Reducing excess mortality from common illnesses during an influenza pandemic

WHO guidelines for emergency health interventions in community settings

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DISEASE CONTROL IN HUMANITARIAN EMERGENCIES
EPIDEMIC AND PANDEMIC ALERT AND RESPONSE

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These guidelines are a subsidiary product derived primarily from existing WHO guidelines listed in the bibliography, and adapted for the context of communities affected by pandemic influenza. Their development was guided by a review of literature and by expert opinion, with expert technical consensus through working groups from within and outside WHO between June 2007 and April 2008.

The guidelines were produced by the Communicable Diseases Working Group on Emergencies at WHO headquarters. This working group provides technical and operational support on communicable disease issues to WHO regional and country offices, ministries of health, other United Nations agencies, and nongovernmental and international organizations. The working group includes staff from: the departments of Epidemic and Pandemic Alert and Response, Food Safety, Zoonoses and Foodborne Diseases, and Public Health and Environment in the Health Security and Environment cluster; the Global Malaria Programme, Stop TB and HIV/AIDS in the HIV/AIDS, Tuberculosis and Malaria cluster; the departments of Child and Adolescent Health and Development, and Immunizations, Vaccines and Biologicals in the Family and Community Health cluster; Injuries and Violence Prevention and Nutrition for Health and Development in the Noncommunicable Diseases and Mental Health cluster; the department of Essential Health Technologies in the Health Systems and Services cluster; Security and Staff Services in the General Management cluster; the cluster of Health Action in Crises; and the Polio Eradication Initiative.

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These guidelines may need to be updated as the epidemiological information evolves or as new information emerges. It is anticipated that the recommendations contained in these guidelines will remain valid until 2010. The Department of Epidemic and Pandemic Alert and Response at WHO headquarters will be responsible for their review at that time.

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Abbreviations

ACT	Artemisinin-based combination therapy
ART	Antiretroviral therapy
CHR	Community health responder
CMAM	Community-based management of acute malnutrition
GBV	Gender-based violence
HEW	Health extension workers
Hib	*Haemophilus influenzae* type b
HMM	Home-based management of malaria
IEHK	Interagency emergency health kit
IMAI	Integrated Management of Adolescent and Adult Illnesses
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent preventive treatment
LLIN	Long-lasting insecticidal net
MISP	Minimal initial service package
MOH	Ministry of health
MUAC	Mid-upper arm circumference
NGO	Nongovernmental organization
ORS	Oral rehydration solution
PPH	Postpartum haemorrhage
PPP	Pandemic preparedness plan
RDT	Rapid diagnostic test
RUTF	Ready-to-use therapeutic foods
TB	Tuberculosis
TOT	Training of trainers
UN	United Nations
UNICEF	United Nations Children's Fund
WASH	Water, sanitation and hygiene
WHO	World Health Organization

Introduction

Background

An influenza pandemic occurs when an influenza virus that is efficiently transmissible from person to person appears, against which the human population has limited or no immunity. On average, three pandemics per century have been documented since the 16th century, occurring at intervals of 10–50 years. In the 20th century, pandemics occurred in 1918, 1957 and 1968. The 1918 pandemic is estimated to have killed more than 40 million people in less than one year. The 1957 and 1968 pandemics were milder, but many countries nevertheless experienced strains on health-care resources. Given the unpredictable behaviour of influenza viruses, neither the timing nor the severity of the next pandemic can be predicted with certainty. If an influenza pandemic virus were to appear again similar to the one that struck in 1918, even taking into account the advances in medicine since then, unparalleled tolls of illness and death could be expected (*1*). An influenza pandemic has the potential to cause considerable morbidity and mortality for a concentrated period of around 8–12 weeks, with recurrence in waves over 2–3 years.

Communicable diseases are currently the leading cause of preventable deaths worldwide, disproportionately affecting resource-poor settings. Pandemic influenza would add to already unacceptable levels of morbidity and mortality from diarrhoea, malaria, pneumonia, malnutrition, HIV/AIDS and tuberculosis, in addition to causing high maternal and neonatal death rates. A few key conditions cause 90% of deaths from communicable diseases: pneumonia (3.9 million deaths per year); diarrhoeal diseases (1.8 million); and malaria (1.2 million). Malnutrition is a significant contributing factor to this mortality (*2*).

During a pandemic, these illnesses are likely to increase in resource-poor settings where chronically strained health systems would face even higher patient volumes, severe resource constraints, and absenteeism of critical staff. Therefore strategies are needed to address pandemic influenza within the broad range of health needs, while acknowledging current resource limitations.

Rationale

In resource-poor settings, pandemic preparedness efforts are best directed broadly, to address not