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Introduction

Between 1975 and 2016, the worldwide prevalence of obesity nearly tripled. Today, no country is on track to meet the 2025 WHO Global Targets. Failing to meet the obesity target puts other health targets - especially SDG 3.4 on non-communicable diseases and 3.8 on universal health coverage - in jeopardy, as well as undermines progress on SDG 2 to end malnutrition in all its forms.

Obesity is a chronic disease that independently increases mortality¹ rates and is also a major risk factor for three non-communicable diseases (NCDs) responsible for the majority of premature deaths worldwide - cardiovascular disease, type 2 diabetes and cancer. Mounting evidence also suggests that obesity is also now a major risk factor for COVID-19 complications and mortality. It is vital that we focus during this time on improving the health and reducing the vulnerability of people living with or affected by obesity, while addressing long-term well-being through public health initiatives.

Since the beginning of the COVID-19 pandemic, it has been clear that people with a higher body mass index (BMI) are at increased risk from severe illness due to the virus. Research from China, UK, USA, France and Italy demonstrates an approximate doubling of risk of complications and mortality from COVID-19 among people with obesity. Meanwhile, the health emergency caused by the outbreak may divert attention from the prevention and care of NCDs such as obesity. Lockdowns around the world have led to sustained shifts in diets and levels of

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physical activity as well as worsening mental health, all of which may increase the risk of NCDs.

These factors, alongside the disruption of food systems and food supplies, are likely to exacerbate the double burden of malnutrition, particularly amongst the most vulnerable populations.

COVID-19 is disrupting health and food systems, and threatening progress on global obesity-related goals. However, the emerging evidence and awareness of the links between obesity and COVID-19 provide an opportunity for governments to step up action on obesity and other diet-related NCDs, both in their response to and recovery from the current pandemic. This digital policy briefing builds on the request by World Obesity members and colleagues to the World Health Organization (WHO) to acknowledge the role of obesity in COVID-19, and the request from Member States for support in the inclusion of nutrition when developing national responses and quidelines.

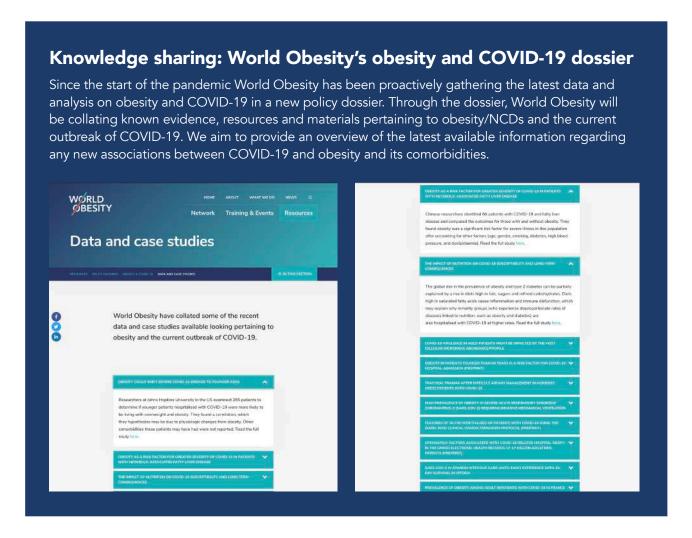


Evidence

Evidence from clinical settings overwhelmingly shows that a higher BMI is associated both with a higher risk for intensive care unit (ICU) admission and poorer outcomes for COVID-19.³⁻⁵ BMI>40 also increases the risk of acute respiratory distress syndrome, which is a major complication of COVID-19. Many studies have now demonstrated an association of obesity with ICU admission and mortality among individuals with COVID-19.⁶⁻¹¹

In the UK, a report showed that out of 10,465 patients critically ill with confirmed COVID-19, 73.7% were living with overweight or obesity (BMI>30).¹² Meanwhile, a report from Italy suggests 99% of deaths have been in patients with pre-existing conditions, including those that are commonly seen in people with obesity such as hypertension, cancer,

diabetes and heart disease.¹³ Overweight and obesity also appear to be risk factors for worse outcomes in younger populations (<60 years old), with patients with BMI between 30 and 34 being twice as likely to be admitted to ICU compared to individuals with a BMI under 30.⁴



During the 2009 H1N1 pandemic, higher BMI was recognised as an independent risk factor for increased disease severity, hospitalisation, risk of spreading the disease, and death.¹⁴ Adults with

obesity were shown to have higher viral load and longer shedding time. ¹⁵ Vaccination efficacy in adults with obesity may be compromised and specific vaccination strategies for high-risk groups required.

Impacts

The COVID-19 pandemic and the measures that have had to be taken to help curb COVID-19 are likely to have a number of impacts for people living with obesity, as well as on the health of the population as a whole.

The pandemic has shed light on existing challenges including a lack of health coverage and access to adequate care, infrastructure challenges both within and outside the health system, and the perpetuation

of weight stigma.¹⁶ A number of these impacts also represent underlying root causes of obesity and thus risk exacerbating the risk of obesity.

The first phase of the pandemic has shown:

- Strained food systems and supply chains due to concerns about food shortages, as well as an
 increased reliance on processed, long-life foods and a reduction in fresh fruit and vegetables
 and unprocessed meat.
- Impacts on health systems and exacerbated challenges for treatment access for people living with
 obesity, including lack of training in how to manage obesity, potential reductions in elective surgical
 procedures (e.g. bariatric surgery), and modifications to or curtailment of multidisciplinary team
 management, group weight-loss programmes and other forms of ambulatory care.
- Changes in eating behaviours due to lockdowns, especially for children.¹⁷
- Food insecurity amongst the most vulnerable, who have reduced access to shops and may have reduced access to normal food assistance programmes e.g. due to school closures.¹⁸
- Reduced opportunities for people to be physically active as movement is restricted.¹⁹ While the
 repercussions of COVID-19 on physical inactivity remains unclear, preliminary data shows a decline
 in step count of around 12% in the US, 38% in Spain, 24% in Italy and 15% in Brazil. However,
 a recent study highlighted an increase interest in engaging in physical activity.²⁰
- An impact on mental health, due to the seriousness of the emerging situation and challenges posed by isolation, reduced physical activity, lack of social engagement and employment changes. A study conducted in the UK revealed that 56% of adults revealed feeling stressed or anxious.²¹
- Rise in the exposure to opportunistic marketing and distribution of unhealthy commodities and high fat, sugar and salt (HFSS) products.²² Evidence suggests that the marketing of HFSS products is directly linked to an increase in overweight and obesity in children.²³

Poverty, obesity and COVID-19 in South Africa

Across the African continent, South Africa has been one of the hardest hit nations by COVID-19. Although it has a relatively low proportion of older people, the country has very high levels of obesity.

Two-thirds of COVID-19 deaths in South Africa have been among people aged under 65 and many of these deaths have been people living with obesity. As witnessed through the HIV/AIDS epidemic, death of the working-age household head can exacerbate extreme poverty, especially in a country still lacking universal healthcare coverage. Where the main breadwinner has died from COVID-19 (often linked to obesity complications), many families may now find themselves without an income and food insecure.²⁴

Voices from the obesity community

To better understand the policy implications of obesity and COVID-19, World Obesity asked its global membership to share their experiences and views on their government responses.¹

While the experience of respondents varied around the world, we saw a number of key trends emerging:

- 1. Despite the evidence, most national governments have not included obesity in their national COVID-19 response plans.
 - Less than 10% of members that participated in our survey think their government
 has done enough to recognise the link between obesity and COVID-19 as part of
 its COVID-19 response.
 - Only 15% think their government has done enough to protect and support people living with obesity as part of its COVID-19 response.

"Evidence of the links between obesity and worse health outcomes from COVID-19 appear to be ignored." - England

"WHO does not explicitly include obesity in its guidance to countries, and this is part of the reason national governments do not prioritise it, even though it has been demonstrated to be one of the most serious drivers of COVID complications." - World Obesity Member

2. People living with obesity have experienced disruption to weight management and other services with support groups, clinics and bariatric surgeries cancelled.

"Only essential services remain during the pandemic. Obesity was not included."- Spain

3. Many members fear that obesity will be soon forgotten, with little or no action taken.

When asked what they expected to be the greatest challenges for obesity in their country over the coming months, members reported (i) lack of understanding of adult and childhood obesity in the health system (ii) reduced opportunities for physical activity and (iii) increased vulnerability of people living with obesity as key concerns.

While much of the direct impact of the pandemic is observed within the health system, repercussions will be much wider. Impacts of lockdown on behaviour and food choices, poverty, inequity, unemployment and opportunistic marketing by unhealthy commodity industries and disrupted food systems are just some of the trends that are likely to accelerate and exacerbate the double burden of malnutrition. This is particularly concerning in countries that also experience high levels of poverty and fragile health systems. In Mexico, for instance, it is estimated that the expected reduction in GDP (6%) as a result of COVID-19 could increase the number of people who are poor and food insecure by 10 million.²⁵

National responses²⁶

Despite overwhelming evidence, as reported by World Obesity members, the majority of governments have not responded adequately to the links between COVID-19 and obesity. However, some countries are taking action as illustrated.

Mexico

Care and recommendations for nutrition in Mexico towards
COVID-19 [Atención y Recomendaciones de Alimentación y Nutrición en México]:

After discussing basic information about COVID-19, this guidance from Mexico delves into how poor diets may affect the immune system. It mentions that people with obesity may experience more severe illness than those without if they do contract COVID-19, possibly due to vitamin deficiencies, diminished lung capacity and challenges in receiving care in hospitals. Finally, it encourages, when possible, people living with obesity and overweight to use telemedicine. Read the full guidance here.

Sweden

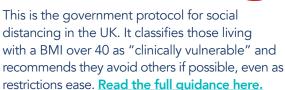
The public health agency of Sweden (Folkhalsomyndigheten) has included obesity in the list of conditions that present higher risk for COVID-19 illness:

The Swedish social services agency (Socialstyrelsen) has also included obesity (BMI>40) as a risk group for COVID-19 illness.

Read the full guidance from the public health agency here.

UK

Staying alert and safe (social distancing):



Peru

Ministerial Resolution 239-2020-MINSA [Resolución Ministerial 239-2020-MINSA (Peru)]:

This government resolution from Peru bans people living with severe obesity from physically returning to work in order to protect them from COVID-19. While this originally affected those with a BMI over 30, it now only applies to those with a BMI over 40. Read the full resolution here.

Cyprus

Groups of citizens with higher risk of becoming seriously ill from COVID-19:



This document lists separates at-risk populations into two groups. Group A, which includes people with a body mass index over 40, may return to work as long as their position does not involve direct interaction with many people. Group B is considered to be more vulnerable and should therefore remain at home.

Access the full document here.

Switzerland

Ordinance on Measures to Combat the Coronavirus (COVID-19):



This ordinance is a set of measures from the Swiss Government intended to control the COVID-19 outbreak within the country. Many different topics and groups are covered by the document. In particular, Switzerland recognises those with obesity (defined as BMI greater than 40) as vulnerable to severe disease from COVID-19. **Read the full ordinance here.**

Austria

Federal law consolidated:
Entire legal provision for the
COVID 19 risk group regulation, version
dated 21.05.2020 [Bundesrecht konsolidiert:
Gesamte Rechtsvorschrift für COVID-19Risikogruppe-Verordnung, Fassung vom
21.05.2020]:

This amendment in the federal law legally defines at risk and most vulnerable groups towards COVID-19. Among the different groups listed, obesity grade III, or people with a body mass index over 40, as well as people with diabetes, are included in the listed groups. Read the full update here.

Management of people living with obesity in relation to the management of the COVID-19 epidemic [Prise en charge des personnes en situation d'obésité dans le cadre de la gestion de l'épidémie de COVID-19]:

This guidance document is meant to support health professionals manage vulnerable people. They aim to raise awareness without being stigmatising, to reinforce prevention of people living with obesity (defined as having BMI≥30) and provide support to their loved ones in case of suspicion of COVID-19.

Read the full guidance here.

Iceland

Guidelines for persons at risk of severe COVID-19 infection:



This document from the Icelandic Directorate of Health provides recommendations for those more vulnerable to severe COVID-19 infection as the country prepares to reopen. People with obesity and some obesity-related conditions (such as diabetes and cardiovascular disease) are listed definitively at higher risk. The document details why people with obesity (and other listed risk factors) may be more likely to be severely affected by the virus. Read the full guidance here.

Luxembourg

France

Recommendation of the
Higher Council for Infectious
Diseases People. People vulnerable to
COVID-19 [Recommandation du Conseil
supérieur des maladies infectieuses. Les
personnes vulnérables au COVID-19]:

This guidance document highlights which population groups might be more at risk to severe illness due to COVID-19. Among them, people living with obesity with a BMI>40 are identified as a vulnerable group. Furthermore, while the guidance highlights that the identified groups can work, it also calls on their employers to protect them while at the workplace. Read the full guidance here.

Russia

COVID-19: Back to Work Guidelines for Russian Employers:



This guidance outlines rules and regulations for allowing employees to return to the workplace. Employees who fall into risk groups, including those living with obesity, are discouraged and possibly prohibited from physically returning to work. Read the full guidance here.

Canada

Obesity is not included in the list of individuals who are at higher risk for severe illness from COVID-19:

However, the guidance from the Public Health Agency of Canada recognizes that people with weakened immune systems from medical conditions or treatments are at higher risk.

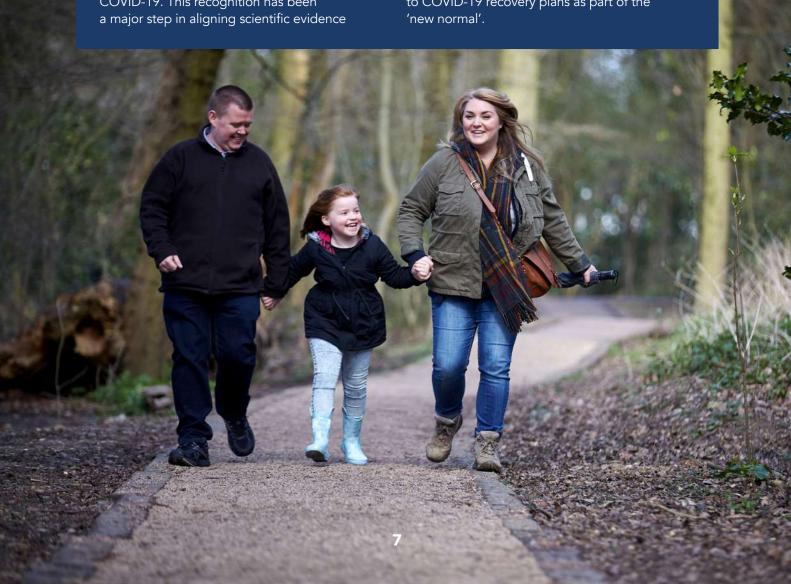
Read the full guidance here.

European recommendations regarding COVID-19 and obesity: the work of European Association for the Study of Obesity

As a medical and scientific society, EASO has a key responsibility to support the needs of our European patient communities.

Early on during the pandemic and as evidence started to emerge, EASO and its National Associations strongly advocated for the recognition of obesity as a key risk factor for serious COVID-19 illness and complications. EASO held webinars with clinicians, scientists, patients and frontline health workers alike to discuss, debate and disseminate the emerging risks. The society published a strong Policy Statement encouraging EU recognition of obesity as a medical vulnerability under COVID-19. This recognition has been a major step in aligning scientific evidence

with policymaking at EU, national and regional levels. EASO has developed a novel survey, EUROPEANS, to better understand the circumstances and assess the needs of people with obesity during various stages of the pandemic across a variety of criteria, so we can advocate for access to treatment including mental health services in primary and specialist care environments. In the European Region, treatment, long-term clinical management and prevention strategies must be integral to COVID-19 recovery plans as part of the 'new normal'.



The need for guidance

Specific guidance for people with obesity during the COVID-19 pandemic is limited, and where it does exist it is highly variable. A handful of national governments have recognised that people with obesity represent a population who are more vulnerable to the complications of COVID-19 in their guidance documents, but BMI cut-offs and the implications of being categorised as such are wide ranging.

Providing specific guidance to countries on obesity will be vital for ensuring that obesity is sufficiently embedded in country responses, in the context of health systems and other related policy areas (food, eduction, physical activity).

What should guidance include:

- Recognition that obesity is a leading risk factor for COVID-19 complications, alongside other NCDs
- Surveillance and data collection around the disease as a risk factor for COVID-19 (see box)
- Advice for people living with obesity and the extra steps they should take to protect themselves from COVID-19 infection, particularly as countries reduce lockdown measures
- Recommendations on how health professionals should tailor routine services for obesity
- Recommendations on how health professionals should tailor their care for people with obesity who are admitted due to COVID-19
- The need to provide safe and respectful health care for people with obesity, including resources such as trained personnel, supplies and specialised equipment
- For obesity scientific and patient communities to be included in COVID-19 treatment and vaccines development and discovery
- Highlight the importance of healthy behaviours, including good nutrition, physical activity, sleep and stress management for people with obesity and also for the general population
- Provide national guidelines on healthy and sustainable diets.

What country-level data needs to be collected as part of COVID-19 surveillance?

- BMI of people known to have contracted COVID-19, been admitted to hospital with COVID-19 infection, and who died as a result of COVID-19
- Information about pre-existing health conditions and/or disease state
- Availability of services for people with obesity and the impact of COVID-19 on these
- Impact of COVID-19 on dietary behaviours, physical activity and mental health of the general population, and specific sub-populations at higher risk (e.g indigenous, migrants, ethnic minorities, socially disadvantaged groups)
- Data on equity systematic reviews on obesity flag that very little research collects data on factors such as educational attainment, employment status, socioeconomic status and access to care.

Obesity Canada's new Clinical Practice Guidelines for obesity in adults

The new Canadian Adult Obesity Clinical Practice Guidelines reflect the current scientific understanding of the homeostatic and pathological mechanisms underlying the development and maintenance of obesity and its effect on health.

The guidelines include 80 key recommendations applicable to health care professionals, health policy makers, health systems and people affected by obesity. The recommendations are organised around the arc of the patient journey and related clinical management approaches in the primary care setting. A key change in the guidelines includes the definition and assessment of obesity. The traditional anthropometric-based obesity definition (BMI, weight, waist

circumference) has caused confusion among clinicians, policymakers and the public. The new guidelines define obesity as "a chronic disease characterised by excessive or abnormal body fat that impairs health" and emphasise that obesity treatment should focus on improving health, not weight loss alone. The guidelines also reaffirm that people with obesity deserve to have evidence-based care that is contextualised to their own realities, root causes and experiences.



Call to action

A group of obesity experts recently wrote an <u>open letter</u> to WHO's Director-General requesting that WHO provide more COVID-19 guidance on obesity, highlighting the need to increase weight surveillance, protect people with obesity, and take steps to ensure food and nutrition security, opportunities for physical activity, and mental health support.²⁷

The WHO COVID-19 resolution, while having no specific mention of obesity resolution, while not specifically mentioning obesity, presents an opportunity to integrate obesity within national COVID-19 responses through commitments on nutrition and physical activity and to protect people living with NCDs.²⁸

The global obesity community is ready to work with WHO and its Member States to tackle the pandemics of obesity and COVID-19. As countries continue to respond to COVID-19 and plan strategies to build back better, action is needed in two priority areas:

Obesity treatment and prevention strategies should be integral to COVID-19 recovery plans.

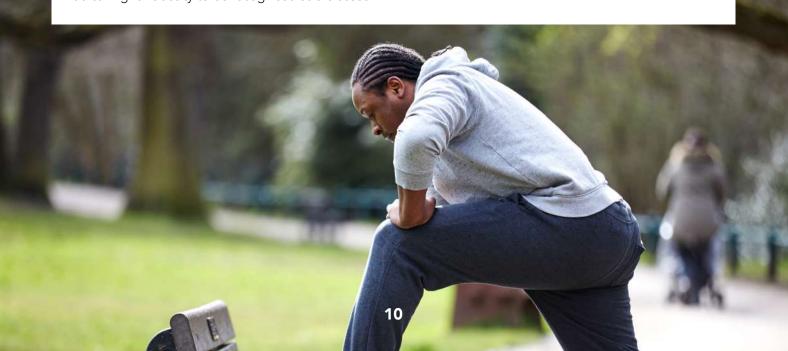
Obesity is a multifactorial, complex disease, and the root causes run deep - they can be genetic, psychological, sociocultural, economic and environmental. The COVID-19 pandemic highlights the need for countries to recognise obesity as a chronic disease requiring lifelong medical treatment and support. Treating obesity can improve overall health and wellbeing, and prevent obesity related complications (e.g. chronic inflammation and impaired immune response, hypertension, type 2 diabetes, coronary artery disease, and some cancers) that put individuals at higher risk for poor COVID-19 outcomes and fatalities.

Building on the commitments set out in the <u>World</u>

Obesity Day 2020 ROOTS declaration,²⁹ we will be calling for obesity to be recognised as a disease

in its own right, and included in national health plans alongside diabetes, cancer and cardiovascular diseases. Commitments to addressing childhood obesity should also be prioritised. There is an urgent need for health systems to be better equipped to treat obesity, for health care professionals to have access to obesity training, and for strong population policies such as front-of-pack labelling and sugar-sweetened beverage taxes to be implemented more widely.³⁰

In the middle of the pandemic in Mexico – a country with a high proportion of people living with obesity at risk of COVID-19 – new labelling legislation has become mandatory, leading the way for other countries to follow.

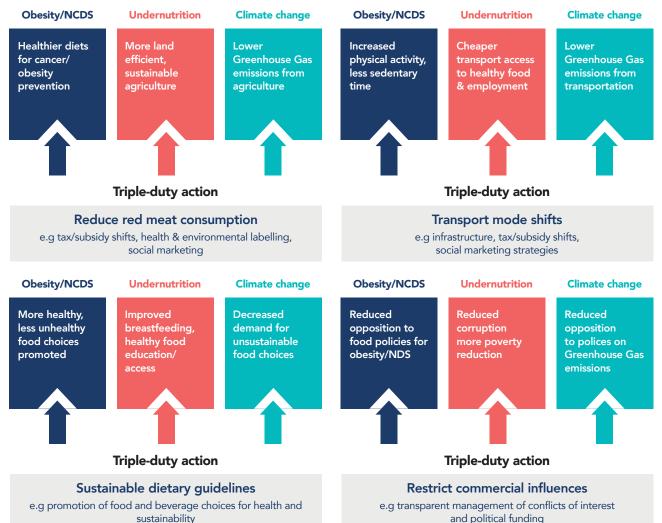


'Building back better' requires systems thinking. Ending malnutrition in all its forms and reducing the impacts of climate change requires more equitable and integrated food and health systems.

Given the emerging evidence on obesity and COVID-19, and the devastating effects of the pandemic on undernutrition globally, there is a new urgency to address malnutrition in all its forms to help prevent the worst impacts of COVID-19 on vulnerable populations. But there is also an opportunity in 'building back better' healthier systems and environments. As WHO and others set out their ambition for a 'Healthy Recovery'³¹ to create more resilient populations and environments, the

recommendations from the 2019 Lancet Commission on Obesity, 'The Global Syndemic of obesity, undernutrition and climate change', are now more relevant than ever.³² The triple-win duty actions recommended by the Lancet Commission to reduce risks from climate change and malnutrition can now also be considered part of COVID-19 recovery strategies: win-win policies reducing COVID-19 risks through promoting healthy diets and physical activity opportunities are called for.

Examples of triple-win policies that can help ensure a healthy recovery from COVID-19



Obesity stakeholders across the globe are working to help transform this moment of crisis into a potential opportunity for action on obesity.

As a result of COVID-19, our lifestyle and surrounding environments have drastically changed. 'Building back better' from the COVID-19 crisis will require

transformative policy approaches to tackle the interrelated pandemics of obesity and COVID-19, but also the underlying social, economic and racial inequities that must be addressed to ensure #HealthForAll and a #HealthyRecovery.

Useful resources

World Obesity Policy Dossier

https://www.worldobesity.org/resources/policy-dossiers/obesity-covid-19

World Obesity Covid news bulletin

https://www.worldobesity.org/resources/policy-dossiers/obesity-covid-19/covid-news

European Association for the Study of Obesity (EASO) - resources https://easo.org/covid-19-and-obesity/

Obesity Canada - resources https://obesitycanada.ca/covid-19/

NCD Alliance - resources summary https://ncdalliance.org/why-ncds/ncds-and-covid-19

Food and Agriculture Association on maintaining a healthy diet during the COVID-19 pandemic http://www.fao.org/3/ca8380en/ca8380en.pdf

United Nations System Standing Committee on Nutrition: A resource list on Food Systems and Nutrition responses from the UN

https://www.unscn.org/en/news-events/recent-news?idnews=2065



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