



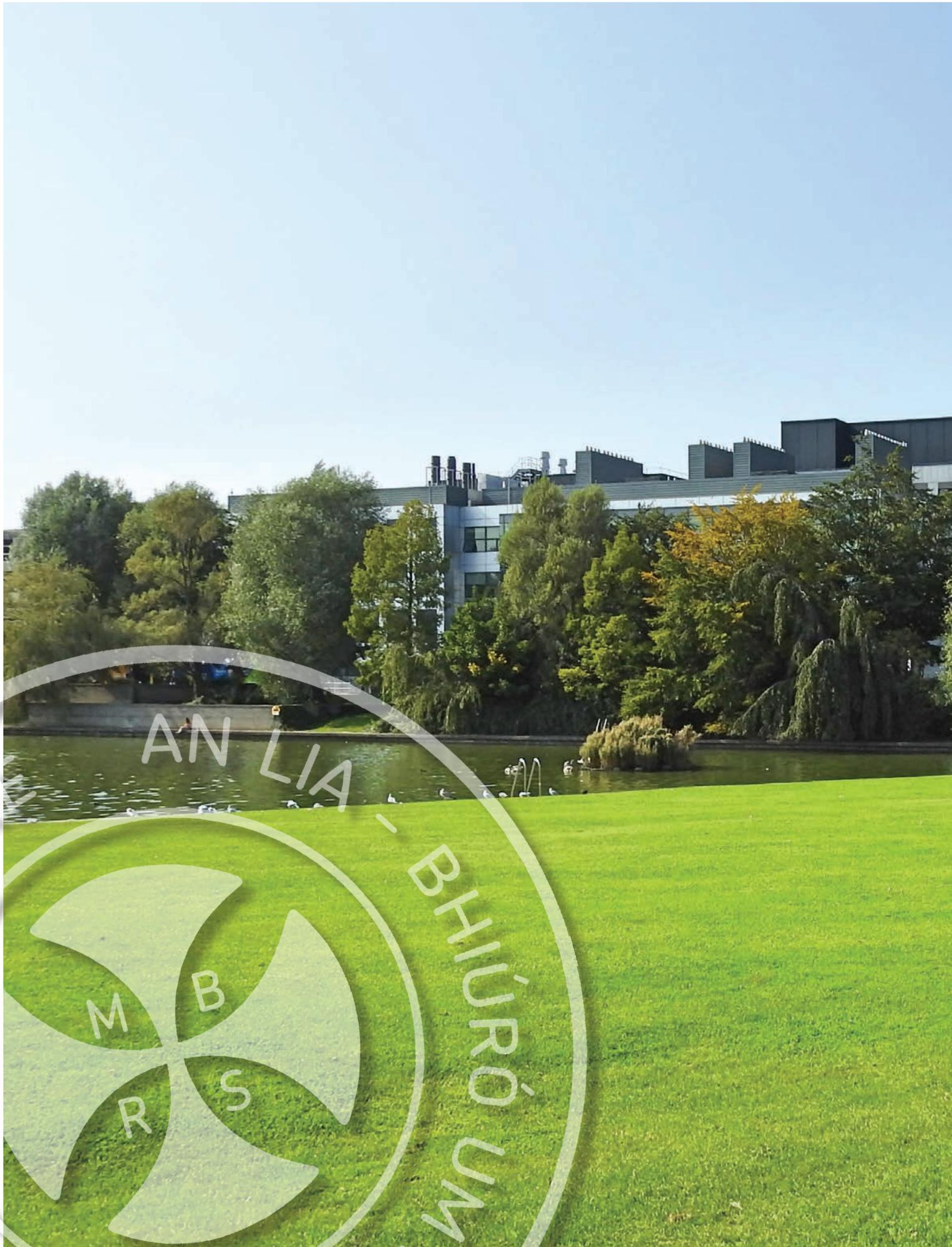
# MEDICAL BUREAU OF ROAD SAFETY



## ANNUAL REPORT 2020

MEDICAL BUREAU OF ROAD SAFETY, HEALTH SCIENCES  
CENTRE, UNIVERSITY COLLEGE DUBLIN, BELFIELD, DUBLIN 4





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# TABLE OF CONTENTS

Director's Introduction .....	1
Mission Statement .....	2
Functions of the Medical Bureau of Road Safety .....	3
Covid 19 Impact .....	5
Achievements and Developments during 2020 .....	6
Specimens Received in the Laboratory for Analysis.....	8
Alcohol Programme: Blood and Urine .....	14
Alcohol Programme: Breath .....	16
Toxicology Programme .....	20
Quality Assurance .....	26
Proficiency Testing Programme.....	27
Financial Information .....	28
Corporate Governance .....	29
Statement on Internal Control.....	33
Freedom of Information .....	35
Staffing .....	35
MBRS Organisational Chart.....	36
Conferences and Courses attended by Staff in 2020 .....	37
Energy Consumption.....	39





## Directors Introduction

The Annual Report for 2020 presents a summary of the Medical Bureau of Road Safety's activities and performance. It also provides relevant and important information, figures and data on driving under the influence of intoxicants and on the Bureau's continuing role in the current Road Safety Strategy 2013-2020.

The Bureau provides an integrated and high quality national forensic scientific and medical service in intoxicant detection and research. This continues to play an integral and central role in reducing deaths and injuries on Ireland's roads which had a figure for road traffic deaths of 30 per million of population in 2020, the fifth lowest rate in the European Union. The Bureau continues to work in close partnership with the Department of Transport, An Garda Síochána and the Road Safety Authority as well as with other national and international bodies in the challenging endeavour to achieve "Vision Zero" for road deaths and injuries.

The impact of the Covid-19 pandemic from March 2020 into 2021 was the greatest challenge faced by Ireland in decades. It impacted on the business and social life of the country in an unprecedented way. The Bureau was formally deemed by the Government as an essential service and was exempt from the public health closure restrictions introduced in March. The Bureau put in place a menu of health safety measures to allow the essential functions to be carried out in a safe and controlled manner with minimal disruption to its forensic work. The continuing pandemic saw many of the measures continuing into 2021.

Despite the severe restrictions on movement, particularly in the first national lockdown between March and June, resulting in a 70% reduction in traffic in that time there was an increase of 23% in the number of blood and urine samples received by the Bureau for intoxicant analysis. The work of the Bureau increased substantially during 2020 and it continues to operate at this higher level into 2021.

The number of preliminary drug testing devices supplied to the Gardaí for roadside use was increased by releasing a further 43 devices from Garda stations for roadside use also following a strategic review with an Garda Síochána in August 2020. At the end of 2020 there were 130 devices available for roadside drug testing compared with 75 at the end of 2019, with a 61% increase in the number of PDT tests over 2019. Evidential alcohol breath testing instruments were available in 86 Garda stations nationwide. Although some on-site testing of these instruments was suspended in April due to travel restrictions, almost all 86 were kept in service continuously with prudent rescheduling of station visits by Bureau scientists.

The number of blood and urine specimens received for alcohol analysis increased by 23% over 2019 and for drug toxicology analysis the number increased by 39%. Evidential breath testing numbers decreased by 39% over 2019 figures as Gardaí reduced this type of testing and increased roadside drug testing and Garda station samples for drugs analysis. The number of blood and urine testing kits issued by the Bureau increased from 6,300 in 2019 to 7,900 in 2020.

The continuing significant increase in blood and urine specimens for analysis is challenging the resources of the Bureau but Quality Assurance with ISO accreditation was maintained for the large number of tests required and the Bureau participated in several Proficiency Testing Schemes.

This report provides some detailed epidemiological data such as the mean blood, urine and breath alcohol levels detected (148mg/100ml, 199 mg/100ml and 51µg/100ml respectively) and the percentage of drivers with significant alcohol levels (of the alcohol positive specimens, 75% of blood results were greater than 100mg/100 ml; 70% of urine results were greater than 135 mg/100ml; and 64% of breath results over 36µg/100ml). Of the 4,489 blood and urine specimens tested for drugs (an increase of 39%), 3,650 (81% of toxicology specimens and 61% of all specimens received) were positive for at least one drug class on preliminary testing leading to the 49% overall increase in drug confirmed results. Additional information on drugs and driving was added to the Bureau's website during 2020.

Training and information programmes continued for An Garda Síochána during the pandemic year of 2020 in accordance with public health precautions. The Bureau also continued its role in participating in and contributing to national and international conferences and learning and in its membership of relevant bodies such as the Ministerial Committee on Road Safety; the Road Safety Authority and European Road Safety Exchange meetings; and the National Office for Traffic Medicine at the Royal College of Physicians of Ireland on medical fitness to drive guidelines. Almost all of these meetings took place on virtual meeting platforms after March 2020.

The Bureau looks forward to continuing playing its part in the challenges ever-present in order to improve and support road safety for all our citizens into 2021 and to a changed positive environment following the Covid-19 pandemic period.

**Professor Denis A. Cusack**  
Director



An Lia-Bhiúró um Shábháilteacht ar Bhóithre  
Medical Bureau of Road Safety

## MISSION STATEMENT:

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*“To provide a high quality national forensic service in alcohol and drug (intoxicant) detection in support of the effective operation of the road traffic legislation and contribution to road safety and medical fitness to drive measures.”*

# FUNCTIONS OF THE MEDICAL BUREAU OF ROAD SAFETY

The responsibility for chemical testing of intoxicants in driving in Ireland rests with the Medical Bureau of Road Safety which is a corporate body established in November 1968 by the Minister for Local Government under Part V of the Road Traffic Act, 1968.

The Minister's title was altered to Minister for the Environment & Local Government on 22nd July 1997. In June 2002, the Medical Bureau

of Road Safety came under the aegis of the Minister for Transport under the Transfer of Departmental Administration and Ministerial Functions Order 2002.

Since 2011 the Medical Bureau of Road Safety is under the Department of Transport, Tourism and Sport. The functions of the Bureau are laid down in the Road Traffic Acts 1968 – 2016.





When the Bureau was established in 1968 it commenced operating for Roadside Alcohol Testing, Blood and Urine Alcohol Analysis, the Issue of Certificates and provision of equipment for the taking of specimens (kits).

There have been many legislative changes such as the introduction of evidential breath alcohol testing (EBT) and driving under the influence of drugs (DUID), specimens provided in hospitals, specimens taken from drivers involved in collisions and mandatory intoxicant testing to include Preliminary Breath Alcohol testing (PBT) and Preliminary Drug Testing (PDT). The Bureau issues certificates under section 17 of the Road Traffic Act 2010 (as amended 2016), certifying the concentration of alcohol in blood or urine, certifying the presence of a drug or drugs in blood or urine and certifying the concentration of a drug or drugs in blood.

The Road Traffic Act 2018 introduced a more severe penalty for drivers having alcohol levels between 50mg/100ml and 80mg/100ml blood and equivalent in urine or breath, recognizing that even at low levels of alcohol driving is impaired.

Statutory Instrument 385 of 2020 allowed for the issuing of Certificates under section 17 of the Road Traffic Act 2010 for the presence of particular drugs rather than the class of drug only. Concentration of drugs for those listed with per se limits under the Road Traffic Act 2016 are issued on the same certificate where

appropriate. This has streamlined the reporting process and offers more information to the Driver, An Garda Síochána and the Court.

Through 2020 the Bureau continued to focus on its legal responsibilities as set out in the Road Traffic Acts (RTA) and in accordance with the Government's Road Safety Strategy.

The Bureau operates to fulfil the interconnected functions below.

The Bureau continues to keep up to date with technology and use the best methods of analysis. It has kept abreast of innovation in instrumentation in the field of alcohol and drug detection both in the laboratory and outside of the laboratory – roadside and garda stations.

The Bureau provides a service to the Department of Transport, Tourism and Sport, the Courts, An Garda Síochána, defence, prosecution and the public.

The continued successful operation of the Bureau is dependent on the investment in staff training and skill enhancement. The Director is responsible for the day to day running of the Bureau. The Chief Analyst is responsible for the day to day running of the laboratories and their programmes. Each programme has a programme manager at Principal Analyst level. The Senior Administrator is responsible for the Corporate/Financial programme and for overall administration within the Bureau. The Bureau has a Quality Manager at Principal Analyst level.



# COVID-19 IMPACT

The onset of the COVID-19 pandemic brought about unprecedented disruption and uncertainty for the Irish economic and social landscape. COVID-19 and the public health restrictions put in place by the Government with the aim of preventing the spread of the virus, immediately impacted on the business and social life of the country, and on key elements of our role as an essential service.

The Medical Bureau of Road Safety plays a significant role in the delivery of an essential service to An Garda Síochána so was exempt from the closure advice issued by the Government in early March 2020. Following this the Bureau put a series of immediate measures in place to allow it to operate to the extent required to carry out the necessary statutory functions in a safe and controlled manner. When these measures were first introduced, like most COVID-19 supports, it was expected that they would be in place for the short-term.

From April 2020 three scientific staff were seconded on a short term basis to work at the National Virus Reference Laboratory (NVRL). This greatly helped the emergency response of the NVRL to the unfolding pandemic situation. The NVRL being on the same campus meant the three scientific staff from the MBRS were available to start immediately.

However, the continuing crisis meant that measures were extended for the duration of 2020 and into 2021. Like many organisations across the country and globally, the Bureau quickly adjusted to ensure its offices and laboratories were a safe environment for personnel and appropriate measures were implemented through its COVID-19 Response Plan.

The Bureau developed its Response Plan in line with UCD, Government Departments

and Health bodies to ensure a coordinated approach to virus prevention in the workplace while still maintaining an essential service with minimal disruption. Measures introduced, and/or provided for, as part of the response plan included working from home, changes to shift patterns, induction training, social distancing in the workplace, provision of PPE, cleaning & sanitisation procedures, public health signage and the implementation of protocols for staff dealing with potential COVID-19 cases.

With the immediate increase of Garda patrols and checkpoints, and travel restrictions implemented for the general public, the Bureau prepared for the uninterrupted analysis of blood and urine specimens, supply to the Gardai of the necessary equipment for their operational requirements and the necessary scientific forensic support for their use throughout the Covid 19 Pandemic. The work of the Bureau increased substantially during this pandemic period and is continuing to operate at this higher level.

Despite restrictions in 2020, there was a 23% increase in blood and urine specimens received by the MBRS and Drug testing increased by 39% when compared to 2019. This increase in specimens presented a significant challenge to the drug testing programme at a time when practices in the laboratory were changed to implement the required health and safety measures associated with Covid risk reduction.

The Toxicology programme managed to continue testing during all stages of the pandemic. Initially a shift pattern was adopted but this was discontinued, and normal working patterns resumed. For April and May, the reporting of benzodiazepines was suspended where another drug was present. Full testing was resumed in June 2020.

# ACHIEVEMENTS & DEVELOPMENTS DURING 2020

The Covid -19 pandemic brought particular challenges to the Bureau not least the very unexpected increase in specimens being forwarded to the Bureau in spite of the great reduction in traffic volumes. Particular health and safety measures were put in place, and these caused restrictions to normal ways of working.

## Preliminary Drug Testing

Preliminary Drug Testing (PDT) continued to increase at a moderate rate throughout the country. In compliance with action 124 of the Road Safety Strategy 2013-2020 the PDT review group chaired by the Chief Analyst and members from the Medical Bureau of Road Safety, An Garda Síochána and the Department of Transport, Tourism and Sport continued to meet to review and assess use of roadside drug testing, as well as review new technologies and testing systems available which may further enhance drug detection capabilities by An Garda Síochána. A prior information notice was published to assess the market and availability of advanced technologies for preliminary drug testing.

## Laboratory Preliminary Drug Screening

The Bureau continues to carry out Preliminary Drug Screening using LC-MS-MS for the analysis of drugs. In previous years, all specimens which had an alcohol level of less than 80mg/100ml blood or equivalent were screened for the presence of drugs, this was extended to include all specimens having an alcohol level of less than 100mg/100ml blood or equivalent. The LC-MS-MS screening method allows the specific drug or drugs to be identified at this preliminary stage.

## Laboratory Confirmatory Drug Testing

All specimens that screened positive for a drug or drugs were forwarded for confirmatory analysis. In many cases polydrug use was evident. The Bureau certifies the presence of

drugs and certifies the concentration of those drugs specified in Schedule 2 of the Road Traffic Act 2016. All laboratory drug testing is carried out in the Bureau's facility in University College Dublin.

## Preliminary Breath Alcohol Testing

Preliminary Breath Testing (PBT) devices are provided to An Garda Síochána for use at the roadside to test drivers breath for the presence of alcohol. The Bureau continue to calibrate these devices biannually and there are 1,400 available for use by the force at all times.

## Evidential Breath Alcohol Testing

Evidential Breath Testing (EBT) instruments are tested biannually. On site visits were suspended when the country was in full lockdown in the month of April. This was managed by bringing some visits forward into March and pushing others on to May. This resulted in maintaining almost all EBT instruments throughout the entirety of 2020. The Bureau continued to maintain 86 evidential breath alcohol testing instruments in Garda stations nationwide.

## Quality Assurance

Following an audit by INAB (Irish National Accreditation Board) in early 2020, ISO 17025 accreditation was maintained.

The Bureau's Flexible scope allowed changes to be made to the cut-off levels applied to several analytes which are part of the Bureau's preliminary drug testing panel. These changes were applied to the Bureau's scope of testing following the INAB audit in April 2020.

## Health, Welfare and Safety

Particular Covid -19 protocols were put in place and remain in place at the time of writing this 2020 report. These included personal temperature check on entry, one-way systems, social distancing, clear signage and mask wearing while moving about the building. The

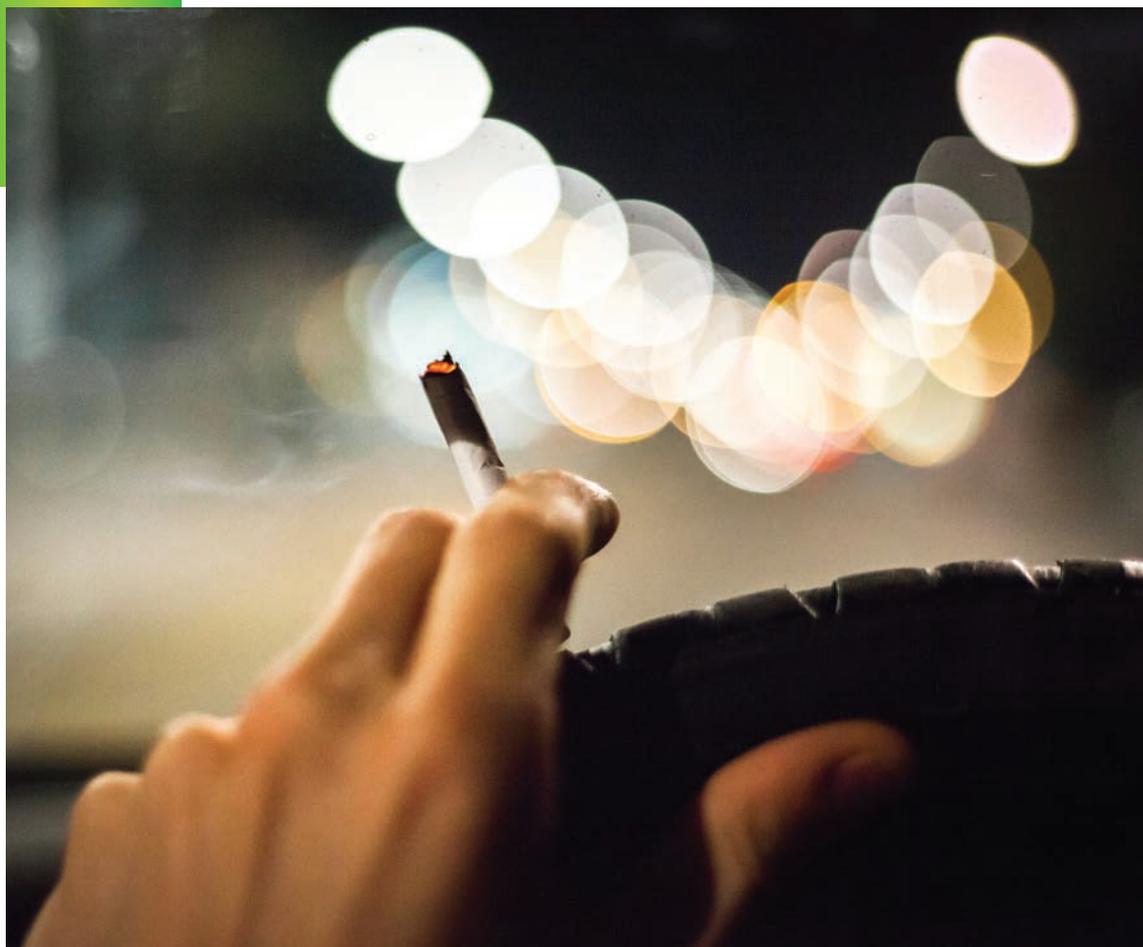
Bureau and the staff are committed to following government and HSE guidelines. This ensured that the Bureau remained open and fully operational throughout 2020.

The Bureau is committed to providing a safe environment for all employees, visiting engineers, Gardaí and others. The Bureau Safety Statement was reviewed and throughout the year Safety Monitors continued to assess and maintain the highest safety standards. University College Dublin's parent Safety Statement is adhered to and staff in the Bureau have access to the full suite of health and wellness offerings made available by the university. There were no reportable or significant accidents or incidents in the year.

## Knowledge Sharing and Development

Bureau staff and the Director continued to present at a number of meetings which were in the main held virtually. Training of Gardaí by the Bureau did not take place throughout 2020. It is not expected that this had any significant operational impact as an adequate number of garda members were trained in previous years.

Bureau scientists sit on national and international standards and knowledge sharing committees and working groups including OIML (International Organisation of Legal Metrology), Eurachem, UKIAFT (United Kingdom and Ireland Association of Forensic Toxicologists) and EMCDDA (European Monitoring Centre for Drugs and Drug Addiction). The work of these committees continued virtually.



# SPECIMENS RECEIVED IN THE LABORATORY FOR ANALYSIS

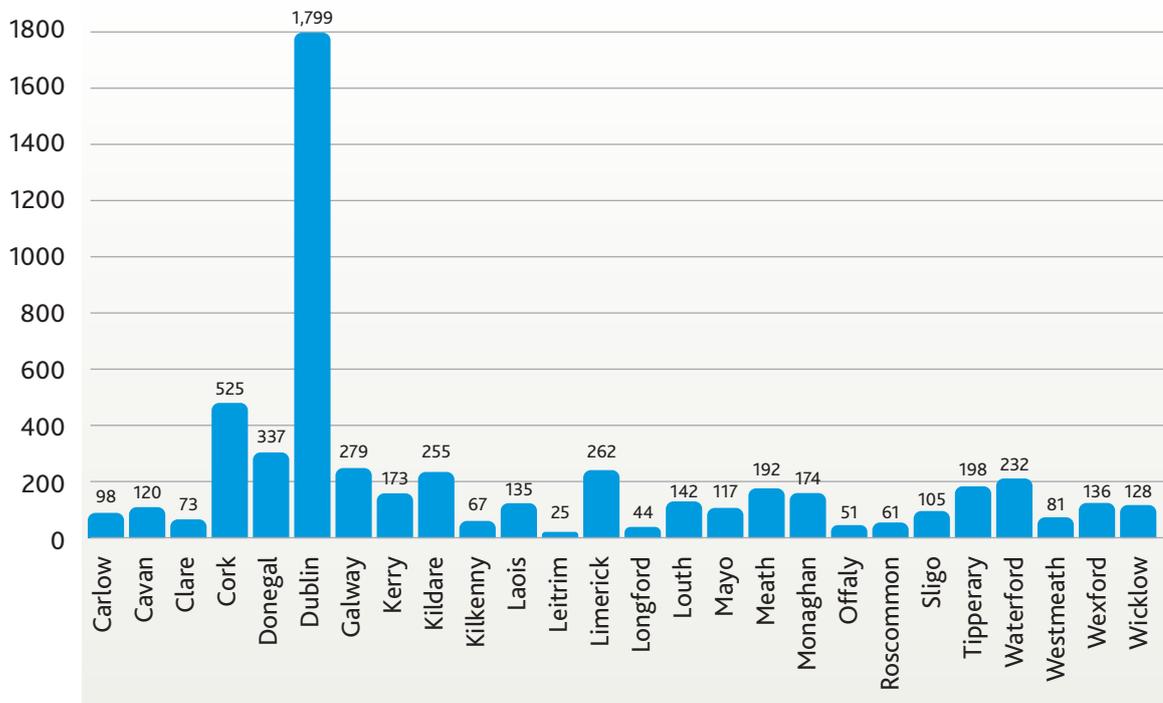
In 2020, a total of 5,967 blood and urine specimens were received for alcohol and/or drug testing.

This is a 23% increase in specimens received with a 39% increase in specimens being forwarded for Drug Testing. The drug testing increase is driven by a change in procedure which includes all specimens having an alcohol result < 100mg/100ml in blood or the equivalent in urine being forwarded for drug testing and increased drug detection by An Garda Síochána.

**Table 1 Total Number of Specimens Received within Programmes**

Programme	2020	2019	Increase/Decrease
Alcohol Blood & Urine	5,967	4,854	23% increase
Toxicology Blood & Urine	4,489	3,229	39% increase
Evidential Breath Testing	3,278	5,372	39% decrease

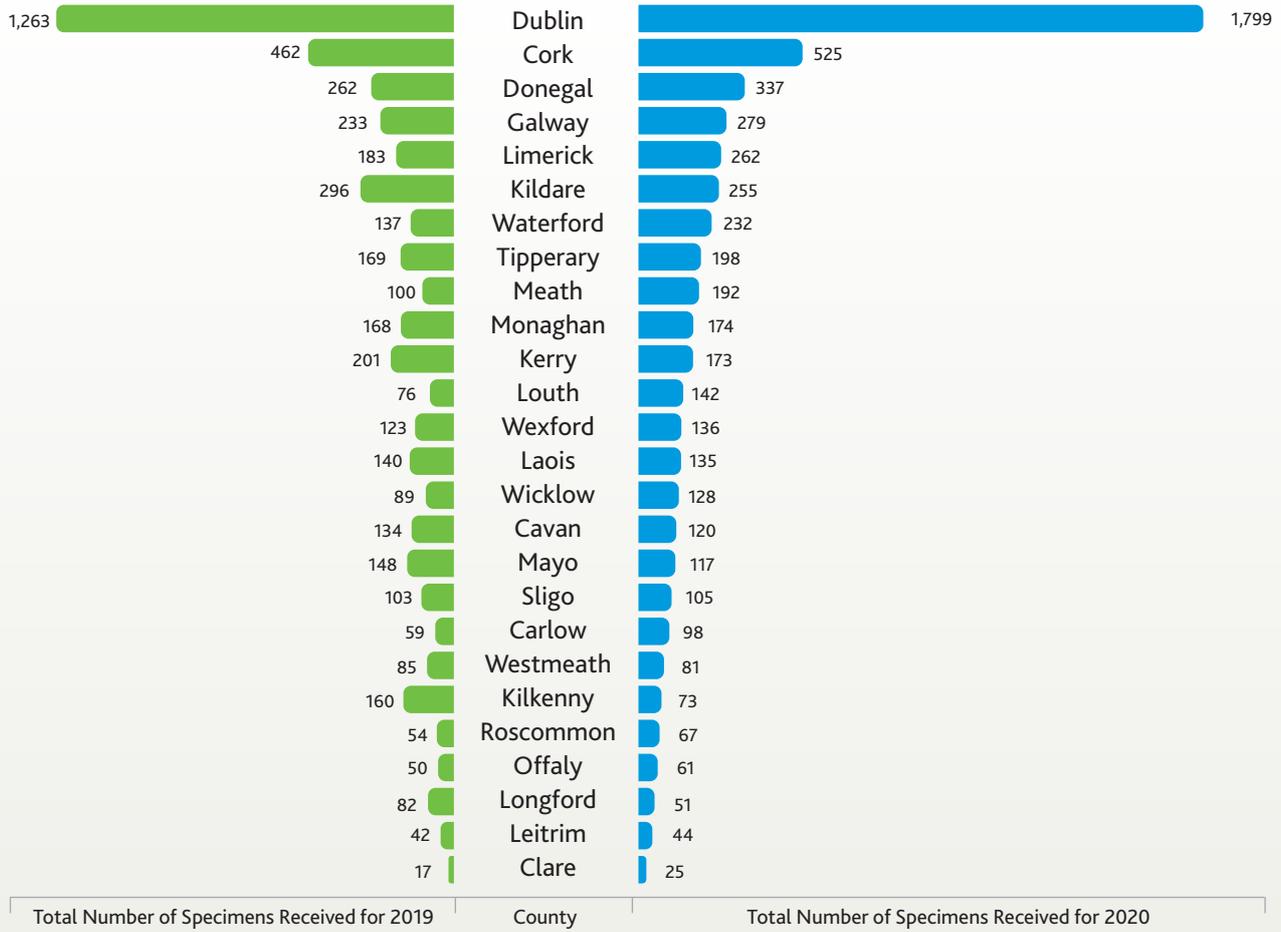
**Chart 1 Blood & Urine Specimens received by County**



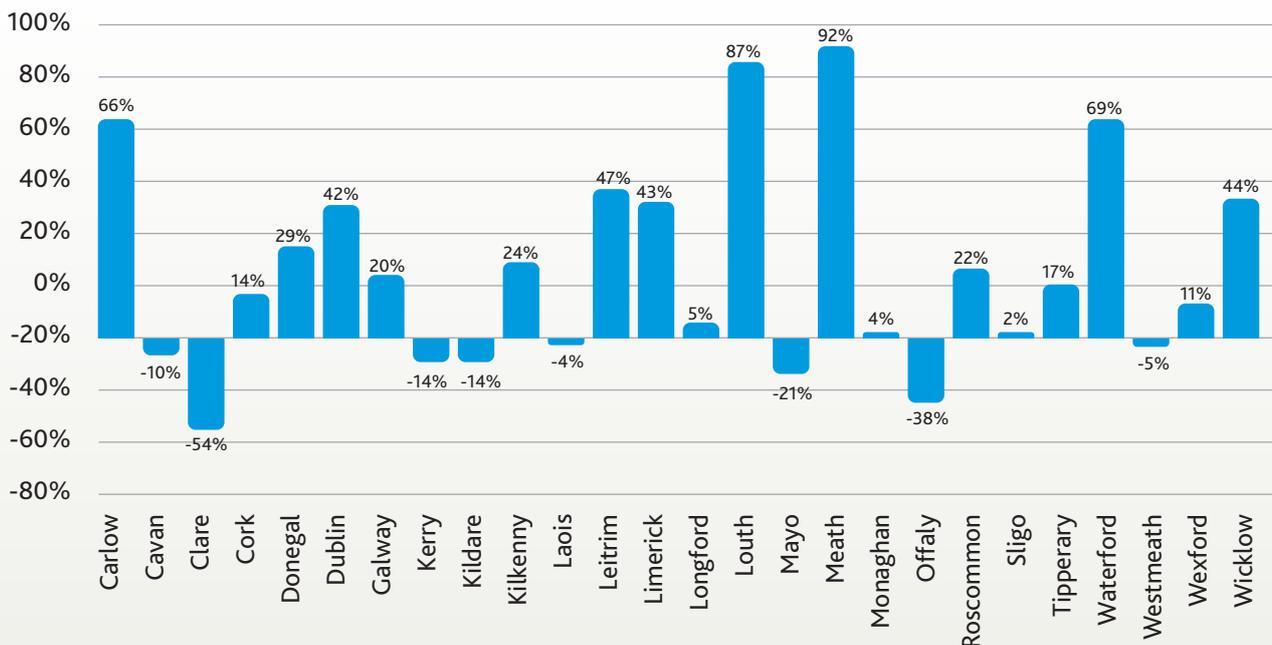
Note: Number of Specimens forwarded to the Bureau for analysis by An Garda Síochána



Chart 2



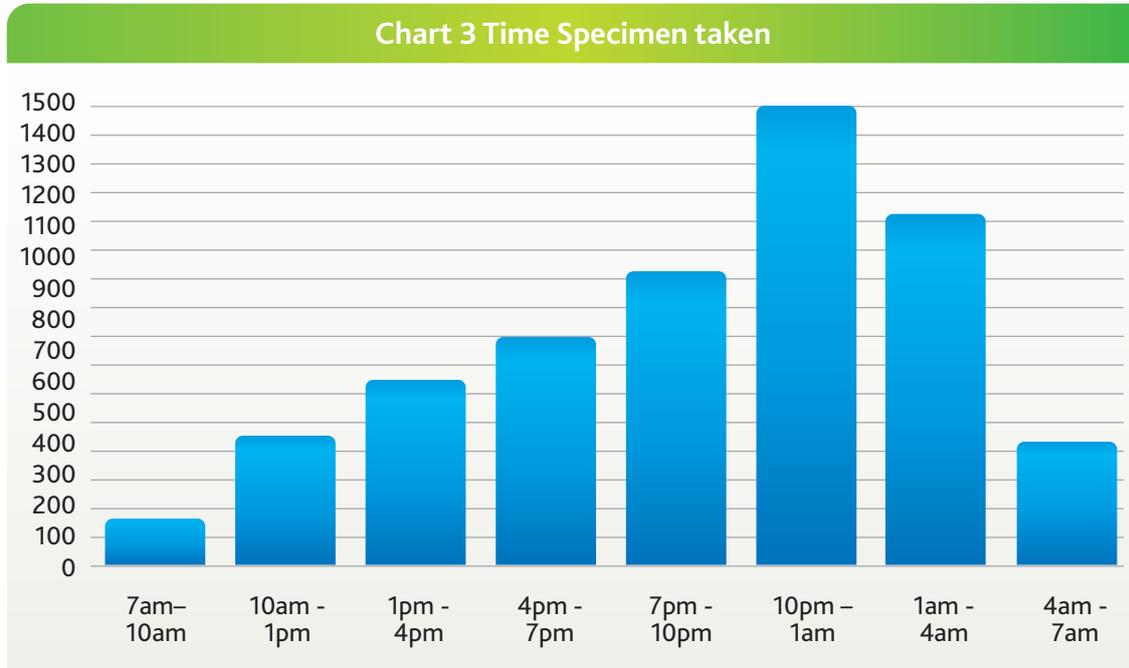
% Difference by County 2019 v 2020





### Analysis of Time

Specimens of blood and urine are much more likely to be provided in the evening to early hours of the morning as can be seen from the chart below. This remains unchanged from previous years.



### Number of Specimens Provided in Hospitals

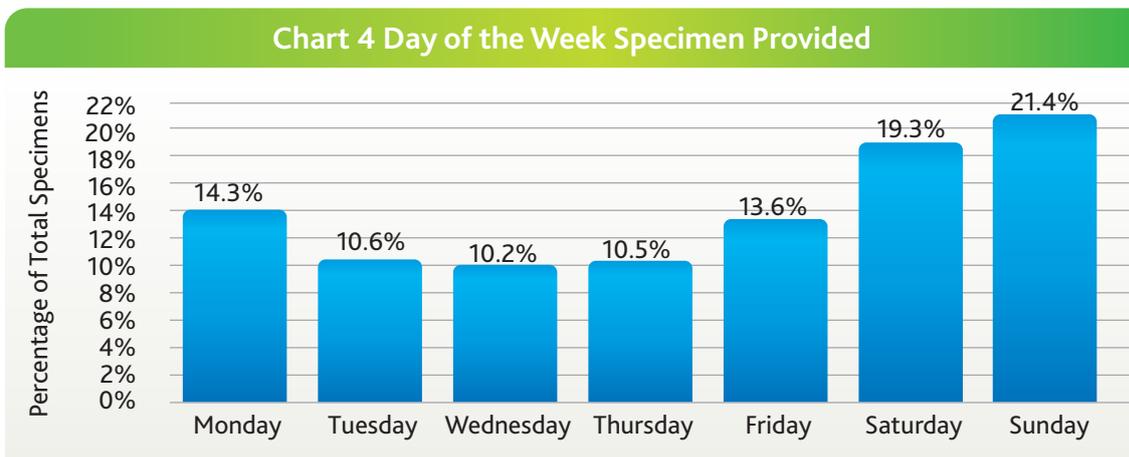
In 2020 there were 441 specimens provided in hospitals, this represents 7% of total blood and urine specimens. There has been a significant reduction of 18% in specimens taken in hospitals in 2020 compared to 2019, this is interesting in the context of an overall specimen increase of 23%.

### Unconscious Drivers

In 2020, 4 specimens were forwarded to the Bureau for analysis following blood draws from unconscious drivers.

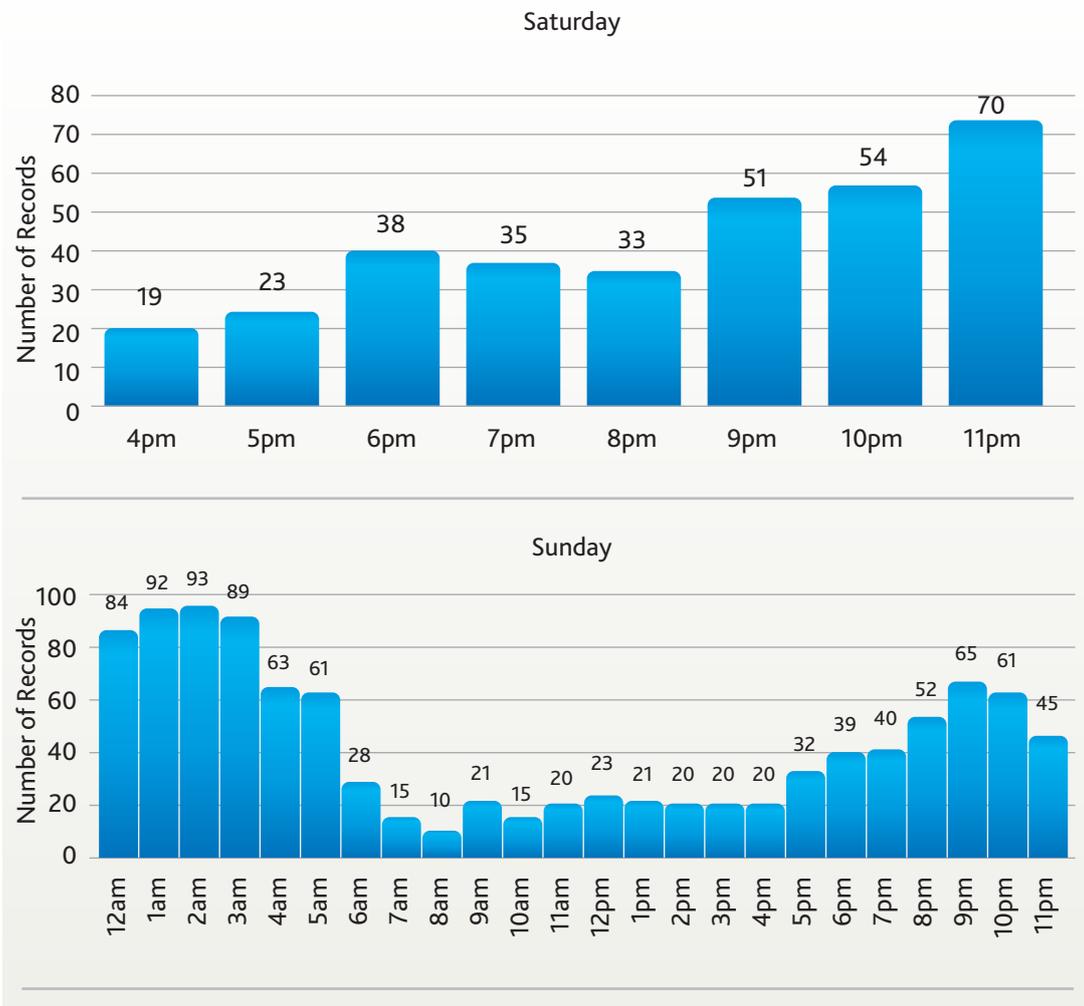
### Analysis of Day

As per Chart 4 below, it is evident that more specimens of blood and urine are provided on Saturday, Sunday and Monday. With the peak number of specimens being taken between 11pm on a Saturday evening to 3 am on Sunday morning





**Weekend hours – 4pm Saturday to 10am Monday Morning**



The above charts display that the most prevalent hours for intoxicant drivers is late night to early morning.

**Gender Analysis**

A similar pattern was seen in the male/female ratio in 2020 compared to previous years with 86% of drivers providing specimens being male.

**Table 2 Gender Profile of Specimens received – Blood & Urine**

	2020	2019
<b>MALE</b>	87%	86%
<b>FEMALE</b>	13%	14%



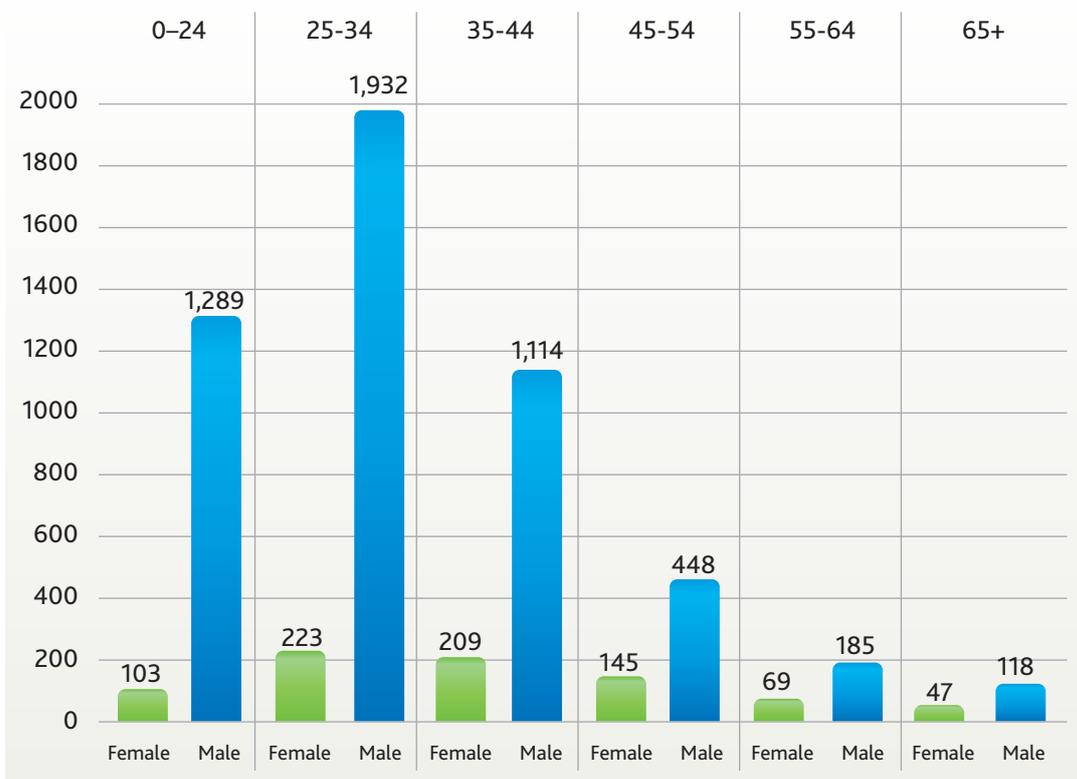
### Age Profile

The age profile of drivers providing blood and urine specimens in the 25 – 34 year old bracket continues to contribute to the greatest percentage of arrested drivers.

Chart 5 2020 Age Profile of Drivers

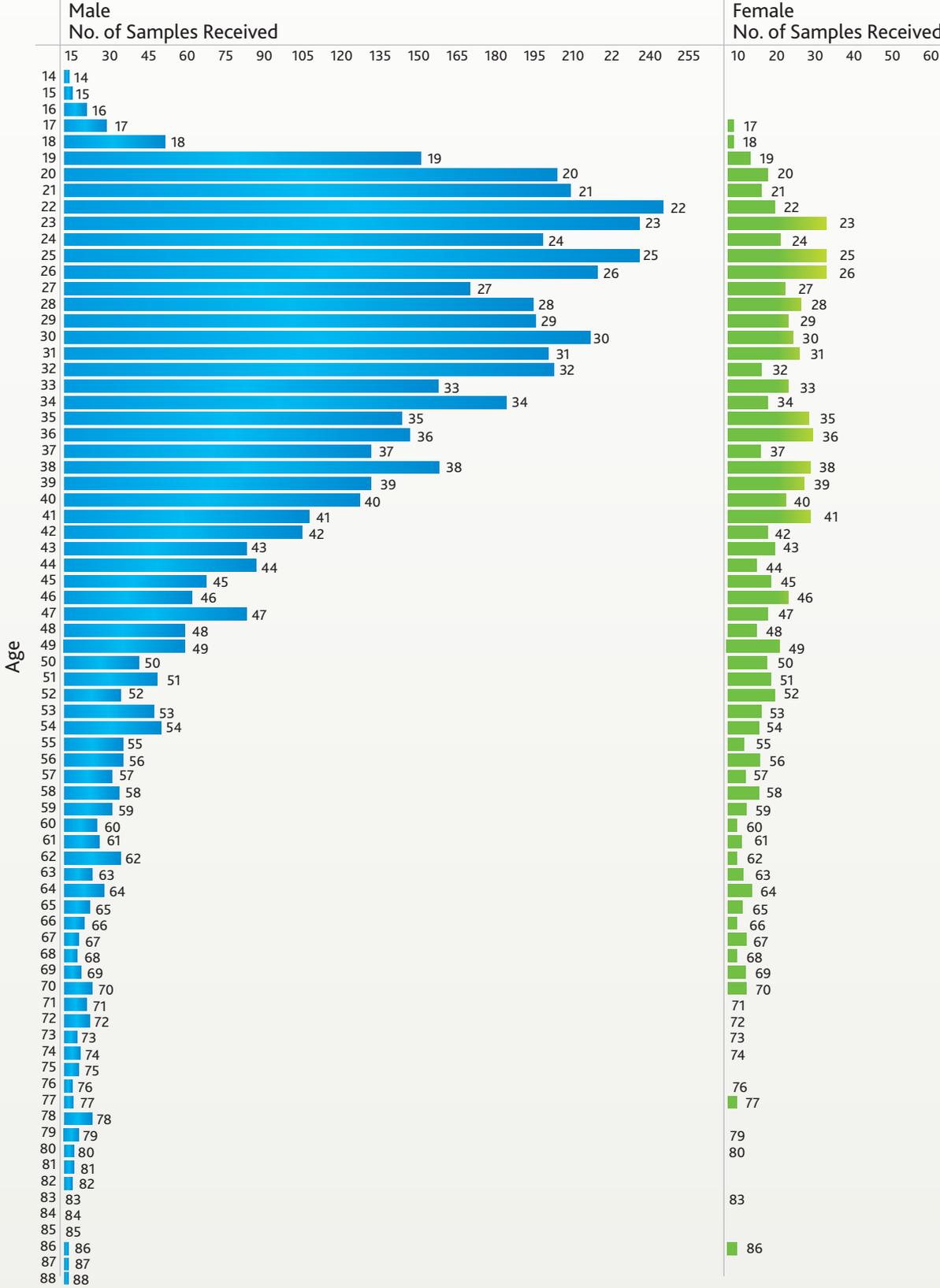


Chart 6 2020 Age Profile by Gender





### 2020 Age Profile by Gender



# ALCOHOL PROGRAMME: BLOOD & URINE

This programme is led by Principal Analyst, Ms Louise Lawlor.

The main functions of the Blood and Urine programme are:

- The receipt and analysis of specimens of blood and urine forwarded to the Bureau
- The determination of the concentration of alcohol in blood and urine specimens
- The issue of Certificates of Analysis
- The testing of spurious specimens
- Provision of expert assistance to the Courts and the Department of Transport, Tourism and Sport
- Collection and analysis of data in relation to alcohol tests

## Provision of Blood and Urine Kits

The number of specimen kits prepared in 2020 was 7,900 (consisting of 6,400 blood kits and 1,500 urine kits.)

In total 7,200 kits were issued, comprising of 5,600 blood kits and 1,600 urine kits to Garda Central Stores in 2020.

1,700 jugs were prepared and 1,800 issued. (See Table 3).



**Table 3: Kits Prepared & Issued by the Medical Bureau of Road Safety**

	Kits Prepared		Kits Issued	
	2020	2019	2020	2019
<b>BLOOD KITS</b>	6,400	3,600	6,400	3,600
<b>URINE KITS</b>	1,500	1,300	1,500	1,300
<b>JUGS</b>	1,700	1,400	1,700	1,400



### Blood and Urine Alcohol Analysis

Blood and Urine specimens are analysed using Headspace Gas Chromatography with Flame Ionisation Detection (HSGC-FID). Each specimen is analysed at least twice by two different scientists using two different HSGC-FID systems. The results of analyses must concur before issue of a Certificate of Analysis.

A total of 5,967 blood and urine specimens were received for analysis during 2020. 14 specimens were received for drug testing only, as the drivers had been tested for alcohol using an Evidential Breath Testing instrument. In 69 cases, certificates were not issued either because of some defect in the specimen or in the documentation accompanying the specimen. The number of blood and urine specimens received in 2020 increased by 23% on the number received during 2019.

### Median Alcohol Level in Blood and Urine

The median alcohol level in blood was 148mg/100ml and in urine was 199mg/100ml for 2020 excluding specimens which had no trace of alcohol.

### Max Alcohol Reported Level in Blood and Urine

The max alcohol level in blood was 396mg/100ml and in urine was 494mg/100ml for 2020.

*\*\* It is important to note that on receipt of specimens for testing, the Bureau does not receive driver classification details, i.e., Fully Licenced Drivers versus Professional, Learner and Novice Drivers where the legal limits are reduced.*

Charts 7 and 8 show the proportion of drivers in the different bands for blood and urine, respectively.

Chart 7 Certified Positive Alcohol Blood Levels for 2020 Samples

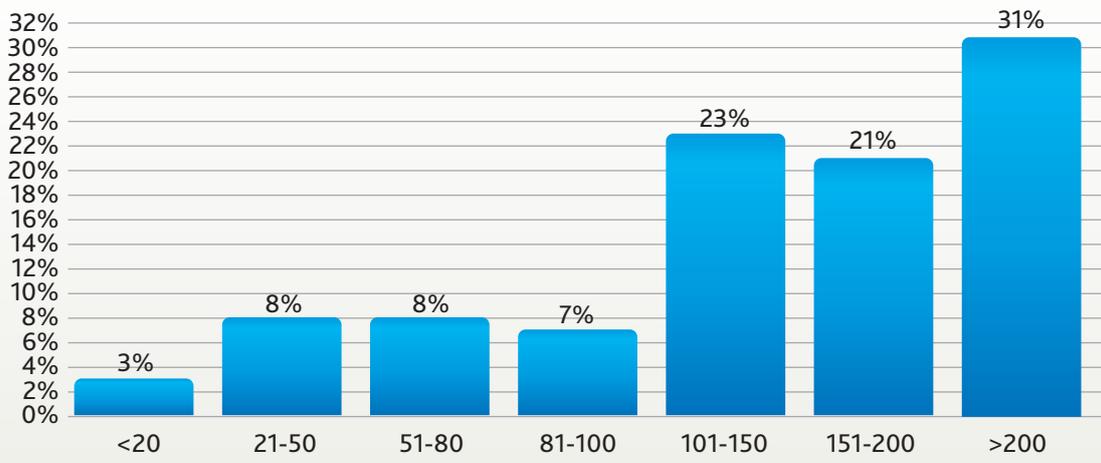
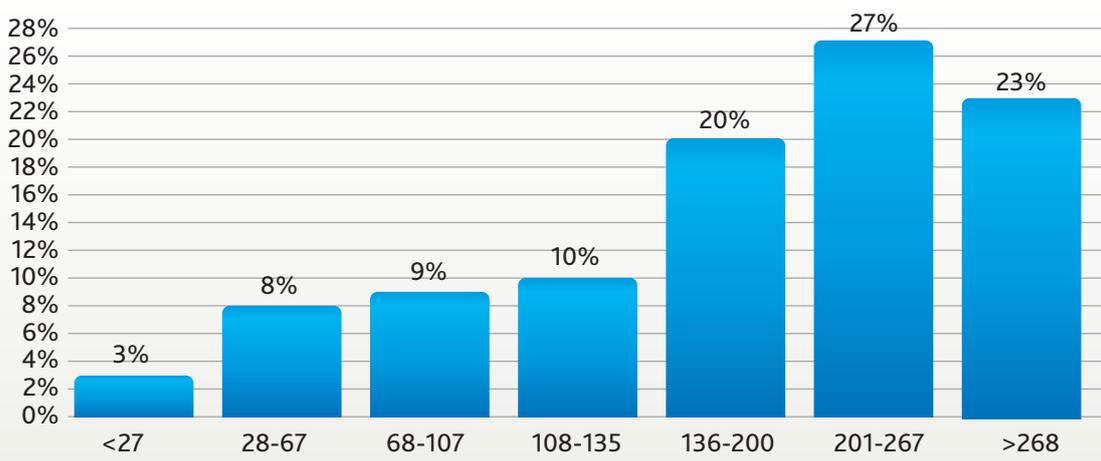


Chart 8 Certified Positive Alcohol Urine Levels for 2020 Samples



# ALCOHOL PROGRAMME: BREATH

This programme is led by Principal Analyst,  
Ms Louise Lawlor.

The main functions of the Breath Alcohol  
programme are:

- › The approval, supply and testing of apparatus for indicating the presence of alcohol in the breath (roadside preliminary breath testing devices)
- › The approval, supply and testing of apparatus for determining the concentration of alcohol in the breath (evidential breath testing instruments)
- › Provision of expert assistance to the Courts and DTTAS (Department of Transport, Tourism and Sport).
- › Provision of training courses for EvidenzerIRL Operators and Supervisors.
- › Collection and analysis of data in relation to evidential breath alcohol tests.

## Roadside Breath Alcohol Testing

A total of 2,410 calibrations were conducted on 7510 devices with devices being calibrated biannually.

## Evidential Breath Alcohol Testing

The Bureau continued to support and maintain the 86 EvidenzerIRL instruments in Garda stations throughout Ireland.

## Garda Training

All Garda Training by the Bureau was suspended since the beginning of the Covid restrictions in March 2020.

## Testing EBT instruments in Garda Stations

Bureau Scientists tested each instrument installed in Garda stations on at least two occasions. This onsite testing was carried out on 203 occasions in 2020 (213 in 2019) notwithstanding the Covid-19 restrictions during two lockdowns in 2020. This testing is an essential element in assuring the quality of breath alcohol test results for evidential purposes.

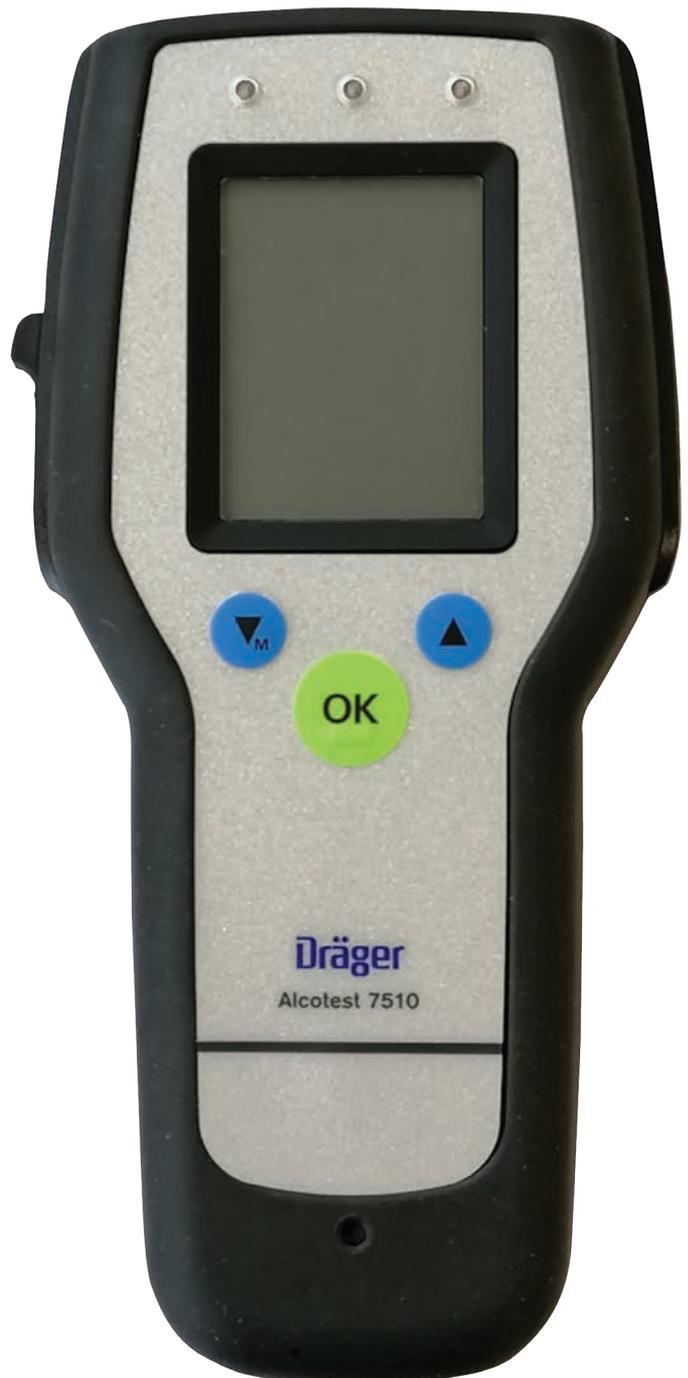
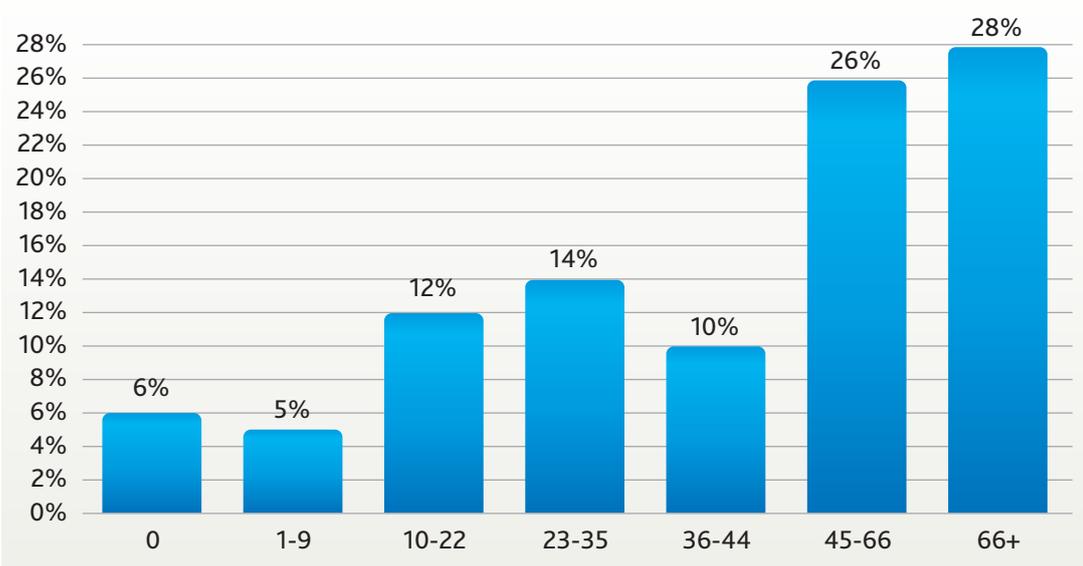




Chart 9 Certified Breath Alcohol Levels 2020





### Breath Alcohol Analysis

In 2020, a total of 3,278 drivers were brought to Garda Stations and provided breath specimens for alcohol analysis. This is a decrease of drivers brought to provide breath specimens to an EBT instrument of 39%. 2% of these were cases where the EvidenzerIRL flagged a reason why the Section 13 certificate could not be produced, for example safeguards such as Mouth Alcohol or Breath Difference. 9% of drivers either failed or refused to provide breath specimens. A total of 2,783 (4,723 in 2019) breath specimens were successfully completed and a Section 13 certificate issued.

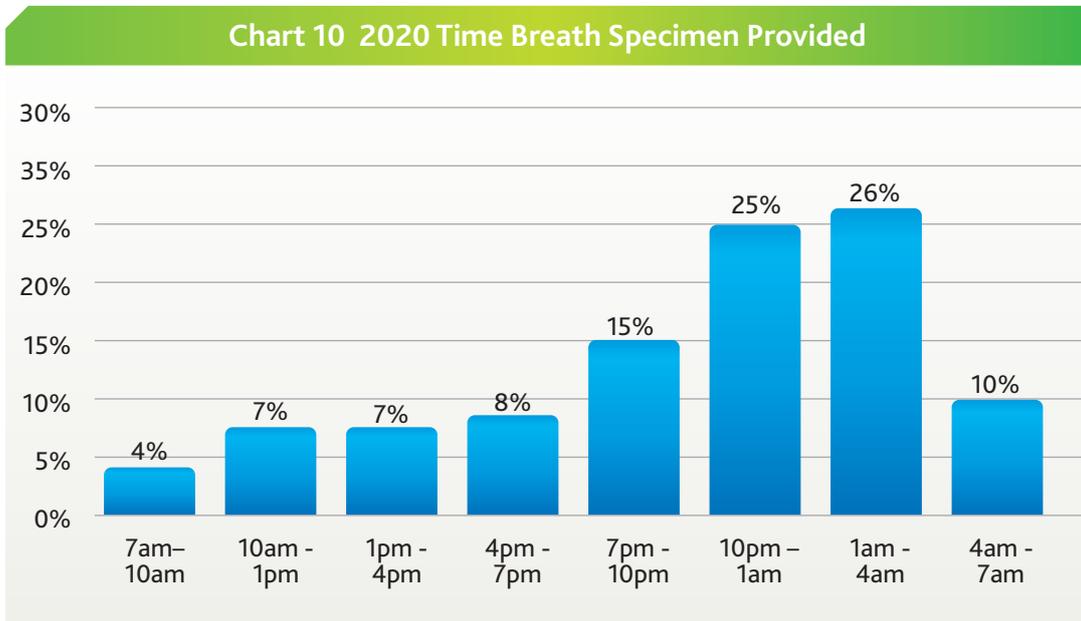
Of all the drivers who successfully provided breath specimens 94% of them registered an alcohol result above zero.

### Mean Alcohol Level in Breath

Excluding breath specimens which returned a zero alcohol result the mean certified alcohol level in breath was 51µg/100ml in 2020.

### Analysis of Time

The greatest number of detections are made between 10pm and 4am.



### Gender in Evidential Breath Testing Specimens

The number of male drivers required to provide a breath specimen far exceeds the number of female drivers, the male to female ratio being 6:1.

**Table 4 Gender Profile of Breath Specimens provided**

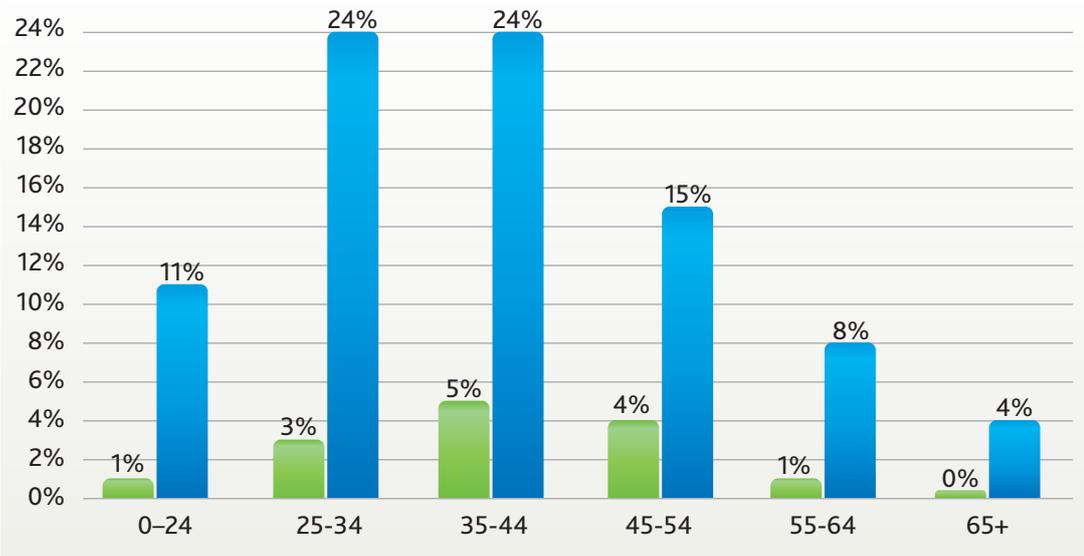
	2020	2019
MALE	85%	86%
FEMALE	15%	14%



Chart 11 2020 Age Profile of Drivers - Breath



Chart 12 2020 Agr Profile of Drivers - Breath % Male and Female



# TOXICOLOGY PROGRAMME

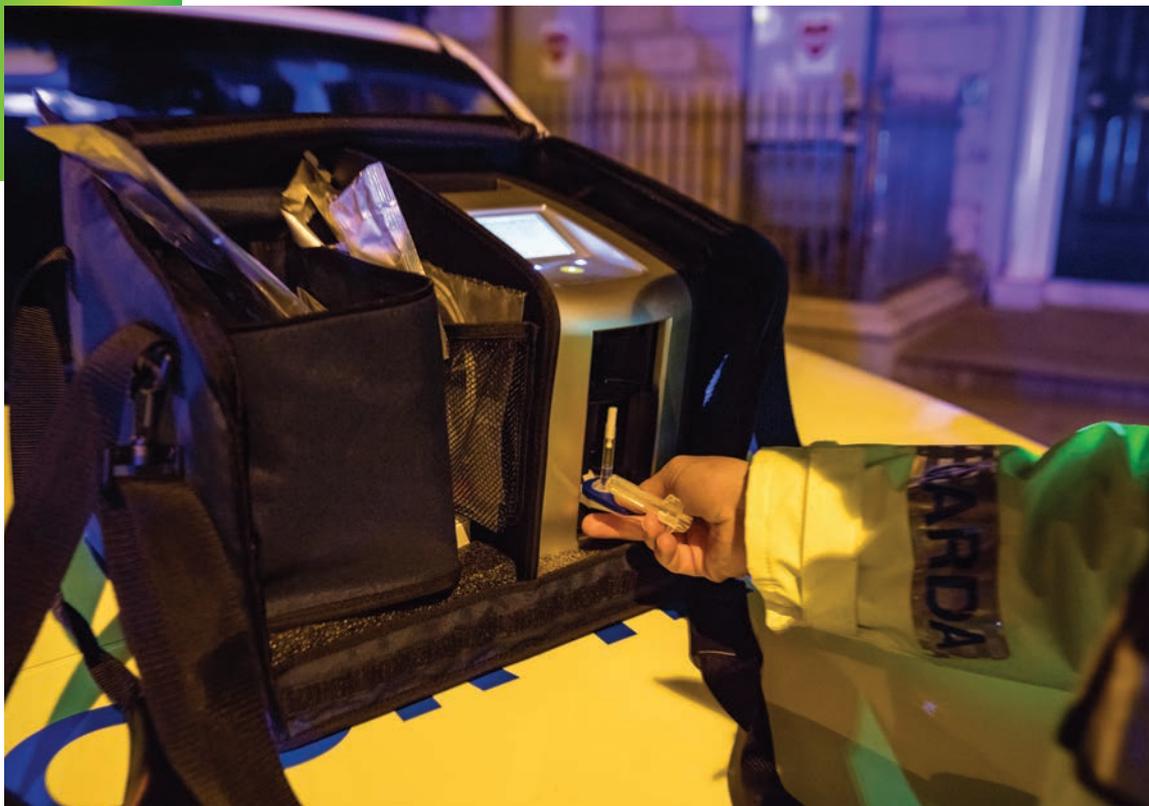
This programme is led by Principal Analyst, Dr Richard Maguire. The main functions of this programme in 2020 were:

- The analysis of blood and urine specimens for the presence and/or concentration of a drug or drugs.
- The issue of Certificates of Analysis for the presence and/or concentration of a drug or drugs.
- Provision/maintenance of Preliminary Drug Testing Devices (oral fluid) and quality control of consumables.
- Analysis of oral fluid for quality control purposes.
- Development of new methods of drug testing and improvement of existing methods.
- Provision of expert assistance to the Courts, the Department of Transport and An Garda Síochána.

- Collection and analysis of data in relation to toxicology tests.
- Research on drugs that cause impairment in drivers.
- Development of the Scientists in the Toxicology programme.

## Roadside/Station Based Preliminary Drug Testing (PDT)

The PDT programme was introduced in 2017 and was effective from 13th April 2017. Initially this provided 86 stationary DT5000 analysers and 47 mobile analysers. The analyser can detect Cannabis, Cocaine, Opiates and Benzodiazepines in oral fluid. There was a further increase in mobile devices to 75 during 2019 bringing the total mobile devices issued to 161. In 2020, the number of Drager 5000 devices was increased by 12 to 173.





86 station-based systems were available and 43 of these were also available for use outside the stations. In total 87 analysers were available exclusively for mobile use. This is an additional 12 on the number available in 2019. Five analysers are used for Training purposes in the Garda Training college in Templemore. These devices are calibrated on a biannual basis.

The Bureau purchased 11,620 consumable drug test cassettes, which are called STKs, for use with the devices in 2020. The Bureau manages the quality control testing of the STKs part of this system. This is a labour intensive process

and requires a significant amount of laboratory analysis to ensure that the STKs meet the requirements of the MBRS.

The MBRS was satisfied with the analytical performance of the DT5000 in 2020 and will continue to monitor its performance on an ongoing basis.

When tests are conducted on the analysers they are recorded, and this information can be downloaded for statistical purpose before being erased from the analysers. The number of tests on the analysers available to An Garda Síochána were collated for 2020; however, it is important to note, this is not a measure of enforcement activity, and the current system does not distinguish between tests conducted for training, demonstration, quality control or enforcement purposes. The activity for 2020 is shown in Table 5 below.

These figures represent increases in use of both mobile (46%) and station-based analysers (228%). The policy change in August 2020 which resulted in 43 of the station based devices being available for mobile use had a very positive impact on analyser use and drug detection in drivers.

Table 5

ANALYSER USE TYPE	NUMBER OF TESTS
Mobile	10,069 (6,881 in 2019), 46% increase
Station Based	1,820 (554 in 2019), 228% increase
Total	11,889 (7,345 in 2019), 61% increase



## INFORMATION FORM

To be returned to Medical Bureau of Road Safety with specimen taken under the Road Traffic Act.

(1) Driver's Name: \_\_\_\_\_

(2) Was Evidential Breath Testing carried out? **YES / NO**

(3) Was Preliminary Drug Testing carried out? **YES / NO**

Cannabis  Benzodiazepine  Cocaine  Opiate

Please indicate positive results by ticking the relevant boxes.

When an oral fluid sample is collected from a driver for testing, and is positive for a drug or drugs, the Bureau requests that An Garda Síochána submit an "Information Form" (see below) indicating the results of the roadside test. This is to enable a comparison of the performance of the DT5000 and subsequent laboratory testing. In 2020, 2,162 specimens were returned with an "Information Form" indicating that an oral fluid PDT test had been carried out (46% increase on 2019). Of these, 2,151 indicated a positive drug result for at least one of the four drugs that the DT5000 can detect.

Of the 2,151 positive cases the prevalence of drugs detected by the DT5000 was as follows: 67% were positive for cannabis (66% 2019, 72% 2018, 64% 2017), 46% were positive for cocaine (43% 2019, 41% 2018, 35% 2017), 8% were positive for opiates (8% 2019, 8% 2018, 8%

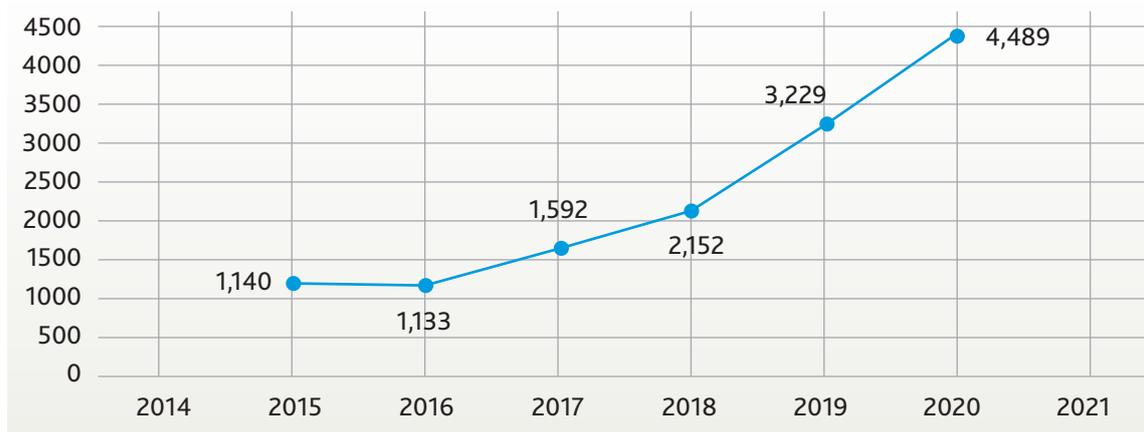
2017) and 5% were positive for benzodiazepines (4% 2019, 7% 2018, 5% 2017). As in previous years the overwhelming detection is for illicit drugs rather than opiates and benzodiazepines which can be legitimately purchased and/or prescribed but can also be misused. The steady year on year increase in the number of detections for cocaine when using the DT5000 is notable and is clearly out of step with the trends for the other drugs.

### Laboratory Testing

#### Blood and Urine Specimen Overview

In 2020, there were 4,489 specimens analysed for the presence of a drug or drugs. This is a 39% increase on the number of specimens analysed in 2019, which is a significant increase. The chart below shows how this figure has changed since 2015 (Chart 13). Since 2016 the workload in toxicology has quadrupled.

Chart 13 Total Toxicology Specimens Tested 2015-2020





Toxicological analysis was required for 75% of all specimens received. (9% increase on 2019 where 66% of all specimens required Toxicological analysis). From the beginning of 2020, specimens under 100mg/100ml in blood and the equivalent in urine were automatically tested for drugs. Prior to that, specimens with alcohol under 80mg/100ml in blood and 107mg/100ml in urine were automatically tested for drugs.

There were 26 (33% decrease on the 39 in 2019) over the alcohol limit specimens specifically requested by An Garda Síochána and 14 (66% decrease on the 42 in 2019) Evidential Breath Testing negative specimens sent to the MBRS for drug testing. An additional 119 (290% increase on the 41 in 2019) specimens which were over the alcohol limit stated above but were received with a positive preliminary drugs test at either the roadside or in a Garda station were also automatically tested for drugs.

The measures introduced in the 2016 Road Traffic Act empowered the Gardaí to take blood where drugs were indicated by a preliminary

test. This shift in the specimen type continued in 2020 90.1% (86% 2019) of specimens analysed for toxicology being blood and 9.9% being urine (14% urine in 2019).

Initial screening testing was conducted for cannabis, cocaine, opiates (e.g., morphine, codeine), benzodiazepines, amphetamines (e.g., amphetamine, methamphetamine, MDA, MDMA) using Liquid Chromatography with Mass Spectrometry (LC-MS-MS).

Of the 4,489 specimens tested in 2020, 3,650 were found to be positive for at least one drug class on preliminary laboratory drug testing, while 839 (19%) were negative for the drugs targeted by the MBRS at the thresholds used by the MBRS. This drug positive figure represented 81% of Toxicology specimens and 61% of all specimens received in the MBRS.

Chart 14 below shows the prevalence of the drugs detected in all specimens of blood and urine. As in previous years cannabis remains the most prevalent drug as in 2019. Cocaine remains the second most prevalent.

Chart 14 Drug Prevalence Screening 2020

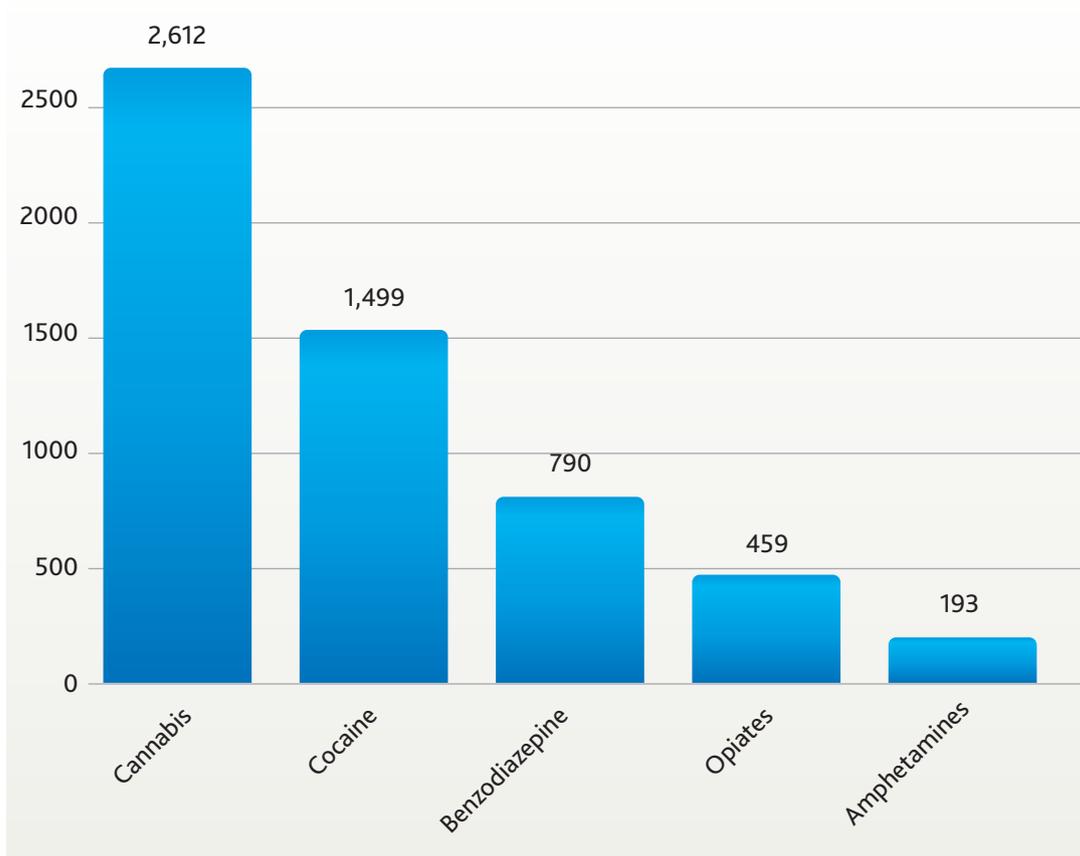
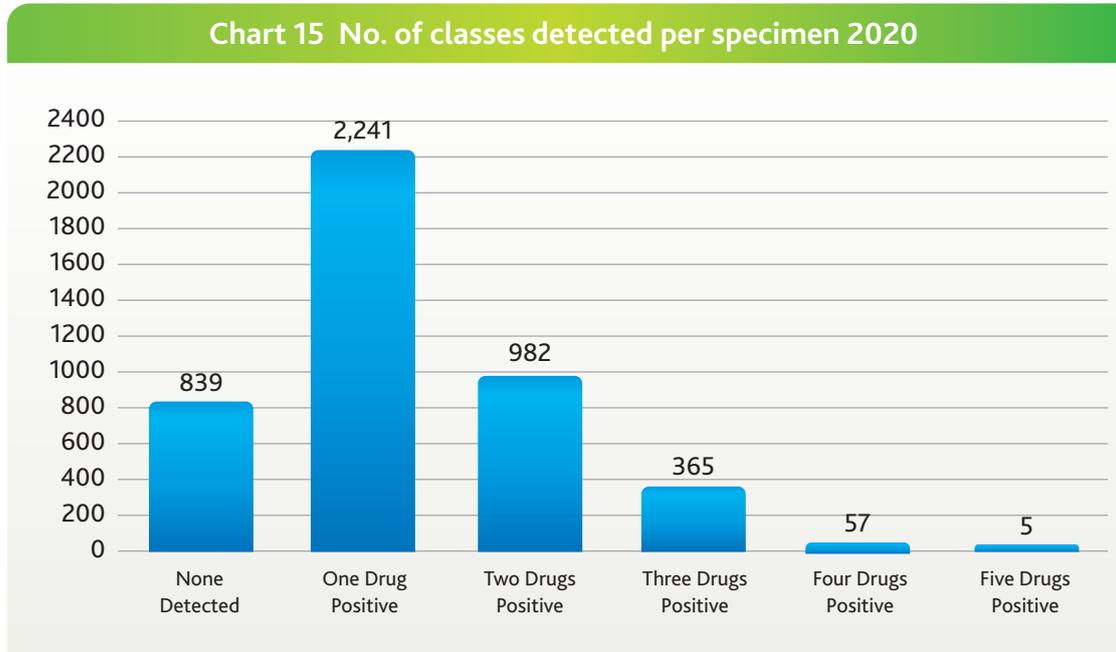
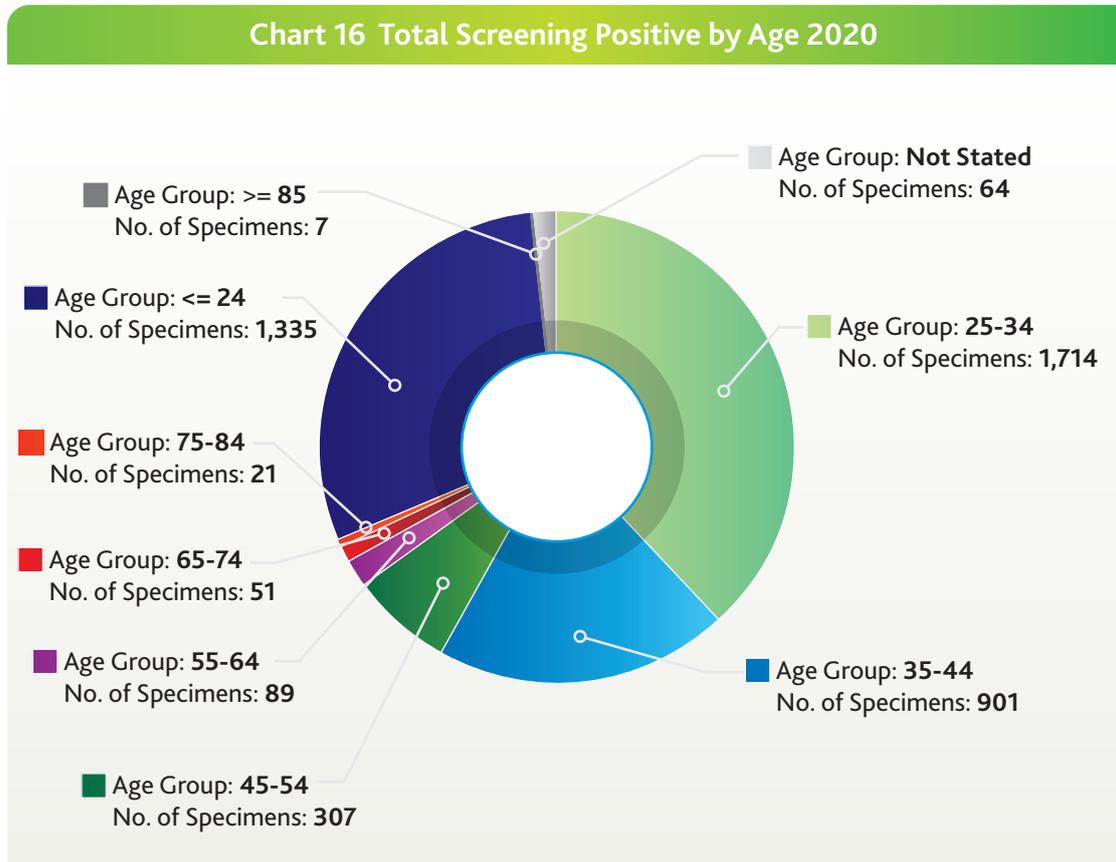




Chart 15 shows the prevalence and extent of polydrug use in the tested specimens for blood and urine. Again, polydrug use was commonly detected in 2020, where 1,409 of positive cases (38% of positive cases) of cases had 2 or more drugs detected.



The gender profile was 88% male and 12% female based on screening positive data. The age profile of positive specimens is shown in chart 16 below with the vast majority being in the 44 and under age bracket.





Once a positive specimen is detected at the initial screening test, confirmation is carried out using Gas Chromatography with tandem Mass Spectrometry for Cannabis and Liquid Chromatography with tandem Mass Spectrometry for all other drugs. All specimens positive on lab screening in 2020 were forwarded for confirmation of all drugs detected at the screening stage, as far as specimen volume permitted.

As in 2020 and previous years the workload in confirmatory testing has also increased significantly. The extent of the increase in confirmatory testing for the various drugs/

classes is highlighted in Table 6 and 7 below. These tables show the difference in the number of confirmatory analyses testing positive in 2020 with the percentage increase/decrease compared to 2019 and this shows that the increase in confirmations was in the order of 49.2%. In each case a small number of specimens could not be confirmed due to specimen volume limitations and small number were found to be negative on confirmation. In the case of benzodiazepines not all screen positive specimens were confirmed due measures introduced during first wave of Covid-19.

Table 6

DRUG CLASS	2018	2019	2020	% Change
Cannabis	1,034	1,747	2,606	49.2% Increase
Benzodiazepines*	468	475	535	12.6% Increase
Cocaine	535	852	1,494	75.3% Increase
Opiate/Methadone	260	308	453	47.1% Increase
Amphetamine/Methamphetamine	82	157	193	22.9% Increase
<b>Total</b>	<b>2,649</b>	<b>3,539</b>	<b>5,281</b>	<b>49.2% Increase</b>

\*During the first wave of covid 19 Benzodiazepine confirmations were not carried out if another drug was confirmed (between April and May 2020).

Table 7

DRUG CLASS	Screened Positive	Confirmed Positive	Confirmation Rate (including presence)
Cannabis	2614	2527	98.2%
Benzodiazepines*	788	495	63.9%*
Cocaine	1499	1375	91.9%
Opiate/Methadone	459	441	96.1%
Amphetamine/Methamphetamine	193	192	99.5%

\*During the first wave of covid 19 Benzodiazepine confirmations were not carried out if another drug was confirmed (between April and May 2020).



The 2016 Road Traffic Act (enacted April 2017) introduced per se levels for Cannabis, Cocaine and Heroin in whole blood (see Table 8 below).

Table 8

Drug	Legal Limit
$\Delta^9$ -Tetrahydrocannabinol (Cannabis)	1ng/ml
11-nor-9-carboxy- $\Delta^9$ -tetrahydrocannabinol (Cannabis)	5ng/ml
Cocaine	10ng/ml
Benzoylcegonine (Cocaine)	50ng/ml
6-acetylmorphine (Heroin)	5ng/ml

In October 2020, the green and blue certificates for concentration and presence respectively were consolidated into one certificate prescribed in Statutory Instrument 385, 2020. In addition, internal changes in the Laboratory information system enabled a move away from class-based reporting to analyte-based reporting. This is a huge step forward as it is now much clearer to all involved as to what has been detected by the MBRS.

Additional information in relation to drugs was added to the frequently asked questions area on the MBRS website to assist with the new information being provided. The transition to the new certificate went smoothly without any remarkable increase in queries in relation to reporting from users. The concentration for cannabis analytes was reported on certificates 2,527 times for cannabis analytes and 1,375 for cocaine analytes. The concentration of 6-acetylmorphine was not reported in 2020.

## QUALITY ASSURANCE

2020 was a year of challenges for the Bureau and Quality Assurance did not remain untouched. For the first time since the Bureau was accredited to ISO 17025, INAB (Irish National Accreditation Body) conducted their annual surveillance visit remotely in April 2020.

Adapting to a remote assessment was not without its challenges to all participants. Despite this, INAB were confident in the Bureau's processes and recommended maintenance of accreditation to ISO17025:2017 for the following areas:

- › Blood and Urine alcohol analysis
- › Drug analysis
- › Breath Testing analysis

Furthermore, utilising the Flexible scope which the Bureau operates, allowed for changes to the Preliminary Drug Testing method to be made. INAB approved the changes which were

subsequently incorporated into the Bureau's Scope of Accreditation following the INAB visit in April 2020.

Full details of the Scope of Accreditation are available at <https://www.inab.ie/inab-directory/laboratory-accreditation/testing-laboratories/>.

ISO 17025 accreditation was maintained for the following tests:

- › Blood and Urine Alcohol Analysis
- › Evidential Breath Testing
- › Preliminary Breath Testing
- › Preliminary Drug Testing
- › Drug testing in Oral Fluid
- › Laboratory Preliminary Drug Screening
- › Cannabis confirmation in Blood and Urine
- › Benzodiazepine confirmation in Blood and Urine
- › Multidrug confirmation in Blood and Urine

# PROFICIENCY TESTING

Over the course of 2020 the Bureau continued its involvement in all Proficiency testing schemes (see Table 10) in which it participates with very little disruption.

Scheme providers lengthened deadlines to allow for extended delivery times caused by the Pandemic and Brexit.

Performance across all schemes was acceptable.

**Table 10 Proficiency Testing Programmes**

Programme	Provider	Scheme	No. Specimens	Analytes
Toxicology	CAP	Drugs of Abuse in Whole Blood and Urine	8 specimens per annum	Amphetamines & Stimulants Cannabinoids Cocaine & Metabolites Minor Tranquilisers Non - Opiate Narcotics Opiates
	Labquality	Drugs of Abuse in Urine	6 specimens per annum	Amphetamines & Stimulants Cannabinoids Cocaine & Metabolites Minor Tranquilisers Non - Opiate Narcotics Opiates
	LGC Standards Proficiency Testing	Drugs of Abuse in Urine	12 specimens per annum	Over 210 analytes are available including Amphetamines & Stimulants. Cannabinoids Cocaine & Metabolites Minor Tranquilisers Non - Opiate Narcotics Opiates, Creatinine, pH, Specific Gravity



Table 12 Proficiency Testing Programmes

Programme	Provider	Scheme	No. Specimens	Analytes
	LGC Standards Proficiency Testing	Toxicology	8 specimens per annum	Amphetamines & Stimulants Cannabinoids Cocaine & Metabolites Minor Tranquilisers Non - Opiate Narcotics Opiates
	LGC Standards Proficiency Testing	Drugs in Oral Fluid	12 specimens per annum	Amphetamines & Stimulants Cannabinoids Cocaine & Metabolites Minor Tranquilisers Non - Opiate Narcotics Opiates
	LGC Standards Proficiency Testing	Tox – Benzodiazepines	8 specimens per annum	Diazepam, Nordiazepam, Temazepam, Oxazepam, Nitrazepam
	LGC Standards	Tox - Z – Drugs	8 specimens per annum	Zopiclone, Zaleplon, Zolpidem
<b>Alcohol in Blood and Urine</b>	Labquality	Blood	8 specimens per annum	Alcohol
	Labquality	Urine Quantitative	4 specimens per annum	pH, Creatinine & Urea
	LGC Standards Proficiency Testing	Tox - Blood & Tox - Urine	24 specimens per annum	Alcohol
<b>Evidential Breath Testing</b>	CTS, Inc.	568 Breath Alcohol Simulator Solution Analysis	2 solutions per annum	Alcohol

## FINANCIAL INFORMATION

The Medical Bureau of Road Safety derives its finances from an Annual Grant from the Department of Transport, Tourism and Sport. The total grant allocation for the Bureau for 2020 was €5,948,000.

# CORPORATE GOVERNANCE

The Board of the Medical Bureau of Road Safety was established under the Medical Bureau of Road Safety (establishment) Order, 1968. The functions of the Board are laid down in the Road Traffic Acts 1968 – 2016 and their regulations. The Board is accountable to the Minister for Transport, Tourism and Sport and is responsible for ensuring good governance and performs this task by setting strategic objectives and targets and taking strategic decisions on all key business issues. The regular day-to-day management, control and direction of the Medical Bureau of Road Safety are the responsibility of the Director and the senior management team. The Director and the senior management team must follow the broad strategic direction set by the Board and must ensure that all Board members have a clear understanding of the key activities and decisions related to the entity, and of any significant risks likely to arise. The Director acts as a direct liaison between the Board and management of the Medical Bureau of Road Safety.

## Board Members

The Board of the Medical Bureau of Road Safety comprises of five members (including the Director) and is appointed by the Minister for Transport, Tourism and Sport. On the 24th of March 2020 Mr. Paul Burns resigned from the Board. In accordance with the Section (4) of Section 37 of the Road Traffic Act 1968 (No 25 of 1968) and articles 4 and 6 of the Medical Bureau of Road Safety (establishment) Order, 1968 (S.I. No 241 of 1968) the Minister appointed two new members - Ms. Joan O'Brien, appointed on 9th October 2020 and Mr. Sean Quigley appointed on 20th November 2020.

### BOARD MEMBERS

Name	Position	Attendance Record (Virtual)
Dr. Declan Bedford	Chairman	4 of 4
Professor Denis Cusack	Board Member and Director	4 of 4
Mr. Paul Burns	Board Member	1 of 1
Professor Patricia Fitzpatrick	Board Member	4 of 4
Mr. Sean Quigley	Board Member	1 of 1
Ms. Joan O'Brien	Board Member	1 of 1

## Bureau Membership and Meetings

During 2020 the Medical Bureau of Road Safety held four meetings. The first one of 2020 was held in the Medical Bureau premises and three were zoom-facilitated meetings due to covid restrictions. These meetings were held on 13th March, 18th June, 17th September and 10th December 2020.



## Schedule of Fees and Aggregate Expenses paid to Directors during 2020

During 2020 the following fees were paid:

BOARD FEES PAID			
Board Member	Type of Fee	Paid 2019	Paid 2018
Dr. Declan Bedford	Fee for Chairperson of Board of State Body	€8,978	€8,978
	Fee for Non-Executive members of Boards of State Bodies	-	-
Mr. Paul Burns	Fee for Non-Executive members of Boards of State Bodies	€1,496	€5,985
Ms. Joan O'Brien	Fee for Non-Executive members of Boards of State Bodies	€1,368	-
Mr. Sean Quigley	Fee for Non-Executive members of Boards of State Bodies	€676	-
Professor Patricia Fitzpatrick	No Fee for Non-Executive members of Boards of State Bodies	-	-

The Board has established two committees, as follows:

### (1) Audit and Risk Committee

The Audit and Risk Committee comprises of three Board members. The role of the Audit and Risk Committee (ARC) is to support the Board in relation to its responsibilities for issues of risk, control and governance and associated assurance. The ARC is independent from the financial management of the organisation. In particular, the Committee ensures that the internal control systems including audit activities are monitored actively and independently. The ARC reports to the Board after each meeting, and formally in writing annually. There were 4 meetings of the ARC held in 2020.

### (2) Governance Committee

The role of the Governance Committee (GC) is to support the Board in meeting legal and statutory requirements, as well as adopting good practice. The members of this committee are Representatives from the Department of Transport, Tourism and Sport and the Senior Administrative Officer and Administrative Officer from the Medical Bureau of Road Safety. There were 3 meetings of the GC held in 2020.

### Compliance

The Board has adopted the Code of Practice for the Governance of State Bodies (2016) and has put procedures in place to ensure compliance with the Code. The Medical Bureau of Road Safety was in full compliance with the Code of Practice for the Governance of State Bodies for 2020.

### Disclosure

Section 22 of the Protected Disclosures Act 2014 requires the Publication of an Annual Report each year relating to the number of protected disclosures made in the preceding year and any actions taken in response to such disclosures. Pursuant to this requirement, the Medical Bureau of Road Safety confirms that no protected disclosures were received in accordance with the provisions of the Protected Disclosures Act, 2014 for the period from 1st January 2020 – 31st December 2020.

### Statutory Requirements

The Medical Bureau of Road Safety confirms that it complied with its statutory requirements during 2020.

### Ethics in Public Office

The members of the Board who held office at the 31st December 2020 had no interests for the purposes of the Ethics in Public Office Acts 1995 and 2001.

### External Financial Audit

The Comptroller and Auditor General performed the annual audit of the 2019 Financial Statements during 2020. No significant issues were raised during the audit.

### Internal Audit

The Internal Audit function is a key element in informing the Board on the effectiveness of the system of internal financial control. The internal auditor operates in accordance with the Code of Practice for the Governance of State Bodies. An Internal Audit report was prepared in relation to 2020.



## Procurement

Competitive tendering is the normal policy utilized by the Medical Bureau of Road Safety in the procurement process. It affirms that it complied with procurement procedures and relevant EU Directives as set out in the Code of Practice for the Governance of State Bodies during 2020.

## Strategic Planning

The Bureau compiled its Annual Strategic Plan for 2021 and its Five-Year Strategic Plan 2021 – 2025 and both strategies were forwarded to the Minister. The Plans set out the Bureau's key objectives over the coming year and years in conjunction with its key actions to achieve these objectives. Both strategies can be viewed on the Bureau's website.

## Prompt Payment of Account

The Board acknowledges their responsibility for ensuring compliance in relation to the Prompt Payment of Accounts Act. Under an agreement with University College Dublin, suppliers are paid in the first instance by the College which is then reimbursed by the Bureau.

It is the policy of the Medical Bureau of Road Safety to ensure that all invoices are paid promptly. University College Dublin, as a public-sector body, is required to comply with the requirements of the Act in relation to payments to suppliers for the supply of goods or services and therefore has strict procedures in place.

In the case of a small number of suppliers, the Bureau will issue payment by cheque

directly to the supplier. The controls in relation to processing of invoices, credit notes and dealing with supplier disputes can only provide reasonable and not absolute assurance against material non-compliance with the Act.

## Public Spending Code

The Public Spending Code commenced in September 2013 and updated previous guidelines, circulars and directions in relation to capital appraisal and value for money.

The public spending code is designed to ensure that the State gets the best possible value for the resources at its disposal. The code applies to both capital and current expenditure and outlines what is required of public service managers at different points of the expenditure lifecycle such as appraising, planning, approving, implementing and reviewing.

The Board acknowledges their responsibility to the Public Spending Code and can confirm compliance in 2020.

## Professional Witness

The area of road safety traffic enforcement and in particular driving under the influence of intoxicants, alcohol and drugs is one of the most litigated areas in the criminal law sphere in Ireland. The Bureau provides expert witness in cases before the Courts. In 2020 there were 8 court attendances by Bureau staff.

Reports and opinions were provided to both Defence and Prosecution parties to assist the Court in many other cases.



**MEDICAL BUREAU OF ROAD SAFETY  
STATEMENT OF INCOME AND EXPENDITURE  
AND RETAINED REVENUE RESERVES  
FOR THE YEAR ENDED 31 DECEMBER 2020**

Type of Fee	31/12/2020 €	31/12/2019 €
<b>INCOME</b>		
Oireachtas grants	5,948,000	5,843,000
Professional fee income	400	1,880
<b>Total Income</b>	<b>5,948,400</b>	<b>5,844,880</b>
<b>EXPENDITURE</b>		
Salaries and wages	3,180,157	2,920,397
Board fees	12,518	18,760
Direct costs associated with service delivery	989,585	1,329,208
Office and laboratory supplies	778,576	408,471
Administration costs	731,369	768,578
Depreciation	776,797	783,623
<b>Total Expenditure</b>	<b>6,469,002</b>	<b>6,229,037</b>
<b>Deficit for the year before appropriations</b>	<b>(520,602)</b>	<b>(384,157)</b>
<b>Transfer from/(to) capital account</b>	<b>686,963</b>	<b>397,940</b>
<b>Surplus for the year after appropriations</b>	<b>166,361</b>	<b>13,783</b>
Balance brought forward at 1 January	599,070	585,287
Balance carried forward as at 31 December 2020	765,431	599,070

The statement of income and expenditure and retained revenue includes all gains and losses recognised in the year.

# STATEMENT ON INTERNAL CONTROL

## SCOPE OF RESPONSIBILITY

I, Dr. Declan Bedford, Chairman of the Medical Bureau of Road Safety, acknowledge the Board's responsibility for ensuring that an effective system of internal control is maintained and operated. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

## Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform has been in place in Medical Bureau of Road Safety for the year ended 31 December 2020 and up to the date of approval of the financial statements.

## Capacity to Handle Risk

The Medical Bureau of Road Safety has an Audit and Risk Committee (ARC) comprising of three Board members. The ARC met four times in 2020.

The Medical Bureau of Road Safety has also established an internal audit function which is adequately resourced and conducts a programme of work agreed with the ARC. The internal audit function has been outsourced to an external company.

The ARC has developed a risk management policy which sets out its risk appetite, the risk management processes in place and details the roles and responsibilities of staff in relation to risk. The policy has been issued to all staff who are expected to work within the Medical Bureau of Road Safety's risk management policies, to

alert management on emerging risks and control weaknesses and assume responsibility for risks and controls within their own area of work.

## Risk and Control Framework

The Medical Bureau of Road Safety has implemented a risk management system which identifies and reports key risks and the management actions being taken to address and, to the extent possible, to mitigate those risks.

A risk register is in place which identifies the key risks facing the Medical Bureau of Road Safety and these have been identified, evaluated, and graded according to their significance. The register is reviewed and updated by the ARC and Board on an annual basis. The outcome of these assessments is used to plan and allocate resources to ensure risks are managed to an acceptable level.

The risk register details the controls and actions needed to mitigate risks and responsibility for operation of controls assigned to specific staff. I confirm that a control environment containing the following elements is in place:

- procedures for all key business processes have been documented,
- financial responsibilities have been assigned at management level with corresponding accountability,
- there is an appropriate budgeting system with an annual budget which is kept under review by senior management,
- there are systems aimed at ensuring the security of the information and communication technology systems,
- there are systems in place to safeguard the assets, and
- control procedures over grant funding to outside agencies ensure adequate control over approval of grants and monitoring and review of grantees to ensure grant funding has been applied for the purpose intended.

### Ongoing Monitoring and Review

Formal procedures have been established for monitoring control processes and control deficiencies are communicated to those responsible for taking corrective action and to management and the Board, where relevant, in a timely way. I confirm that the following ongoing monitoring systems are in place:

- › key risks and related controls have been identified and processes have been put in place to monitor the operation of those key controls and report any identified deficiencies,
- › reporting arrangements have been established at all levels where responsibility for financial management has been assigned, and
- › there are regular reviews by senior management of periodic and annual performance and financial reports which indicate performance against budgets/ forecasts.

### Procurement

I confirm that the Medical Bureau of Road Safety has procedures in place to ensure compliance with current procurement rules and guidelines and that during 2020 the Medical Bureau of Road Safety complied with those procedures.

### Review of Effectiveness

I confirm that the Medical Bureau of Road Safety has procedures to monitor the effectiveness of its risk management and control procedures. Medical Bureau of Road Safety’s monitoring and review of the effectiveness of the system

of internal control is informed by the work of the internal and external auditors, the Audit and Risk Committee which oversees their work, and the senior management within the Medical Bureau of Road Safety responsible for the development and maintenance of the internal financial control framework.

I confirm that the Board conducted an annual review of the effectiveness of the internal controls for 2020 on the 10th March 2021.

### Internal Control Issues

No weaknesses in internal control were identified in relation to 2020 that require disclosure in the financial statements.

### Tax Compliance

The Medical Bureau of Road Safety is committed to compliance with taxation laws and was compliant during 2020.

### Breaches in Control

No breaches in control were identified in relation to 2020 that require disclosure in the financial statements.

### Material Losses or Frauds

There were no material losses or frauds identified in relation to 2020 that require disclosure in the financial statements.

On behalf of the Board of the Medical Bureau of Road Safety:

**Dr. Declan Bedford**  
Chairman



# FREEDOM OF INFORMATION

During 2020 the Bureau received two requests which were dealt with as follows:

Decision	Number of Requests
Part-Granted	1
Administrative Pathway	1
Total	2

Category of Requester	Number Received
Journalist	1
Solicitor	0
Other	1
Total	2

# COVID 19 RESPONSE

The Board recognises that the Covid-19 pandemic is a significant event. The Board is taking the situation seriously and is monitoring the situation, in conjunction with management, on an ongoing basis. The business continues to operate with measures in place to protect staff and the Bureau's clients and services continue to be provided. To date, the operations and most of the entity's activities are being maintained while adjusting to the different way in which the services are delivered. While the Bureau is unable to predict the impact of Covid-19 on its cash flows, the performance and operations of the Bureau are being monitored closely and regular cash flow forecasts are provided to the Board and to our parent department, the Department of Transport.

# BREXIT

Despite the challenges of COVID -19 the Bureau continued its preparations for Brexit on all fronts throughout 2020.

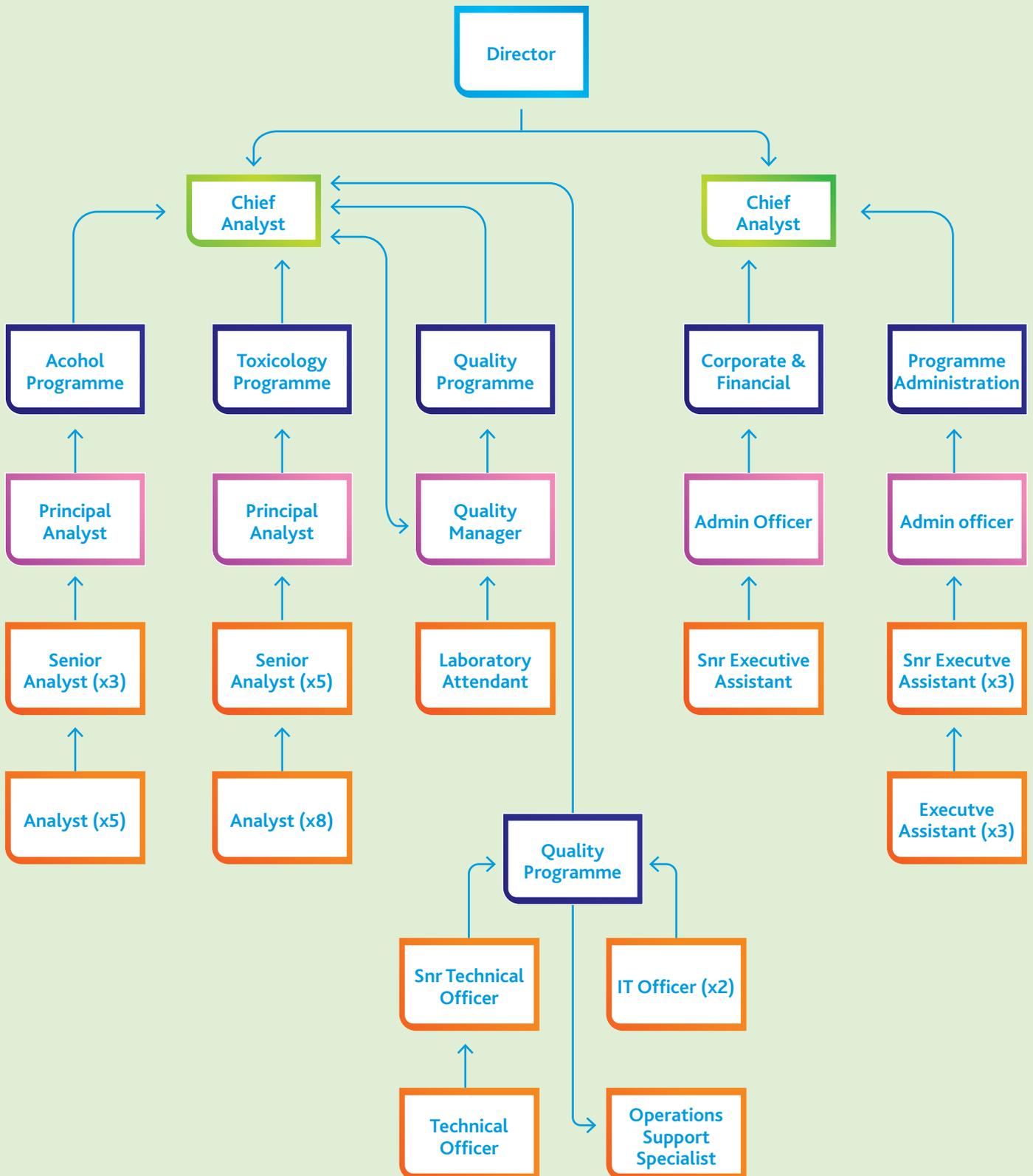
# EQUALITY AND DIVERSITY

The Medical Bureau of Road Safety is committed to respecting gender equality, diversity and inclusion for the benefit of its employees, stakeholders, outside agencies and the public.

# STAFFING

The Bureau continued during 2020 to operate within its Employment Control Framework complement.

# MEDICAL BUREAU OF ROAD SAFETY ORGANISATION CHART



# COURSES AND CONFERENCES ATTENDED BY STAFF IN 2020

## Courses and Conferences attended by staff in 2020

1. A Technical Officer attended a meeting on QTOF at the State Laboratory on 13th January 2020.
2. An IT Officer attended a 3-hour conference on Six Nations Predictions and Data Analysis (Tableau) in Dublin on 29th January 2020.
3. The Director attended the National Office of Traffic Medicine Working Group on Traffic Medicine in the Royal College of Physicians of Ireland, Dublin on 10th February 2020.
4. The Director attended the Academic Day Conference of the Medico-Legal Society of Ireland at the Kings Inns, Dublin on 15th February 2020.
5. The Director attended and presented at a meeting at the European Parliament in Brussels on Forensic & Legal Medicine as President of the European Council of Legal Medicine on 19th – 20th February.
6. The Director attended and presented at a meeting of the European Union Road Safety Exchange Study Visit in Dublin on 27th February 2020.
7. An IT Officer attended a 5-day training course in Dublin on SQL Database Infrastructure from 2nd to 6th March 2020.
8. In the first quarter of 2020, four staff members attended courses offered by UCD People Learning and Development.
9. A Senior Analyst attended the 2020 Online Forensic Symposium – Current Trends in Forensic Toxicology from 8th - 12th June 2020.
10. An Analyst attended Phenomenex Gas Chromatography Training, online, on 10th June 2020.
11. In the second quarter of 2020, 36 staff members undertook online courses offered by UCD, which included People Learning and Development courses and Covid-19 Induction Training.
12. The Quality Manager attended a 2-day online course, e-Eurachem Workshop on 14th and 15th July 2020.
13. A Principal Analyst and a Senior Analyst attended sessions of the SOFTember Virtual Programme in the third and fourth quarters of 2020.
14. A Senior Analyst attended a webinar on Oral Fluid Drug Testing in DUID Cases, hosted by the Society of Forensic Toxicologists (SOFT) on 22nd July 2020.
15. The Chief Analyst attended, and a Principal Analyst presented at the webinar Driving under the Influence of Drugs in Ireland, hosted by the National Office for Traffic Medicine, Royal College of Physicians of Ireland (RCPI), on 8th September 2020.
16. A Principal Analyst attended the online Drinkaware Autumn 2020 Research Briefing, Drinking behaviours and attitudes in Ireland in the context of Covid-19, on 23rd September 2020.
17. An Analyst attended a SCIEX Forensic and Tox LCMS virtual seminar on 29th September 2020.



### Courses and Conferences attended by staff in 2020

18.	In the third quarter of 2020, 2 staff members undertook online courses offered by UCD which included People Learning and Development courses and Covid-19 Induction Training.
19.	The Director attended and chaired a meeting of the Royal College of Physicians of Ireland on Traffic Medicine Clinical Update on 7th October 2020.
20.	The Chief Analyst attended an online conference on Substance Use and Medical Fitness to Drive on 7th October 2020.
21.	The Director attended the NOTM Working Group on Traffic Medicine in the Royal College of Physicians of Ireland, Dublin on 12th October 2020.
22.	The Director attended and presented a Keynote Address at the Arab Union of Forensics & Toxicology, Forensics Middle East & Africa Virtual Conference, 12th – 14th October 2020.
23.	The Director attended a Road Safety Authority Workshop in Dublin on 21st October 2020.
24.	The Director attended a Virtual Meeting of the Medical Advisory Panel on Alcohol, Drugs and Driving, UK Department of Transport, London on 14th October 2020.
25.	Two analysts attended a one-day Phenomenex online training course – An Introduction to LC-MS, on 4th November 2020.
26.	Two Senior Analysts, four Analysts and a Technical Officer attended a two-day online training course, Agilent Triple Quadrupole Mass Spectrometry on 5th & 6th November 2020.
27.	The Chief Analyst attended the online Drinkaware Autumn 2020 Research Briefing on 11th November 2020.
28.	The Director attended and was a Guest Speaker at the Virtual 17th Forensic Sciences Congress and 1st Turkish Forensic Scientific Conference 13th – 15th November 2020.
29.	An Administrative Officer attended an online three-hour Drager 7510 Repair Training Session on 3rd December 2020.
30.	A Principal Analyst, a Senior Analyst and an Analyst attended online sessions of the International Association of Forensic Toxicologists (TIAFT) Online Educational Symposium on 10th December 2020.
31.	The Quality Manager attended an online Paradigm User Group meeting on 11th December 2020.
32.	In the fourth quarter of 2020, 2 staff members undertook online courses offered by UCD which included People Learning and Development courses and Covid-19 Induction Training.

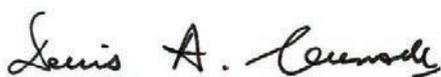
# ENERGY CONSUMPTION

Under the Government's commitment to improve public energy efficiency by 33% in 2020 the Medical Bureau of Road Safety has registered for and is reporting through the SEAI online system. The Bureau's main energy usage is gas and electricity which is necessary for operating a forensic laboratory and ancillary facilities, e.g. heating and lighting, laboratory equipment, air handling, computers and servers.

The Bureau utilizes initiatives to improve energy efficiency. A Building Management System (BMS) is used to monitor and control heating, air handling units, water boiler (direct hot water supply) and extractor fans. Each of the four floors of the Bureau's premises is managed individually and automatic controls are scheduled accordingly. Energy efficient light bulbs, movement sensors and timer switches are fitted throughout the building to minimise energy consumption.

# LEGAL DISCLAIMER

The descriptions and statistics contained within this report are of a condensed and general informative nature only. They should not, by themselves, be relied upon in determining legal rights or other decisions under the Road Traffic Acts. Readers and users are advised to verify with their legal advisors any information on which they may wish to rely.



Professor Denis A. Cusack,  
Director.



Dr. Declan Bedford,  
Chairman.



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