

HEALTH PROMOTION AND DISEASE PREVENTION DIRECTORATE

ANNUAL REPORT 2023

The Health Promotion and Disease Prevention Directorate within the Department for Health Regulation has the main aim to protect and promote the health of people on the Maltese Islands by:

- empowering individuals to adopt healthier lifestyles
- advocating the creation of supportive environments conducive to health
- carrying out effective surveillance and control of communicable diseases
- developing strategies for reducing the burden of communicable and non-communicable disease

The main tasks of this directorate are to:

1. Enhance knowledge, attitudes, beliefs, and values that are conducive to good health;
2. Educate and empower the public to adopt healthy behaviour, enhance personal skills, promote environmental change, and advocate lifestyle policies favourable to health;
3. Monitor health and disease trends and provide the necessary input to the development of policies in respect of communicable and non-communicable diseases;
4. Study ways of promoting better nutrition; preventing excessive weight, obesity, and chronic disease in people;
5. Formulate effective health promotion measures, in co-operation with the key stakeholders, by applying a multisectoral approach;
6. Produce publications and use media on a range of health topics;
7. Formulate and regularly update national policy for communicable disease and ensure its implementation
8. Carry out field investigation and epidemiological control of communicable diseases;
9. Minimize the transmission of and mortality from communicable diseases;
10. Prepare operational policies and strategies aimed at reducing non-communicable diseases and their impact on morbidity and mortality;
11. Reduce the incidence, morbidity, and mortality from non-communicable diseases;
12. Formulate contingency plans for potential epidemics and prepare national plans for biological threats to public health.

Activities are categorized under three units:

1. Infectious Disease Prevention and Control Unit
2. Health Promotion and Chronic Diseases Unit
3. Administration unit

INFECTIOUS DISEASE PREVENTION AND CONTROL UNIT (IDCU)

During 2023 the Infectious Disease Prevention and Control Unit (IDCU) maintained its primary role of surveillance, investigation and control of infectious diseases notified to the unit.

Apart from the management and investigation of notified infectious disease cases, the IDCU is also responsible for other tasks and projects which are described in further detail below. These include:

- Processing of applications for Health Screening for Work Permits.
- Management of Health Screening Unit, Floriana Health Centre.
- Leading and participating in EU projects.
- Participating in national and international committees and meetings related to different infectious diseases, preparedness and response to threats, migrant health, health security and advisory forum meetings at ECDC.
- Conducting various tasks related to Preparedness and Response including updating plans and strategies and completing international questionnaires.
- Updating and reviewing various relevant action plans and strategies.
- Hosting trainees who are undergoing specialist training nationally and internationally.
- Participating in educational initiatives such as the provision of lectures to various cohorts of people as well as participating in educational programmes on various types of media platforms.
- Regularly reviewing and updating educational and informative material that is tailor-made for various audiences, including healthcare professionals, educators, and the general public. Participation in symposia and conferences.

Overall, in the process of carrying out their work, throughout 2023 IDCU staff had encounters with 61,839 individuals.

There was an increase in 898 confirmed sporadic cases this year with increases observed in the following infectious diseases:

- Foodborne - Campylobacter, Cryptosporidiosis, Giardiasis, Scombrototoxic food poisoning, Shigella and Typhoid
- Blood borne - Hepatitis B and C and HIV
- Invasive diseases - Invasive group A streptococcal (iGAS) disease, invasive Streptococcus pneumoniae
- STIs - Gonorrhoea, Chlamydia
- Respiratory – Legionnaire’s disease, pulmonary and non-pulmonary tuberculosis
- Vector borne - Malaria, Typhus, Leptospirosis and Scabies.

There was also an increase of 38 outbreaks from the previous year.

Below is a more detailed description of the cases notified to and investigated by the IDCU throughout 2023. A summary of the confirmed cases, both sporadic and those forming part of an outbreak, can be found in table form at the end of the document.

Notifiable Diseases

Statutorily notifiable infectious diseases are reported to the Infectious Disease Prevention and Control Unit by medical practitioners, the microbiology, Virology and Molecular Diagnostic Laboratories at Mater Dei Hospital and other medical diagnostic laboratories. The data presented in this report may be subject to changes according to further investigation results.

Food and Waterborne Diseases

Campylobacter

466 sporadic cases were reported together with 15 clusters which affected a total of 35 individuals. The suspected source of infection was food consumed in households, take-aways and from restaurants.

Cryptosporidiosis

In 2023, 43 cases of cryptosporidiosis were reported to IDCU, and 1 cluster of 3 individuals. The suspected sources of infection of some cases were mainly contaminated water and unpasteurized cheeses. Veterinary investigations are still ongoing. For the rest of the cases the source remained unknown.

Giardiasis

29 sporadic cases of Giardiasis were reported in adults throughout the year, 10 of which were imported. Also 1 cluster of 2 individuals was reported where Giardia was transmitted sexually.

Hepatitis A

In 2023, total of 7 confirmed cases of Hepatitis A were reported (locally acquired) and a cluster of 3 children were investigated, for which the source of infection remained unknown.

Listeriosis

In 2023, 2 cases of Listeria were investigated by IDCU. Whole genome sequencing was carried out and 1 of the cases (deceased) had a match with raw sausage consumed from a specific butcher. Investigations by Environmental Health Officers are still ongoing.

Salmonella

153 sporadic cases of Salmonella were reported in 2023, as well as 10 clusters affecting a total of 42 individuals. An outbreak occurred in December, where around 20 persons were affected, and 4 were confirmed to be infected with Salmonella enteritidis.

Scombrototoxic food poisoning

During 2023 there were 10 sporadic cases and 1 cluster of 2 individuals who suffered from Scombrototoxic food-borne illness. The sources were fresh tuna steak, canned tuna and lampuki.

Shiga toxin/Verotoxin producing E. Coli (VTEC): 70 cases were found to be PCR positive for Shiga toxin 1 or 2, of which 12 cases had VTEC cultured (9: VTEC non-0157; 3: VTEC 0157). In addition, 2 clusters of 6 individuals with Shiga toxin were reported.

Shigella

21 probable cases of Shigella (Shigella PCR+ve, not cultivated on culture), 8 of which were imported, were notified to IDCU. There were 9 confirmed cases of Shigella; 2 Shigella flexneri 1B local, 1 Shigella flexneri ESBL+ve, locally acquired during EuroPride events, 3 *Shigella sonnei* ESBL+ve, and 1 Shigella sonnei, all locally acquired. There were 2 clusters involving 6 individuals reported during 2023.

Typhoid/Paratyphoid fever

3 cases of *Salmonella paratyphi* A and 3 cases of *Salmonella typhi* were reported to IDCU. All cases of *Salmonella paratyphi* A were imported (2 India, 1 Pakistan). Two of the cases of *Salmonella typhi* were imported from India. The other case had a history of recent travel to Italy however investigations could not conclude whether this may have been locally acquired or acquired in Italy. All contacts of the cases were also screened but resulted negative. Source of infection remained unknown as environmental samples all tested negative.

Unspecified foodborne illness

There were 34 individual cases of reported unspecified food-borne illness. In addition, there were 23 outbreaks affecting a total of 153 persons. 7 of these clusters occurred in institutions including nursing homes (affecting at least 101 residents). For these clusters, the causative organism was not identified, however it was suspected to be of viral etiology.

Cholera

No cases of *Vibrio cholera* were reported to IDCU.

Norovirus

During 2023 IDCU investigated 7 Norovirus outbreaks with 27 confirmed individuals affected. 2 of these outbreaks occurred in a nursing home and 1 occurred following an event held in a hotel. In addition, 63 sporadic cases of Norovirus were reported

Rotavirus

There were 80 individual cases of rotavirus reported.

Amoebiasis

There was 1 sporadic case of amoebiasis and a cluster of 2 amoebiasis cases, who were family members.

Bacillus cereus

No cases were reported, in 2023.

Staphylococcal infection

There were no reported cases of staphylococcal food poisoning during the year.

The table below shows the number of notified sporadic cases of food-related, gastro-intestinal infections per month for Year 2023

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Amoebiasis	0	1	0	0	0	0	0	0	0	0	0	0	1
Campylobacter	35	38	34	40	46	55	33	36	33	32	46	38	466
Cryptosporidiosis	1	4	4	2	1	2	4	6	5	4	8	2	43
VTEC non-O157	0	0	2	2	2	0	1	1	0	1	0	0	9
VTEC O157	0	0	0	0	0	0	0	0	1	1	1	0	3
Shiga toxin genes stx 1 & stx 2 (STEC/VTEC)	4	6	3	3	6	4	6	9	7	8	1	1	58
Echinococcosis	0	0	0	0	0	0	0	0	0	0	0	0	0
Giardiasis	3	3	2	8	0	4	0	1	3	1	1	3	29
Hepatitis A	0	0	0	0	1	1	2	1	0	0	1	1	7
Listeria	0	0	0	0	0	1	1	0	0	0	0	0	2
Salmonella	11	9	3	15	6	11	15	18	25	18	13	9	153
Typhoid (<i>Salmonella typhi/paratyphi</i>)	0	1	0	1	1	1	1	0	0	0	0	1	6
Probable, Shigella	1	0	1	0	1	0	5	2	2	1	6	2	21
Confirmed, Shigella	0	0	1	0	0	0	2	1	0	2	2	1	9
Toxic (Scombroid)	1	0	0	1	0	0	4	4	0	0	0	0	10
Yersinia	0	0	0	0	0	0	0	0	0	0	0	0	0

Bloodborne Diseases

AIDS

There were 2 cases of AIDS reported during the year. Both were male. One was a foreigner and the other was a Maltese male who passed away.

Hepatitis B

There were a total of 82 cases of Hepatitis B notified in 2023 - 17 were acute (8 Maltese; 9 Foreigners), 22 cases were of unknown staging (11 Maltese; 11 Foreigners) and 43 were chronic cases (13 Maltese; 30 Foreigners).

Hepatitis C

IDCU was notified of 135 cases of Hepatitis C during the year. 13 were acute cases (8 Maltese; 5 Foreigners), 76 were chronic cases (56 Maltese; 20 Foreigners) and 46 were of unknown staging (20 Maltese; 26 Foreigners).

HIV

111 cases (101 males and 10 females) were reported during the year. 62 of these cases were newly diagnosed cases while 49 were already diagnosed cases in another country but presently residing and taking treatment in Malta. Of the total number 22 of these cases occurred in Malta born nationals and were probably locally acquired, occurring in 21 males and 1 female. The rest of the cases, 84 occurred in foreign born persons and shows a gender distribution of 76 males and 8 females.

Of the total number of HIV cases 50 were acquired through MSM contacts, 19 cases through heterosexual transmission, and 37 cases were of unknown transmission. There were none contracted through vertical transmission.

Invasive Disease

Invasive Group A Streptococcus pyogenes (iGAS)

In 2023, 23 sporadic confirmed cases of iGAS were notified. Contact tracing was done accordingly and prophylaxis was given as per guidelines.

There were **no** cases reported in 2023 of *invasive Group B Streptococcus agalactiae*, *invasive Haemophilus influenza*, *invasive Meningococcal septicaemia*, and *invasive Neisseria gonorrhoea*.

Invasive Streptococcus pneumoniae

18 cases of *invasive Streptococcus pneumoniae* were reported in 2023.

Meningitis

Viral Meningitis

4 cases of confirmed viral meningitis were reported to IDCU in 2023. In all cases Enterovirus was detected by PCR.

Meningitis, Other bacteria

10 cases of bacterial meningitis other than *Neisseria meningitidis*, were notified, 8 of which had *Streptococcus pneumoniae* detected and the other 2 had *Hemophilus influenzae* detected (non typable)

Meningitis, *Neisseria meningitidis*

1 case of *Neisseria meningitidis*, unknown serogroup, was reported in 2023.

Non-invasive meningococcal disease

No cases of non-invasive meningococcal disease (*Neisseria meningitidis*) isolated from a non-sterile site) were reported in 2023.

Meningitis, Suspected bacterial

4 suspected cases of bacterial meningitis were notified but no organism was cultivated in CSF.

Viral Encephalitis

No cases of viral encephalitis were reported in 2023

Meningitis, *Cryptococcus*

There was 1 case of cryptococcal meningitis affecting a Maltese adult male notified during 2023.

Sexually Transmitted Diseases (STDs)

The following cases of STDs were notified to IDCU during 2023:

- There were 351 cases of **Gonorrhoea**, 177 of these cases occurred in foreigners.
- There were 7 cases of **Syphilis**, 4 of which were foreigners.
- There were 67 cases of **Latent Syphilis**, 38 amongst which were foreigners.
- There were 19 cases of **Primary Syphilis** reported, 9 were foreigners.
- There were 21 cases of **Secondary Syphilis** reported, 13 were foreigners.
- There were 2 cases of **Lymphogranuloma venereum (LGV)** reported.
- There were 87 cases of ***Mycoplasma genitalium***, of which 29 were Maltese.
- There were 374 notified cases of **Chlamydia**, 199 of which were foreigners.

Respiratory Diseases

Legionnaire's Disease

In 2023, there were 13 cases of Legionnaire's disease reported to IDCU. Diagnoses was done through urinary antigen testing, followed by a PCR on lower respiratory samples in most cases as confirmation. Of these 10 were Maltese residents and one was a foreigner who acquired the infection through local residences (households) or other establishments. Two were foreigners who had stayed in Malta during the incubation period. All establishments were investigated, and corrective action was taken if necessary.

Tuberculosis (TB)

There were 68 TB cases notified in 2023. The cases are as follows:

- 3 pulmonary TB cases in Maltese nationals
- 45 pulmonary TB cases in foreign nationals
- 1 extrapulmonary TB case in a Maltese national
- 19 extrapulmonary TB case in foreign nationals
-

Only 3 cases exhibited resistance to Isoniazid.

As in previous years, the majority of TB cases were among foreigners - 94% of total TB cases (64/68).

Influenza - Sentinel Surveillance

Throughout 2023 7 private family doctors participated in the sentinel surveillance of influenza which requires clinicians to report cases of Influenza-Like Illness (ILI), based on a clinical diagnosis, of patients they encounter during their clinics. Reports are sent on a weekly basis.

Starting from week 44 (week starting 29th October 2023) a steady increase in cases was reported which remained high throughout December 2023.

Covid-19

Between the 7th of March 2020, when the first case of SARS-CoV-2 was diagnosed in Malta, and the 31st of December 2023, there have been 121,034 confirmed cases and 871 deaths.

During 2023 there were 4650 confirmed cases of Covid-19 and 53 deaths. The main dominating variant group was XBB.1.5-like mutations followed by XBB.1.5-like+F456L mutations group and BA.2.75 Omicron mutation.

A total of 60,082 official tests were carried out and 27, 609 vaccinations were administered.

Scarlet Fever

There were 88 sporadic cases of Scarlet fever and 5 clusters involving a total of 13 individuals

Vaccine Preventable Diseases

Chickenpox

The IDCU received 132 notifications for Chickenpox during 2023.

Measles, Mumps and Rubella

- No cases of **Measles** were confirmed during this year.
- There was 1 confirmed cases of **Mumps** imported from Nepal.
- There were no confirmed cases of **Rubella** during the year.

Pertussis

There were 3 confirmed cases of Pertussis notified during the year.

Herpes Zoster

There were 32 cases of herpes zoster reported.

Varicella zoster

117 cases of Varicella were notified to the IDCU.

Diphtheria, Tetanus and Polio

There were no cases of Diphtheria, Tetanus or Polio reported during 2023.

Vector borne Diseases

With regards to Vector borne diseases, the following cases were notified in 2023:

- 1 case of **visceral Leishmaniasis**
- 16 confirmed cases of **Malaria**, all imported, 1 of which was a case of cerebral malaria
- 1 confirmed case of **Sandfly fever**
- 9 confirmed cases of **tick-borne Typhus** (*Rickettsia conorii*)

No cases were reported of **Chikungunya**, **Dengue**, **cutaneous Leishmaniasis**, **scrub or epidemic Typhus**, **West Nile Fever**, **Schistosomiasis**, **Tularaemia** and **Zika**.

Zoonotic diseases

The IDCU received the following notifications for Zoonotic diseases:

- 1 case of **Cryptosporidiosis**
- 9 confirmed cases of **Leptospirosis** - confirmation was based on both clinical diagnosis and laboratory confirmatory tests
- 8 sporadic cases of **Toxoplasmosis**

Monkeypox

On the 16th May 2022 a multi-country outbreak of monkeypox (MPX) started, with cases being identified worldwide. In 2022, in Malta, there were 33 confirmed cases. 32 cases occurred in men, 29 of which occurred in MSM/homosexual or bisexual males.

In 2023, in Malta, 2 cases were reported – 1 female (heterosexual) in March and 1 male (MSM) in September, both foreign nationals residing in Malta. One of the cases was imported following a history of travel abroad, where there was sexual contact, in the 3 weeks prior to onset of symptoms.

No contacts were symptomatic and there was 1 high risk contact who was eligible but refused vaccination.

Other diseases

Acute Flaccid Paralysis

There were 2 cases of Acute Flaccid Paralysis occurring in adult Maltese males notified during the year.

Creutzfeldt Jakob Disease (CJD)

There were 2 cases of sporadic CJD notified in 2023.

Scabies

There were 142 confirmed sporadic cases of Scabies notified during 2023, while there were 66 outbreaks of scabies involving a total of 240 individuals. All confirmed cases were diagnosed by Dermatologists.

Diseases of Childhood

There were 40 cases of **Hand, Foot and Mouth disease** notified to IDCU.

There was 1 case of **Slapped Cheek Syndrome**.

Infectious diseases notified from the National Blood Bank in 2023

The following cases were notified to the IDCU from the National Blood Bank:

- 73 cases of **Cytomegalovirus (CMV)**
- 17 cases of **Hepatitis E**
- 1 case of **HIV**
- 5 cases of **Syphilis**

Other work done by IDCU

Below is more detailed information about the other initiatives undertaken by the unit.

i. Processing of applications for Health Screening for Work Permits

Some members of staff within IDCU are tasked with the vetting of application forms for Health Screening from Third Country Nationals applying for a work permit. Throughout 2023 submissions for applications for Health Screening for Work Permits continued to increase. In fact, in 2023 the relevant unit processed 4,571 more applications than it did in the previous year.

During 2023:

- 49,376 - health screen approvals were vetted
- 36,582- were new applicants
- 12,794- were renewals from third country nationals

The new applicants included:

- Administrative staff – 2734
- Footballers – 142
- Cleaners/Housekeepers – 6694
- Construction Workers/Manual Work/Sales not Food Handlers/Others – 10,847
- Hairdressers/Makeup Artists – 53
- Transport – 4397
- Carers/Child Carers – 2552
- Food Handlers – 8412
- Beauty Therapists/Beauticians/Spa Therapist/Massage Therapist – 199
- Nannies – 20
- Allied Health Care Professionals – 32
- Allied Health Care Professionals with temporary registration – 3
- Tattooists – 3
- Dental Chairside Assistants/Dental Surgery Assistants – 15
- Doctors – 16
- Nurses – 387
- Nurses with temporary registration – 76
- Renewals in 2023 - 12,794

ii. Work one by Health Screening Unit, Floriana Health Centre

The Health Screening Unit within Floriana Health Centre is managed by 2 nurses and 1 administrative staff member who fall under the remit of the IDCU.

Their tasks include screening individuals for Tuberculosis infection as well as administering BCG vaccines as required.

1) Contact Tracing Screening

- **67** individuals who were contacts of confirmed tuberculosis positive cases (65 adults and 2 children) were screened.

2) Work Permits

During 2023 the Health Screening Unit followed up the following individuals as part of the work permit application screening process.

- **673** cases with abnormal results from their work permit screening. These were referred to the Health Screening Unit for follow up with a Tuberculosis specialist.
- **98** were screened as part of the Family Reunification process.

3) Screening Programme for Migrants

The Health Screening Unit regularly carries out screening for migrants for various reasons. Below are the number of migrants screened during 2023:

- **380** were irregular migrants who came to Malta by boat, (332 adult Males, 18 adult Females, 30 minors)
- **88** were overstayers and were screened before being repatriated (75 adult Males, 2 adult females, 11 minors)
- **296** were asylum seekers who arrived by plane (219 adult Males, 45 adult Females, 32 minors)
- **518** were asylum seekers from Ukraine (136 adult Males, 257 adult Females, 125 minors)
- **189** were foreign students coming from high risk TB countries referred to the Health Screening Unit for TB screening prior to entering a government school in Malta.
- **28** were adopted children who were screened as they were coming from high risk TB countries.
- **47** Miscellaneous individuals (12 Foreigners and 35 Maltese)

4) Screening of health care workers

The Health Screening Unit screened the following Healthcare Workers prior to their entering the workforce:

- **121** – Final year Medical Students
- **30** – Foundation year Doctors
- **163** – Final year Nursing and Allied Health Care Professional Students
- **63** – Nurses who are Third Country Nationals and who are going to work in government hospitals
- **222** – Health Care Workers within the Ministry of Health

5) Students studying for health care professions at Universities

- **472** - First year University Students – (71 foreigners, 401 Maltese)
- **6** - Third year Medical Students - all Foreigners
- **56** – medical students attending other healthcare educational institutions
- **301** – Foreign nursing students

6) Students studying for health care professions at MCAST

- **39** – First year dental MCAST Students
- **103** – First year Allied Students at MCAST (7 Foreigners, 96 Maltese)
- **116** – First year Nursing Students

7) Tuberculin Skin Tests (Mantoux Test) performed

The Unit performed a total of **2004** Tuberculin skin tests.

8) BCG vaccinations

The Unit administered a total of **1661** BCG vaccinations.

iii. Leading and participating in EU projects

The IDCU is involved in a number of **EU projects** some details of which are provided below.

- ***Increased Access to Vaccination for Newly Arrived Migrants (AcToVax4NAM) project.***

The general objective of the AcToVax4NAM project is the improvement of Vaccination Literacy (VL) and access and thereby vaccination uptake for Newly Arrived Migrants (NAM) making access conditions more equitable and guaranteed. This year we focused on training health care professionals who work directly with migrants and provide them with vaccines.

- ***COVID 19 Waste Water Testing and Surveillance.***

The general objective of the COVID 19 Waste Water Testing and Surveillance is to track SARS-CoV-2 levels in our wastewater in Malta and Gozo to monitor the spread of covid within our population.

- ***SARI- Enhanced surveillance of Severe acute respiratory illnesses (VEBIS)***

We monitor severe acute respiratory infections caused by respiratory organisms in patients admitted to our only state hospital in Malta. The SARI Surveillance is essential to monitor the circulation of common and emerging respiratory pathogens and assess their severity and burden.

- ***Electronic Health Records (EHR)-based SARI Surveillance (ESURE)***

Involved in project to strengthen SARI surveillance using routinely collected electronic health records.

- ***SHARP – Strengthened International Health Regulations & Preparedness in the EU***

SHARP Joint Action aims to strengthen preparedness in the EU against serious cross-border threats to health and support the implementation of International Health Regulations (2005). This EU project has ended in 2023.

- ***JA TERROR – Strengthened preparedness and response to biological and chemical terror attacks.***

TERROR's main objectives are to address gaps in health preparedness and to strengthen cross-sectoral work with security, civil protection, and health sectors response to biological and chemical terror attacks. This year the 3 entities participated in a chemical simulation exercise (table-top) and also a workshop on how to improve collaboration and communication.

- ***VEBIS – Vaccine Effectiveness Burden and Impact Studies of Covid-19 and Influenza.***

The Vaccine Effectiveness Study (VE) is monitoring vaccine effectiveness within different settings, and population sub-groups.

- ***JA integrated digitalised surveillance for United4Surveillance.***

This EU project started in 2023 and we are participating in outbreak detection and hospital surveillance.

- **Upcoming projects**

- We are preparing documentation to start EU-WISH project on Wastewater surveillance in 2024 for covid, influenza, polio, AMR and any new emerging pathogen.
- We are preparing documentation to apply for direct surveillance grants in 2024

iv. Miscellaneous initiatives

Throughout 2023 the IDCU was also involved in carrying out various other tasks and initiatives including:

- **Preparedness and Response**

- Drafting plans to deal with a vector borne disease outbreak, polio outbreak, avian influenza outbreak, CBRN plan.
- Completion of SPAR questionnaire for WHO and EU questionnaire for EU/ECDC on our capabilities and capacities in preparedness and response to emergencies and health threats.
- Currently working on updating our communicable disease strategy

- **Participation in national and international committees and meetings**

- Meetings related to different infectious diseases, preparedness and response to threats, migrant health, health security and advisory forum meetings at ECDC.
- Participated in local and international committees related to International Health Regulation, ACIP, National Antibiotic committee, Migrant health and Generic Preparedness and response, vector borne diseases, health security, EWRS, Training, Surveillance and on specific groups of infectious diseases.

- **Provision of data according to international commitments**

- Regularly providing data to The European Surveillance System (TESSy) on the 73 notifiable infectious disease in Malta
- Completion of numerous questionnaires for WHO, ECDC, EU Commission on infectious diseases, preparedness and response, antimicrobial resistance, vaccinations and contact tracing.

- **Training**

- The unit hosts trainees as part of their training programme for specialisation in Public Health. They also had a trainee in GP and a Foundation programme first year doctor.
- Presently the unit has its fourth EPIET fellow training in the unit, who started in the last quarter of this year. IDCU is an EPIET training site approved by ECDC.
- Specialists in Public Health with IDCU provide supervision of students of Master's in Public Health Medicine

- **Education**
- The IDCU acknowledges its important role in communicating with and educating other professionals as well as the general public with regards to infectious diseases and any developments that may occur.
- It does this through various initiatives:
 - Participating in educational initiatives such as the provision of lectures to various cohorts of people as well as participating in educational programmes on various types of media platforms.
 - Regularly reviewing and updating educational and informative material that is tailor-made for various audiences, including healthcare professionals, educators, and the general public.

- **Other work carried out in 2023**
- Participation in symposia and conferences.
- Involved in preparation of EuroPride in September 2023 where meetings were held with relevant stakeholders.
- Preparatory work on EMIS (European MSM internet Survey)
- Updating of SOPs with other entities including the immunisation unit, Primary Health Care, Infectious Disease consultants and neurologists to deal with infectious diseases
- IDCU was involved in updating and reviewing the information available on its website, especially since a new site was launched in 2023. The IDCU maintains its website by posting monthly reports and also relevant information or updates on infectious (communicable) diseases as required including any important press releases.
- **Meetings, Conferences, Seminars and Courses attended by staff** - Staff members of the unit attended a number of meetings and workshops abroad in 2023. Meetings attended included Health Security meetings, Advisory Forum, network meetings on Foodborne, Hepatitis B and C, Influenza, STIs and Vector borne diseases. They also attended the EPIET training forum meeting and European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) scientific conference. Staff also attended meetings related to EU projects - JA Terror, Sharp, Actovax4NAM and JA on hospital surveillance. Two consultants attended the World Congress on Public Health (WCPH) organised by the World Federation of Public Health Association (WFPHA) in Rome, and presented local data at this congress.
- **Provision of advice** – IDCU staff are available to provide advice regarding communicable diseases to the general public.
- **Improving Vaccinations uptake** – the unit plays a role in promoting uptake of vaccines by:
 - being involved with the National Immunisation Unit to raise awareness on the importance of immunisation during European Immunisation week.
 - being involved in promoting the administration of BCG vaccines to new-born babies
 - being involved with other health sectors to promote Influenza vaccination uptake.

Table 1: Sporadic cases reported to and investigated by IDCU during 2023, by quarter, gender, and nationality

Infectious Disease Control Unit – Yearly Report – 2023 – Sporadic Cases											
Notifiable Disease	Q1	Q2	Q3	Q4	Male	Female	Unk	Maltese	Non-Maltese	Unk	Total
Foodborne diseases											
Campylobacter	107	141	102	116	280	183	3	353	96	17	466
Cryptosporidiosis	9	5	15	14	20	22	1	30	11	2	43
Giardia	8	12	4	5	22	7	-	19	10	-	29
Hepatitis A	-	2	3	2	5	2	-	5	2	-	7
Listeria	-	1	1	-	1	1	-	2	-	-	2
Salmonella	23	32	58	40	87	66	-	127	19	7	153
Scombrototoxin	1	1	8	-	3	7	-	5	4	1	10
Shiga toxin/ VTEC	15	17	25	13	36	34	-	60	7	3	70
Shigella	3	1	12	14	28	1	1	14	15	1	30

Typhoid	1	3	1	1	5	1	-	-	6	-	6
Foodborne, Unspecified	8	5	10	11	18	16	-	18	13	3	34
Echinococcosis	-	-	-	-	-	-	-	-	-	-	-
Botulism	-	-	-	-	-	-	-	-	-	-	-
Cholera FoodBorne	-	-	-	-	-	-	-	-	-	-	-
Norovirus	25	15	12	11	23	28	12	42	5	16	63
Rotavirus	47	10	6	17	49	29	2	53	14	13	80
Trichinella	-	-	-	-	-	-	-	-	-	-	-
Amoebiasis	1	-	-	-	1	-	-	-	1	-	1
Bloodborne diseases											
AIDS	1	1	-	-	2	-	-	1	1	-	2
Hepatitis B	17	15	25	25	48	29	5	28	35	19	82
Hepatitis C	39	33	32	31	93	34	8	90	27	18	135
HIV	19	37	35	20	101	10	-	22	89	-	111
Hepatitis Unspecified	-	-	-	-	-	-	-	-	-	-	-

Invasive diseases											
Invasive Group A Streptococcus (Streptococcus Pyogenes)	3	10	5	5	15	8	-	15	8	-	23
Invasive Group B Streptococcus (Streptococcus Agalactiae)	-	-	-	-	-	-	-	-	-	-	-
Invasive Haemophilus Influenzae	-	-	-	-	-	-	-	-	-	-	-
Invasive Meningococcal Septicaemia	-	-	-	-	-	-	-	-	-	-	-
Invasive Neisseria Gonorrhoea	-	-	-	-	-	-	-	-	-	-	-
Invasive Streptococcus Pneumoniae	11	3	1	3	10	8	-	16	2	-	18
Meningitis											
Meningitis Viral	1	1	1	-	1	2	-	1	2	-	3
Meningitis, bacterial other than Neisseria Meningitidis cultured	-	-	-	1	1	-	-	1	-	-	1
Meningitis, Haemophilus Influenza	2	-	-	-	1	1	-	2	-	-	2
Meningitis, Neisseria Meningitidis	-	-	-	1	1	-	-	-	1	-	1
Meningitis, Non-Invasive Meningococcal disease (Neisseria meningitidis cultured from non-sterile site)	-	-	-	-	-	-	-	-	-	-	-

Meningitis, Streptococcus Pneumoniae	3	2	3	-	2	6	-	7	1	-	8
Meningitis – suspected bacterial (no organism isolated from sterile site)	1	1	2	-	2	2	-	1	3	-	4
Acute Viral Encephalitis (Meningitis)	-	-	-	-	-	-	-	-	-	-	-
Aseptic / Viral Meningitis	-	-	-	1	1	-	-	-	-	1	1
Sexually transmitted diseases											
Granular conjunctivitis	-	-	-	-	-	-	-	-	-	-	-
Gonorrhoea- Gonococcal infection	63	91	94	103	296	55	-	166	185	-	351
Syphilis	-	-	5	2	7	-	-	3	4	-	7
Syphilis Latent	14	18	19	16	58	9	-	33	34	-	67
Syphilis Primary	5	4	5	5	18	1	-	10	9	-	19
Syphilis Secondary	5	8	2	6	20	1	-	8	13	-	21
Lymphogranuloma venerum (LGV)	-	-	1	1	2	-	-	2	-	-	2
Mycoplasma Genitalium	21	24	16	26	12	30	45	29	12	46	87
Trichomonas vaginalis (TV)	1	2	1	3	2	5	-	4	3	-	7
Chlamydia	95	100	88	91	268	106	-	163	211	-	374

Hepatitis B (STI)	1	2	-	1	1	-	3	-	-	4	4
Hepatitis C (STI)	2	1	1	1	1	-	4	-	-	5	5
Respiratory diseases											
Legionnaire's Disease	1	3	5	4	8	5	-	9	4	-	13
Tuberculosis, Non-Pulmonary	6	6	-	8	12	8	-	1	19	-	20
Tuberculosis, Pulmonary	13	11	13	11	39	9	-	3	45	-	48
Influenza	-	-	2	-	1	1	-	1	-	1	2
Smallpox	-	-	-	-	-	-	-	-	-	-	-
SARS	-	-	-	1	1	-	-	-	1	-	1
COVID-19	-	-	-	-	-	-	-	-	-	-	-
Pneumonia	-	-	-	1	-	1	-	-	1	-	1
Scarlet Fever	25	36	3	24	46	37	5	68	7	13	88
Vaccine preventable diseases											
Chickenpox	49	46	16	21	78	52	2	82	35	15	132
Measles	-	-	-	-	-	-	-	-	-	-	-
Mumps	-	1	-	-	-	1	-	-	1	-	1

Pertussis	-	1	1	1	2	1	-	3	-	-	3
Rubella	-	-	-	-	-	-	-	-	-	-	-
Shingles, Herpes Zoster	8	13	4	7	14	17	1	30	1	1	32
Tetanus	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-
Polio	-	-	-	-	-	-	-	-	-	-	-
Vector-borne diseases											
Chikungunya	-	-	-	-	-	-	-	-	-	-	-
Dengue	-	-	-	-	-	-	-	-	-	-	-
Leishmaniasis (Cutaneous)	-	-	-	-	-	-	-	-	-	-	-
Leishmaniasis (Visceral)	-	-	-	1	1	-	-	1	-	-	1
Malaria	3	4	4	5	15	1	-	4	12	-	16
Sandfly Fever	-	-	1	-	1	-	-	1	-	-	1
Typhus, Tick-borne (Rickettsia)	-	2	5	2	5	4	-	7	2	-	9
Typhus, Scrub	-	-	-	-	-	-	-	-	-	-	-
Typhus, Epidemic	-	-	-	-	-	-	-	-	-	-	-

West Nile Fever	-	-	-	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-	-
Schistosomiasis	-	-	-	-	-	-	-	-	-	-	-
Tularaemia	-	-	-	-	-	-	-	-	-	-	-
Zoonotic diseases											
Brucellosis	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis (Zoonotic)	-	-	1	-	1	-	-	1	-	-	1
Echinococcosis (Zoonotic)	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis	1	5	3	-	6	3	-	8	1	-	9
Q-Fever	-	-	-	-	-	-	-	-	-	-	-
Toxoplasmosis	2	2	2	2	3	5	-	7	1	-	8
Ebola	-	-	-	-	-	-	-	-	-	-	-
Marburg	-	-	-	-	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	-	-	-	-	-
Tularaemia	-	-	-	-	-	-	-	-	-	-	-

Lassa Fever	-	-	-	-	-	-	-	-	-	-	-
Yersinia	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	-	-	-	-	-	-	-	-	-	-	-
Monkeypox	1	-	-	1	1	1	-	-	2	-	2
Other diseases											
Acute Flaccid Paralysis	1	-	1	-	2	-	-	2	-	-	2
Classical Creutzfeldt - Jakob Disease	-	-	-	2	-	-	2	2	-	-	2
Variant Creutzfeldt - Jakob Disease	-	-	-	-	-	-	-	-	-	-	-
Scabies	20	63	25	34	88	54	-	66	69	7	142
Acute Viral Encephalitis	-	-	-	-	-	-	-	-	-	-	-
Hand Foot and Mouth	30	7	2	1	26	12	2	39	-	1	40
Hepatitis Unspecified	-	-	-	1	-	1	-	-	-	1	1
Botulism	-	-	-	-	-	-	-	-	-	-	-

Table 2: Outbreaks reported to and investigated by IDCU during 2023, by quarter, gender, and nationality

Infectious Disease Control Unit – Yearly Report – 2023 – Outbreaks											
The figures in brackets indicate the number of implicated outbreaks/clusters.											
Notifiable Disease	Q1	Q2	Q3	Q4	Male	Female	Unk	Maltese	Non-Maltese	Unk	Total
Foodborne diseases											
Campylobacter	12	9	10	4	18	11	6	18	10	7	35(15)
Cryptosporidiosis	-	-	-	3	1	2	-	2	1	-	3(1)
Giardia	-	-	-	2	1	1	-	-	2	-	2(1)
Hepatitis A	-	3	-	-	2	1	-	3	-	-	3(1)
Salmonella	-	-	11	31	11	8	23	12	7	23	42(10)
Scombrototoxin	-	-	2	-	1	1	-	2	-	-	2(1)
Shiga toxin/ VTEC	-	-	3	3	2	2	2	2	2	2	6(2)
Foodborne, Unspecified	14	9	85	45	15	22	116	37	1	115	153(23)
Norovirus	13	3	4	7	5	6	16	11	-	16	27(7)
Rotavirus	10	-	-	3	2	6	5	9	-	4	13(5)

Amoebiasis	2	-	-	-	2	-	-	2	-	-	2(1)
Respiratory diseases											
Scarlet Fever	2	7	-	4	4	3	6	7	2	4	13(5)
Vector-borne diseases											
Malaria	-	2	-	-	2	-	-	1	1	-	2(1)
Other diseases											
Scabies	66	102	26	46	97	97	46	154	41	45	240(66)

Table 3: Paediatric cases reported to IDCU during 2023, by age group

Disease Name	Age			Grand Total
	0-5 years	6-10 years	11-17 years	
C. difficile	2			2
Chickenpox	31	18	11	60
Chlamydia			5	5
Cryptosporidiosis	3	1		4
EHEC	1			1
Entamoeba coli	1			1
Food Poisoning, Campylobacter	105	25	30	160
Food Poisoning, Salmonella	39	15	9	63
Food Poisoning, Shiga Toxin 1&2	4		1	5
Food Poisoning, Shigella	3			3
Food Poisoning, Unspecified	4	1	1	6
Giardiasis	3			3
Gonorrhoea			3	3

Hand, foot and mouth disease	22	7		29
Hepatitis A	1	2		3
Hepatitis B	2			2
Hepatitis C	1			1
Influenza	1	1		2
Invasive Group A Strep. Pyo	4	1		1
Invasive Strep. Pneumonia	5			2
Leptospirosis			2	2
Meningitis, (Other bacterial)	1			1
Meningitis, Strep. Pneumonia		1		1
Mumps		1	1	2
Mycoplasma Genitalium			2	2
Norovirus, Gastroenteritis	15	8	2	23
Pinworms		1		1
Rotavirus	58	5	6	69

Scabies	29	11	18	58
Scarlet Fever	57	21	3	81
Shingles, Herpes zoster	1			1
Slapped Cheek Syndrome		1		1
Toxoplasmosis	1			2
Tuberculosis, Non-Pulmonary			1	1
Typhoid		1		1
Viral Meningitis	1			1