

WHO-Facts Sheet

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1. RECENT FOOD SCARES PROVE WEAKNESSES IN FOOD SAFETY SYSTEMS AROUND THE WORLD - FAO AND WHO URGE FOR MORE VIGILANCE

The Food and Agriculture Organization (FAO) and the World Health Organization (WHO) urge all countries to strengthen their food safety systems and to be far more vigilant with food producers and traders.

Recent food safety incidents, like the discovery of the industrial chemical melamine in animal and fish feed, or the unauthorized use of certain veterinary drugs in intense aquaculture, can affect health and often lead to rejections of food products in international trade.

Such food safety incidents are often caused by lack of knowledge of food safety requirements and of their implications, or by the illegal or fraudulent use of ingredients including unauthorised food additives or veterinary drugs.

During the last 12 months, an average of up to 200 food safety incidents per month have been investigated by WHO and FAO to determine their public health impact. Information about food safety incidents of international significance was shared with countries through the International Food Safety Authorities Network (INFOSAN).

"Food safety is an issue for every country and ultimately every food consumer. All countries can benefit from taking stronger measures to fill safety gaps in the sometimes considerable journey food takes from the farm to the table," said Dr Jørgen Schlundt, Director of WHO's Department of Food Safety, Zoonoses and Food borne Diseases.

"Countries are only able to keep their shares in globalized food markets and the trust of consumers, if they apply internationally agreed food quality and safety standards," said Ezzeddine Boutrif, Director of FAO's Nutrition and Consumer Protection Division. "Consumers have a right to be informed about potential hazards in food and to be protected against them."

Inadequate food safety systems

Weak food safety systems can lead to a higher incidence of food safety problems and diseases caused by micro-organisms such as *Salmonella*, *E. coli*, *Campylobacter*, and *Listeria*, by residues of agricultural chemicals (pesticides, veterinary drugs, etc) and by the use of unauthorized food additives. Diarrhoeal diseases alone, mainly due to unsafe food and water, kill 1.8 million children every year.

Food production systems in developing countries are facing a series of challenges: population growth and urbanization, changing dietary patterns, intensification and industrialization of food and agricultural production. Climate conditions, poor sanitation and weak public infrastructure compound these difficulties. Food safety legislation in many developing countries is often incomplete or obsolete or not in line with international requirements. Responsibility for food safety and control tends to be dispersed across many institutions. Laboratories lack essential equipment and supplies.

Many developed countries are in similar situations with fragmented food safety systems that often do not include or cover primary production where many food safety issues originate. For

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example the spread in recent years of new Salmonella strains in poultry originated in developed countries and was spread globally through trade.

In order to ensure safe food production for their own consumers and to meet international sanitary and phytosanitary requirements for food exports, national food safety authorities should be more vigilant. Producers and traders should be held accountable for safe food production throughout the food chain.

The rules of the World Trade Organization stipulate that developed countries help exporting developing countries to achieve the necessary high level of food safety for international trade. This assistance should contribute to building or strengthening integrated national food safety systems covering the entire food chain. This often requires long-term multi-billion dollar investments and technical advice.

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2. BATTLE AGAINST CHAGAS THE “KISSING BUG” DISEASE - STRATEGY SET OUT TO ELIMINATE DISEASE

A new effort to eliminate Chagas disease by 2010 was launched at a World Health Organization (WHO) meeting of disease experts and partners, in July 2007. The strategy was designed to answer key questions about the treatment and control of Chagas disease, and to coordinate global efforts toward the prevention of transmission through a new Global Network for Chagas Elimination.

“The establishment of the WHO Global Network to combat Chagas disease occurs in the broader context of the WHO’s renewed fight against neglected tropical diseases. The prospects for reducing the burden caused by these diseases have changed dramatically in the past few years. While Chagas disease is controlled in many countries in the Americas, commitment must be strengthened as elimination of the disease is now attainable. Cases identified in non-endemic countries have demonstrated the need to globalize our efforts.” said Dr Margaret Chan, WHO Director-general.

Chagas disease is a serious, potentially life-threatening illness caused by a protozoan parasite called *T. cruzi*. Early symptoms can include fever,

fatigue, swollen glands and heart pain, but in later years the infection can lead to chronic debilitation caused by progressive destruction of the heart muscle. It occurs mainly in Latin America where, during the 1980s, over 20 million people were thought to be infected. Since then, Latin American countries have made enormous efforts to control the infection, such that current estimates suggest that less than eight million people remain infected. However, the infection is no longer confined to the Americas because of blood transmission and organ transplantation. Cases have been identified in non-endemic countries in Europe, and in Canada and the United States.

Although remarkable success has been achieved in the Region of the Americas in eliminating vectorial transmission of Chagas, much remains to be done, to reduce the risk of transmission to recipients of blood or blood products obtained from migrants from Chagas endemic areas, and to ensure screening and diagnosis of congenital Chagas disease.

The parasite that causes Chagas disease is called *T. cruzi* and is mainly transmitted by large blood-sucking insects, sometimes known as ‘kissing bugs’, that often colonise the homes of poorer rural communities in Latin America. But the parasite can also be transmitted by blood transfusion or organ transplant from infected donors, and occasionally by transplacental passage from infected mother to new-born baby. In some regions, particularly in the southern cone countries of South America, the chronic infection can also give rise to severe intestinal problems requiring complex corrective surgery.

The WHO Global Network will focus on several key aspects of the Chagas problem including:

- strengthening epidemiological surveillance and information systems;
- preventing transmission by blood transfusion and organ transplantation in endemic and non-endemic countries;
- identifying a diagnostic test(s) for screening and diagnosis of infections;
- expanding secondary prevention of congenital transmission and case management of congenital and non-congenital infections; and
- promoting a consensus on adequate case management

In keeping with the goal of eliminating Chagas disease by 2010, the WHO Global Network plans to develop a five pillar strategy before the end of this year.

Earlier this year, WHO together with partners from across the public, private and non-governmental sectors, launched a campaign to

address neglected diseases. An estimated one billion people are affected by one or more of these diseases and very often, the victims are among the poorest populations.

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3. SAFE BLOOD FOR SAFE MOTHERHOOD: GLOBAL FACTS ON BLOOD SAFETY AND DONATION

Safe Blood for Safe Motherhood

Globally, more than half a million women die each year during pregnancy, childbirth or in the postpartum period - 99% of them in the developing world. An estimated 25% of those deaths are caused by severe bleeding.

- Of the 20 countries with the highest maternal mortality ratios, 19 are in sub-Saharan Africa where the lifetime risk of maternal death is one in 16, compared with one in 2800 in rich countries.
- Severe bleeding during delivery or after childbirth is the commonest cause of maternal mortality and contributes to around 34% of maternal deaths in Africa, 31% in Asia and 21% in Latin America and the Caribbean.

Postpartum bleeding is unpredictable and the quickest of maternal killers. It can kill even a healthy woman within two hours, if unattended. Blood transfusion has been identified as one of the eight key life-saving functions that should be available in healthcare facilities providing comprehensive emergency obstetric care. Access to a safe and sufficient blood supply could help to prevent the deaths of a significant number of mothers and their newborn children each year.

The impact that access to safe blood can have on health outcomes for pregnant women with severe bleeding is illustrated by Malawi. In 2003, the country established the Malawi Blood Transfusion Service. In 2005, the maternal mortality rate due to severe blood loss had fallen by more than 50%.

Global data: WHO has collected data from 172 countries, covering 95% of the world's population, based on 2004 figures. Blood transfusion saves lives and improves health, but millions of patients

requiring transfusion do not have timely access to safe blood. Despite advances in medical science, it will be many years before artificial blood substitutes can routinely replace the need for the donation of human blood. Every country needs to avoid blood shortages and ensure that blood supplies are free from HIV, hepatitis viruses and other life-threatening infections that can be transmitted through unsafe transfusion.

Blood supply: While the need for blood is universal, there is a major imbalance between developing and industrialized countries in access to safe blood.

- Only 45% of the global blood supply is collected in developing countries, which are home to more than 80% of the world's population
- In sub-Saharan Africa, fewer than three million units of blood are collected each year for a population of more than 700 million people
- Out of 80 countries that have donation rates of less than 1% of the population (fewer than 10 donations per thousand people), 79 are in developing regions; it is generally recommended that 1-3% of the population give blood to meet a country's needs
- The average number of blood donations per 1,000 population is 11 times higher in high-income countries than in low-income countries.

Types of blood donation:

The safest blood is donated by the safest blood donors. The prevalence of HIV, hepatitis viruses and other blood-borne infections is lowest among voluntary unpaid blood donors who give blood purely for altruistic reasons. Higher infection rates are found among family or family replacement donors who give blood only when it is required by a member of the patient's family or community. Worldwide, the highest rate of infection is found among donors who give blood for money or other form of payment. Adequate stocks of safe blood can only be assured by regular donation by voluntary unpaid blood donors.

The 2004 data reveal some tangible improvements since 2001-2002, but family/replacement donors and paid donors still remain a significant source of blood for transfusion in many developing and transitional countries.

- A total of 60 countries reported an increase in the percentage of blood donated by voluntary unpaid blood donors and a further 41 countries maintained the same

level; 37 countries showed a decline in the percentage of blood donations from unpaid voluntary blood donors.

- In 2002, 39 countries had achieved 100% unpaid voluntary blood donation, of which five were developing countries. By 2004, this had risen to 50 countries. Out of the 11 new countries that achieved this, three were least developed countries.
- Ministries of health in three countries reported very significant strides in achieving 100% voluntary unpaid donation. These are Central African Republic (where the proportion increased from 25% to 100%), Egypt (from 15% to 100%) and Uruguay (28% to 100%).
- More and more countries are moving towards voluntary blood donation. In 2002, 63 countries were collecting less than 25% of their blood from voluntary unpaid donors; by 2004, this had fallen to 46 countries.
- Particularly striking was the increase from 25% to 47% in the proportion of total donations collected from voluntary non-remunerated blood donors in developing and transitional countries.
- The number of units donated in transitional countries has increased from 29 million in 2002 to 36 million in 2004.
- 92% of donations in developed countries are from voluntary unpaid donors as compared to about 67% in developing and transitional countries. This means that family/replacement donors still remain a significant source of blood for transfusion in low HDI and medium HDI countries.
- More than 2.2 million units were still collected from paid blood donors in 2004 in which the level is the same as compared to the last survey. The majority of these (94%) were collected in medium HDI countries.

Blood screening

WHO recommends that, at minimum, all blood for transfusions should be screened for HIV, hepatitis B, hepatitis C and syphilis. Complete and accurate data on the testing of donated blood are not available in the majority of developing countries, particularly in those where blood services are fragmented, but many do not yet have reliable systems for testing because of staff shortages, poor quality test kits or irregular supplies, and lack of basic laboratory quality systems. The advanced technology used in many developed countries is unable to detect very recent

infections and is not affordable or cost-effective in most developing and transitional countries.

- Fortyone out of 148 countries (28%) that provided data on screening for transfusion-transmissible infections including HIV, hepatitis B and C, and syphilis were not able to screen all donated blood for one or more of these infections.
- However, globally, the number of tests not performed for the markers for four main infections (HIV, HBV, HCV and syphilis) decreased from six million in 2002 to 1.5 million in 2004. The most marked reduction was seen in the African region where the number of tests not performed was reduced from more than one million in 2001-02 to 380 000 in 2004.
- In 2004, the following countries achieved universal screening for all four recommended markers of transfusion-transmissible infections: Benin, Burundi, Chile, Democratic Republic of Congo, Ecuador, Guinea-Bissau, Honduras, Mauritania, Uzbekistan and Democratic Republic of Korea
- Out of 40 countries in sub-Saharan Africa, 28 countries have yet to implement national quality systems in their blood transfusion services.

Blood usage

Data on blood utilization are limited, but studies suggest that transfusions are often given unnecessarily when simpler, less expensive treatments can provide equal or greater benefit. Not only is this wasteful of a scarce resource, it also exposes patients unnecessarily to the risk of serious adverse transfusion reactions or transfusion-transmitted infections.

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4. NEW WHO ONLINE TOOL TO IMPROVE CLINICAL TRIAL TRANSPARENCY

The World Health Organization (WHO) launched this year, a new web site that will enable researchers, health practitioners, consumers, journal editors and reporters to search more easily and quickly for information on clinical trials. The site works as an entry point or portal into multiple, high quality clinical trial registers with a global search function.

For a doctor or a patient, identifying all clinical trials relevant to a decision to receive a specific treatment option is a difficult task, made easier if the results have been reported in the published literature. However, a significant proportion of research is never published and, even if it is published, it is possible that only part of the story is told in the publication. Relying on information provided only by published trial research is therefore, unreliable and leads to inadequately informed treatment decisions.

The only way to ensure the availability of complete and accurate information about clinical trials is for all trials to be registered before any participants are recruited. WHO believes that the registration of clinical trials is a scientific, ethical and moral responsibility.

“The Clinical Trial Search Portal is a collaborative international initiative led by WHO that facilitates the identification of all clinical trials, regardless of whether or not they have been published. For health care researchers, funders, policy makers and consumers, the Portal represents an enormous step towards greater access, transparency and accountability of health research globally.” Tim Evans, Assistant Director General, Information Evidence and Research, WHO.

Clinical trial registries have now become widely accepted as an essential part of an overall strategy for improving health outcomes. The challenge now facing those wanting to identify clinical trials research is knowing how to navigate their way

through the ever increasing number of registers that now exist, and knowing which registers provide information that is accurate and reliable.

The quality of information accessible through the WHO portal is assured as registers providing data to the search portal are all collaborators in the WHO Network of Collaborating Clinical Trial registers, also announced today. The Network will provide a forum for registers to exchange information and work together to establish best practice for clinical trial registration. Registers in the Network that contribute data to the search portal have agreed to prospectively register trials, are able to collect all 20 items in the WHO Trial Registration Data Set and have mechanisms in place to ensure the optimal quality of the data provided. They are also required to publicly disclose their ownership, governance structure and for-profit status. Details of registers meeting the required standards are available on the web site.

“The WHO search portal is a big step forward to making it possible to search for all relevant trials in a given research area. The onus now lies with all investigators to be sure that their work is fully and meaningfully registered in a WHO compatible database,” said Jeff Drazen, Editor-in-Chief of the *New England Journal of Medicine*

The WHO Clinical Trial Search Portal may be accessed at <http://www.who.int/trialsearch/> For more information on the WHO International Clinical Trials Registry Platform go to <http://www.who.int/ictrp>.