The **S-O-S** initiative – **Stop Overdose Safely:**

Emergency community management of heroin and opioid overdose including interim naloxone

In response to Target 3.5 of Goal 3: Health for All, the 2030 Agenda for Sustainable Development (SDGs) and Commission on Narcotic Drugs (CND) resolution 55/7 on “Promoting measures to prevent drug overdose, in particular opioid overdose ¹,” the United Nations Office on Drugs and Crime (UNODC) in collaboration with the World Health Organization (WHO) in the framework of the UNODC-WHO Programme on Drug Dependence Treatment and Care are launching the “S-O-S Initiative” as a global implementation target setting initiative to enhance adequate access to opioid overdose prevention in line with recommendations of the WHO guidelines on Community Management of Opioid Overdose ². While opioid overdose causes serious respiratory depression and subsequent deaths, it is both preventable (e.g. through comprehensive drug dependence treatment and care programmes) and, if witnessed, reversible through an adequate emergency response including the administration of naloxone, an opioid antagonist which rapidly reverses the effects of opioids.

UNODC and WHO aim with this initiative to encourage Member States and other stakeholders to work towards a new global implementation target by strengthening partnership worldwide and mobilizing available resources to reduce preventable deaths due to opioid overdose.

(i) 90% of the relevant target groups will have received training in overdose risk and emergency management

(ii) 90% of those trained will have been given a supply of emergency naloxone

(iii) 90% of those who have been given a naloxone supply will be carrying the naloxone on them or have it close to hand

---

The facts

Drug use and drug use disorders is a public health, developmental and security problem both in industrialized and developing countries. It is associated with health problems, poverty, violence, criminal behaviour and social exclusion. Prevention and treatment of disorders due to drug use are essential demand reduction strategies of significant public health importance.

Opioids include morphine, heroin, codeine and some prescription painkillers such as oxycodone, tramadol, and fentanyl. It is difficult to accurately estimate the number of fatal opioid overdoses because of the poor quality or limited nature of mortality data available. With an estimated 207,400 drug-related deaths in 2014, corresponding to 43.5 deaths per million people aged 15-64, the number of drug-related deaths worldwide has remained relatively stable, although with significant variations in some jurisdictions, and unacceptably high while preventable. Overdose deaths contribute to between roughly a third to a half of all drug-related deaths, which are attributable in most cases to opioids. Worldwide, overdose is the leading cause of avoidable death among people who inject drugs. It accounts for nearly half of all deaths among heroin injectors, exceeding HIV and other disease-related deaths.

Effective Management

Naloxone has been used in opioid overdose management for over 40 years, with minimal adverse effects beyond the induction of opioid withdrawal symptoms. It carries no potential for abuse. The different routes of naloxone administration have distinct advantages and disadvantages, and the WHO guidelines (2014) recommend that persons using naloxone should select a route of administration based on the formulation available, their skills in administration, the setting and the local context. The availability of naloxone as an emergency medication is not always a given. Although naloxone is on the WHO Model List of Essential Medicines, it is reported that naloxone is often not available. The S-O-S initiative aims at saving lives of opioid overdose cases by making naloxone and training in overdose management available to all potential first responders, including peers and family members. The S-O-S initiative sets the following 90-90-90 implementation target:

i. 90% of those likely to witness an overdose will have received training in overdose risk and emergency management

Training of opioid overdose management should be made available to all first responders (healthcare providers, ambulance staff, police) and relevant community members likely to witness an opioid overdose such as people with opioid use disorders, their peers, family members, and other relevant people in their community. The training covers essential elements to save lives in opioid overdose cases, including

---

recognition of overdose symptoms, calling an ambulance, cardiopulmonary resuscitation, in particular ventilation assistance, and naloxone administration.

ii. 90% of those trained will have been given a supply of emergency naloxone

Naloxone (N-allylnoroxymorphone) has been used in opioid overdose management for over 40 years, with minimal adverse effects beyond the induction of opioid withdrawal symptoms. It is a semisynthetic competitive opioid antagonist with a high affinity for the μ opioid receptor. It rapidly displaces most other opioids from opioid receptors, and if given soon enough will reverse all clinical signs of opioid overdose. It can be administered by a variety of routes including intravenously (IV), intramuscularly (IM), subcutaneously (SC) and intranasally (IN). It carries no potential for abuse, although high doses may lead to the development of opioid withdrawal symptoms such as vomiting, muscle cramps and agitation. Recently, an intranasal (IN) naloxone spray has been registered and approved by relevant drug authorities in some jurisdictions.

iii. 90% of those who have been given a naloxone supply will be carrying the naloxone on them or have it close to hand

Overdose death does not usually occur immediately, and in the majority of cases, overdoses are witnessed by a family member, or a peer. Increased access naloxone and increased capacity to manage an opioid overdose in line with recommendations in WHO guidelines could significantly reduce the high numbers of opioid overdose deaths if people likely to witness an overdose are enabled to carry the antidote with them.

The S-O-S initiative: Partners in action

The initiative is based on a global collaborative effort, under the leadership of UNODC and WHO. Responding to this global challenge, the goal of the UNODC-WHO Programme on Drug Dependence Treatment and Care (UNODC project GLOK32) is to promote and support worldwide, with a particular focus on low and middle income countries, evidence-based and ethical treatment policies, strategies and interventions to reduce the health and social burden caused by drug use and dependence. The Programme was launched at the CND in 2009 and the overall strategy includes outcomes at the global, regional and national level.

The S-O-S initiative, which is implemented in the framework of the UNODC-WHO Programme on Drug Dependence Treatment and care, aims at the mobilization of a broad range of partners including governments, healthcare providers, people with drug use disorders and their peers, family members, people in local communities as well as non-governmental organizations (NGOs), research institutes/universities, international organizations and funding agencies committed to increasing the coverage of the training on opioid overdose prevention and management, and naloxone provision in community to work towards the goal of reducing opioid related mortality worldwide.

Stop - Overdose - Safely
Suggested activities include:

- broad mobilization promoting the new 90-90-90 target setting initiative to enhance adequate access to naloxone in implementation of WHO recommendations.
- a comprehensive 90-90-90 multi-country study under the leadership of UNODC/WHO to better estimate the public health impact of the community management of opioid overdose approach, including the use of naloxone: a study protocol has been developed and is open for interested partners to join with their own resources.

For further information on this initiative, please contact:

Vienna International Centre, P.O. Box 500, 1400 Vienna, Austria
Tel: +(43-1) 26060-0, Fax: +(43-1) 26060-5866, www.unodc.org
Contact: treatnet@unodc.org

Department of Mental Health and Substance Abuse
20 Avenue Appia, CH-1211 Geneva 27, Switzerland
Contact: msb@who.int

Stop - Overdose - Safely