TAIWAN

衛生福利部疾病管制署

署長的話
MESSAGE FROM THE DIRECTOR-GENERAL

防疫無假期！
建立專業、合作、溝通的團隊

疾病管制署是國內防疫安全的捍衛者，因應層出不窮的新興傳染病，我們需不斷提升專業能力，並踏實地做好每項工作，迎戰潛伏四周的疫病。

隨著環境的變遷，防疫已不僅視同作戰，而是天天都在作戰。從冬季的流感、春天的腸病毒到夏秋時節的登革熱；甚至結核病、愛滋病不分季節默默侵蝕國人健康，都是我們要努力防治的目標。此外，境外移入的傳染病，如茲卡病毒感染症、中東呼吸症候群冠狀病毒感染症 (MERS) 等，都是我們必須嚴加防範的敵人。

在這一場人類和細菌、病毒的戰爭裡，如果只靠疾管署的力量，尚不足以應付疫病的挑戰，需要中央與地方防疫夥伴齊力合作。長遠來看，我們期待的不只是自己專業能力的增強，也將協助地方夥伴們一起成長茁壯，共同打贏這場戰爭。

此外，防疫是世界一體的，臺灣一直以來透過各種方式，包括參與國際會議、國際援助等，積極參與全球防疫體系，未來仍將持續與各國防疫單位密切聯繫，建立良好的合作關係，掌握最新訊息、知識和技術，共同提升國際防疫能量。

所有防疫政策的推動，唯有民眾的支持，才做得成、做得好。因此，疾管署將秉持疫病訊息更即時、透明與公開的原則，在「適當警」跟「引起恐慌」中間找到平衡點，讓民眾能信任並支持疾管署專業團隊。

細菌和病毒無時無刻、無所不在威脅人類，疾管署全體同仁懷著戒慎恐懼的心情，本著「防疫無假期」的精神，與防疫夥伴一起捍衛防疫安全，建立全民不憂不懼的健康環境。

Disease prevention requires 24/7 effort!
Taiwan CDC strives to be a professional, cooperative and communicative team.

The Taiwan Centers for Disease Control (Taiwan CDC) works 24/7 to protect Taiwan from the threat of infectious diseases. To tackle challenges posed by emerging infectious diseases, we must continue to upgrade our professional skills and meticulously complete our every task in order to combat the diseases that lurk around us.

As the environment changes, disease prevention has become not just analogous to war; rather, we are constantly at war. Influenza occurs in the winter, enterovirus in the spring, dengue fever in the summer and fall, while tuberculosis and AIDS quietly gnaw away at people's health year-round. All these are some of the diseases we strive to prevent and control. Simultaneously, imported infectious diseases such as the Zika virus infection and Middle East respiratory syndrome (MERS) coronavirus infection have also become enemies that we must vigilantly guard ourselves against.

In this battle of humans against bacteria and viruses, Taiwan CDC alone is not enough to overcome the challenges posed by diseases; the task requires collaborative efforts with disease prevention partners at the central and local levels. In the long run, we do not only anticipate improvement in our own professional capabilities, but also look forward to assisting local colleagues in achieving mutual growth, so that together we may gain the upper hand in this battle.

In addition, disease prevention is a global effort. Taiwan has always been committed to playing its part in the global disease prevention system by participating in international conferences and providing international aids. In the future, we will remain in close contact with foreign disease prevention institutes, foster partnerships with our global colleagues, and remain up to date on the latest information, knowledge, and technologies as we work with other countries in strengthening the global capacity to prevent, detect and respond to infectious diseases.

The implementation of any disease prevention policy requires support from the public for the policy to become feasible and succeed. Therefore, Taiwan CDC will adhere to the principles of timeliness, transparency, and openness in releasing outbreak information as we strike a balance between due warning and causing panic in order to ensure public trust and support.

Humans are under constant threat from bacteria and viruses. As "disease requires 24/7 efforts", all colleagues at Taiwan CDC will remain proactive and diligent while we work with our partners in disease prevention to establish a healthy environment without fear and worry for our people.

衛生福利部疾病管制署　署長
Director-General
Taiwan Centers for Disease Control

周志浩 Jih-Haw Chou



Stop TB
partnership

ROC

性傳染病

PASS BOX
BIO-BOTTLE



生命
雙手






核動起來
抗愛滋 動起來



組織與任務
ORGANIZATION AND MISSION

衛生福利部疾病管制署為我國最高防疫單位，主要負責防疫政策制定、疫病控制、人才培育及國際合作等。為了因應新興傳染病，即時提供相關單位疫情監測及傳染病通報等資訊，並快速處理各地傳染病疫情調查、控制及港埠檢疫等業務，於各地設置 6 個管制中心。另為進行病原體確認及相關研究，防止新興傳染病或生恐攻擊的威脅，設置有國家級檢驗及疫苗研製中心、國家流感中心、結核病防治研究中心、食媒性疾病研究中心等，以專業先進的技術，不分日夜守護民眾的健康。

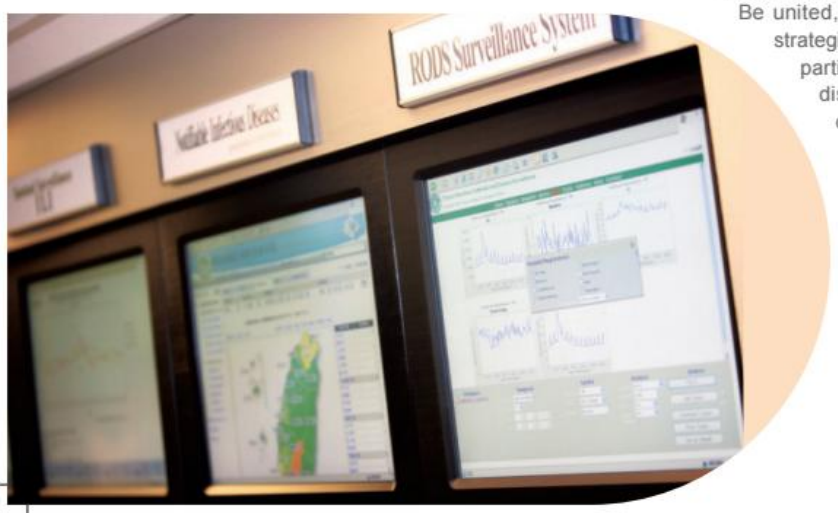
此外，為精進防疫人員的能力，疾管署設有感染症防治中心，不定期辦理實際操演及與其他國家合作辦理教育訓練等。至國家衛生指揮中心之設置，則為重大疫情發生時，可有效整合各界防疫資源，並依指揮官指示統籌調度，以有效解除疫病威脅。

面對本土性傳染病及未來新興疫病潛在的威脅，疾病管制署以「防疫視同作戰，團結專精實幹」為座右銘，以防疫機動化、資訊化、專業化、全民化及國際化為行動策略，阻絕疫病於境外，防止於境內擴散，免除疫病威脅，為全民健康把關。

The Centers for Disease Control (CDC), Ministry of Health and Welfare (MOHW) is the highest infectious disease control unit in Taiwan. It is primarily responsible for the formulation of infectious disease prevention and control policies, outbreak control, talent development, and international cooperation. In response to any occurrence of emerging infectious diseases in Taiwan, CDC provides real-time information such as disease surveillance data and infectious disease notifications to relevant units. In addition, CDC implements rapid response efforts and port quarantine to investigate and control outbreaks. Six regional centers have been established throughout the nation. In addition, to identify pathogens and conducted related research, thereby preventing the threats posed by emerging infectious diseases or bioterrorism attacks, CDC has established national-level research centers such as the Center for Diagnostics and Vaccine Development, the National Influenza Center, the Research Center for Tuberculosis Control, and the Research Center for Food-borne Diseases, which employ professional and advanced technologies to safeguard the health of the public around the clock.

Furthermore, to enhance the abilities of infectious disease prevention and control personnel, CDC has established the Center for Infection Control, and conducts practical drills and educational training in collaboration with other countries from time to time. The National Health Command Center has been established to coordinate and integrate infection control resources from various sectors during the occurrence of a major outbreak, based on the instructions from the Commander in order to effectively eliminate the threat of the disease.

In facing the potential threats posed by endemic infectious diseases and future emerging infectious diseases, CDC has adopted the motto "View infectious disease prevention and control as a battle; Be united, specialized and pragmatic", and based operational strategies on mobility, informatization, professionalism, citizen participation and internationalization to prevent infectious diseases from entering the country, prevent infectious diseases from spreading within the country, eliminate the threats posed by infectious diseases, and to safeguard the health of our citizens.



疾管署結合健保資料、倉儲系統等多項資料庫，可即時監測疫病狀況。

CDC has combined multiple databases such as NHI data and stockpile systems for real-time surveillance of epidemic situations.

重要團隊分布

WHERE CDC WORKS

- 總署、昆陽實驗室
  Department, laboratory Kunyang
- 食媒性疾病研究中心
  Food -borne Disease Research Center
- 感染症防治中心
  Center for Infectious Disease Control and Prevention
- 登革熱防治研究中心
  Center for Dengue Fever Control and Research

- 臺北區管制中心
  Taipei Regional Center
- 北區管制中心
  Northern Regional Center
- 中區管制中心
  Central Regional Center
- 南區管制中心
  Southern Regional Center
- 高屏區管制中心
  Kaohsiung-Pingtung Regional Center
- 東區管制中心
  Eastern Regional Center

行政單位 秘書室、人事室、政風室、主計室、資訊室

業務單位 企劃組、急性傳染病組、慢性傳染病組
新興傳染病整備組、感染管制及生物安全組
檢疫組、檢驗及疫苗研製中心、疫情中心

任務編組 公共關係室、預防醫學辦公室、戰情室
國會小組、疫苗中心、國家流感中心
結核病防治研究中心

Five Offices:
Information Management Office; Secretariat; Personnel Office; Accounting and Statistics Office; Civil Service Ethics Office.

Six Divisions:
Division of Planning and Coordination; Division of Infection Control and Biosafety; Division of Acute Infectious Diseases; Division of Chronic Infectious Diseases; Division of Preparedness and Emerging Infectious Diseases; Division of Quarantine.

Two Centers:
Epidemic Intelligence Center; Center for, Diagnostics and Vaccine Development.

Task Forces:
Public Relations Office; Office of Preventive Medicine; Emergency Operation Center; Parliament Liaison Office; Vaccine Center; National Influenza Center; Tuberculosis Prevention Research Center.

急性傳染病防治

PREVENTION AND CONTROL OF ACUTE INFECTIOUS DISEASES

2007 年校園腸病毒宣導活動。
Enterovirus awareness campaign on campus in 2007.

急性傳染病防治業務，包含：腸道傳染病、病媒傳染病、急性呼吸道傳染病等防治政策的規劃及推動。由於我國地處熱帶及亞熱帶氣候區，其中以腸病毒感染併發重症及病媒傳播的登革熱二種疫病最為常見，簡述如下：

腸病毒感染併發重症

台灣氣候適合腸病毒生存，全年都有腸病毒感染個案。疾病管制署已建立多元監測系統、群聚事件處理及重症個案審查等措施，以掌握疫情趨勢。

另為提升腸病毒重症患者的治療品質，於各縣市均有指定腸病毒重症責任醫院，透過院際橫向聯繫，加速病患轉診與病床調度。

腸病毒的防治首重早期發現，透過對幼兒照顧者、教托育機構等分衆宣導，同時與地方政府合作培訓在地化衛教人才，並針對兒童出入的場所加強衛生查核等，期透過全面防護及早預防。

登革熱及其他病媒傳染病

全球暖化造成蚊蟲迅速繁衍，為免除病媒傳染病帶來的威脅，已在臺南、高雄規劃成立「國家蚊媒傳染病研究所」，整合疾病管制署、各學術研究機構及大專院校的專家，積極進行蚊蟲控制與傳染病防治的研究，以成為亞太與東南亞地區研發重鎮為原則。

為了降低登革熱的發生率與致死率，除疫情監測、加強通報及鼓勵社區動員外，也積極推廣登革熱快速診斷試劑，以即時掌握病患及防止病媒傳染病的流行。

透過推廣登革熱快速診斷試劑 (NS1) 的使用，及早針對疫情發生處展開防治工作。
The promotion of the use of rapid diagnostic tests for dengue fever (NS1) allows for early control at locations where epidemics break out.

The scope for the prevention and control of acute infectious diseases includes the following: planning and implementation of prevention and control policies of gastrointestinal infectious diseases, vector-borne infectious diseases and acute respiratory infectious diseases. As Taiwan is located in the tropical and subtropical regions, enterovirus infection with severe complications and vector-borne dengue fever are the two most common infectious diseases. They are briefly described as follows:

Enterovirus infection with severe complications

The climate in Taiwan promotes the survival of enteroviruses, hence cases of enterovirus infection occur all year round. CDC has already implemented a number of measures, including the establishment of diverse surveillance systems, handling of cluster events, and review of severe cases, in order to monitor enterovirus activity in Taiwan.

In addition, to improve the quality of healthcare for patients with severe enterovirus infections, CDC has designated responsible hospitals for treating severe enterovirus infections in all counties and cities in the nation. Through lateral communication among hospitals, patient referral and hospital bed arrangements can be expedited.

The most important aspect in the prevention and control of enterovirus infection is early detection. Through targeted individual awareness campaigns for caregivers of young children and educational/childcare organizations, collaboration with local governments to train local health education personnel, as well as enhanced hygiene inspections at places often visited by children, CDC aims to achieve early prevention through all-rounded protection.

Dengue fever and other vector-borne infectious diseases

Global warming has promoted the rapid growth of mosquitoes. To eliminate the threat of vector-borne infectious diseases, CDC has already established the National Research Center for Vector-Borne Diseases in Tainan City and Kaohsiung City where specialists from CDC, various academic research organizations and tertiary institutions collaborate to actively conduct research on mosquito control and the prevention and control of vector-borne infectious diseases, with the aim of becoming a major research and development facility in the Asia-Pacific and Southeast Asia regions.

In order to reduce the incidence and fatality rate of dengue fever, apart from disease surveillance, enhanced notification and encouragement of community mobilization, active promotion of rapid diagnostic tests for dengue fever is also conducted for real-time monitoring of patients and to prevent outbreaks of vector-borne diseases.

急性傳染病防治

PREVENTION AND CONTROL OF ACUTE INFECTIOUS DISEASES

為防範登革熱疫情持續攀升、提供早期診斷及治療，疾病管制署由 7 位防疫醫師組成「登革熱醫療支援隊」。

To prevent the continued escalation of the dengue fever epidemic and to provide early diagnosis and treatment, CDC established the "Dengue Fever Medical Support Team", which comprises 7 medical officers.

急性傳染病防治工作必須有風險管理之觀念，即是針對威脅國人健康之高風險傳染病，加強監控及預測，透過整合中央與地方防疫資源，降低急性傳染病之流行風險。

臺灣為了根除小兒麻痺症、麻疹、先天性德國麻疹症候群及消除新生兒破傷風，自 1991 年起開始執行根除三麻一風計畫，逐步建立疫苗接種系統且整合落實到國家的健康照護中；目前我國已於 2000 年根除小兒麻痺症，而先天性德國麻疹症候群，僅有境外移入病例；新生兒破傷風則無病例通報，麻疹也已達國際間消除的標準，多數急性傳染病均已獲得控制。

然疾病只要仍在國際間傳播，就有傳入國內的可能，不能掉以輕心，疾病管制署為因應急性傳染病的發生風險，2011 年起研提「急性傳染病流行風險監控與管理計畫」，針對病媒傳染病、腸病毒、三麻一風及病毒性肝炎等疾病，訂定防治策略。

此外，新興再浮現的傳染病也要持續關注，例如狂犬病在臺灣絕跡五十餘年後，在 2013 年又發生動物案例，這對長期以來無相關經驗的衛生及農政防疫單位是一大考驗。

因此，傳染病防治工作除了持續儲備防疫人才、物資等應變量能外，更迫切需要結合疫苗研發、新檢驗技術與診斷方法，及相關防疫體系之整合，以隨時做好迎戰各種疫病的準備，保障國人健康。

Risk management is an important concept in the prevention and control of acute infectious diseases. In other words, with regard to high risk infectious diseases that can threaten the health of our citizens, surveillance and forecast must be strengthened, and central and local infectious disease prevention and control resources must be integrated to reduce the risk of acute infectious disease outbreaks.

To eradicate poliomyelitis, measles and congenital rubella syndrome and to eliminate neonatal tetanus, beginning 1991, CDC launched the Eradication Program for Poliomyelitis, Congenital Rubella Syndrome, Neonatal Tetanus and Measles, in which an immunization system was established progressively, and integrated and implemented into the national health care system. Currently, poliomyelitis has been eradicated in Taiwan since 2000. For congenital rubella syndrome, only imported cases have been reported. For neonatal tetanus, no cases have been reported. For measles, the international elimination standard has already been achieved. Further, most acute infectious diseases have already been brought under control in Taiwan.

However, as long as diseases are being spread internationally, the possibility that they may be imported into Taiwan will always remain. Therefore, they should never be treated lightly. In response to the risk of occurrence of acute infectious diseases, from 2011, CDC proposed the Acute Infectious Disease Outbreak Risk Monitoring and Management Plan, in which control strategies have been formulated for vector-borne infectious diseases, enterovirus infection, poliomyelitis, congenital rubella syndrome, neonatal tetanus and measles, and viral hepatitis.

In addition, the occurrence of emerging and re-emerging infectious diseases must also be continuously monitored. For example, after Taiwan has been free of rabies for over 50 years, animal cases have re-occurred in 2013. This has posed a huge challenge to the health and agricultural disease control units that had not had relevant experience for a long period of time.

Thus, besides continuously strengthening capacity to detect and respond to infectious diseases, including infectious disease prevention and control personnel and resources, the more pressing needs for effective control of infectious diseases require the integration of vaccine development, new diagnostic technologies and diagnosis methods, and the integration of relevant infectious disease prevention and control systems, so as to be prepared for various diseases at any time and to safeguard the health of our citizens.

TAIWAN CDC

慢性傳染病防治

PREVENTION AND CONTROL OF CHRONIC INFECTIOUS DISEASES

2016 年結核病日記者會，宣告我國加入「WHO 2035 消除結核計畫」。
At the press conference for World Tuberculosis Day 2016, we announce Taiwan's participation in the WHO End TB Strategy 2035.

我國重要慢性傳染病，包含：結核病、愛滋病、漢生病及其他性傳染病等。由於臺灣人口老化，加上全球交流便捷及網路交友盛行，使得慢性傳染病的挑戰日益艱難，其中結核病、愛滋病更是我國及全球的防疫重點，簡述如下：

結核病

2005 年，我國國民所得邁入已開發國家，臺灣的結核病發生率仍在每 10 萬人中佔有比率高達 72.5 人的中高度負擔國家。疾病管制署為加強控制結核病疫情，並呼應世界衛生組織（WHO）的呼籲，2006 年開始推動「結核病十年減半全民動員計畫」，包括：都治計畫、大眾航空器限乘政策、成立多重抗藥性結核病醫療照護體系等。

2015 年，我國的結核病發生率已從 2005 年的每 10 萬人裡有 72.5 人的比率，降至 2015 年的每 10 萬人 45.6 人；死亡率也由 2005 年的每 10 萬人有 4.3 人，降至 2014 年的每 10 萬人 2.5 人，成效卓越。

在防治工作上雖已有成效，但仍須面對人口老化、抗藥性結核病等挑戰，疾病管制署參照 WHO 防治策略，提出「我國加入 WHO 2035 消除結核計畫」。自 2016 年起，以「強化防疫基礎建設與預防策略」、「以病人為中心的整合照護策略」、「加強業務研究與開創新興技術」及「拓展跨國合作與國際防治奧援」為四大策略，將陸續導入新藥與新診斷技術、提升照護廣度及深度等，向 2035 年消除結核（10 例 / 每 10 萬人口）之全球目標邁進。

The major chronic infectious diseases in Taiwan include: tuberculosis (TB), HIV/AIDS, leprosy and other sexually transmitted diseases. Due to the population aging in Taiwan, as well as the convenience of global interaction and the prevalence of online dating, the challenges posed by chronic infectious diseases are becoming more and more complicated. Among them, TB and HIV/AIDS are the two focuses of Taiwan's and global prevention and control efforts. They are briefly described as follows:

Tuberculosis

By 2005, the national income in Taiwan had reached the standards of a developed country. However, Taiwan was still a medium-high burden country for tuberculosis, as the incidence rate of tuberculosis in Taiwan was still as high as 72.5 per 100,000 persons. To strengthen the control of the TB epidemic, CDC took action in response to the calls from the World Health Organization (WHO) and launched the National Mobilization Plan to Halve TB in 10 Years in 2006, which includes: Directly Observed Treatment Short-Course (DOTS), Public Aircraft Travel Restriction Policy, and the establishment of the Taiwan MDR-TB Consortium (TMTC) Medical Care System.

By 2015, the TB incidence rate in Taiwan had reduced from 72.5 per 100,000 persons in 2005 to 45.6 per 100,000 persons in 2015; the TB mortality rate had also reduced from 4.3 per 100,000 persons in 2005 to 2.5 per 100,000 persons in 2014, which indicate success of our TB prevention and control efforts.

Although results have been achieved through TB prevention and control efforts, challenges posed by population aging and drug-resistant TB must still be addressed. Therefore, based on the WHO's control strategies, CDC proposed the Plan for Taiwan's Participation in the WHO's End TB Strategy 2035. Beginning 2016, with the adoption of four major strategies, including "Strengthening infectious disease prevention and control infrastructure and strategies", "Patient-oriented integrated care strategies ", "Strengthening research and development of new technologies", and "Expanding international cooperation and foreign aid", new drugs and new diagnostic technologies will be progressively introduced, and the breadth and depth of health care will be increased in the pursuit of the global elimination of TB (10 cases/100,000 people) by 2035.

TAIWAN CDC

慢性傳染病防治

PREVENTION AND CONTROL OF CHRONIC INFECTIOUS DISEASES

愛滋病

我國自 1984 年通報第 1 例愛滋病毒感染個案後，截至 2015 年底，發現本國籍累積感染者共計 31,036 例。從歷年個案感染之危險因子顯示，2004 年至 2005 年間注射藥癮者因經由共用針具及稀釋液，導致愛滋感染人數迅速攀升，經推動藥癮愛滋減害計畫，注射藥癮者之愛滋感染疫情很快受到控制。

但近年來網路交友盛行，娛樂性成癮藥物濫用及男男間性行為者比例攀升，提高了易感族群發生不安全性行為之風險，愛滋防治面臨嚴峻考驗。

為此，疾病管制署持續針對易感族群推動各項防治策略，期透過多元化的網絡及場域，及時向年輕族群宣導愛滋正確認知、拒絕使用成癮藥物及避免不安全性行為之觀念。

而為推動愛滋病平權化，2015 年完成「人類免疫缺乏病毒傳染防治及感染者權益保障條例」部分條文修正，取消外籍感染者停、居留的限制，修改愛滋醫療費用給付的制度，為我國愛滋防治寫下重要里程碑。

另為響應 UNAIDS 規劃於 2020 年達到「90-90-90」之目標（即 90% 感染者知道自己病況、90% 知道病況者有服用藥物、90% 服用藥物者其病毒量成功被抑制），並於 2030 年終止愛滋（End AIDS），未來愛滋防治策略將以疾病去污名化、拓展多元篩檢方案、推動以治療作為預防及暴露前預防性投藥等策略，期早日達終止愛滋疫情之目標。

AIDS

Since the first case of HIV infection in Taiwan was reported in 1984, as of the end of 2015, a cumulative total of 31,036 Taiwanese HIV-infected patients had been reported. Risk factors of the infection cases over the years indicate that from 2004 to 2005, due to the sharing of needles, syringes and diluents among injection drug users, the number of HIV-infected patients increased rapidly. With the launch of the Harm Reduction Program for Injection Drug Users, the AIDS epidemic among injection drug users was quickly brought under control.

However, with the increasing prevalence of online dating, the abuse of recreational drugs and the increasing proportion of men who have sex with men (MSM), the risk of unprotected sex within susceptible populations is thus elevated, posing a serious challenge to our HIV/AIDS prevention and control efforts.

Therefore, CDC has continuously launched various prevention and control strategies targeting different high-risk populations. Through diverse networks and domains, CDC hopes to educate young people with the correct HIV/AIDS-related knowledge as well as the concepts of refusing drug use and avoiding unprotected sex.

In addition, to promote equality rights for people with HIV/AIDS, in 2015, amendments to selected articles of the HIV Infection Control and Patient Rights Protection Act were completed. As a result, restrictions on the stay or residence for foreign HIV-infected patients have been canceled, and the payment scheme for AIDS-related medical expenses has been amended, which signify important milestones in Taiwan's HIV/AIDS prevention and control efforts.

Furthermore, in response to UNAIDS' plan to achieve the "90-90-90" target by 2020 (i.e. 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, 90% of all people receiving antiretroviral therapy will have viral suppression), as well as to achieve the goal of ending AIDS by 2030, future HIV/AIDS control efforts will adopt strategies such as destigmatization, development of diverse screening programs, and promotion of Treatment as Prevention and pre-exposure prophylaxis (PrEP) with the hope of achieving AIDS elimination at the earliest possible time.

響應愛滋防治，知名廣播主持人雷夢娜呼籲早期篩檢的重要。
Well-known radio host Rainbow Queen offers support for AIDS prevention and control efforts and emphasizes the importance of early screening.

TAIWAN CDC

預防接種
IMMUNIZATION

TAIWAN CDC

預防接種是預防傳染病最有效的途徑之一，可避免傳染病感染或使病情減輕，目前我國已有許多疫病透過預防接種，已獲得有效控制，甚至根除，例如 1955 年起無天花病例，1981 年後白喉病例完全消失，1991 年起無小兒麻痺病例，2000 年 10 月宣告根除小兒麻痺症。

我國於 1944 年訂定「種痘條例」，亦是預防接種工作的開始，截至 2016 年，提供幼兒常規接種的疫苗包括 B 型肝炎疫苗、卡介苗、五合一疫苗（DTaP-Hib-IPV）、結合型肺炎鏈球菌疫苗、水痘疫苗、麻疹腮腺炎德國麻疹混合疫苗（MMR）、日本腦炎疫苗、流感疫苗等達 8 項，可預防 13 種傳染病，目前國內幼兒常規疫苗基礎劑接種率均維持在 95% 以上。

另為防治流感對民眾健康的威脅，疾病管制署自 1998 年開始推動「流感疫苗接種計畫」，將流感高風險與高傳播族群列為接種對象，並逐年擴大實施。包括自 2001 年起開放所有 65 歲以上老人公費接種，2004-2012 年陸續開放學齡前及國小學童接種，2016 年為因應流感疫情提升接種涵蓋率，再新增 50 至 64 歲健康成人及國高中生等公費對象；疫苗接種量也由原先 100 萬劑，逐年成長至 2011 年的 300 萬劑，2016 年為因應流感疫情，再爭取經費倍增疫苗採購量至 600 萬劑，預估全人口涵蓋率可提升至 25%。

Immunization is one of the most effective ways to prevent infectious diseases as it can prevent infections and reduce the severity of diseases. Currently, through immunization programs, many infectious diseases in Taiwan have been effectively brought under control and even eradicated. For instance, since 1955, no cases of smallpox have occurred; since 1981, diphtheria has vanished; since 1991, no cases of poliomyelitis have occurred; and in October 2000, poliomyelitis was declared eradicated.

Taiwan established the Smallpox Immunization Act in 1944, which marks the beginning of our immunization efforts. As of 2016, the routine vaccines recommended for young children include 8 vaccines: hepatitis B vaccine, BCG vaccine, DTaP-Hib-IPV vaccine, pneumococcal conjugate vaccine, varicella vaccine, measles, mumps, and rubella (MMR) vaccine, Japanese encephalitis vaccine, and influenza vaccine, which can prevent 13 types of infectious diseases. Currently, the basic routine immunization coverage rate for young children in Taiwan has been maintained at above 95%.

In addition, to protect the public from the threats posed by influenza, CDC launched the Influenza Immunization Program in 1998, listing populations with high risk of contracting and transmitting influenza as targets for immunization, and has expanded the scope of implementation over the years. From 2001 onwards, all senior citizens aged 65 and above are eligible for government-funded vaccines; from 2004 to 2012, pre-school and elementary school children were progressively included for immunization; in 2016, in response to the rising influenza epidemic, healthy adults aged 50 to 64 as well as middle and high school students have been included as targets for government-funded immunization. The quantity of vaccines administered has also progressively increased from 1 million vaccines to 3 million vaccines in 2011; and in 2016, in response to the influenza epidemic, funding has been secured to double the order quantity to 6 million vaccines, and it is estimated that the coverage rate for the total population will increase to 25%.

預防接種
IMMUNIZATION

TAIWAN CDC

臺灣同時面臨少子化威脅及高齡化的時代，政府除讓每個小朋友都接種到品質優良的疫苗，保護其安全健康地成長；疫苗接種也讓老年人免除部分疾病侵襲，減輕整體醫療費用負擔。

另外也掌握國際趨勢，逐步納入新的疫苗政策，包括以細胞培養日本腦炎疫苗，取代鼠腦產製的日本腦炎疫苗；提供 65 歲以上長者接種肺炎鏈球菌疫苗等。另外考量輪狀病毒是幼兒腹瀉的常見原因，及國內年輕族群多不具 A 型肝炎抗體，潛藏爆發流行的風險，因此未來輪狀病毒疫苗及 A 型肝炎疫苗納入常規接種，亦是亟須推動的政策。

因應新疫苗陸續上市，為避免疫苗預算遭排擠，疾病管制署於 2010 年起依據「傳染病防治法」第 27 條，成立疫苗基金，在多重財源、獨立編列、專款專用等架構下，辦理疫苗採購及預防接種工作。但疫苗基金仍不足以推動所有預定的新政策及全面提升既有的服務體系，除繼續自可行的管道爭取經費外，也嘗試由其他方式支付疫苗及接種服務費用。

隨著醫療環境及民眾就醫行為改變，疫苗接種業務逐漸由衛生所移往醫療院所，因此未來需與各醫療院所密切合作，並積極規劃多元化的疫苗接種政策，推廣終身接種疫苗的觀念，才能全面提升服務品質。

Taiwan is facing the threat of a low birth rate and an aging society at the same time. Besides ensuring all children are immunized with high quality vaccines so that they can grow up safe and healthy, the Government also provides immunization for the elderly, which protects them from being inflicted by certain diseases and reduces the overall burden of health care costs.

In addition, CDC has also been paying close attention to international trends and progressively introduced new vaccine policies, including the replacement of mouse brain-derived Japanese encephalitis vaccines with cell culture-derived Japanese encephalitis vaccines, and providing senior citizens aged 65 and above with immunizations of pneumococcal vaccines. Furthermore, since rotavirus is a common cause of diarrhea in young children and the majority of the young people in Taiwan do not have hepatitis A antibodies, which poses the risk of a potential outbreak, CDC will be including rotavirus vaccines and hepatitis A vaccines in the routine immunization program in the future. This is also a policy that requires urgent implementation.

In response to the continuous introduction of new vaccines into the market, CDC set up a vaccine fund in 2010 in accordance with Article 27 of the Communicable Disease Control Act to avoid supplanting of the vaccine budget and handle the purchase of vaccines and immunization efforts within the frameworks of multiple income sources, independent planning and earmarking of funds. However, the vaccine fund is still insufficient to launch all new planned policies and perform comprehensive upgrades of the existing service systems. Besides continued efforts in seeking funds from viable channels, CDC has also attempted other methods to pay for the vaccines and immunization services.

As the health care environment and medical behavior of the public have changed over time, immunization services have gradually shifted from public health centers to medical institutions. Therefore, in the future, CDC needs to work closely together with various medical institutions, actively plan diverse immunization polices and promote the concept that getting immunized is a lifelong responsibility in order to improve the service quality in all aspects.

新興傳染病防治

PREVENTION AND CONTROL OF EMERGING INFECTIOUS DISEASES

多元儲備及管理流感抗病毒藥劑，於流感疫情高峰期間可擴大公費藥劑之適用對象。

With diverse reserve stockpiles and proper management of influenza antivirals, the expansion of target populations for government-funded antivirals can be done during peak periods of influenza epidemics.

全球氣候變遷加上國際交流，新興傳染病的威脅與日俱增，爰此，疾病管制署擬定「新興傳染病風險監測與應變整備計畫」，包括保全國際衛生條例（IHR）指定港埠的核心能力、擴充檢驗量能、提升應變整備效能等，重要項目包含流感大流行整備、建立傳染病防治醫療網、生恐應變整備，簡述如下：

流感大流行整備

流感是最具大流行潛力的疾病，疾病管制署呼應世界衛生組織（WHO）公布之策略，擬訂「我國因應流感大流行準備計畫」，建置應變體系與策略架構，多元儲備及管理抗病毒藥劑，並維持全人口適當比例之儲備量，儲備疫苗及辦理自願接種計畫等。

另外，為因應流感疫情高峰期之防治需求，訂定「流感疫情高峰期應變作戰計畫」，提高監測密度，並擴大公費藥劑之適用對象及增設配置點，以及要求醫院在流行期之假日開設類流感特別門診，以紓緩急診壅塞情況，提升醫療照護品質。

建立傳染病防治醫療網

為確保新興傳染病發生時，保全醫療體系並使病患獲得妥適治療，於 2003 年成立「感染症防治醫療網」，指定專責醫院收治第一類及第五類傳染病或新興未明原因重大傳染病病患；2007 年修訂傳染病防治法將「感染症防治醫療網」正名為「傳染病防治醫療網」，並使傳染病防治網之建構法制化，落實區域聯防概念。

Due to global climate changes and international interactions, the threat of emerging infectious diseases has increased over the years. Therefore, CDC has established the Emerging Infectious Diseases Risk Surveillance and Preparedness and Response Plan, which includes maintaining of the International Health Regulations (IHR) core capacities of at designated points of entry, expanding laboratory diagnostic capacity, and improving the overall preparedness and response capacity. Key items include influenza pandemic preparedness planning, establishment of the Communicable Disease Control Medical Network, and bioterrorism preparedness and response planning, which are briefly described as follows:

Influenza Pandemic Preparedness Planning

As influenza is the disease that has the greatest pandemic potential, to echo the strategies announced by WHO, CDC has formulated the National Influenza Pandemic Preparedness Plan, which includes the establishment of response systems and strategy frameworks, diverse stockpile and management of antivirals, maintenance of reserve stockpile in appropriate proportion to the total population, vaccine stockpile, and the organization of voluntary immunization programs.

In addition, in order to meet the needs during the peak of an influenza epidemic, the Influenza Epidemic Peak Contingency Plan has been formulated, which includes increasing surveillance, expanding target populations for government-funded antivirals and increasing antiviral distribution locations, as well as requesting hospitals to operate special outpatient clinic for influenza-like illnesses on holidays during the epidemic period that will help relieve emergency department congestion and improve the quality of health care.

Establishment of the Communicable Disease Control Medical Network

To ensure the operation of the health care system and patients receive appropriate treatment when emerging infectious diseases occur, CDC established the Infection Control Medical Network in 2003, which designates responsible hospitals to receive and treat patients with Category I and Category V Communicable Diseases or severe emerging infectious diseases of unknown causes. In 2007, the Communicable Disease Control Act was amended to rename the Infection Control Medical Network to the Communicable Disease Control Medical Network, as well as to legalize the framework of the Communicable Disease Control Medical Network and to realize the concept of zone defense.

TAIWAN CDC

新興傳染病防治

PREVENTION AND CONTROL OF EMERGING INFECTIOUS DISEASES

生物防護應變隊採檢人員執行環境檢體採集。

Specimen collection personnel from the Bioterrorism Response Team collecting environmental specimens.

傳染病防治醫療網將全國劃分為六個醫療網區，以區域聯防為運作策略，並於每個網區指定指揮官、副指揮官各一人做為公衛、醫療溝通橋樑，協助辦理轄內傳染病防治相關事項：於中央流行疫情指揮中心成立期間，依中心指揮官指示統籌調度轄區醫療資源、疫情防治及病人隔離治療等防治事項，使公衛端與醫療端緊密合作，以有效解除疫病威脅。

生恐應變整備

生物恐怖攻擊事件，是指人為蓄意使用生物製劑作為攻擊武器，生物製劑含對人類、動物、植物有害的細菌、病毒或毒素，如：細菌（炭疽桿菌、鼠疫桿菌等）、病毒（天花病毒、伊波拉病毒等）、毒素（肉毒桿菌毒素、產氣芽孢桿菌毒素等）或立克次體、基因改造之微生物等。

為了因應國內如有生物恐怖攻擊事件，事件發生所在地之主管機關或地方政府於評估後，發現現場環境檢體採檢量能不足，請求疾病管制署支援時，必須能迅速出動處置，執行採集檢體與初步研判病原之需求。因此於 2009 年成立生物防護應變隊，並定期進行應變隊自主訓練，以維持處置技能之熟練度，另外也不定期辦理生物防護應變各項研習，以及辦理國際機場或港埠跨部會桌上型演練，強化國內整體生物防護應變量能。

The Communicable Disease Control Medical Network divides the country into 6 medical network zones, and adopts zone defense as the operating strategy. Within each network zone, a Commander and a Vice Commander are designated as representatives to liaise with public health and medical personnel, and to assist in the handling of matters related to the prevention and control of infectious diseases in the zone; during the establishment of the Central Epidemic Command Center, instructions from the Center Command will be followed to coordinate the arrangement of medical resources, epidemic control and isolation and treatment of patients fin the zone, and to ensure close cooperation between the public health and medical sectors, so that the threat of the epidemic can be effectively eliminated.

Bioterrorism Preparedness and Response Planning

Bioterrorism attacks refer to the intentional use of biologic agents as weapons of attack. Biologic agents include germs, viruses or toxins which are harmful to humans, animals and plants, e.g., bacteria (bacillus anthracis, yersinia pestis etc.), viruses (variola virus, Ebola virus etc.), toxins (botulinum toxin, clostridium perfringens toxins etc.) or Rickettsiae, genetically modified microorganisms, etc.

When a bioterrorism attack occurs in the country, if the evaluation conducted by the competent authority or the local government at the location of the attack determines that the specimen collection capacity at the site is inadequate, and requests support from CDC, CDC must be able to quickly deploy resources to meet the needs of specimen collection and initial identification of the pathogen. Therefore, in 2009, the Bioterrorism Response Team was established. The Response Team routinely conducts independent training to maintain its proficiency in response techniques. In addition, it also conducts workshops on biological defense response from time to time, and organizes cross-ministry tabletop exercises for international airports or ports to strengthen the overall preparedness and response capacity for biological defense in the country.

2015 年台美合作在我國成立亞太區域「伊波拉防疫訓練中心」。

In 2015, through a joint U.S.-Taiwan project, the Asia-Pacific Ebola Prevention Training Center was established in Taiwan.

醫院感染管制及抗生素抗藥性管理

INFECTIONS CONTROL IN HOSPITALS AND ANTIBIOTIC RESISTANCE MANAGEMENT

響應 WHO 5 月 5 日醫護人員洗手運動，各大醫院院長呼籲營造健康醫療環境。

In response to the WHO Hand Hygiene campaign for health care workers on May 5, superintendents of various hospitals call for the creation of healthy medical environments.

在SARS 疫情過後，疾病管制署為改善醫院感染管制，自 2005 年起依據傳染病防治法執行醫院感染管制查核，每年公布查核基準，交由地方政府衛生局協同專家進行實地訪查。透過外部稽核督導醫院實施組織性的感染管制管理，建構合宜的照護環境；同時由專家提供相關規劃，推行輔導與經驗交流，持續提升各級醫院的感染管制品質。

另於 2009 至 2017 年間，陸續辦理多項國家型醫院感染管制行動計畫，包括推動醫療照護工作人員手部衛生 5 時機與提升設備可近性，導入中心導管、呼吸器、及導尿管的組合式照護措施等。執行成果顯示，可有效提升工作人員對措施的認知與落實度，及降低醫療照護相關感染發生情形的成效。未來將繼續導入其他措施，如預防手術部位感染組合式照護等，期以感染管制為基石，建立醫院病人安全文化，提升醫療品質。

此外，抗生素抗藥性已成為全球公共衛生的重大危機之一，我國參考國際抗生素管理政策，將持續推動國家型抗生素管理相關計畫，以抗生素合理使用及感染管制二大主軸作為因應對策。並計畫建構與行政院農業委員會、衛生福利部食品藥物管理署、國家衛生研究院等相關政府，與學術單位跨部會合作平台，整合並健全我國抗生素管理在農業、食品及人類上安全合理使用政策和面向。

After the SARS epidemic, to improve infection control in hospitals, beginning 2005, CDC has conducted inspections of infection control in hospitals in accordance with the Communicable Disease Control Act. The inspection criteria are announced annually, and the on-site inspections are jointly conducted by the Department of Health of the local governments and relevant experts. The supervision of hospitals' implementation of organizational infection control and management through external inspections enables the construction of an appropriate health care environment. At the same time, with relevant planning provided by experts, counseling and exchange of experience can be promoted for the continuous improvement of the quality of infection control quality in hospitals of all levels.

In addition, from 2009 to 2017, several national action plans for infection control in hospitals have been progressively carried out, including the implementation of Five Moments for Hand Hygiene for health care workers and improvement in access to medical equipments, as well as the implementation of care bundles for the insertion of central catheters, ventilators and bladder catheters. The results of implementing these plans indicate that the understanding and implementation levels of measures by health care workers can be effectively enhanced, and the infections associated with health care can be effectively reduced. In the future, other measures such as care bundles for the prevention of surgical site infections will be introduced with the hope that a patient safety culture can be established and medical care quality can be improved upon the foundation of infection control.

In addition, antibiotic resistance has become one of the major global public health crises. Taiwan has taken reference from international antibiotic management policies and will continuously launch national programs relevant to antibiotic management, in which the reasonable use of antibiotics and infection control are adopted as focus points for countermeasures. Furthermore, CDC plans to set up a cross-ministry cooperation platform with relevant government agencies such as the Council of Agriculture under the Executive Yuan, the Food and Drug Administration under the Ministry of Health and Welfare and the National Health Research Institutes as well as academic units, so as to integrate and strengthen the policies and aspects of Taiwan's antibiotic management for the safe and reasonable use of antibiotics in agriculture, food and humans.

TAIWAN CDC

邊境檢疫
BORDER QUARANTINE

我國地理位置處於交通貿易樞紐，疾病管制署為防止傳染病藉由旅客或船舶、航空器等運輸工具境外移入，於各國際機場、港口設置辦事處，於平時執行入境旅客發燒篩檢、旅客及運輸工具通報等相關邊境檢疫措施。

疾病管制署對入境人員執行必要之檢疫措施，包括對有症狀旅客進行評估、衛教及追蹤關懷，以保護國民健康。目前每年入境人數約有 2 千多萬人次，其中有症狀旅客人數約為 1.7 萬人次，後續由地方衛生單位進行追蹤監視。經由入境旅客填報「傳染病防制調查表」、體溫篩檢及必要的血液採檢等措施，偵測出登革熱、屈公病及茲卡病毒感染症等相關傳染疾病。

而為了防堵公共衛生緊急事件藉交通工具散播，疾病管制署肩負重責，依國際衛生條例規範，行政院分別核定我國指定港埠核心能力建置第一、二期計畫，擇定桃園國際機場及高雄港為首二指定港埠，與臺北國際機場、高雄國際機場、臺中清泉崗機場、基隆港及臺中港為第二期指定港埠。

目前指定港埠已涵蓋我國 95% 以上入、出境的旅客數及貨物吞吐量，評估重點包含新興傳染病、人畜共通疾病防治等。我國雖非世界衛生組織（WHO）會員國，為降低公共安全危害，持續強化港埠應變能力，其成果不但獲得國際專家高度肯定，亦保障國人生命財產安全。

德國公共衛生專家來台 IHR 複評，檢疫站人員說明國際機場發燒篩檢站相關宣導設施。

Public health experts from Germany conduct IHR re-assessment in Taiwan. ICDC quarantine officers explain the relevant promotional facilities for fever screening stations at the international airport.

疾病管制署於機場對入境旅客執行必要之檢疫措施。

CDC conducts mandatory quarantine measures on arriving passengers at airports.

As Taiwan is a transport hub, to prevent infectious diseases from entering the country via travelers or means of transport such as ships and aircraft, CDC has established offices at the various international airports and seaports, and implements relevant border quarantine measures during normal times such as fever screening of inbound passengers, and reporting of travelers and means of transport.

CDC implements necessary quarantine measures on inbound passengers, including evaluation, education, follow-up and care of passengers with symptoms, so as to protect the health of our citizens. Currently, the number of visitor arrivals per year is approximately 20 million, including 17,000 passengers with symptoms who are subsequently tracked and monitored by local health units. Through measures such as the Communicable Disease Survey Form filled by inbound passengers, body temperature screening and necessary blood sampling, associated infectious diseases such as dengue fever, Chikungunya fever and Zika virus infection have been detected.

CDC undertakes great responsibility in preventing the spread of emergency public health events via means of transport. In accordance with the International Health Regulations (IHR 2005), the Executive Yuan has respectively approved the First and Second Phases of the Plan for Building Core Capacities at Designated Points of Entry, and has selected Taoyuan International Airport and Port of Kaohsiung as the first two designated points of entry; and Taipei Songshan Airport, Kaohsiung International Airport, Taichung International Airport, Port of Keelung and Port of Taichung as the second phase designated points of entry.

Currently, the designated points of entry cover more than 95% of all inbound and outbound passengers and cargo throughput. Key points of assessment include the control of emerging infectious diseases and zoonoses. Although Taiwan is not a WHO member state, to reduce threats to public safety, continuous efforts have been made to strengthen the response capacity at points of entry. The outcomes of these efforts have been highly affirmed by international experts, and have also helped safeguard the lives and property of our citizens.

旅遊醫學
TRAVEL MEDICINE

TAIWAN CDC

隨著時代的發展與各類交通工具的進步，國人的國內、外旅遊風氣日漸盛行，隨之而來的醫療保健需求也日益受到重視。

為能提供國人出國前更完整的旅遊健康諮詢、醫療服務及預防措施建議，並促進旅遊醫學專業知識的研究與發展，疾病管制署自 2008 年 1 月起與台大醫院合作成立「旅遊醫學教育訓練中心」，並陸續與全台多家醫院合作開辦「旅遊醫學門診」，各縣市均至少設有 1 家合作醫院，提高民眾獲得旅遊醫學諮詢服務之可近性。旅遊醫學門診不但提供民眾出國前個別化諮詢、預防性用藥及疫苗接種等。民眾回國後如有身體不適，也可以到該門診接受診斷與治療。

另為提升我國旅遊醫學服務的品質，「旅遊醫學教育訓練中心」定期舉辦研討會及教育訓練，提供全國醫護人員相關進修資訊。疾病管制署也透過與旅行業者的合作，辦理旅遊相關從業人員的教育訓練，維護出國民眾健康。

疾病管制署全球資訊網亦設置「國際旅遊與健康」專區，即時提供「國際重要疫情資訊」、「國際間旅遊疫情建議等級表」及「國際旅遊處方箋」等傳染病疫情警示，以及旅遊保健、旅遊醫學門診與國際預防接種等實用資訊。疾病管制署將持續推動更多旅遊醫學相關教學與訓練，以達高品質的旅遊醫學服務，為國人的健康全面把關。

With the development of the times and advancements in various means of transport, domestic and overseas travels have become increasingly popular among our citizens. As a result, greater emphasis has also been placed on the consequent health care needs.

To provide more comprehensive recommendations regarding pre-travel health consultation, health care services and prevention measures, and to promote the research in and development of travel medicine, CDC established the Training Center for Travel Medicine with National Taiwan University in January 2008, and progressively collaborated with many hospitals around the country to establish outpatient services in travel medicine. For each county/city, there is at least 1 contracted hospital that provides the public with the access to travel medicine consultation services. Outpatient clinics in travel medicine provide personalized pre-travel consultations, preventive medication and immunizations. If members of the public feel unwell after returning to Taiwan, they can also receive diagnosis and treatment at these clinics.

In addition, to improve the quality of Taiwan's travel medicine services, the Training Center for Travel Medicine routinely conducts seminars and educational training to provide health care workers around the country with relevant information for advanced studies. Through collaborations with travel agencies, CDC also organizes educational training for travel industry personnel to safeguard the health of people traveling abroad.

On the CDC's website, a special section entitled "International Travel and Health" has also been set up, which provides travel alerts regarding epidemics of infectious diseases, including "Information regarding epidemics of international importance", "Travel notice levels for international travel", and "Prescriptions for international travel", as well as other useful information such as travel health, outpatient services in travel medicine and immunization for international travel. CDC shall continuously introduce more educational and training courses relevant to travel medicine in order to achieve high quality travel medicine services and to provide comprehensive protection of the health of our citizens.

防疫醫師兼任台大醫院旅遊醫學門診醫師，為民眾健康把關。

A CDC medical officer concurrently serves as an outpatient physician at the National Taiwan University Hospital Travel Medicine Clinic to safeguard the health of the public.

疾病監測及國家衛生指揮中心

DISEASE SURVEILLANCE AND NATIONAL HEALTH COMMAND CENTER

疾病監測及預警為防治傳染病的關鍵，疾病管制署參考世界各國疫情監測的架構，積極建置指標式與事件式的監測體系，並依國際衛生條例設置我國「IHR 聯繫窗口」，與國際間同步接收、即時交換疫情資訊，以及早釐清研判國際重大傳染病事件。

此外，也結合健保資料、倉儲系統、即時疫情監視及預警系統等多項資料庫資訊，提供常規更新、定時產出之監測分析報表，並可利用行動裝置隨時隨地查詢瀏覽，以視覺化呈現方式，即時對疫情提出警示資訊，以供防疫決策運用。

2003 年，SARS 在全球肆虐，亦嚴酷地考驗著我國政府機關在防疫動員時的危機處理能力。因此，亟需要一座以疫災為主的防災中心，作為中央與區域、地方直接聯繫的作戰指揮據點，並藉完善的軟硬體功能、暢通的聯絡通訊系統，建構完整的資訊平台，以提供決策者完整的災情及資源訊息。

有鑑於此，衛生福利部以疾病管制署為基地，建置國家衛生指揮中心（National Health Command Center, NHCC），結合中央流行疫情指揮中心、生物病原災害中央災害應變中心、反生物恐怖攻擊指揮中心及中央緊急醫療災難應變中心等功能，共同架構完整的防災啓動機制，在這套中央統一指揮系統之下，有效地進行流行疫病、生物病原災害、反生恐及緊急醫療等災難應變，保障國人健康。

Disease surveillance and warnings are key aspects in the control of infectious diseases. CDC has taken reference from epidemic surveillance frameworks of other countries, and actively established pilot-based and event-based surveillance systems. It has also established a National IHR Focal Point in accordance with the International Health Regulations (2005), which enables the synchronized reception and timely exchange of epidemic information with other countries, as well as clarification and determination of infection events of international importance at the earliest possible time.

In addition, CDC has also combined data from multiple databases such as the National Health Insurance (NHI) data, stockpile systems and real-time epidemic surveillance and warning systems to provide regular updates and routinely generate surveillance analysis charts. The information can be searched and accessed at any time and location using mobile devices, and visual representation methods provide real-time warnings of epidemics for use in epidemic control decision-making processes.

In 2003, there was a worldwide outbreak of SARS, which posed grave challenges to the crisis management abilities of the Taiwan's government agencies in terms of resource mobilization for epidemic control. As such, there is an urgent need for a disaster prevention center that is focused on epidemic disasters to act as the operational command point for direct communications among the central, regional and local authorities. Also, a comprehensive information platform should be constructed with the use of robust software and hardware functions and free-flowing contact and communication systems, so as to provide decision makers with comprehensive information regarding the disaster situation and the available resources.

Therefore, using CDC as the base, the Ministry of Health and Welfare (MOHW) established the National Health Command Center (NHCC), which combines the functions of the Central Epidemic Command Center, the Central Disaster Response Center for Biological Disasters, the Anti-bioterrorism Command Center and the Central Medical Emergency Operations Center to jointly construct a comprehensive activation mechanism for disaster prevention. Under this central command system, response to disasters such as disease outbreaks, biological disasters, bioterrorism attacks and medical emergencies can be effectively conducted to safeguard the health of our citizens.

風險溝通
RISK COMMUNICATION

在SARS 疫情過後，更突顯「風險溝通」對於防疫的重要，疾病管制署建立發言人制度，每週定期召開記者會，主動對外溝通最新疫情資訊以及宣布重要政策。如遇緊急、重要的疫情發生，亦於第一時間發布新聞稿，必要時召開記者會說明，因此長期以來與記者建立良好的溝通機制，對疾管署已建立信任及公開、公正之防疫專業形象。

除建置媒體溝通機制外，亦透過分眾且多元的管道與民眾進行溝通，依不同對象開發宣導素材，並於疾病管制署網站提供各界下載使用。另為聚焦國際新聞話題，持續規劃配合 WHO 國際傳染病日辦理議題式宣導活動，吸引國外媒體關注。隨著網路及行動媒體的興起，疾病管制署順應趨勢經營「1922 防疫達人」Facebook、「Taiwan CDC」Youtube 影音專區，以及 Line@、IG、Tumblr 等新媒體通路宣導，將防疫資訊轉為易懂的圖像。

另為即時答覆民眾對於傳染病相關疑問，疾病管制署設立 24 小時、全年無休之 1922 防疫專線，且備有國、台、客、英及聽語障服務，即時線上解決民眾疑問，目前該專線電話接通率均維持 97%以上，民眾滿意度高達 95%。

隨著資訊科技的推陳出新，疾病管制署將多管齊下，主動調整對媒體與大眾的溝通模式，以「民眾在哪裡，我們就在哪裡」的理念，不斷在健康傳播的模式與思維中創新。

After the SARS outbreak, the importance of risk communication in epidemic control has become more pronounced. CDC has established a spokesperson system and holds routine weekly press conferences to proactively communicate latest epidemic information and announce major policies to the public. During the occurrence of an epidemic emergency or a major epidemic, CDC issues press releases at the earliest possible time and holds press conferences to explain the situation when necessary. Therefore, the long-standing good communication mechanisms established with the press has helped CDC in creating a trustworthy, open and fair professional image in epidemic control.

Besides constructing media communication mechanisms, CDC also communicates with members of the public through targeted and diverse channels. Education materials are developed based on different target audience and made available for download and use on the CDC's website. In addition, to gain public attention on international news topics, CDC has continuously planned issue-based educational activities in conjunction with the international days observed by WHO for infectious diseases, which have also attracted attention from foreign media. With the rise of the Internet and mobile media, CDC has rode on the trend and set up the "1922 Epidemic Prevention Experts" Facebook fan page and the "Taiwan CDC" YouTube channel, as well as disseminates educational information via new media channels such as Line, Instagram and Tumblr, where information regarding epidemic prevention have been translated into images that are easy to understand.

Additionally, to provide timely replies to queries from the public regarding infectious diseases, CDC has established a 24-hour 1922 Hotline, which is available all year round. Mandarin, Taiwanese, Hakka and English language services as well as services for the hearing and speech-impaired are available to provide timely solutions to queries from the public. Currently, the call completion rate of the hotline has been maintained at over 97%, and a public satisfaction level of up to 95% has been achieved.

With the emergence of new information technologies, CDC shall adopt a multipronged approach to proactively adjust the communication modes with the media and the public. Based on the concept of "Being present for the public wherever they are", CDC continuously innovates the modes and ideas of health communication.

透過辦理每週例行記者會，主動對外溝通最新疫情。
CDC holds routine weekly press conferences to proactively communicate latest epidemic information.

國際合作與援助

INTERNATIONAL COOPERATION AND ASSISTANCE

有鑑於臺灣與國際間交流頻繁，疾病管制署積極加強國際衛生交流合作，與歐、美、日本等國家簽署衛生合作協定，固定派員參與流行病學訓練計畫課程，以提升在流行病學調查及公共衛生監測的能力；並與日本國立傳染病預防研究所合作，每年輪流召開研討會，相互分享傳染病防治政策及研究成果。

當國際或鄰近國家有大規模疫情發生時，亦派遣防疫專家至疫情發生國家，考察當地疫情現況與因應措施，並與當地衛生防疫單位交流防治經驗，進而將寶貴的疫情防治資訊與經驗帶回臺灣，使我國防疫人員能夠獲取最新疫情防治資訊，強化防疫體系應變能力。

近年來，除多次派遣防疫醫師至境外參與大規模疫情考察，包括非洲奈及利亞伊波拉病毒感染、韓國中東呼吸症候群冠狀病毒感染症、非洲馬拉威霍亂及中南美洲茲卡病毒感染症等，亦舉辦登革熱及茲卡病毒研討會，邀請東南亞及亞太國家醫衛專業人員或官員共同與會，提升區域防疫量能。

未來，除了持續參與世界衛生組織（WHO）、亞太經濟合作（APEC）等國際組織舉辦之衛生會議及活動外，更積極推動雙邊或多邊之傳染病防治合作計畫，並在台美簽署之「全球合作暨訓練架構」下，持續強化區域傳染病防治量能，共同維護全球衛生安全。

防疫醫師向奈及利亞台商僑胞發放防疫物資。
Medical officer distributes disease control resources to Taiwanese nationals residing in Nigeria.

As Taiwan has frequent interactions with countries around the world, CDC has been actively strengthening exchanges and cooperation with international health organizations. Agreements on health cooperation have been signed with European countries, the U.S. and Japan, and personnel are routinely sent overseas to participate in training programs related to epidemiology, so as to enhance their capabilities in conducting epidemiologic surveys and public health surveillance. In addition, CDC has also collaborated with Japan's National Institute of Infectious Diseases (NIID) to take turns in organizing annual symposium for the mutual sharing of infectious disease prevention and control policies and research results.

When a large-scale epidemic occurs internationally or in neighboring countries, CDC also dispatches infection control experts to countries where the epidemic has occurred to study the local epidemic situation and response measures and exchange experiences in epidemic control with the local health and epidemic control units. Subsequently, valuable epidemic control information and experiences are brought back to Taiwan, which provide our personnel with the latest information and strengthen the response abilities of the epidemic control systems.

In recent years, besides repeatedly dispatching epidemic control doctors abroad to participate in studies of large-scale epidemics, including the Ebola virus infections in Nigeria, Africa; the Middle East respiratory syndrome coronavirus (MERS-CoV) infections in Korea, the cholera outbreaks in Malawi, Africa and the Zika virus infections in Central and South America, CDC has also continuously organized seminars on dengue fever and Zika virus, and invited participation from medical and health professionals or officials for the purpose of improving the regional capacity to prevent, detect and respond to infectious diseases.

In the future, besides continuously participating in health conferences and activities organized by international organizations such as the World Health Organization (WHO) and the Asia-Pacific Economic Cooperation (APEC), CDC will also actively engage in bilateral or multilateral cooperation for the prevention and control of infectious diseases, and under the Global Cooperation and Training Framework (GCTF) jointly signed by the U.S. and Taiwan, CDC shall continue to strengthen the regional capacity to address threats posed by infectious diseases and jointly ensure global health security.

TAIWAN CDC