEBRATING THE FIRST YEAR IN OPERATION

Ireland's first community-funded air ambulance celebrated its first 12 months in operation on 30 July.

During this time (as of 22 July 2020), the charity chopper has been tasked to 513 emergency medical incidents in rural and urban locations across Munster, Leinster and Connaught.



For further informatio visit www.icrr.ie

Tasked by the HSE's National Ambulance Service, the team responds to the most serious emergencies, where time can make the difference between life and death. The most common call-outs include cardiac arrest, road traffic collisions, fall from height, equestrian incidents, farming related injuries and stroke.

"These past 12 months have proved that the Air Ambulance is a vital service and the community has really got behind us. People know that they could need the Air Ambulance at any time, and our mission is to be there for them in those times of need," noted John Finnegan, Chairperson of the ICRR Board.

He also highlighted the partnership with the National Ambulance Service as being a key component in the air ambulance's operation. "We are proud of our strong relationship with NAS, which has ensured the highest levels of advanced paramedic care is in our helicopter, leading our team."



TELEMEDICINE ZOOMS IN ON NEW DIGITAL AGE OF PATIENT CARE

With the highly infectious coronavirus having propelled Irish healthcare into the digital age, telemedicine may now well become part of the 'new norm'. Lorraine Courtney talks to those at the frontline and finds an increasing appetite to use video solutions for medical consultations that looks set to continue into the future.

t the beginning of March, the HSE urged Ireland's GP surgeries to reduce their face-toface appointments to prevent the potential transmission of Covid-19.

The virus has fundamentally changed the way medicine is practiced in Ireland, particularly in general practice, according to Dublin-based GP Dr Knut Moe.

He said that at the start of the pandemic, most queries had been dealt with by phone or video consultations (probably about 90%), adding that prescriptions were emailed to pharmacies using 'health-mail' and GPs were back wearing scrubs, masks etc.

In many ways, innovation comes at a time of crisis,

so many practices have used the opportunity to adopt new strategies and policies, some that may have been otherwise slow to be introduced at HSE level or slow to be adopted in the community.

COLLATERAL DAMAGE OF COVID

"We have seen a dramatic fall-off in numbers contacting their GP for advice, leading to concerns about the 'collateral damage' of Covid – patient care has been delayed by not seeking medical help in a timely enough manner," Dr Moe told *'Emergency Services Ireland'*.

Irish GPs have been slow traditionally to adopt telemedicine, often saying that there's no substitute for 'eyeballing' a patient. "However, in a patient with whom we already have an existing relationship, it can be quite a useful tool and certainly can be more beneficial than a phone call for all the visual clues it can give," he claimed.

"Only recently a patient described a 'small blister' on a finger, I started a video consultation to assess it and the resulting sight prompted me to refer the patient to hospital, where she spent nearly 10 days and nearly lost the finger!"

Telemedicine is here now, with most GPs and many consultants having had some experience with it over the

past few months, so it is likely here to stay in some way.

> "Increasingly, people are stuck in work or at home with kids and unable to visit their GP for some reason, so I do think that there will be times when we come through the other side of Covid-19 that it will be useful," he noted.

"However, it works best when the GP and patient have an existing relationship and it's certainly not appropriate for many types of consultation. One thing that we often pick up as general practitioners with our patient are the visual cues, such as a change in body language or something not quite right that prompts us to dig a little deeper, often to reveal the hidden agenda of why the patient





The virus has fundamentally changed the way medicine is practiced in Ireland, particularly in general practice, according to Dr Knut Moe.

is really attending, perhaps with mental health or psychological concerns," according to the Churchtown-based GP.

"These can be the most rewarding consultations, but they are more difficult to pick up on the phone or even in video consultations, so we have to look out for these cues even more carefully."

NEW DIGITAL SOLUTIONS

And in terms of the new digital solutions now being put in place, it means that GPs have a more effective system of triage, which should vastly reduce the number of time-consuming face-to-face consultations needed in the future.

Irish company RedZinc is now providing two main video solutions for medical consultations. The first is the 'BlueEye Handsfree' platform - a headset with integrated high-definition camera, using a smartphone for mobile connection.

The healthcare provider who is local to the patient (paramedic or community nurse) wears the video camera and can send live video footage to the hospital for the purpose of getting medical expertise.

The ergonomic design and lightweight hardware make the video

'ICU FAMILY LINK' AT UNIVERSITY HOSPITAL GALWAY

University Hospital Galway's new video call system - ICU FamilyLink - enables contact between families, patients and the clinical teams providing care, which is particularly important as visitors are not permitted into the hospital, due to the COVID-19 pandemic.





Using the BlueEye Handsfree' platform (a headset with integrated highdefinition camera, using a smartphone for mobile connection) the paramedic or community nurse wears the video camera and can send live video to the hospital to get medical expertise.



The healthcare professional logs into the BlueEye Direct Video and can send a link to a patient's smartphone, whereby the patient can click the link to initiate a video call. No app is required.

camera easy to wear and use in an emergency. The doctor in the hospital can see and speak with the patient, and give senior medical support and help with pre-hospital diagnosis, treatment and oversight.

"This platform would be used by any remotelylocated first responder service such as ambulance, fire and police to call for assistance with video. It can be used for many emergency applications but also for cases such as community nursing, for example if a community nurse is unsure as to whether an



"Doctors are delighted to be able to use a video service, allowing them to maintain contact with their patient visually and audibly while remaining at a distance from them during the pandemic" - Donal Morris, RedZinc's Founder and CEO elderly/frail person needs to go to the Emergency Department in an ambulance," said Donal Morris, RedZinc's Founder and CEO.

He told '*Emergency Services Ireland*' that the time saved in diagnosing a medical condition or providing help or direction to the right hospital department can improve patient outcomes and save time in rehabilitation and save hospital and first responder resources.

VIDEO OUTPATIENT CLINIC

The second video service – a video outpatient clinic called 'BlueEye Direct Video' – was adapted from the 'BlueEye Handsfree' platform and arose directly from the challenges imposed by Covid-19.

"BlueEye Direct Video is a secure, reliable and easyto-use telemedicine solution," said Morris. "It is a webbased, real-time video communication service between two devices. BlueEye Direct Video can be used as a video outpatient clinic for hospitals, or for any healthcare professionals such as nurses, therapists and clinicians."

The healthcare professional logs in and sends a video invite to the patient's device. The patient simply clicks the link to initiate the video call. "This service can be used by any clinician who can progress the patient's health, such as physiotherapy, mental health, genetics, haemophilia, occupational therapy etc, through remote video consultation," said Morris. "It is very beneficial in a pandemic situation where neither patient nor doctor wish to be exposed to contagious viruses."

Doctors are delighted to be able to use a video service, which allows them to maintain contact with their patient visually and audibly while remaining at a distance from them during the pandemic, said Morris.

"They need to be in a good Wi-Fi location for the service to work well. Surgeons are using BlueEye Handsfree to train doctors who can remain outside the operating theatre, yet they get to see and hear first-hand what is happening in the surgery.


TALLAGHT UNIVERSITY HOSPITAL ZOOMS IN ON VIDEO TECHNOLOGY

Tallaght University Hospital has introduced numerous new digital solutions to assist patient care and enable patients and their families to keep in touch during the pandemic. New technology combined with existing innovation has been put in place to support hospital staff communicating with colleagues in order to efficiently treat and diagnose patients as well as helping them provide support for

between colleagues as well as patients and their families. Advances in ICT have facilitated a number of 'firsts' for the hospital including an online interactive lecture series using Zoom, medical teams being able to consult with colleagues using wearable cameras, remote monitoring and virtual

"Emergency doctors are using BlueEye Handsfree to assess the emergency and provide decision-making and approvals for different situations, such as sending the right medical assistance or deciding that an ambulance is not, in fact, necessary or sending the injured person to the right hospital department specialised to deal with their issue."

PATIENT CONFIDENTIALITY

Hospitals are very busy supporting clinicians working through the new clinical processes and the need to ensure patient confidentiality using brand new technology. Video gives hospitals new options in terms of the care they can offer while protecting and assisting their staff and patients.

"Covid-9 has brought many challenges to the healthcare system globally," said Morris. "Video helps healthcare providers to see and hear patients remotely, and it offers assistance in terms of diagnosis and treatment and support.

"We believe that once healthcare providers become familiar with using the new BlueEye Direct Video technology and see the benefits of supporting patients in their own homes, with no need to travel, they will be more inclined to use video services in the future.

"It is an ideal tool for follow-up consultations where the patient needs to communicate verbally and visually. It is also ideal for contagious situations such as Covid-19 where patients and doctors need to isolate from possible contagion."

The BlueEye Handsfree platform has always had obvious benefits and this will go from strength to strength as healthcare providers get used to using video and come to

see the advantages, he added. "Using video can save a lot of time for doctors who don't need to travel to patients in different hospital locations or clinics," said RedZinc's founder and chief.

BECOMING THE NEW NORMAL

"It will help to reduce the waiting lists, which have been building up throughout this pandemic in terms of follow-up patients who need support or check-ins on their progress at home. The doctor can get a more rounded view of the patient by seeing them in their home surroundings, which can be useful for progressing treatment."

Before the Covid-19 pandemic, telemedicine seemed like a luxury, but people are now thinking that a technologybased healthcare experience will become the new normal. One major development to have emerged for the healthcare sector from the coronavirus crisis has been the incorporation of telemedicine into routine medical care and it certainly promises to be transformative.

And while telemedicine is not a substitute for seeing and physically examining a patient, it is certainly of benefit to some patients, especially elderly patients, who may not be able to leave their homes.

"Certainly during Covid-19, there needs to be a good reason to bring a patient into our practice, potentially exposing them (and us) to asymptomatic transmission," said Dr Moe. "There are other benefits, particularly for the more elderly or those with mobility issues, who live far away from their GP in more rural areas, or those with young children. It can allow us to treat conditions more quickly than we may otherwise be unable to do."



CARDIOLOGY TRIAL HELPS PATIENTS TO AVOID HOSPITAL ADMISSIONS

The cardiology team at Galway University Hospitals (GUH) has carried out a first-in-man clinical trial for a sensor, which detects changes in the health of patients with heart failure and securely transmits the information to the care team for review, to hopefully avoid hospitalisation.

ince January 2019, seven patients with advanced heart failure have had a Cordella Sensor implanted in their right pulmonary artery to monitor their heart pressure. Using a secure cloudbased system, the physiological data from the sensor can be read daily by the hospital's clinical team who can identify if there is a change in the patients' condition and modify their medication and make other decisions on their care.

This technology had been particularly relevant when patients with underlying conditions were cocooning to minimise their movements and the chances of contracting Covid-19. Leading the clinical trial, Dr Faisal Sharif, GUH Consultant Cardiologist and Director of Cardiovascular Research and Innovation Centre at NUI Galway, said: "Patients with advanced heart failure usually have three or four hospital admissions per year with each stay lasting between two and three weeks in order to get their flare-up under control.

"However, there are changes in the pressure of the pulmonary artery around a week before a flare-up and if these changes are detected in time, myself or my colleague Dr John Barton can make changes to the patients' medication to prevent the flare-up and the subsequent hospital admission."

EASY ACCESS TO DATA

"To monitor the pressure in the pulmonary artery we insert a tiny sensor into the artery – it is a simple procedure that just requires an



Pictured in one of the cath labs at GUH (I-r): Eileen Coen, Research Nurse at GUH/NUI Galway; John Killilea, Research Assistant at NUI Galway; and Dr Faisal Sharif, Consultant Cardiologist at Galway University Hospital (holding the sensor reader used by patients with heart failure taking part in a clinical trial at the hospital).

overnight in hospital. We can then receive the data from the patients when they are at home, via a handheld reader which they hold over the sensor and this in turns transmits the information directly to our clinic by WiFi.

"In addition, the Cordella System includes Bluetooth-enabled devices to measure blood pressure, weight, heart rate and oxygen saturation which all connect to our clinic. We then have all the data we need, without the patient having to leave home."

Since the start of the clinical trial in January 2019, none of the patients who have taken part have been admitted to hospital with heartrelated illnesses, he added.

"Also they no longer need to travel to outpatient clinics, which would typically involve six or eight visits per year. This greatly improves the quality of life for our patients and during this time, it is one less worry for them."

PATIENT'S PEACE OF MIND

"Besides the convenience of being able to check their condition at home, this new technology allows the patient to become actively involved in their treatment. The patients become part of the team and are empowered and motivated to get involved in managing their own care themselves."

John O'Connor, a patient from Galway City, said, "This technology gives me peace of mind that my heart pressures are being monitored constantly by hospital staff without the need for me to go into the hospital. Since I've had the sensor I've had no hospital admissions for almost two years. I would highly recommend this to other patients."

The second phase of the clinical trial is open for patients with heart failure, who meet certain criteria, and they're being treated at GUH's Heart Failure Clinic. The technology has been developed by a US-based company called Endotronix. The trial has been running simultaneously in Ireland and Genk in Belgium.



ORDER OF MALTA COUPLE AT THE FRONTLINE OF COVID-19 RESPONSE

Dr Lisa Guthrie and her husband Bernard took on new roles within the Order of Malta Ambulance Corps in January and within the space of two months they found themselves in the middle of a pandemic. Based in Ballina, Co Mayo, the couple have been at the heart of the national response to the Covid-19 pandemic. Report by Deirdre O'Flynn.

specialist registrar in University Hospital Galway (UHG), Lisa Guthrie became the Order of Malta's first female Chief Medical Officer, since the organisation was established in Ireland in 1938. Her husband Bernard, who joined the Order of Malta as a cadet aged 10, became the organisation's Assistant National Director, in charge of operations and finance.

The Order of Malta has 2,500 volunteer members in Ireland and its Ambulance Corps provides first aid and emergency medical ambulance services to an extensive array of organisations, events and festivals throughout the island of Ireland.

Members deliver training in first aid and health and safety, co-ordinate and manage community care services including day care centres, community care centres, centres for the elderly and support welfare clinics for the homeless. They also provide essential respite for disabled young people and train cadets, aged between 10 and 16 years, in basic lifesaving skills and offer them personal development opportunities.

As one of the largest providers of pre-hospital emergency care and voluntary ambulance services in Ireland, the Order of Malta is listed as a 'Voluntary Emergency Services' resource available to the Health Service Executive under the Framework for Major Emergency Management.

OPERATIONS DURING PANDEMIC

Based in Ballina, Co Mayo, Bernard and Lisa Guthrie have been at the heart of the nation's response to the Covid-19 pandemic – participating in the Order of Malta's National Covid-19 Task Force twice-weekly meetings, and also monitoring the evolution of the virus throughout the country.

At an operations level, the pandemic has impacted the organisation significantly from the top down. "Our clinical directorate in the Order of Malta had a three-year plan to standardise pharmacy orders and nursing practices and we had added a new pharmacist to the directorate," said Lisa, who "The directorate met in February and we have had online video meetings since then. All members of the



Bernard and Lisa Guthrie pictured on duty during the visit of Pope Francis to the Knock Shrine on 28 August 2018.

directorate are frontline workers, fulfilling clinical roles in their day jobs, so we have had to defer some of our plans until September or October," she noted.

Operationally, the organisation has undertaken over 1,050 duties across the island of Ireland (at the time of writing in mid-May), according to Bernard. These were all delivered in full compliance with the emergency legislation and sanitary and social distancing directives of both the Irish Government and the Northern Ireland Executive, respectively. All of the Ambulance Corps' units co-operated closely with the emergency response programmes in both jurisdictions.

"Our 65 Ambulance Corps units were involved in transferring patients to hospitals, delivering medications, Covid-19 testing kits and specialist equipment to hospitals and clinics, and they are in daily communication with the National Director's Office at Headquarters," he added. "The units also provided ambulance support to a number of the Covid-19 Assessment Centres throughout the Dublin metropolitan region seven days a week."





Order of Malta's Chief Medical Officer demonstrates CPR during a training day for cadets.

respond when the chief pharmacist in some hospitals needed medicines delivered to vulnerable people around the country. Those vulnerable people included not just the elderly, but people living with HIV, tuberculosis and cancer."

That response also involved having a duty of care to the organisation's own members. "Personal Protective Equipment (PPE) was a huge issue and it was difficult to source," he added. "That has improved now but, when we were called in by the HSE and the Department of Justice, they provided the appropriate PPE. We made sure of that because of our duty of care to our volunteers."

CANCELLATIONS PROVE COSTLY

All of this recent activity – and everything else the organisation does – comes with a financial cost and, as with many organisations, the cancellation of events has hit the income stream of the Order of Malta.

"A lot of our major duties were postponed for big concerts and events such as the National Ploughing Championships. They're all major contributors to our charitable works, so that makes for a financially precarious situation that may only get worse as

MULTI-AGENCY COLLABORATION

In addition, the Ambulance Corps' special Covid-19 Task Force continued to monitor the evolving situation daily and collaborated closely with the National Ambulance Service, Civil Defence, Red Cross, St John Ambulance and other voluntary paramedical humanitarian and charitable organisations.

"We issued our own Standard Operating Procedures around Covid-19," said Lisa, adding that the Order's chief practitioner is involved with the Pre-Hospital Emergency Care Council (PHECC) and was familiar with the necessary standards.

"We were flexible in adapting to Covid-19 and able to apply the practices from our clinical day jobs and replicate them for our units, for instance, in terms of protocols for taking persons to the emergency departments."

Those protocols and guidance meant that the Order of Malta was able to swing into action quite quickly, said Bernard. "For instance, the Department of Justice contacted us to help with refugees and we were able to step up. Likewise, we were able to



Lisa pictured on board the Essex & Herts Air Ambulance Charity Air Ambulance, during an observer ship day.





The Westport Order of Malta branch marked its 75th anniversary in 2018 with a number of competitions and events on that October; Lisa and Bernard pictured at a dinner dance at the Westport Woods Hotel following the weekend's events.

As with everything, life goes on, nothing stays the same, and so Lisa is moving to England for a year to take on additional training. "I'll be training in pre-hospital emergency medicine with the air ambulance unit in Essex and Hertfordshire." Essex & Herts Air Ambulance Trust (EHAAT) is a Charity Air Ambulance service providing a free life-saving Helicopter Emergency Medical Service (HEMS) for the critically ill and injured of Essex, Hertfordshire and surrounding areas. She welcomes the new challenge having worked in Emergency Departments around the country as part of her training for 10 years.

RAPIDLY CHANGING SITUATION

And not surprisingly, University Hospital Galway's Emergency Department was at the centre of the response to Covid-19 in the west of Ireland.

"When we were gowned up, we tried not to talk about Covid-19," she said. "Ironically, people came to work and talked about everything else, in part to get some respite from the overwhelming amount of information on the news, social media, WhatsApp groups.

"The situation was changing so rapidly in the early days - on one

the year goes on. Our organisation is a voluntary effort but there is a lot of expense involved," noted Lisa.

In addition, the Order of Malta's own events have been cancelled. "Our cadet competitions in April were cancelled, our international pilgrimage to Lourdes in May was postponed, and our global Grand Master, Fra' Giacomo Dalla Torre del Tempio di Sanguinetto, died in April, so nothing stays the same," she added.

GLOBAL ASSISTANCE

That global nature of the Order of Malta was a particular benefit during the pandemic. The organisation is active in 120 countries caring for people in need through its medical, social, and humanitarian works.

"I was in touch with other chief medical officers around the world, especially Germany, sharing experiences and hearing about what was going on in their countries," noted Lisa. "On Zoom, I participated in international meetings and, from a medical point of view, Ireland held up very well in terms of our response to Covid-19."



The cancellation of big concerts and events, such as the National Ploughing Championships, during the Covid-19 pandemic has hit the income stream of the Order of Malta.

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occasion, the protocol changed three times in the 12 hours between my work shifts. So, there was almost a cognitive overload," Lisa recalled.

Fortunately, PPE was not an issue. "In Galway, the PPE was always on point and it became second nature to us. But, initially, you had to get over the fear of seeing colleagues fully gowned up."

PRIDE AT NATIONAL LEVEL

Now, what next for the Order of Malta? "Our national conference had been scheduled for November," said Lisa.

Due to the ongoing pandemic the event will have to be deferred. "If we had been able to do that, we would have concentrated on the fantastic effort put in this year by our volunteer members. We all helped each other and that didn't require a particular skill set; what we needed was care and compassion to do our work.

"There's a great sense of pride at national level and I am so proud of all our members. The pre-hospital voluntary services continue to give a huge service to the country, often without recognition."



Lisa Guthrie pictured in Lourdes as part of the Order of Malta's voluntary work.

ABOUT THE ORDER OF MALTA

The Order of Malta was formed in Jerusalem in 1099 and has been headquartered in Rome since 1834. Known also as the Sovereign Military Hospitaller Order of St John of Jerusalem of Rhodes and of Malta, it is a lay religious order of the Catholic Church.

The organisation runs medical, social, and humanitarian projects in 120 countries. Internationally, it is especially involved in helping victims of armed conflicts and natural disasters by providing medical assistance, caring for refugees, and distributing medicines and basic equipment for survival.

It has social assistance programmes to help the homeless in developed and developing countries, cares for people often pushed to society's fringes including the disabled and elderly, provides first-aid and organises medical and social campaigns.

In 1938, the Irish organisation's Chancellor, the Marquis Patrick MacSwiney of Marshanaglass, and Dr Charles Conor O'Malley, Professor of Ophthalmology and Otology in University College Galway, commenced the Order of Malta Ambulance Corps' services as the organistaion's primary charitable activity.

The first unit was established in Galway and, within ten years, ambulance corps' units were established in other Irish cities and towns, and they are continue to be actively engaged in providing emergency medical assistance to local and rural communities.

This service provided the blueprint and example for the development of similar ambulance and mobile emergency medical services elsewhere such as Malteser Hilferdienst in Germany and Malteser International. Subsequently, the organisation in Ireland expanded the range of its activities in the provision of care and support services for the disabled, elderly, marginalised and vulnerable.

For further information on the Order of Malta contact: Tel: 01-6140031; email info@orderofmalta.ie website: https://orderofmaltaireland.org/ or check out their Facebook Page: OrderofMaltaIRL



LIFESAVING 24/7 CRISIS TEXT SERVICE LAUNCHED

A new free text-based mental health service funded by the HSE is the first of its kind for Ireland to provide everything from a calming chat to immediate support for people going through a mental health or emotional crisis. It is expected that '50808' will support over 50,000 people each year once it is fully operational.

he service uses an artificial intelligence (AI) system to analyse a texter's initial message, scanning keywords, phrases, and even emojis to determine the level of severity. The texters who are seen to be at most imminent risk are placed at the top of the gueue.

There have been over 100 'Active Rescues' via the text service since its pilot phase in September 2019, in which the National Ambulance Service is contacted for a texter in need of emergency support. The service allows trained crisis volunteers to volunteer from home; they complete a 30-hour training and have 24/7 supervision by full-time mental health professionals.

Anne O'Connor, HSE's Chief Operations Officer, said: "The impact of this pandemic will be different for all of us and while not everyone will need mental health support, for those that do, then it's important to have a variety of services that meet those needs.

"Picking up the phone and asking for help can appear daunting, but texting 50808 will connect you to a trained crisis volunteer. Parallel to this important service, the HSE, through our Psychosocial Response Project, is aligning the different levels of supports that are available online, by phone and text to improve accessibility to mental health resources for those who might be struggling at this time."

lan Power, CEO of 50808, said "We now have over 300 trained crisis volunteers providing free, anonymous support to people who are struggling with any issue, big or small. We're also using technology to ensure we're getting to the texters who need us most, first, and using data to

INITIAL FINDINGS OF PILOT PROGRAMME Since the pilot was rolled out in September last year, the service has provided support to over 3,800 people through up to 6,700 conversations, and has revealed the following:

- 832 people were thinking about suicide.
- 360 people were self-harming.
- Top issues discussed included anxiety/stress (40%), depression/sadness (32%), relationships (29%), isolation/loneliness (23%) and suicide (18%)
- 80% are between the ages of 16 and
- 65% are female, 24% male, 2% transgender and 2% non-binary
- 30% are identified as LGBTI-



"We now have over 300 trained crisis volunteers providing free, anonymous support" – Ian Power, CEO of 50808

understand our texter's needs and improve the service. We're excited to make the '50808' number famous so people who need us, know we're here to listen."

- a disability, an existing mental health condition, or other medical condition.
- Reasons for texting: no one else to talk to (50%), want to talk



to someone whom they don't know (48%), more comfortable texting than talking (40%), too embarrassed to talk on the phone or in person (31%), no access to a therapist (31%)



RESEARCHERS CALL FOR GREATER INTAKE OF THE 'SUNSHINE VITAMIN'

Researchers at Trinity College Dublin are calling for new government guidelines for greater Vitamin D intake, in a push for Vitamin D supplementation that over-shines any earlier recommendations.

iving in Ireland means less sun exposure than in other countries while a large proportion of the Irish population has too little Vitamin D in the blood. Scientists at Trinity College Dublin (TCD) say this is a problem and are calling for a change of recommendations with one particular benefit in mind – Vitamin D is required for normal immune health.

In an article published in The Irish Times (11 May 2020), the TCD researchers point out, on behalf of their new report, that Vitamin D supports the immune system through a number of immune pathways. Their research is backed up by a study from Northwestern University in the United States that also saw immunesupporting benefits of Vitamin D.

D-PEARLS - LOADED WITH BENEFITS

D-Pearls from Pharma Nord can offer the following advantages, making the



A growing number of people choose Vitamin D supplements as a way to maintain an adequate Vitamin D status, since the amount of Vitamin D in food is comparatively low.

product both a safe, convenient and an effective choice:

- It contains biologically active Vitamin D3 that is easily utilised by the body.
- Vitamin D content is dispersed in high-quality olive oil for optimal bioavailability.
- D-Pearls have been tested in several published studies where the preparation has demonstrated that it is absorbed and raises blood levels accordingly.
- D-Pearls come in different strengths which makes it easy to adjust your intake to factors like age, skin type, sun exposure level and season.

The challenge with Vitamin D is that it is difficult to get enough of the nutrient during the winter period, where the sun sits too low in the sky for the synthesis to take place in our skin.

Even during the summer, there is often a lack of bright sun to undertake the task, and the amount of Vitamin D in food is comparatively low. That is the reason why a growing number of people choose supplementation as a way of maintaining an adequate Vitamin D status.

To read the article 'Coronavirus: Adults should take vitamin D, researchers say' published in The Irish Times on 11 May visit https://bit.ly/2NNnO9y



PORTABLE STERILISER PROVIDES EXTRA LAYER OF INFECTION CONTROL

CW Applied Technology has developed a Portable UVC Room Steriliser to help the return to work by adding a layer of reassurance in infection control. The unit is already in operation in some areas of the Irish healthcare system including the Beacon Hospital in Dublin.

he UV-C Room SteriliSer is extremely easy to operate, according to John O'Connell, Managing Director of CW Applied Technology. "Following the standard room clean, the UV-C Room Steriliser is merely plugged into a standard socket for the required time and when you come back the room as been sterilised," he explained.

An explanatory video on his company's website www. cwappliedtechnology.com shows how easy it is to operate together with a range of further information on UV-C sterilisation. "This unit is already in use in some areas of the Irish healthcare system including the Beacon Hospital in Dublin, and we are looking forward to deploying more units in the weeks and months to come," he noted.

PROVIDING SAFE CLINICAL PRACTICE

Meanwhile, other healthcare professionals who have used the system are happy with the results. For example, Prof Karen Redmond, Consultant Thoracic & Transplant Surgeon, who is now using this easy-to-store and cost-efficient UV-C room steriliser, says "it takes just under 10 minutes to complement a deep clean, supporting our commitment to deliver a safe clinical practice for employees and patients, following the COVID19 pandemic".

One sterilising device costs \in 3,500 (plu s vat), and discounts are also available if two or more units are purchased. The company also has a flexible payment plan option in place with 'flexifi', so it can be paid off over a few years. In terms of maintenance, the bulbs will need to be replaced once a year.



Pictured following the delivery of one of the first units to the Beacon Hospital were (I-r): John O'Connell, Managing Director of CW Applied Technology (Shannon) Ltd; Dr Jonathan Lyne, MB BChirBSc (Hons) MRCP FHRS Consultant Cardiologist and Electrophysiologist at Beacon Hospital, Blackrock Clinic and Hermitage Clinic; Brian Fitzgerald, Deputy CEO of the Beacon Hospital, and Josephine Redmond, Managing Director of SSHI (Specialist Screening Healthcare Ireland).



DID YOU HEAR THAT DIAGNOSTIC AUDIOLOGY IS BACK IN BUSINESS?

Diagnostic Audiology Services Ltd has reopened for business, and with all staff fully trained in the use of PPE and clinic rooms altered to ensure social distancing, both branches on Dublin's northside and southside are ready to tend to customers' hearing needs again, according to director and audiologist Charyl Nugent.

e appreciate that many of our elderly customers have been cocooning and have been cut off from family and friends. Having a hearing loss may have left you feeling further isolated.

Parents of some of our youngest customers may be worried about any further delay in their child's development.

Diagnostic Audiology Services appreciates your patience and understand you may have been anxious while you waited for us to reopen. We have spent time training our staff in the use of PPE; using face masks; hand hygiene; cleaning our clinic rooms; and preparing patients for returning to clinical appointments.

STAFF AND CUSTOMER SAFETY

Our clinic rooms have been altered to ensure social distancing is adhered to and minimum contact maintained, while ensuring we maintain the highest possible standards we are used to offering.

The structure of our appointments does need to change in line with COVID-19 opening requirements.



Diagnostic Audiology Services care about your safety and the safety of our staff. To this end, we will contact you in advance of every appointment to discuss how this will be achieved.

We will provide you with alcohol gel; on arrival to the clinic and your temperature will



Image: Provide state Diagnostic audiology Services (ireland) LTD

TAKE BACK YOUR HEARING AND YOUR LIFE

be taken before entering our clinic rooms. It is necessary to wear a mask and if you don't have one it will be provided.

Signs and symptoms of hearing loss may include:

- Muffling of speech and other sounds.
- Difficulty understanding words, especially against background noise or in a crowd.
- Trouble hearing consonants.
- Frequently asking others to speak more slowly, clearly and loudly.
- Needing to turn up the volume of the television or radio.
- Withdrawal from conversations.
- Avoidance of some social settings.
- Ringing in the ears/Tinnitus.
- Balance problems.

If you suffer from any of these symptoms contact your GP or Diagnostic Audiology Services directly for a free hearing screen or a full diagnostic audiological assessment.

Call our northside branch in Artane on 01-9015080 or our southside branch in Sandyford on 01-5267870. Alternatively email **info@diagnosticaudiology.ie** or visit **www.diagnosticaudiology.ie** for further information.

WHAT WILL IT TAKE TO KEEP THE CURVE FLAT?

There is a growing use of healthcare apps, wearable sensors and electronic healthcare records, with the HSE's National Ambulance Service adapting technology to improve the services it offers, according to Tom Beegan. He notes that allied health professionals have stepped up to expand their scope of practice to provide a safe, and high quality service.

s Ireland moved through its planned phases of reopening for business during the summer, right across the economy management teams and their boards of directors reopened not for business as usual' but for business that meets customer needs in the new way.

To do this they triangulated the risks associated with the three pillars of a highly functioning organisation – safety, quality and productivity. Successful management of risk is now a non-negotiable key performance indicator (KPI) and must become an integral part of the management style. Everybody who works in the organisation needs to understand the 'why' and the 'how' of managing risks specific to their workplace.

During lockdown there was time for reflection on our past, present and to try to visualise what the future may hold. However, while we cannot predict the future, we can try to influence it so that we are healthier, safer and productive.

In workplaces across the world as they tried to survive by being safe, these workplaces have been transformed out of necessity to respond to this pandemic and we have learned how interdependent and vulnerable we all are. We have



also learned the importance of having trusted scientificallybased evidence upon which to make decisions and for such decisions to be communicated clearly and in a timely fashion to the population.

This approach and with a massive effort to do what we need to do, has seen transformative and innovative solutions emerge on a daily basis. What was previously believed to be undoable is now operational. Behaviours have changed, what's not acceptable behaviour is being called out and not ignored.

FUTURE TECHNOLOGIES

The application of technology facilitated closing the gaps created in how our business and social interactions occurred during this lockdown. We can now experience real-time virtual consultations, remote monitoring, remote meetings, the rise in the cashless society, increase in online shopping, social media and working from home, to name but some.

Artificial Intelligence (AI) and other future technologies allow for systems to convert real-time data into knowledge for consideration and application for key decision-making. Many workplaces now have time-delayed cameras, CCTV, Radio Frequency Identification Devices (RFIDs), risk management software and 3-D printing – just some of the technologies that will forever change the world of work.

Based on what we know today, technology on its own cannot solve all complex problems faced by society. However, based on our pre-and post Covid-19 experiences, we do know that technology can expand capacity to respond, bridge the geographical access gaps to expert advices, and speed up decision-making without always using face-to-face contact.

The majority of those responsible for workplaces are fully focused on leveraging the wisdom and skills of their employees, which will be integrated with the power of technology to future-proof their business from further shocks, competition and change.

HEALTHCARE APPS

Healthcare has been and will continue to be at the centre of these changes. We have seen new ways being found and funded to meet current and projected needs. A type of digitalisation in primary care took place through a combination of available technology and a restatement of procedures to remove non-value adding activities.

There is a growing use of healthcare apps, wearable sensors and electronic healthcare records. The HSE's National Ambulance Service is the international leader in the adoption of technology to improve the services it offers. We have seen allied health professionals stepping up to expand their scope of practice and providing a safe, high quality service.

Our recent experience is that when people are empowered and allowed access to information and treatments, that heretofore required disruption to routines, travel, crowded waiting rooms and unnecessary delays, they embrace such change.

Of course, this was facilitated by our heroic healthcare workers demonstrating a spirit of caring and service, in circumstances that placed their own health at risk, while caring and treating patients severely ill from Covid-19.

There is a price to be paid, other than financial, for 'flattening the curve', with healthcare workers now mentally and physically drained. Clinicians advised us of the healthcare needs of people which went unmet, creating a new surge which may bring the system into further crisis.

Our healthcare system is under seemingly continuous review and issued with countless reports which never get fully funded or implemented. Is this wishful thinking or could it be different this time, post lockdown?

Limited though it has been the adoption of technology together with greater empowerment of the patient, has worked. The report on mental health will recommend the greater use of technology in the assessment and treatment of psychiatric illness. The concept of 'self-managed care' and 'self-directed care' is in operation in many jurisdictions.

INTEGRATED PATIENT CARE

Ireland can learn from these experiences, and in so doing may ensure the care is 'integrated' to best meet the needs of the patients. Apart from the return of control to the patient it also opens up the possibility of treating the person at the lowest level of complexity and having timely access to assessment, treatments proposed and care given which is monitored in-situ, at a time and a cost which is pre-determined.

People can be empowered to monitor and manage their own health and in doing so make a major impact by removing a significant level of activity away from the



ABOUT THE AUTHOR

With a 40-year successful track record of achievement within the private sector, government and nonfor-profit organisations, Tom Beegan has unique European and Canadian senior management expertise in transforming the potential of organisations, teams and individuals to achieve high performance.

He facilitates executives and their teams surmount their most important risk management challenges by focusing on getting to understand why people behave as they do and then coaching them to become highperformance teams. A qualified psychiatric nurse, he graduated with an Advanced Management Diploma and MBA from UCD. He has also attained a professional designation of Charted Directorship in Corporate Governance and Accountability from McMaster University, is trained as an arbitrator with the UK Institute of Arbitrators and has studied Strategic Thinking with the Schulich School of Business in Toronto.

He was Deputy CEO of the Health and Safety Authority for five years (1996-2001) before his appointment as CEO, a position he held for a further five years. In 2006 he moved to Canada to take up a position as Chief Prevention and Strategy Officer for Ontario's Workplace Safety and Insurance Board (WSIB) in Toronto, until January 2012 when he returned to Ireland.

Tom is Managing Director at Tom Beegan and Associates, which specialises in behavioral-based approaches to managing risks. He also serves as a director on various boards.



emergency departments of our acute hospitals.

The Government has the opportunity to nurture and build on the flexibility, commitment, caring and innovation delivered by our healthcare workforce. It will be a challenge to continue to build trust and instil confidence in a process which will reimagine how our Irish healthcare system can deliver world class outcomes. solutions are required, so too is a national framework and a set of principles to guide their design and implementation.

The new Minister for Health Stephen Donnelly would be well-advised to carefully evaluate technology-facilitated mechanisms of both improving the delivery of healthcare and returning an adequate return on investment for the Irish taxpayer.

This approach should embrace the private sector and service users in a true partner, driven by people's needs rather than vested interests and current organisational structures. Prioritised investment in integrated selfmanaged care which will help reduce inappropriate activity in the acute hospital should be pursued.

The technology is available, the needs are evident and staff have shown they will respond positively. Before Covid-19 there was a risk-averse appetite in policy towards the implementation of a formal telemedicine approach with a few islands of innovative 'pilot projects' being the extent of engagement.

This has now changed with the risk-benefit analysis and the public's perception in seeing telemedicine more broadly implemented, with an increased awareness and acceptance resulting in better level of service.

However, worrying signs are already emerging of a fragmented approach that will not be in the best interests of service users or patients. While innovation and rapid implementation of



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FOCUS AREAS FOR A SUCCESSFUL EMERGENCY RESPONSE

The Covid-19 pandemic has demonstrated that effective co-ordinated emergency planning and preparedness is crucial in minimising casualty and fatality numbers. In providing a brief general guide to emergency responses with an emphasis on temporary mortuary and mass fatalities, Dr Trish Markham Dr René Gapert and Paul Rock state that public health requirements and ethical treatment must be upheld throughout the fatality-handling process.

ational emergencies come about in various ways such as natural, transportation, technological and civil

emergencies. Incidents involving mass fatalities are particularly challenging, potentially adding unprecedented strain on emergency services, healthcare systems and death investigation systems. To support a response, countries including Ireland have developed inter-agency preparedness in the immediate treatment of a large number of fatalities in an emergency situation.

The nature of mass fatality incidents can differ. Having a flexible strategy that can be used to cope with unique influences can assist agencies to be in a state of readiness to deal with complexity.

This facilitates the development of contingency to support capacity creation and capability to adapt to emerging challenges. There are areas, such as effective inter-agency preplanning that when focused upon have the ability to positively impact on a successful and timely response.

In mass fatality incidents, it is important that public health



Ireland and other countries have developed inter-agency preparedness in the immediate treatment of a large number of fatalities in an emergency situation.



requirements and ethical treatment are upheld throughout the fatality handling process. It is essential that families and friends are assured that their loved ones are taken care of in a respectful manner, that permits the responding agencies to identify, deal with and track the fatality at all time.

INTERAGENCY PLANNING

Organisational preplanning and engagement with stakeholders around potential incident scenarios facilitate the development of relationships across agencies and creates a culture of collaboration.

Interagency planning and preparedness facilitates effective co-ordination for task allocation and incident management in the response phase. In relation to mass fatality emergencies, areas for consideration include the continuity of services, possibly over a long duration and adaptive infrastructure capabilities in terms of delivering the requirements of the response.

An effective response depends

on pre-planning, exercising and effective communication between all stakeholders involved in the response. Having a knowledge and understanding of the potential requirements for dealing with particular numbers of deceased in a very short time frame in a particular location is crucial.

Temporary mortuaries are available in different formats worldwide and come in various sizes which can be utilised as short-term temporary body storage solutions depending on the magnitude of the incident. A small number of fatalities may only require adequate storage until further examination and/or final disposition.

Medium to large-size mortuaries or purpose-built large-scale systems need a safe accessible space, water and electricity supplies and sewerage/ waste system. The type of incident will dictate the requirements for specialised equipment, for example a body holding unit versus a fully functional mortuary with Disaster Victim Identification functions. **Governance:** Clear governance structures create clarity around individual responsibilities, lays accountability for actions and portrays where associate authority exists for decision making.

Dependencies and interdependencies can be collaboratively agreed to ensure the elimination of any uncertainty, gaps and manage any emerging risks. By establishing governance, each part of the process will have aligned responsibility and promote safe and clear management in the system of managing fatalities.

A clear management structure, which is available within the first hours of the structural set-up of a temporary mortuary needs to be considered before an incident occurs. Areas of responsibility may include facility management (outside), casualty bureau including family liaison, site management and security, mortuary management (inside the facility), overall authority over the death investigation system, technical



management and specialists' managements.

Roadmap: The existence of plans, pathways and algorithms provide a roadmap that supports clarity and signals the specific requirements in a response. They provide a platform that can be amended as new evidence emerges and specific requirements become evident. The ability to rapidly establish end-to-end requirements supports transparency for all involved including the public when responding to an incident.

Planning for the most likely mass fatality occurrences in Ireland includes identification of appropriate sites and allows for the visual mapping of temporary mortuary deployments. Decision trees and graphics displays assist with visually displaying detail and can be quickly amended in an evolving emergency environment.

Information: Sharing knowledge such as evidence and data with real-time access provides valuable insights for groups and people to guide and plan the construction of relevant work plans. The development of guidance and its dissemination through technology platforms to stakeholders and to the public provides clear messaging around key

issues, determining priorities and the suitability of the methodologies and tools to be deployed.

Providing clear information to the public is crucial in retaining trust in the organisation and that the systems that haves been put in place are fit for purpose. Any misunderstandings regarding mass fatalities that arise should be immediately corrected as this may lead to mistrust, anger and upset.

Connectivity: Internal and external communication through the use of media platforms including leaflets, websites, press releases, social media and live updates create structures for disseminating information in a fast and effective manner, reaching large audiences. By being professionally connected, requests for actions can occur in a planned, collaboration and co-ordination at all levels and with all people.

Systems: The interoperability of systems, processes and procedures supported by remote access facilitates an integrated and comprehensive endeavour and supports the ability to re-engineer current and future requirements to meet emerging need and support proficiencies and the

ABOUT THE AUTHORS:

Dr Trish Markham has 30 years' healthcare experience spanning the UK and Irish healthcare systems. Having begun her career in the clinical field as a nurse, midwife, health visitor and public health nurse, Dr Markham gained experience in hospital, maternity, primary care and community services.

She has worked in the corporate setting in a variety of roles, supported an emergency management function for 15 years and has worked exclusively in the area for seven years. Trish holds postgraduate qualifications in healthcare management and leadership and has completed a PhD in the area of quality.



Dr René Gapert is a certified forensic anthropologist with over 20 years' experience in the dissection of human bodies and over 17 years' experience in the examination of human remains for forensic human identification. He is experienced in the analysis of skeletonised, mummified, burnt and decomposed remains/body parts and has assisted in the investigation of unidentified remains in missing persons cases, building fires, forensic exhumations and mass fatality incidents.



Dr Gapert consults for various organisations such as the Irish Coroners' Service, An Garda Síochána, Police Service of Northern Ireland, Office of the State Pathologist and Forensic Science Ireland.

He has worked internationally in the UK, Germany and Sweden on behalf of local coroners, the Australian Government, the German police and the Buchenwald Concentration Camp Memorial Museum and is member of various international Disaster Victim Identification organisations.

Paul Rock: An experienced crisis management professional with over 25 years' experience –18 years with Dublin Fire Brigade and seven years as a National Advisor for Emergency Management.

Paul holds qualifications in Forensic Science (MSc) from Anglian Ruskin University, Cambridge and a Masters in Emergency Management from Dublin City University, in addition to having vast experience in international disaster management and training.

He is currently a United Nations Disaster Assessment and Coordination (UNDAC) expert and a European Civil Protection Expert (EUCPT) and is the President of the Fire Investigation Association of Ireland (FIAI).





reorientation of services. Accessibility to systems, particularly out-of-hours, requires testing to ensure availability and that problem shooting is examined prior to an incident.

Capacity: Having an understanding of the essential business of an organisation and plans in place to scale back services (whilst meeting legislative and statutory requirements) supports the ability to effectively and safely create surge capacity to support resilience in terms of

rer tech

performance capability to meeting emerging need.

The step-down from a mass fatality incident is just as important as the initial deployment. As the workload decreases, plans previously agreed on can be put in place to facilitate the reduction of services and staff on site until such time that the mortuary is no longer required. Staff rostering and the redeployment of personnel is an area that required planning to ensure the available of alternative staff to allow for time off and rest.

Horizon Scanning:

Essentially, horizon scanning examines incidents that occur in other countries and provides the platform for anticipating the emergent of issues in terms of forward planning and preparation around areas such as demand and availability of appropriate resources.

Mass fatality incidents are a global phenomenon and require up-to-date standards in treatment of the deceased and the responses to such incidents. International co-operation and information sharing are crucial in fostering good relationships and reciprocal learning by exchange of experience and expertise. These eight

areas provide an outline that when combined provide an organisation with a strategy to respond in a coherent and structured manner to an incident. The ability to rapidly assess requirements, engage with stakeholders and establish role and responsibilities underpins the effectiveness and efficiency of the ability to act and thus respond to the incident as it emerges.

For further information please contact Dr René Gapert by email **forensic@hrsi.ie** or visit **www.hrsi.ie**.

For more information call 00353 45 531 528



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LEADERSHIP IN TIMES OF CRISIS LESSONS LEARNED BY US ARMY GENERAL

As leaders around the world battle to bring their organisations through the current pandemic, retired US Army General Stanley A. McChrystal recently outlined how the lessons he learned during his high-profile career with the US Armed Forces are still vital today. Sgt Wayne Fitzgerald, who took part in the exclusive webinar, provides a synopsis of the event organised and hosted by the City Security And Resilience Networks (CSARN).

eadership in times of crisis' was the title of the fourth webinar in the series on leadership values during the pandemic, with others titled 'Pandemics without borders - protecting our people'; 'COVID-19: critical discussions for the new normal', and 'Are we fully prepared for the next biological event?'

Over 150 participants from around the world tuned into the webinar, including private companies, government organisations, members of the UK Armed Forces, UK Police Forces, An Garda Síochána and the Irish Defence Forces. This was a great discussion on leadership and many thanks to CSARN for the invitation.

General Stanley A. McChrystal, a graduate of West Point and the Naval War College, has served in the following theatres of war during his career – Operation Desert Shield, Gulf War, War in Afghanistan and the Iraq War. He has commanded the US and international forces in Afghanistan with NATO's International Security Assistance Forces (ISAF), which included 150,000 troops from 45 different countries, and was previously Commander of the US military's counter-terrorism force JSOC (Joint Special Operations Command).

He has been described as 'creating a cohesive counterterrorism organisation that revolutionised the inter-agency 'operating culture' in Afghanistan. During a very impressive military career, he commanded a number of elite organisations, including the 75th Ranger Regiment.

COMPARING COVID TO TERRORIST THREAT

Starting off the webinar, General McChrystal compared the Covid-19 pandemic to a terrorist threat and noted how it grew very quickly and was deadly. He spoke about his experience in Iraq, when he took command in Afghanistan, and when asked to reveal the three big things he took away from his experience, he explained that there was actually four.

He discussed the importance of intelligence in the battlespace, saying they spent a lot of time looking at how



Four-star General Stanley A. McChrystal, US Armed Forces. (Photo: US Department of Defence)

Al-Qaeda operated, before explaining that they needed to understand how they operated themselves. He explained that you need to find out what works before trying to solve the problem, and what you are not going to be able to solve.

The second was to understand the problem – US Armed Forces did not just want to take out the leadership of Al-Qaeda, but rather needed to understand them and how they operate. He further explained that Iraqi civilians even those who didn't support Al-Qaeda fundamentals were still assisting them, so they needed to look further back on why the Populus was supporting them.

Thirdly concerned the issue of adaptation, and the General explained that early in command, you need to have the ability to adapt; starting with an assumption we have to change our mindset and start with me. This is based on decision making, he explained.

His final point was about good people, asking whether or not those individuals in leadership positions needed to look in the mirror, which he qualified in the affirmative, claiming that they need to a lot!

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General McChrystal at the Pentagon giving a briefing regarding the Iraq War, in April 2003. (Photo: www. defense.gov)

DEVOLVED LEADERSHIP

Speaking about devolved leadership and pushing it down the chain of command he explained that we need to provide the inspiration to hit them every day and that in the absence of leadership the organisation will fail. He added that it can be quiet leadership, The temptation to lead as a chess master, controlling each move of the organisation, must give way to an approach as a gardener, enabling rather than directing. A gardening approach to leadership is anything but passive. The leader acts as an 'Eyes-On, Hands-Off' enabler who creates and maintains an ecosystem in which the organisation operates

- General Stanley McChrystal, "Team of Teams: New Rules of Engagement for a Complex World"

but it must be continuous. He finished by saying that someone down at ground level can make decisions on the ground that could be harmful to the main intention and so 'the mission' needs to be shared down the chain of command.

Looking at Covid-19 he explained that to defeat a pandemic you have to make decisions early, which may look irrational but must be scientifically based, and to get in front of the pandemic because once it has passed you, you are losing.

One final point that he made that relates to all military forces around the world was that every soldier now has access to a smart phone with internet access. They can contact home during an operation and discuss information. Commanders now have to compete with that and understand that they have to provide a consistent flow of information.

He finished by saying that "people can sniff out spin" and that the





US Army soldier on patrol in an Iraqi suburb in 2007. Photo: Spc. Daniel Herrera, 55th Signal Co. (COMCAM)/US Army.

information can then be discounted so that it's better to use less spin when passing on the mission and orders.

DISTINGUISHED SERVICE AWARDS

Following 9/11, he was deployed in a number of leadership positions in combat over a six-year period. His awards and decorations include the Defence Distinguished Service Medal (2), Army Distinguished Service Medal, Defence Superior Service Medal (2), Legion of Merit (3) and a Bronze Star Medal. General McChrystal retired from the US Armed Forces on 1 August 2010.

He was more than happy to be called 'Stan' during the webinar by the host Brett Lovegrove MA FRSA FSyl FICPEM, who was the former head of counter-terrorism for the City of London Police Force and is the Chief Executive of CSARN.

General McChrystal started by discussing the challenges he faced in leading JSOC through one of the most difficult periods in his country's history, most notably the war on terror after the 9/11 attacks on the US. He outlined how the lessons he learned are still vital today as leaders fight to bring their organisations through the current Covid-19 pandemic.

A senior fellow at Yale University's Jackson Institute for Global Affairs, he teaches a course on leadership, and also sits on the boards of a large number of businesses and organisations. His own McChrystal Group has partnered with organisations in financial services, oil and gas, healthcare, energy, engineering and the public sector for a number of years.

Helping them turn the lens on themselves is a major part of what they do. He is a successful speaker on leadership and the author of a number of books on the same subject; his memoir 'My Share of the Task' was a New York Times bestseller in 2013; another New York Times bestseller in 2015 with 'Team of Teams: New Rules of Engagement for a Complex World'



General McChrystal's personal memoir was a New York Times bestseller in 2013.

and co-authored 'Leaders: Myth and Reality' (a Wall Street Journal bestseller).

For further details on CSARN (UK based not-for-profit business security and resilience membership network that brings public and private sector leaders together) visit www.csarn. org. Visit www.mcchrystalgroup.com to learn more about the McChrystal Group.



ABOUT THE AUTHOR: Sgt Wayne Fitzgerald joined the Defence Forces in 1990, serving initially with the 5 Inf Bn. During his near 31-year career he has worked in a number of roles within the Army and Air Corps. He has served overseas as a peacekeeper with the UN, EU and NATO PfP in Lebanon (1991), Kosovo (2002, 2010) and Bosnia (2008).

He served as the editor of *An Cosantóir Magazine* from May 2011 until August 2020. Wayne is the coauthor, along with military historian Paul O'Brien, of Shadow Warriors as featured in this issue on pages 26-31.

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Dr Gerry Waldron, Director of Slándáil, welcomed delegates to Ireland's first-ever National Security Summit at the Helix on 25-26 February.

There's a huge appetite for a serious debate on Ireland's future security needs, demonstrated by the wide range of presentations from all sectors of the emergency services at the inaugural National Security Summit, according to Dr Gerry Waldron, Director of Slándáil e were delighted to welcome over 1,000 attendees to the Helix on 25-26 February with speakers and delegates from approximately 50 organisations, spanning 20 countries, 10 universities and representatives from all of the uniformed services on the island. The delegate count alone demonstrated quite clearly that there is a huge appetite for a serious debate on Ireland's future security needs.

The summit was opened by Minister of State Paul Kehoe and with the Covid-19 crisis pending the emergency preparedness, response and resilience (EPRR) conference was packed to capacity all day on the first day of the Summit.

Conference delegates were introduced to the topic of Chemical, Biological, Radiological and Nuclear (CBRN) threats, and were presented with an overview of the global CBRN threat and in-depth briefings on the lessons learned from the Salisbury nerve agent attack in the UK.

These briefings were provided by senior members of all three UK emergency services during the earlier part of the first day, followed by later sessions with contributions from Irish public health officials and retired HSE emergency planners on how our health systems plans and reacts to emergencies.

The afternoon saw an in-depth discussion of Ireland's emergency management framework, with the panel debating the adequacy and preparedness of all uniformed services to meet potential threats and the current crisis was never far from each delegate's thoughts. Meanwhile a range of sponsored presentations





With Covid-19 crisis pending, the event was packed to capacity on the first day of the Summit, officially opened by Paul Kehoe TD, Minister of State at the Department of Defence and Chairman of the Government Task Force on Emergency Planning.

Minister Paul Kehoe pictured with Dr Gerry Waldron, Director of Slándáil, following the official launch of the inaugural National Security Summit on 25 February 2020.

highlighted how technology can make incident management more effective for all emergency services.

CBRN AND TERRORISM THREATS

The EPRR conference finished with an in-depth and lengthy presentation by the FBI on their approach to CBRN and Weapons of Mass Destruction, and the FBI's Special Agent Kevin Bosch certainly kept the conference hall packed till the very end of the day.

We also ran parallel sessions examining the future of air power globally and what that means for small states. The future of the Air Corps and the investment, skills and equipment required to return a fighter intercept capability to Ireland were discussed at length with input from serving and retired officers, industry experts and national politicians.



Colonel Darren Doherty British Defence Attaché and Brigadier General Rory O'Connor, General Officer Commanding (GOC) of the Irish Air Corps.

Other sessions during the first day also saw a keynote address from the Director of the US National Counter-Terror Centre on maintaining a focus on terrorism in a world of changing priorities, a discussion on the links between security and our economy and a presentation on the clinical management of CBRN casualties.

The jam-packed programme continued into the afternoon with presentations on intelligence oversight, space and security and the constant battle between disruptive technologies in law enforcement and civil liberties.

The afternoon programme also included a thought-provoking presentation from the Dean of NATO's Defence College on why countries adopt national security strategies, which was followed by a highlyengaging debate on what a future strategy for Ireland may entail.

SECURITY AND DEFENCE INDUSTRY

The second day of the Summit brought a number of different themes including presentations and debates on the Irish security and defence industry and how small to medium businesses (SMEs) and start-ups can help Ireland's emergency services to address their multiple challenges. We also looked at the connections between cyber and national security with insightful contributions from the new Director of the Irish National Security Analysis Centre and the UK's former Deputy National Security Advisor. The implications of EU Maritime Security Strategy for Ireland were examined, with a discussion on the potential roles for the Irish Naval Service beyond Irish waters. The additional capabilities that the new multi-role vessel can bring to the Irish State were also examined with input from industry and local government representatives.

A much anticipated discussion on the future of the Irish Army saw a number of opposing views on the future of our land forces and what capabilities need to be prioritised in the coming decade.

The afternoon session during the second day of the summit saw wellattended presentations on Irish Public Sector Innovation and Unmanned Systems, with panel discussions on the future of European Security and Defence and Autonomous Weapons Systems.

'WHY INTELLIGENCE MATTERS'

Our final session of the summit - 'Why



Brigadier General Tony Cudmore, GOC Officer 2 Eastern Brigade, Des Dowling, Department of Defence, and Vice Admiral Mark Mellett, DSM Chief of Staff, Irish Defence Forces.

SNAPSHOT OF EXHIBITORS AT NATIONAL SECURITY SUMMIT IRELAND



NATIONAL SECURITY SUMMIT



Captain Brian Fitzgerald, Naval Service, and Andrew Cotter, University College Cork.

Intelligence Matters' – brought together for the first time in Ireland former senior intelligence professionals from the Defence Forces and Gardaí, alongside retired members of Government and the Department of Foreign Affairs to discuss the importance of effective intelligence services to senior decision makers across government.

The panel discussed the significant contribution the intelligence branches of both services had made to the security of the state over the last number of decades, the potential for greater co-operation across all of government in intelligence gathering, the oversight of these activities, recruitment to the services and the future direction of these services. It was a fantastic session to finish with and yielded a number of talking points for all those present.

Serving and retired members of all uniformed services contributed to the majority of our sessions whether it was

from the podium or from the floor and ensured that an informed and healthy debate ensued on a number of topics. Countless individuals serving and retired assisted with the planning and running of the event in a variety of ways and we thank them wholeheartedly for their support.

On a final note, a very special thanks to our event media partner 'Emergency Services Ireland' for their assistance in the lead-up to the summit and for their continued support of our activities.

The National Security Summit will return in 2021 and dates will be confirmed in due course. In the meantime, visit www.nssi.ie, LinkedIn and Twitter for more information.



Defence Forces' Assistant Chief of Staff Brigadier General Adrian Ó Murchú and Caitriona Heinl, Azure Forum.





WORLD SLEEPWALKING INTO DISASTER OF COVID-19' – CONCERN

Humanitarian aid agency Concern Worldwide is calling for a greater global response to both the health and economic impacts of COVID-19 in the developing world, amid fears that the pandemic will leave over one billion people without sufficient food.

The world is currently sleepwalking into disaster. It must wake up to the unprecedented challenge we are facing in the developing world," according to Anne O'Mahony, Concern's Director of International Programmes. "Extraordinary measures will have to put in place to avoid hunger growing to levels we have never seen before," she added.

World hunger levels have been rising since 2015 with over 820 million people going hungry on a daily basis and around 168 million people already requiring humanitarian assistance. There is now a high risk that the broader disruptive effect of COVID-19 will drive levels of global food insecurity to over a billion people.

Concern teams in 23 countries continue to escalate their efforts to support communities and are working closely with governments to maintain consistent messaging on COVID-19 and what can be done to prevent it.

"Humanitarian agencies from around the world are prepared to stay where they are needed and deliver, but they need global commitment and leadership," O'Mahony said, adding that lifesaving humanitarian activities such as the distribution of food and cash must be considered essential services.

CATASTROPHIC IMPACT OF COVID

Income losses for people in developing countries as a result of COVID-19 are expected to exceed €202 billion. The more severe lockdown approaches in many western countries are only possible if supported by social protection systems to protect families and individuals whose livelihoods have been disrupted.

With an estimated 55% of the global population having no access to social protection, the impact of COVID-19 on their livelihoods and access to food will be catastrophic, according to the aid agency.

In Ethiopia, where Concern has been working for 46 years, around 8.5 million people are in need of food. The country is simultaneously battling the worst desert locust infestation it has seen in decades.

This infestation has left more than one million people food insecure, according to the UN Food and Agriculture Organisation. Even before the COVID-19 pandemic, 2020 was already shaping up to be a challenging year in Ethiopia, noted Eileen Morrow, Concern's Ethiopia Country Director.

"While I keep hearing 'We are all in this together', the COVID pandemic highlights the major inequality that exists between African countries and the rest of the world. African countries are last in line to get access to global supply chains for essential equipment, and yet their populations are among the most vulnerable," Morrow noted.

"This is neither fair nor strategic in terms of containing the virus – it knows no borders. The time to act for Africa is really now," she said.

Concern is reaching people across Ethiopia with key COVID-19 prevention messages, distributed over 64,000 bars of soap to quarantine facilities, health institutions and vulnerable populations and installed 31 new handwashing stations.



UKNEWS



EMERGENCY SERVICES SHOW POSTPONED UNTIL APRIL 2021

he Emergency Services Show, postponed from September this year, will return to Birmingham's NEC on Tuesday 27 and Wednesday 28 April 2021, due to the impact of the Covid-19 pandemic.

As previously planned, the two-day event will be co-located with other market leading events – The Fire Safety Event, The Health & Safety Event, The Security Event & The Facilities

Event. The Emergency Services Show can be followed on Facebook, Twitter and Instagram.



For further information visit https://www.emergencyuk.com/

VIDEO STREAMING ZOOMS INTO INCIDENT SCENE IN AN INSTANT



South Central Ambulance Service (SCAS) NHS Foundation Trust has launched the GoodSAM's Instant On Scene, which will enable the public to stream video directly from their smartphones into the SCAS 999 Clinical Co-ordination Centres (CCC).

Set to revolutionise triage for the ambulance service, the ground-breaking digital system will ensure that medics can now see what the patient sees in just a few seconds. It will enable SCAS's 999 CCC staff to send a text or email message to a caller containing a link, and when clicked on, it will enable the video to be streamed live from the caller's smartphone directly into the coordination centre.

There's nothing to download and no logins, the system works on any smartphone and on any network, and its use is entirely voluntary. All data is securely transmitted with end-to-end encryption and no video is recorded, so members of the public can be confident that their information is safe.

The 999 call continues while the video is streaming.

Instant on-scene will help to ensure patients are quickly assessed and given effective medical advice. It will support SCAS in better understanding the level of care or resources which may be required to deliver the best patient outcomes.

GoodSAM's products are designed specifically for emergency situations, and no apps, downloads or logins are required, according to Ali Ghorbangoli, Technical Director and Co-Founder.

Prof Mark Wilson, GoodSAM's Medical Director and Co-Founder, said that ambulance services often have limited information from bystanders about a patient's, or multiple patients', injuries to make decisions. "Instantly being able to see the scene radically improves situational awareness, since time is vital in saving a person's life or reducing long-term disability," he added.

It is anticipated that the video solutions will translate into life-changing outcomes, enabling SCAS to respond more rapidly and appropriately. Instant On Scene will also support major incidents and enable emergency services to share video streams in real-time.



DIRECTOR GENERAL OF NATIONAL CRIME AGENCY REAPPOINTED



he UK's Home Secretary Priti Patel has announced the reappointment of Lynne Owens as Director General of the National Crime Agency (NCA), and she will remain in the post for a further two years from January 2021.

According to Patel, the NCA has a critical role to play

in the fight against serious and organised crime. "Lynne's reappointment means the organisation will continue to benefit from her leadership at a crucial time in our collective mission to protect the public."

Owens said she was delighted to have been asked by the Home Secretary to continue to lead the National Crime Agency and the UK's fight against serious and organised crime for the past four and a half years.

"We have delivered some truly ground-breaking operations and successes against serious and organised crime ensuring the public are better protected as a result. There is always more to do across the system which is why I am pleased to be asked to continue in my role. I look forward to continuing to lead and enhance the system response, ensuring we have the right tools and resources to keep people safe."

Lynne Owens took up her post as Director General of the NCA in January 2016. During a career in law enforcement over 30 years, she has held a number of policing roles including Assistant Commissioner of the Metropolitan Police and Chief Constable of Surrey.

NATIONAL POLICE WELLBEING SURVEY FINDS HIGH LEVELS OF FATIGUE

he National Police Wellbeing Service and College of Policing have committed to prioritise research into ways of tackling fatigue amongst officers and staff following the results of the first ever national police wellbeing survey.

More than 34,000 police officers and staff across England and Wales responded to the survey (November 2019 and January 2020). Almost half the number of police officers revealed they slept for less than six hours a night, with shift workers more likely to experience poor sleep quality.

As a result, the National Police Wellbeing Service team will carry out research with experts in police fatigue from around the world, together with UK practitioners and staff associations to look at ways to reduce the growing issue of officer and staff fatigue.

The wellbeing survey also found that police officers working in safeguarding and investigations reported lower levels of wellbeing, while police staff reported lower levels of wellbeing in areas such as custody, contact management and incident management.

There were many positive findings from the survey:

- 65% of respondents felt satisfaction in their work;
- The majority of officers and staff felt trusted in their roles and were able to make choices which reflected their own personal beliefs and values.
- Police officers and staff felt high levels of competence in their work, making important contributions and felt valued by co-workers and supervisors.



Chief Constable Mike Cunningham, CEO of the College of Policing, said: "This survey has now provided a baseline which the National Police Wellbeing Service will use to measure future progress, which will help to prioritise work at both a national level and in the support we provide to individual forces.

"The expectation now is that forces will also address the key themes identified in the survey as part of their local approach to wellbeing with support where needed. We will look to conduct the survey again in 2021 to assess progress and whether improvements are being achieved."

LONDON AMBULANCE STAFF RESUSCITATE THE PROVISION OF PPE

ondon Ambulance Service has recently improved the personal protective equipment (PPE) requirement for staff during patient resuscitation

Following campaigning by activists from a UK trade union to have more protection during CPR procedures, the London Ambulance Service Trust Board increased the level of the PPE as recommended by the Resuscitation Council (RCUK) – above the requirements of Public Health England (PHE).

GMB organiser Lola McEvoy said: "We are sincerely grateful to the Resuscitation Council for confirming what frontline staff already know – performing chest compressions on a Covid-19 patient requires the highestlevel of PPE. It is essential all our frontline members are given the utmost protection equipment and we welcome the real leadership London Ambulance Trust have shown on this issue."

She added: "These professionals should be able to determine and judge for themselves what level PPE they need, and we advise that if there is any doubt about the risk facing our members, they must absolutely have the highest level of protection. We urge PHE to update their guidance so that trusts across the country don't have to make individual decisions and all frontline staff are fully protected."



END-OF-LIFE GUIDELINES ON CARE FOR THE ELDERLY DURING COVID AND POST PANDEMIC

he 'End of Life Care in Frailty' guidelines have been published by the British Geriatrics Society to help doctors, nurses and allied health professionals provide high-quality, person-centred care for older people approaching the end of their lives, both during the pandemic and in the future.

The guidelines aim to improve end-of-life care for all older people with frailty, not just those diagnosed with Covid-19. The planning and delivery of good end of life care, magnified as a key issue for healthcare professionals caring for older patients during the pandemic, is explored in depth in the new guidelines.

A key aim of this new guidance is to prompt and support timely discussions about preferences for care with the older person themselves and their family. The guidelines also cover the unique considerations in specific settings such as urgent care, care homes and prisons.

Dr Eileen Burns, co-editor of the guidelines, commented: "Too often the clinical response to an acute deterioration in a frail older person is protocol or pathway driven, especially during this crisis. This can sometimes lead to distressing treatments without pausing to reflect on the values and wishes of the older person who's being cared for."

Prof Tahir Masud, President of the British Geriatrics Society, said that the document, which is the first of its kind, will be of enormous value to the multidisciplinary teams who support older people with frailty at the end of their lives. "It will help healthcare professionals to navigate older people and their families through this difficult time, providing care, comfort and relief."

The British Geriatrics Society is the professional association of doctors practising geriatric medicine, nurses, therapists, researchers, GPs, old age psychiatrists etc engaged in the specialist care of older people and promoting better health in old age. With over 4,000 members, it's the only society in the UK offering specialist medical expertise in the wide range of healthcare needs of older people.

For more information visit www.bgs.org.uk/EOLCfrailty





COVID-19 CONTACT-TRACING APP LAUNCHED IN ENGLAND AND WALES



Buetooth technology on the new NHS Covid-19 contact-tracing app can be used to track time and distance between smartphone devices in England and Wales.

Users will also be able to check their symptoms and book a free test through the app, which also includes an isolation countdown timer to remind people to guarantine.

The app offers a QR code for use in bars, restaurants and other venues to aid NHS Test and Trace in contacting customers with public health advice should there be a Covid-19 outbreak. Once a QR code is scanned, information will remain on a user's phone for 21 days, but users will have the option to delete venues from their app. Some 160,000 business downloaded the NHS Test and Trace QR code during the first two weeks in September since it was made available.

Health Secretary, Matt Hancock, said: "With infection rates rising we must use every tool at our disposal to prevent transmission, including the latest technology. We've worked extensively with tech companies, international partners, and privacy and medical experts - and learned from the trials - to develop an app that is secure, simple to use and will help keep our country safe."

He said the launch of the new app marks an important step forward in the UK's fight against this invisible killer. Dido Harding, Executive Chair of NHS Test and Trace, said that they want to make it as easy as possible for everyone to engage with England's NHS Test and Trace service.

"The NHS Covid-19 app enables the majority of people with a smartphone to find out if they are at risk of having caught the virus and need to self-isolate, order a test if they have symptoms, and access the right guidance and advice."

The launch follows months of setbacks, including criticism from privacy experts and a U-turn on the original operating model.

COURSE SET FOR DEFENCE FIREFIGHTER TRAINING AT FIRE SERVICE COLLEGE

he first cohort of Defence firefighters recently and successfully completed their first week of training at the Fire Service College, in Moreton-in-Marsh, Gloucestershire.

As part of its contract with the Ministry of Defence (MOD) Capita is responsible for training all Defence firefighters to deliver the Defence Fire and Rescue Project and is investing in and modernising the MOD's fire and rescue capability.

As part of this, the company is transferring centralised fire and rescue training from the Defence Fire Training and Development Centre (DFTDC) in Manston to the Fire Service College in Moreton-in-Marsh, Gloucestershire.

Capita Fire and Rescue has invested in modern firefighting training courses at the college. It is also constructing new facilities at the site, in a £5m build, which will deliver a new fire station and training rigs, while a new purpose-built accommodation block will meet the safeguarding needs of junior trainees. Courses will also utilise virtual reality equipment to safely simulate challenging firefighting environments.

During the first week of training at the college in September, 25 firefighters from the Army, Defence Fire and Rescue, and Capita Fire and Rescue successfully completed Fire Trainer Extinguisher Maintenance courses and Defence Training Supervisor courses.

Jason Clay, MD for Capita Fire and Rescue, said, "Close collaboration with our construction partners and the MOD



Firefighters successfully completed Fire Trainer Extinguisher Maintenance courses and Defence Training Supervisor courses during the first week of training.

ensured this capability-enhancing project has remained on track, despite the significant challenges posed by Covid-19.

"Capita's investment in the Fire Service College and the training programmes on offer to Defence firefighters are creating better fire risk outcomes for our client, our MOD customers and our own Capita Fire and Rescue colleagues."

It is estimated that by 2021, approximately 1,700 military and civilian firefighters will be trained each year at the Fire Service College or by instructors from the college at military bases around the UK.



RESEARCH REVEALS EFFECTIVE DATA SHARING DURING COVID-19

Latest research carried out by the Italian Fire and Rescue Service shows that EU-funded study projects have improved how the emergency services are working together during the Covid-19 pandemic, despite location, language and technological barriers.



ewly-developed technology has enabled frontline agencies to exchange information and data during Covid-19 despite social distancing regulations, and this collaborative approach has improved the protection of the emergency and rescue services battling the pandemic.

The study, part of the IN-PREP and Fire-In Projects, shows that recent technological developments have allowed the emergency services to exchange data in a more effective way, overcoming the existing barriers in location, language and technology and protecting workers in the emergency services who are responding to Covid-19.

Stefano Marsella of the Italian Fire and Rescue Service, who co-authored the study said: "The ability to exchange information quickly and effectively between those responding to disasters is a core element of crisis management which is made more complex due to the number of agencies involved, their location and differences in language and technology used.

"Responding to Covid-19 has meant agencies at both a local and national level need to work together despite social and physical distancing regulations. Up to now this has been a difficult and complex task but recent developments from EU research projects are allowing this collaboration to take place in a safe, coordinated way. The technological side of the challenge can be considered substantially overcome."

CO-ORDINATED RESPONSE LEVELS

The study highlights the IN-PREP Project, funded under the EU's Horizon 2020 grants as one such research project, which is allowing agencies to work together while limiting the health risks presented to frontline workers. IN-PREP (a Horizon 2020 research and innovation project) consists of 20 partner organisations across seven European countries.

Evangelos Sdongos, IN-PREP Project Co-ordinator said: "The outbreak of Covid-19 throughout Europe has brought the issue of planning for such disasters into the wider public consciousness. IN-PREP, through our Mixed Reality Preparedness Platform (MRPP) technology showed that it is possible to co-ordinate a response to a large-scale crisis despite the differences in technologies used by agencies across Europe.

"Our MRPP allows agencies to train, plan and collaborate together remotely by facilitating efficient chainof-command and asset management during disasters. As the study carried out by the Italian Fire and Rescue Service notes, our MRPP has been successfully tested in a number of field exercises so far and we hope that our technology can assist agencies across Europe in the future management of complex crises such as Covid-19."

For more information on the IN-PREP project and the study 'How EU Funded Research Projects have improved Covid-19 Resilience of Rescue and Emergency Control Rooms' visit www.inprep.eu or follow IN-PREP on Twitter @INPREP_EU.

IIN-PREP is 'Project of the Month' in Research*EU Magazine

IN-PREP has been selected as the 'Project of the Month' by Research*EU Magazine (published by the European Commission's Community Research and Development Information Service office).

The article highlights the objectives of IN-PREP in enabling emergency services to respond more

effectively to disasters and crises and mentions the development of IN-PREP's Mixed Reality Preparedness Platform (MRPP), IN-PREP's Cross-Border Handbook of Preparedness and Response Planning and the upcoming final two full-scale exercises (FSXs) of the project.





PANDEMIC CAUSES PANDEMONIUM TO FRONTLINE HEALTH SERVICES

The findings of a recent global survey by the World Health Organisation has revealed that 90% of countries experienced serious disruptions to essential health services since the outbreak of Covid-19, and the WHO is now to roll out learning and monitoring tools to improve service provision during the pandemic.

he WHO's first indicative survey on the impact of COVID-19 on health systems, based on reports from 105 countries with data collected from five regions over the period from March to June 2020, shows that almost every country (90%) experienced disruption to its health services, with low- and middleincome countries reporting the greatest difficulties.

Most countries reported that many routine and elective services have been suspended, while critical care - such as cancer screening and treatment and HIV therapy – has seen high-risk interruptions in low-income countries.

"The survey shines a light on the cracks in our health systems, but it also serves to inform new strategies to improve healthcare provision during the pandemic and beyond," said Dr Tedros Adhanom Ghebreyesus, WHO Director-General.

"COVID-19 should be a lesson to all countries that health is not an 'either-or' equation. We must better prepare for emergencies but also keep investing in health systems that fully respond to people's needs throughout the life course."

DISRPUTION TO ROUTINE IMMUNISATION

Based on reports from key informants, countries on average experienced disruptions in 50% of a set of 25 tracer services. The most frequently disrupted areas reported included routine immunisation – outreach services (70%) and facility-based services (61%), non-communicable diseases diagnosis and treatment (69%), family planning and contraception (68%), treatment for mental health disorders (61%), cancer diagnosis and treatment (55%).

Countries also reported disruptions in malaria diagnosis and treatment (46%), tuberculosis case detection and treatment (42%) and antiretroviral treatment (32%). While some areas of health care, such as dental care and rehabilitation, may have been deliberately suspended in line with government protocols, the disruption of many of the other services is expected to have harmful effects on population health in the shortmedium- and long-term.

Potentially life-saving emergency services were disrupted in almost a quarter of responding countries. Disruptions to 24-hour emergency room services for example were affected in 22% of countries, urgent blood transfusions were disrupted in 23% of countries, emergency surgery was affected in 19% of the countries.

Disruption due to a mix of supply and demand side factors. 76% of countries reported reductions in outpatient care attendance due to lower demand and other factors such as lockdowns and financial difficulties. The most commonly reported factor on the supply side was cancellation of elective services (66%).

Other factors reported by countries included staff redeployment to provide COVID-19 relief, unavailability of services due to closings, and interruptions in the supply of medical equipment and health products.

Many countries have started

(World Health Organization



to implement some of WHO's recommended strategies to mitigate service disruptions, such as triaging to identify priorities, shifting to online patient consultations, changes to prescribing practices and supply chain and public health information strategies.

However, only 14% of countries reported removal of user fees, which WHO recommends to off-set potential financial difficulties for patients.

HEALTH SERVICES HUB

Given the urgent demand by countries for assistance during the pandemic response, WHO is developing the 'COVID19: Health Services Learning Hub' – a webbased platform that will allow sharing of experiences and learning from innovative country practices that can inform the collective global response.

WHO is also devising additional surveys at the sub-national level and in health facilities to gauge the longer-term impact of disruptions and help countries weigh the benefits and risks of pursuing different mitigation strategies.



US TESTS FIGHTER DRONE AGAINST HUMAN PILOT

Air Force researchers are designing an autonomous aircraft that can take down a manned plane in air-to-air combat, with the goal of pitting the two against each other in July 2021. The team is pushing the boundaries of what the military can build, compared to the aircraft that already fill the service's squadrons, according to the head of the Pentagon's Joint Artificial Intelligence Center.

teve Rogers is probably going to have a hard time getting to that flight next year... when the machine beats the human. If he does it, great," noted Lieutenant General Jack Shanahan, Head of the Pentagon's Joint Artificial Intelligence Center, during an event at the Mitchell Institute for Aerospace Studies. (Steve Rogers runs the Air Force Research Laboratory's Autonomy Capability Team 3).

The AFRL team launched its pursuit of an unmanned, AI-driven

fighter jet in 2018, aiming to show promise within 18 months. In May 2018 '*Inside Defense*' (US online news service for defence and aerospace professionals) reported that the "big moonshot" would first insert machinelearning technology into a lessadvanced plane, like an F-16, before trying it in a newer jet, like an F-35 or F-22.

"Our human pilots, the really good ones, have a couple thousand hours of experience," Rogers told *Inside Defense*. "What happens if I can augment their ability with a system



US Defense Department Chief Information Officer Dana Deasy and Joint Artificial Intelligence Center Director Air Force Lt. Gen. Jack Shanahan at a press briefing on the adoption of ethical principles for artificial intelligence at the Pentagon earlier this year. (Photo: Lisa Ferdinando)

that can have literally millions of hours of training time?....How can I make myself a tactical autopilot so in an air-to-air fight, this system could help make decisions on a timeline that humans can't even begin to think about?"

WINGMAN DRONE CONCEPT

If the project works, the invention would join the slew of other Alenabled systems the Air Force wants to add to its inventory. The Skyborg wingman drone concept is perhaps the highest profile of those programmes, though the Air Force is pushing to add Al and machinelearning algorithms to everything from maintenance practices to battle planning software.

AFRL's project echoes the debate revived earlier this year about whether an autonomous fighter could successfully challenge one with a human in the cockpit, sparked by comments by Amazon's billionaire boss Elon Musk at an Air Force Association conference in February.

"The [F-35] competitor should be a drone fighter plane that's remote controlled by a human, but with its maneuovers augmented by autonomy," Musk tweeted. "The F-35 would have no chance against it."

However, while the Pentagon's AI work is picking up steam, Lt. Gen. Shanahan cautioned that not everything happening with the futuristic technology is a success stor. He said that the military should adopt lessons learned by the self-driving car industry, and heed its warnings.

"There is no level four, fully autonomous vehicle on the roads today," he said, despite several companies investing billions of dollars in the idea. "On the other hand, that's a decade worth of experience we should be pulling into the military because they've learned so much." (Source: Rachel S. Cohen, Senior Editor, Air Force Magazine)

AUSSIE POP-UP HOSPITAL READY FOR ANY PANDEMIC NEEDS

A South Australian company has launched a portable isolation hospital for widespread medical emergency hotspots to treat patients with respiratory illnesses during the pandemic. Based in Adelaide, Humanihut's isolation hospital has received expressions of interest from government clients in Australia, the US, Europe and Middle East to better prepare for future epidemics or health crises.

he deployable medical facility was adapted in partnership with French-based business Utilis International from Humanihut designs for disaster accommodation. Humanihut co-founder and Managing Director Neale Sutton said the new model was created for the COVID-19 outbreak in New York and serves as an efficient market-ready alternative to tents, which are the current industry standard for field hospitals.

"In the initial stages, the [coronavirus] epidemic had governments around the globe looking for very quick solutions to assist the pressure that was being placed on their medical facilities," Sutton said.

"We're now focusing our product into the longer term, it's about what comes next after Covid-19 and after all of the equipment has been used on this outbreak; is there enough to be used for the next outbreak?" He said the 'Florey' portable isolation model costs A\$200,000 per bed in comparison to approximately \$1.5 million per bed for a hospital."

In its basic configuration, the Florey isolation hospital



An artist's impression of the Humanihut Florey Isolation Hospital.



A Humanihut configuration deployed for the emergency services in South Australia.

comprises of 16 flatpack huts each measuring 6m x 2.3m (19f x 7.5f) that are set up as single-bed patient rooms attached with en-suites, which stand between two 40ft containers housing a nurse's station, staffroom, kitchen, bathroom and laundry.

'RAPIDLY DEPLOYABLE SYSTEM'

"The Humanihut Florey system is a far more robust and rapidly deployable system than just about anything else that's around," he added. "We're talking to a number of prospective clients around the world about the part we can play in their operations going forward looking over their horizon to 2021 and beyond." Sutton said he was in talks with a local government in the US for the purchase of a Florey unit within the next 12 months.

A fully enclosed weatherproof internal corridor made from a soft polymer canvas is then placed in the centre of the facility to connect the containers and patient rooms.

The huts are steel skinned and have insulated walls, enabling them to maintain a suitable temperature for patients and doctors.

The portable isolation hospital includes utilities for water, power and wastewater treatment, Wi-Fi connectivity, and medical grade equipment supplied by G3 Systems through Humanihut's partnership with Utilis.

The model can be delivered by land, air or sea inside the two 40ft containers and can be established within 24 hours. The facility is also scalable for increased capacity to meet required demand.

Sutton said the rapidly deployable nature of the product was crucial for assisting medical workers at the start of a health crisis. "Clients need things set up quickly...once the field infrastructure system has done its job it can be packed up and reused again over the lifetime of the product," Sutton said.

The company has sold other variations of their field infrastructure systems to the South Australian State Emergency Service as well as to clients in Saudi Arabia and France.

(Source: 'THE LEAD' - News leads from South Australia)



COVID-19 ILLUSTRATES 'WOEFULLY UNDER PREPARED' WORLD – UN HEALTH CHIEF

espite efforts to break the global cycle of panic and neglect seen throughout multiple disease outbreaks, Covid-19 has shown that the world was "woefully under prepared", according to the UN health agency chief.

Although the World Health Organisation (WHO) and World Bank set up the Global Preparedness Monitoring Board (GPMB) two years ago to break the cycle, WHO chief Tedros Adhanom Ghebreyesus told a media press briefing that "reviews and reports are only as good as the recommendations that are implemented". He added that Covid-19 has shown that collectively, the world was woefully under prepared.

Since the turn of the millennium, SARS, MERS, H1N1, Zika and Ebola have all demonstrated the increasing occurrence of viruses making the zoonotic leap from animals to humans – and most recently, Covid-19. In a new report, the GPMB lays out critical lessons learned from the coronavirus pandemic so far, as well as some concrete actions which can be taken to protect ourselves moving forward.

Developing "muscle memory is key to pandemic response", according to the WHO chief, who cited how Thailand drew from its experience with SARS and H5N1 to swiftly scale up an effective track-and-trace system, leaving them among the least affected nations in the world by the pandemic. "The whole world must do this to strengthen preparedness," he added.

While acknowledging that there will certainly be



A child is weighed at a community health centre in the Central Java province, Indonesia. © UNICEF

future novel viruses and unknown diseases, the WHO chief stressed that "the only way" to confront these global threats is "as a global community, united in solidarity and committed to long-term co-operation". He claimed that the right political and financial commitment and investment now could prevent and mitigate future pandemics.

At this critical juncture, WHO is asking leaders to "put targeted measures in place" that will suppress the spread and protect health systems and workers. And the UN agency is also requesting everyone "continue to do the basics", including maintaining physical distance, washing hands, wearing masks, avoiding crowds and keeping windows and doors open when outside visits are impossible.

KEEP HEALTH WORKERS SAFE TO KEEP PATIENTS SAFE' – WHO

he World Health Organisation (WHO) is calling on governments and healthcare leaders to address persistent threats to the health and safety of health workers and patients.

"The Covid-19 pandemic has reminded all of us of the vital role health workers play to relieve suffering and save lives," said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. "No country, hospital or clinic can keep its patients safe unless it keeps its health workers safe. WHO's Health Worker Safety Charter is a step towards ensuring that health workers have the safe working conditions, the training, the pay and the respect they deserve."



The Charter, released on World Patient Safety Day (17 September), calls on governments and those running health services at local levels to take a number of actions to better protect health workers.

These include steps to protect health workers from violence; to improve their mental health; to protect them from physical and biological hazards; to advance national programmes for health worker safety, and to connect health worker safety policies to existing patient safety policies.

However, data availability and quality are limited, and it is not possible to establish whether health workers were infected in the workplace or in community settings. Thousands of health workers infected with coronavirus have lost their lives worldwide.

The pandemic has also placed extraordinary levels of psychological stress on health workers exposed to highdemand settings for long hours, living in constant fear of disease exposure while separated from family and facing social stigmatisation.

A recent review of healthcare professionals found one in four reported depression and anxiety, and one in three suffered insomnia during Covid-19, while WHO has also highlighted an alarming rise in reports of verbal harassment, discrimination and physical violence among health workers in the wake of the pandemic.



WORLD RESCUE CHALLENGES POSTPONED UNTIL 2021

he year's World Rescue Organisation (WRO) challenges, which were due to take place in Miami, have been moved back to November 2021, due to the pandemic.

All subsequent WRC competitions will also be moved back by one year; with the event taking place in Luxembourg in 2022; Spain in 2023 and Portugal in 2024.

In a statement, the WRO Committee said that with that their colleagues in the US this is the correct action. A spokesperson for Rescue Organisation Ireland tweeted: "Sorry to hear but totally understand in these current strange times". (*Pic: Declan Keogh/Emergency Times*)



For further information and updates visit www.wrescue.org

GREATER SAFETY MEASURES ROLLED OUT FOR BUSH FIGHTERS IN AUSTRALIA

ollowing a summer of major bushfires across Australia, a new focus on the safety and wellbeing of bush fighters has been adopted by fire authorities around the country, with the rollout of new emergency vehicles by truck manufacturer Hino.

The company has launched a new version of its 4x4 500 Series GT model, with a fully automatic transmission now fitted as standard equipment to deliver a safer and more dependable vehicle in emergency situations.

"Earlier this year, Australia was devastated by natural disasters that saw emergency services across the country utilising their current Hino 500 Series GTs in some of the toughest off-road conditions," said Hino Australia's Product Strategy Manager, Daniel Petrovski.

He said that the new truck will have an increased appeal to fire authorities. The company has also been

approached by various emergency services organisations and will be rolling out a series of trial vehicles for them.



Hino has launched a new version of its 4x4 500 Series GT model, to make the lives of Australia's bushfire fighters safer.

'RESTART A HEART DAY' CAMPAIGNS TO RAISE AWARENESS ON CARDIAC ARREST

very year around 34,000 Australians and New Zealanders suffer out-of-hospital cardiac arrest, with only a one-in-ten survival rate. This year's 'Restart a Heart Day' campaign on 16 October aims to raise awareness and educate the community about CPR and AEDs.

For every minute that a patient is in cardiac arrest and is not receiving CPR or an AED shock, their chance of survival drops by 10 per cent, and after 10 minutes without intervention the damage is nearly irreversible. The large majority (80%) of out-ofhospital cardiac arrests happen in the home.

'The Council of Ambulance Authorities (CAA) has been



running the campaign since 2017 and together with our ambulance member services we have educated over 50,000 members of the public in CPR and AED use," according to David Waters, CAA Chief Executive.

"This year our target is even higher and eventually we would love to grow the 'Restart a Heart Day' campaign to the point that every member of the public knows what to do if somebody has a cardiac arrest, knows how to perform CPR and is able to use a defibrillator (AED)," he added.

'Restart a Heart Day' – which will be livestreamed on https:// restartaheart.net/ and on social media – is an international initiative of the European Resuscitation Council, and is coordinated in Australia and New Zealand by the CAA.

*The Council of Ambulance Authorities – the industry body for statutory ambulance services in Australia, New Zealand and Papua New Guinea – collaborates on ambulance and pre-hospital issues of metropolitan, regional, national and international significance. For more information visit **www.caa.net.au**/

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