

Report of the Eighth General Meeting of the

**Global
Collaboration
for
Blood
Safety**

Geneva, 5 – 7 December 2007

Blood Transfusion Safety

GCBS Secretariat

Department of Essential Health Technologies

World Health Organization, Geneva

Executive Summary

Introduction

The Global Collaboration for Blood Safety (GCBS), a WHO-convened forum, is a voluntary partnership of internationally recognized organizations, institutions, associations, agencies and experts from developing and developed countries that are concerned with the safety of blood and blood products. The GCBS was established in response to the declaration of the Paris AIDS Summit (1994) which recognized that all governments have a strong interest in global blood safety and identified the need to strengthen international collaboration for blood safety and foster cooperative partnerships to ensure blood safety in all countries. In 1995, in resolution WHA48.27, the Forty-eighth World Health Assembly welcomed the Paris AIDS Summit declaration and invited governments that had not already signed the declaration to do so. The GCBS was subsequently established with the mission to promote the harmonization of efforts and avoid the duplication of activities by identifying problems, sharing expertise, seeking solutions and working towards the common goal of global blood safety as equal collaborative partners.

Plenary meetings of the GCBS have been held annually since 2000. The eighth plenary meeting was held at the WHO Headquarters in Geneva, Switzerland on 5 – 7 December 2007. The meeting was convened and organized by the Blood Transfusion Safety Team, Department of Essential Health Technologies within the Health Systems and Services (HSS) cluster of the World Health Organization (WHO). It was attended by more than 60 participants and observers, including international organizations, WHO Collaborating Centres, individual experts, the WHO Regional Adviser for Blood Safety, EMRO and members of the Blood Transfusion Safety team, WHO/Geneva (see Annex for a list of participants). The meeting was chaired by Dr Silvano Wendel and Professor J-P Allain was the Vice Chairperson. The meeting was opened by Dr Nordstrom, Assistant Director General, WHO.

Three new applicant organizations were accepted as participant members of GCBS. These are: the South African National Blood Service, the International Patient Organization for Primary Immunodeficiencies (IPOPI), and Safe Blood International.

The meeting debated a number of key global themes in transfusion medicine and developed the recommendations and next steps noted below.

Recommendations and Next Steps

- 1) GCBS participants will review and consider supporting initiatives for the implementation of the finalized recommendations of the WHO Global Consultation, Ottawa, June 2007.
 - (i) GCBS participants should review the recommendations from the WHO Global Consultation, Ottawa, June 2007 to address the Millennium Development Goals (child mortality, maternal health and HIV/AIDS and malaria,) related to blood safety through:
 - Focus on the donor
 - Establishing the evidence base, especially relating to advocacy
 - Linking advocacy for blood needs with broader health outcomes
 - Operationalizing the most relevant recommendations.
 - (ii) Support from GCBS participants to blood services in individual countries should, as far as possible, take account of the advantages of integration with other health strategies: e.g. HIV/AIDS, maternal and child health and malaria.
 - (iii) GCBS participants offering support should work with WHO to identify priority countries where systematic country assessments can be undertaken and priority interventions implemented.

- 2) GCBS established a task group to develop decision models applicable to the leading concerns in different country settings as a strategic approach to ensuring universal access to safe and effective blood transfusion, consistent with the UN Millennium Development Goals.

The task group should:

- (i) Through suitable country level enquiries, identify relevant policy questions for countries in different settings
 - (ii) Establish clear linkages between the objectives of the decision models and the Millennium Development Goals
 - (iii) Identify existing data sources and analytic tools to support the decision models
 - (iv) Describe pilot programs for the evaluation of the decision models at country or local levels
 - (v) Identify candidate funding sources for the pilot initiatives.
- 3) GCBS participants agreed to collaborate on a project to:
- (i) Generate evidence on the role of transfusion strategies in preventing malaria-related mortality and morbidity in women and young children.
 - (ii) Investigate the clinical utility of testing strategies on blood donors and donated blood to prevent malarial transmission by transfusion.
- 4) Considering the importance of haemovigilance as an element of TQM for blood programmes, GCBS participants engaged in haemovigilance networking agreed to cooperate in the dissemination of established definitions and, where feasible, tools of haemovigilance applicable in different settings.

GCBS tasked interested participants to convene and participate in a meeting to:

- (i) Identify existing gaps and potential duplication of initiatives for a global haemovigilance network.
 - (ii) Consider strategies for:
 - Local monitoring of complications of donations and transfusions
 - International benchmarking of rates of donation and transfusion incidents
 - Rapid alert systems.
- 5) GCBS participants endorsed the concept of the development of an aide-mémoire on transfusion practices at the bedside.
- (i) GCBS participants agreed that the single most important safety measure at the bedside is the correct identification of the patient and the unit to be transfused; at least minimum requirement should be wrist band identification for all admissions.
 - (ii) A task group was formed to compile these concepts into a draft aide-mémoire to be circulated to GCBS participants for comment and to be followed by clinical consultations.
- 6) Recognizing the adverse impact of supply instability on the availability of safe blood and the barriers to effective procurement and contracting, GCBS participants concurred that steps should be taken to ensure uninterrupted supplies of reagents, diagnostics and consumables for blood services.

- (i) GCBS participants requested that WHO more actively engages with the relevant agencies and organizations involved in procurement practices and contract development for essential reagents, diagnostics and consumables to establish effective mechanisms to ensure stable supplies.
- (ii) GCBS participants proposed the development of an advocacy tool to address procurement practices and contract development in order to prevent interruptions to supplies of essential reagents, diagnostics and consumables.
- (iii) GCBS participants requested WHO assistance to develop and disseminate appropriate specifications for critical reagents, diagnostics and consumables.

Full Meeting Report

Opening and Introductions

Dr Nordstrom ADG welcomed participants and observers to the eighth general meeting of the Global Collaboration on Blood Safety in Geneva.

He recognized the good progress that has been made in blood safety over recent years. There remain common challenges to be faced in developing a comprehensive approach to effective health systems including human resources, finance, logistics, data adequacy, and policies and governance.

Dr Silvano Wendel, Chair of GCBS, welcomed attendees and reminded them of the GCBS TOR and Mission and Goals. The meeting agenda and programme of work (see Annex) was adopted and the minutes of the last meeting were approved.

Theme 1 - Introduction of new Participating Organizations

Presentations were received from three new candidate participants, the South African National Blood Service, the International Patient Organization for Primary Immunodeficiencies (IPOP), and Safe Blood International (see Annex for the presentations).

The meeting voted to accept all three organizations as participant members of GCBS.

Theme 2 - Universal access to safe blood: Linking Blood safety and availability to Health-related Millennium Development Goals (MDGs)

The recommendations from the WHO Global Consultation on Universal Access to Safe Blood Transfusion (Ottawa, Canada. June 2007) were presented.

The consultation comprised 103 experts and representatives for major international organizations drawn together by WHO. The three day meeting concluded with the formulation of recommendations to the WHO, Member States and National/Regional Blood Transfusion Services. The full list of recommendations is available in the Consultation report.

www.who.int/bloodsafety/publications/ReportUniversalAccessToSafeBloodTransfusion.pdf

The recommendations are extensive and resource intensive. GCBS needs to consider where it sits in relation to the recommendations. Four main themes were identified:

- The need to focus on the donor
- The importance of an evidence based approach
- The recognition that blood safety advocacy is not an end in its own right but needs to be linked to wider health issues
- The challenge of implementation and developing effective strategies for implementation.

A major GCBS role will be to ensure collaboration and avoid repetition.

WHO Global Strategic Plan on Universal Access to Safe Blood Transfusion

The background to this plan is the millennium declaration and development goals. There are three health related-millennium development goals, and these include:

- Reduce Child mortality
- Improve maternal health
- Eradicate HIV/AIDS, malaria, and other diseases

The provision of a safe and sufficient blood supply is a requirement to ensure these goals are achieved. The WHO is developing a strategic plan to address these challenges and this is now in an advanced draft.

The importance of advocacy is well recognized and this needs to occur at supra-national level through WHO, but also at country level. Advocacy should be developed around existing strategies where these exist. There is a need to make Ministers of Health aware of the need for a safe blood supply to meet the Millennium Development Goals, and to also provide them with the necessary advice to allow safe blood initiatives to be developed effectively. It is important that the principles of a strategic approach to ensuring blood safety are firmly anchored in any new national legislation.

The Global Database data indicates that 79 countries collect less than 10 donations per 1,000 population. Focusing on these countries may be appropriate. Situations vary considerably and an assessment of the overall health status of the country would need to be established before deciding on whether intervention is appropriate. There needs to be co-ordination of support to prevent duplication of effort. Support should focus on helping countries to implement the principles already established in WHO strategies to give a stepwise and sustainable improvement.

Concern about the quality of information being returned from countries was expressed and it was suggested that a system could be established whereby external assessors visit countries to identify areas of concern. WHO already has mechanisms in place by which it can approach countries for specific information.

The donor categories of voluntary, family replacement and paid are not sufficiently well defined and this impacts upon the information received. Consideration needs to be given to changing and more clearly defining the terminology.

The need to involve other funding partners, such as the World Bank and Global fund is recognized.

Following discussion it was agreed that:

GCBS participants will review and consider supporting initiatives for the implementation of the finalized recommendations of the WHO Global Consultation, Ottawa, June 2007.

- (i) GCBS participants should review the recommendations from the WHO Global Consultation, Ottawa, June 2007 to address the Millennium Development Goals (child mortality, maternal health and HIV/AIDS and malaria,) related to blood safety through:*
 - Focus on the donor*
 - Establishing the evidence base, especially relating to advocacy*
 - Linking advocacy for blood needs with broader health outcomes*
 - Operationalizing the most relevant recommendations.*
- (ii) Support from GCBS participants to blood services in individual countries should, as far as possible, take account of the advantages of integration with other health strategies: e.g. HIV/AIDS, maternal and child health and malaria.*
- (iii) GCBS participants offering support should work with WHO to identify priority countries where systematic country assessments can be undertaken and priority interventions implemented.*

Project Proposals

The work of the Planning Group in developing a Strategic Funding Plan for GCBS was presented. It had been agreed in the Planning Group that the most effective way of securing funds for GCBS would be to undertake practical projects that would attract external funding. Two potential projects have been identified:

- 1) Modelling efficiency and cost-effectiveness of blood transfusion systems. The project would link in with work already in progress by the ISBT Working party on TTI.
- 2) Preventing Malaria deaths through optimal transfusion management. This project would have two main themes:
 - preventing infection by screening
 - transfusion therapies for malaria.

The meeting then received presentations on the two proposed projects. These presentations provided a background upon which the breakout sessions based their discussions. Each breakout reported back to the full meeting and there was further discussion, during which candidate recommendations were developed for final consideration on the last day

Project 1 – Modelling Efficiency and Cost Effectiveness of Blood Transfusion Systems

Mike Busch and Brian Custer presented their existing activity in this area. Courses are being run on a regular basis to provide training in clinical research techniques.

A cost effectiveness model is being developed with respect to the prevention of transfusion transmitted infections. The vision from the GCBS perspective would be much broader. There would be a need to collect complete sets of data regarding collection and clinical use and to enter this data into a cost effectiveness model. The aim would be to provide the world community with objective data to allow implementation of effective strategies. The importance of selecting suitable study sites was emphasized.

The scope should be broad, extending beyond TTI issues to cover important aspects of grouping and antibody screening, hospital practices, blood needs assessment, appropriate use of blood (blood conservation). The project needs to have a patient focus and this should be reflected in the title.

The project could link into a number of related activities including organizational modeling in the Asia/Pacific area; the WHO needs assessment modeling work and the guideline on screening for TTI.

The objective is to ensure that systems are sustainable. These may not necessarily be the same as systems that appear most efficient in the short term.

Following discussion it was agreed that:

GCBS established a task group to develop decision models applicable to the leading concerns in different country settings as a strategic approach to ensuring universal access to safe and effective blood transfusion, consistent with the UN Millennium Development Goals.

The task group should:

- (i) Through suitable country level enquiries, identify relevant policy questions for countries in different settings*
- (ii) Establish clear linkages between the objectives of the decision models and the Millennium Development Goals*

- (iii) *Identify existing data sources and analytic tools to support the decision models*
- (iv) *Describe pilot programs for the evaluation of the decision models at country or local levels*
- (v) *Identify candidate funding sources for the pilot initiatives.*

Project 2 – Preventing Malaria deaths through optimal transfusion management

Safe blood transfusion plays an important role in both the prevention and treatment of malaria.

The following activities are proposed for this project:

- Investigate the clinical impact of transfusion therapy – assessment to be carried out in hospitals (1 main, 1 district) in selected countries.
- Screening for plasmodium – compare performance of existing strategies and develop gold standard quadruplex assay
- Assess the efficacy and cost effectiveness of malarial blood screening

Two caveats were identified that could impact on the value of the work. The first is the impact of global warming which could significantly change the geographical distribution of malaria, and the second is the development of new technologies, such as pathogen inactivation for whole blood which could eliminate the transmission risk.

The project is of importance to GCBS and any data that can be generated will be of wide value and will help countries to determine the most appropriate strategies for their country. The objective of the exercise will be the reduction of infection. There is a need to determine the burden of disease caused by transfusion transmission.

Following discussion it was agreed that:

GCBS participants agreed to collaborate on a project to:

- (i) *Generate evidence on the role of transfusion strategies in preventing malaria-related mortality and morbidity in women and young children.*
- (ii) *Investigate the clinical utility of testing strategies on blood donors and donated blood to prevent malarial transmission by transfusion.*

Theme 3 – Haemovigilance/Biovigilance

Four presentations were made to the meeting. Copies of the presentations are available on the WHO website and only a brief summary is presented in this report.

<http://www.who.int/bloodsafety/gcbs/en/>

National, Regional and Global Haemovigilance and Surveillance Networks

There is already a number of existing or developing blood safety networks systems at regional level (e.g. ABO, APBN, EBA, EHN, and ISBT) – these are different systems and have different objectives. There are no mechanisms in place to share information globally in real time.

There are two main components of these networks - regulatory and surveillance. There need to be mechanisms in place to encourage partnership and information sharing.

WHO is looking to establish a global voluntary network. The aim is to develop a web based system to be maintained by the Health Canada and Public Health Agency of Canada and WHO with e-mail alerts and discussion boards. The network would aim to provide an international mechanism for the timely sharing of information among participants about adverse events and reactions throughout the transfusion chain.

ISBT Working Party on Haemovigilance

Definitions of haemovigilance vary between different countries. In particular plasma derivatives are included in haemovigilance in some countries and in pharmacovigilance in others.

The WP sees the basic requirements for haemovigilance to be:

Hospital

- Personnel dedicated to blood safety – investigation, training, oversight
- Transfusion committee

Regional or national level

- Standardization – data elements and definitions
- Centralized body for data collection and analysis and feedback

Supranational

- Standardization
- Centralized data collection and analysis

There is a need to develop the definitions of the different elements that can be included in haemovigilance. There is also a need to standardize data elements, provide standard definitions of adverse events and define a framework for data reporting.

The WP aims to carry out these activities and then provide a web based database to share haemovigilance instruments in order to provide a source of information to countries that are setting up new systems.

In the discussion following these presentations concern was expressed about the potential duplication in developing haemovigilance systems.

It is important to gather information from developing countries to inform on the challenges faced in these countries, and not assume that they are the same as in the developed world.

There was concern that the haemovigilance agenda is missing the point by focusing on an area which has only a small impact on the safety of patients in developing countries. Current haemovigilance schemes do not capture information on the number of deaths due to no blood being available or on transfusion of untested units due to a lack of test kits; incompatible and wrong blood being administered.

Following discussion it was agreed that:

Considering the importance of haemovigilance as an element of TQM for blood programmes, GCBS participants engaged in haemovigilance networking agreed to cooperate in the dissemination of established definitions and, where feasible, tools of haemovigilance applicable in different settings.

GCBS tasked interested participants to convene and participate in a meeting to:

- (i) Identify existing gaps and potential duplication of initiatives for a global haemovigilance network.*
- (ii) Consider strategies for:*
 - Local monitoring of complications of donations and transfusions*
 - International benchmarking of rates of donation and transfusion incidents*

- *Rapid alert systems.*

Barriers to transfusion outcome monitoring and data collection in hospitals

Transfusion related morbidity and death in developing countries is often due to transfusion to the wrong patient, and a delay in identifying that a transfusion reaction is occurring. This can often be traced back to a lack of, or failure to implement, policies and procedures.

Dr Mbanya identified the severe challenges facing hospitals in resource limited environments. Lack of information and training is a major concern, leading to an increased likelihood of adverse events, and a reduced likelihood of data collection and reporting. As a result the actual number and significance of adverse events is unknown.

Efforts are being made to overcome these barriers in some settings but such developments are not yet widespread.

Several countries have produced national guidelines on clinical use of blood and quality systems. WHO training materials are used and appreciated.

Good human resource management is the cornerstone to success. Ensuring that the right people are in the right place at the right time. There is also a need to encourage the adoption of technology and computerization.

Essential requirements are to have an effective hospital transfusion committee, to develop and report on performance indicators, and to monitor the implementation of, and compliance with, policies and procedures. Good collaboration between the NBTS and hospital clinicians is also important.

Discussion

A number of barriers to successful monitoring were identified:

- The need to distinguish between systems appropriate for LDI and MDI countries
- In LDI countries blood is often viewed as an emergency commodity, placed in category with other drugs; in other places it is overvalued and overused
- Lack of someone in charge of transfusion on the ward, hence weak monitoring and reporting
- General lack of pre-service training in transfusion medicine and nursing standards
- Within countries differences between levels of facilities with different human resources

The ensuing discussion looked at:

1. Hospital transfusion committees: importance, relevance, membership and TOR
2. Clinical interface: Blood Transfusion Service and clinical services (producer vs. consumer)
3. Bidirectional traceability: for BTS ← → clinical service; how to overcome barriers and data collection

It was noted that although the focus of the discussion was on Low HDI countries, the outcome has relevance for Medium and some High HDI countries.

It was emphasized that the major responsibility for the Transfusion Committee lies with hospital blood bank staff, but the engagement of hospital administrators is essential. There must be an effective secretariat and good documentation.

It was recognized that one of the most important steps to be taken to reduce incorrect identification of patients is use of patient wristbands.

Lessons should be learnt from existing successful systems in developing countries.

Following discussion it was agreed that:

GCBS participants endorsed the concept of the development of an aide-mémoire on transfusion practices at the bedside.

- (i) GCBS participants agreed that the single most important safety measure at the bedside is the correct identification of the patient and the unit to be transfused; at least minimum requirement should be wrist band identification for all admissions.*
- (ii) A task group was formed to compile these concepts into a draft aide-mémoire to be circulated to GCBS participants for comment and to be followed by clinical consultations.*

Addressing the challenge of uninterrupted supply of good quality reagents and consumables

The presentation identified a series of constraints in supply as a result of the complexity of the purchasing and tendering rules of different funding agencies.

Constraints:

- Tenders can only happen when funding in place and this is often at the end of the year and not when the reagents are needed therefore procedural timeframes delay delivery within approved budget framework.
- Different funding agencies have different procedures which mean staffs have to spend time learning them.
- Requirements for re-tendering annually increase workload and uncertainty regarding continuity of supply.
- Centralized purchasing authorities may lack relevant technical expertise.
- Pre-qualification documents often do not incorporate technical specifications.

These constraints can lead to the purchase of inappropriate reagents and consumables. There are a number of potential solutions to improve the situation and WHO should initiate a meeting of all partners as a key agent for achieving improvements.

Suggested activities include:

- Reviewing WHO guidelines and recommendations on use of Central Purchasing Authority;
- Evaluating the use and relevance by countries and Purchasing Authorities of 'Operational Characteristics' and 'Bulk Purchase Scheme' for selection of reagents;
- Developing guidelines and recommendations on tendering processes and procedures required by World Bank; Global Fund and other agencies that focus more on finance; international advertising and procedures than on effectiveness of quality and unbroken supplies in the selection and purchase of reagents that continues to lead to interruption of supplies and purchase of inappropriate reagents;
- Reviewing the advantages and disadvantages of purchasing equipment for TTI –v- equipment as part of reagent agreement plan.
- Providing guidance on the advantages of centralized testing.

Discussion

This is an urgent issue for consideration and there is a need for some practical solutions. The presentation identified a series of constraints in supply as a result of the complexity of the purchasing and tendering rules of different funding agencies. A number of potential solutions to improve the situation were identified with WHO as a key agent for achieving these improvements.

There is a link to WHA Resolution: Health Technologies WHA 60 .29 of 23 May 2007 which requests the Director General to provide technical guidance and support in the prioritization, selection, acquisition and management of Health Technologies and the provision of leadership by WHO to the other UN agencies involved in the procurement, supply and funding of reagents and equipment.

Following discussion it was agreed that:

Recognizing the adverse impact of supply instability on the availability of safe blood and the barriers to effective procurement and contracting, GCBS participants concurred that steps should be taken to ensure uninterrupted supplies of reagents, diagnostics and consumables for blood services.

GCBS participants requested that WHO more actively engage with the relevant agencies and organizations involved in procurement practices and contract development for essential reagents, diagnostics and consumables to establish effective mechanisms to ensure stable supplies.

GCBS participants proposed the development of an advocacy tool to address procurement practices and contract development in order to prevent interruptions to supplies of essential reagents, diagnostics and consumables.

GCBS participants requested WHO assistance to develop and disseminate appropriate specifications for critical reagents, diagnostics and consumables.

Theme 4 – Project Reports

Donor health and safety (Donor Selection Guidelines)

There was a report on the current status of the WHO project on the development of Donor Selection Guidelines. WHO has three guidelines in process, the donor selection guidelines, the basic requirements and the screening for TTI. Advice and recommendations need to be consistent across all three documents.

Whilst the need for evidenced based recommendations on deferral is recognized, there is little published evidence that would meet today's acceptance criteria. Where evidence is present or missing, there is a need to state the rationale and theoretical basis.

Further evidence needs to be gathered on the long term iron depletion effects of blood donation. Several groups are working in this area and there is a role for GCBS in coordinating activity. The Planning Group was asked to take this into consideration.

Transfusion practices at the bedside (patient safety)

Recommendation No 4 from the 7th GCBS stated: GCBS participants establish a working group to collaborate with WHO in the development of candidate guidance document on monitoring and improving transfusion recipient safety.

WHO already has materials on the clinical use of blood. There is a section in basic requirements on haemovigilance

An aide memoire has been drafted on patient safety in blood transfusion and this was presented to the meeting. It is targeted at national health programmes.

Following discussion on the content it was agreed that the draft should be revised and then circulated for comments from GCBS and clinical and nursing colleagues.

There was recognition of the difficulties of recruiting appropriately trained nurses in many countries.

Needs assessment model for blood requirements

It is clear that the definition of the 'need' for blood varies with the setting.

The model developed to date is described as a simplified pragmatic model. It uses a consensus method to get data. The main groups of patients at risk are identified by disease/condition and the prevalence, proportion of patients needing transfusion, and the average need is assessed.

A field test has been run in Honduras. The approach shows promise, and the pilot indicates that it can be improved and simplified. A major benefit has been to engage the interest of clinicians and give some understanding of the issues in providing adequate transfusion support

Three publications are being prepared as a result of the pilot and a project manual has been developed. The manual and a supporting toolkit will be put into a package suitable for presentation to other parties. Once this has been done the project will be complete.

The project will only be a success once the toolkit is available.

Theme 5 – Administrative issues

A number of GCBS administrative issues were discussed.

There is a need for all working groups to prepare reports to Planning Group prior to the general meeting. It was agreed that the Planning Group needs to more explicitly identify what groups exist and who are the members.

Secretarial support to GCBS - the WHO department name has changed so a minor change to the ToR is required.

The meeting confirmed that it is satisfied with the current Planning Group membership and wishes the group to continue for the coming year.

Any other matters

GCBS meeting 2008.

An offer to host the 2008 GCBS meeting in November or December in the United Arab Emirates has already been made.

A number of important factors have to be taken into account in determining the time and location of the Plenary meeting. The Planning Group will discuss the matter at its next meeting.

Closing Remarks

Dr Steffen Groth acknowledged the activity of the GCBS and recognized that output from GCBS has been incorporated into documents of WHO. GCBS has primarily been an information sharing body, but maybe it can move on. Dr Wendel thanked Dr Groth and WHO for hosting the meeting. He also recorded his thanks to the Vice Chair and Planning Group.

Annexes

1. Agenda
2. Programme of Work
3. List of Participants
4. Presentations of new participating organizations



**World Health
Organization**

**Global Collaboration for Blood
Safety (GCBS): Eighth General
Meeting**

**5-7 December 2007
Executive Board Room
WHO Headquarters, Geneva**

PROVISIONAL PROGRAMME OF WORK

Wednesday, 5 December 2007		
08:30 - 09:00	Registration	
09:00 - 09:30	Opening ceremony	Dr Anders Nordström, Assistant Director-General, WHO Health Systems and Services Dr Steffen Groth Dr Silvano Wendel (Chair) Dr Jean-Pierre Allain (Vice-Chair)
09:30 - 10:00	<ul style="list-style-type: none"> • Introduction of participants • Adoption of agenda, objectives of meeting and programme of work 	Chair / Vice- Chair
10:00 - 10:30	<ul style="list-style-type: none"> • Review of GCBS 2006 recommendations and implementation by participating organizations • Report of GCBS Planning Group meeting 	Chair / Vice- Chair
10:30 - 11:00	Break	
Theme 1: Introduction of New Participating Organizations		
11:00 - 11:25	Reports from new participating organizations on their international activities, and proposal for acceptance of new participants: <ul style="list-style-type: none"> • South African National Blood Service (SANBS) • International Patient Organization for Primary Immuno-deficiencies (IPOPI) • Safe Blood International 	Dr Loyiso Mpuntsha Dr David Watters Dr James van Hasselt
Theme 2: Universal Access to Safe Blood: Linking Blood Safety and Availability to Health-related Millennium Development Goals (MDGs)		
11:25 - 11:45	Summary of recommendations emerging from WHO Global Consultation, Ottawa, Canada, June 2007	Dr Peter Ganz
11:45 - 12:05	<ul style="list-style-type: none"> • WHO Global Strategic Plan on Universal Access to Safe Blood – towards achieving the health-related Millennium Development Goals (MDGs) • Global Initiative on Safe Blood for Safe Motherhood – Country projects 	Dr Neelam Dhingra Dr Saloney Nazeer
12:05 - 12:25	Outline of project: 'Modelling efficiency and cost-effectiveness of blood transfusion systems'	Dr Michael Busch Mr Brian Custer
12:25 - 12:45	Outline of project: 'Preventing malaria deaths through optimal transfusion management'	Dr Jean-Pierre Allain
12:45 - 13:00	Discussion	
13:00 - 14:00	Break	

14:00 - 15:30	Breakout sessions in three groups: Goal - to develop recommendations and explore opportunities for collaboration <ul style="list-style-type: none"> • Safe Blood for achieving Millennium Development Goals • Cost-effectiveness modelling • Preventing malaria 	Moderators: Dr Loyiso Mpuntsha Dr Michael Busch Dr Jean-Pierre Allain
15:30 - 16:00	Break	
16:00 - 16:30 16:30 - 17:00 17:00 - 17:30	Reports from breakout groups and draft recommendations <ul style="list-style-type: none"> • Group 1 • Group 2 • Group 3 	
17:30 - 18:00	Discussion	
18:00 - 19:00	Welcome Reception	
Thursday, 6 December 2007		
08:30 - 09:00	Report on Day 1	Rapporteur
Theme 3: Haemovigilance/Biovigilance		
09:00 - 09:15	National, regional and global haemovigilance and surveillance networks	Dr Jun Wu
09:15 - 09:30	ISBT Working Party on Haemovigilance: Feedback on ongoing activities	Dr Pierre Robillard
09:30 - 09:45	Barriers to transfusion outcome monitoring and data collection at hospitals	Dr Dora Mbanya
09:45 - 10:00	Addressing the challenge of uninterrupted supply of good quality reagents and consumables	Dr Jean Emmanuel
10:00 - 10:30	Discussion	
10:30 - 11:00	Group photograph (at the stairs facing the Executive Board Room) Break	
11:00 - 12:30	Breakout sessions in three groups: Goal - to develop recommendations and explore opportunities for collaboration <ul style="list-style-type: none"> • Developing effective haemovigilance and surveillance systems and networks • Overcoming the barriers to transfusion outcome, monitoring and data collection at hospitals (hospital transfusion committees, clinical interface, bi-directional traceability) • Ensuring uninterrupted supply of good quality reagents and consumables 	Moderators: Dr Jun Wu Dr Dora Mbanya Dr Jean Emmanuel
12:30-14:00	Break	
14:00 - 14:30 14:30 - 15:00 15:00 - 15:30	Reports from breakout groups and draft recommendations <ul style="list-style-type: none"> • Group 1 • Group 2 • Group 3 	
15:30 - 16:00	Break	
Theme 4: Project Reports		
16:00 - 16:15	Donor health and safety (Donor Selection Guidelines)	Dr Virge James
16:15 - 16:30	Discussion	
16:30 - 16:45	Transfusion practices at the bedside (patient safety)	Dr Noryati Abu Amin

16:45 - 17:00	Discussion	
17:00 - 17:15	Needs assessment model for blood requirements	Dr Brian McClelland
17:15 - 17:30	Discussion	
17:30 - 18:00	General discussion	
Friday, 7 December 2007		
08:30 - 09:00	Report on Day 2	Rapporteur
Theme 5: GCBS Administrative issues, Recommendations and Conclusion		
09:00 - 09:20	GCBS administrative issues <ul style="list-style-type: none"> • GCBS expenditure report • Constitution of planning group • Participation in GCBS - participant, expert and observer status • Any other matters 	WHO
09:30-10:30	Discussion on collaborative projects to address major global challenges in blood safety and availability	Dr Jean-Pierre Allain
10:30-11:00	Break	
11:00-13:15	Development of Recommendations and Conclusion	Chair/Vice-Chair
13:15-13:30	Closing remarks	Chair/Vice-Chair and Dr Steffen Groth



World Health Organization

Global Collaboration for Blood Safety (GCBS): Eighth General Meeting

5-7 December 2007

Executive Board Room, WHO, Geneva

PROVISIONAL LIST OF PARTICIPANTS

Representatives of International / National Organizations / Associations

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AABB	Ms Karen Shoos Lipton CEO, AABB 8101 Glenbrook Road Bethesda, MD 20814, USA Email: karen@aabb.org
Agence Nationale du Sang Algeria	Prof. Kamel Kezzal President, Agence Nationale du Sang BP 59 Tixeraine, 15 route du Kaddoua Alger, Algeria Email: ans@sante.dz (Unable to attend)
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Australian Red Cross Blood Service	Dr Sally Thomas National Donor Medical Services Manager/International Relations Manager Australian Red Cross Blood Service GPO Box B 80, Perth WA 6838, Australia Email: SThomas@arcbs.redcross.org.au
Biomedical Excellence for Safer Transfusion (BEST) Collaborative	Dr Lorna Williamson Medical Director NHS Blood and Transplant Long Road, Cambridge CB2 2PT, United Kingdom Email: lorna.williamson@nhsbt.nhs.uk / gc364@cam.ac.uk (unable to attend)
Centers for Disease Control and Prevention (CDC), USA	Dr Lawrence H. Marum Team Lead, Medical Transmission Global AIDS Program, HIV Prevention Branch Centers for Disease Control and Prevention 1600 Clifton Road NE, MS E-04 Atlanta, GA 30333, USA Email: LMarum@cdc.gov

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Établissement Français du Sang (EFS), France	Ms Claudine Hossenlopp Chargée de mission Direction des Affaires Internationales Etablissement français du Sang 20 avenue du stade de France 93218 La Plaine Saint-Denis Cedex, France Email: claudine.hossenlopp@efs.sante.fr
European Blood Alliance (EBA)	Dr Clair Watts European Blood Alliance Plesmanlaan 125 1066 CX Amsterdam, The Netherlands Email: eba@sanquin.nl
European Commission (EC)	Dr Thomas Brégeon Policy Officer, European Commission Health & Consumer Protection Directorate-General Directorate C - Public Health & Risk Assessment Unit C6 Health Measures, Rue Froissart 101, F 101 7/90 1049 Brussels, Belgium Email: thomas.bregeon@ec.europa.eu
Food and Drug Administration (FDA), USA	Dr Jay Epstein Director, Office of Blood Research and Review Centre for Biologics Evaluation and Research Food and Drug Administration HFM-300, 1401 Rockville Pike Rockville, MD 20852, USA Email: jay.epstein@fda.hhs.gov
Health Canada	Dr Peter R. Ganz Director, Biologicals and Radiopharmaceuticals Evaluation Centre, Health Canada Tunney's Pasture, Building #6 Ottawa, Ontario, Canada KIA OL2 AL:0603D Email: Peter_ganz@hc-sc.gc.ca
International Association for Biologicals	Prof. Jean-Pierre Allain (Vice-Chairperson) Division of Transfusion Medicine, University of Cambridge Long Road, Cambridge CB2 2PT, United Kingdom Email: jpa1000@cam.ac.uk
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International Council for Commonality in Blood Bank Automation (ICCBBA)	Mr Paul Ashford Executive Director, ICCBBA, Inc 204 St Charles Way, Unit 179E York PA 17402, USA Email: paul.ashford@iccbba.com

International Federation of Blood Donor Organizations (IFBDO)	Mr Niels Mikkelsen Secretary-General, Bloddonorernei Denmark Vesterbrogade 191, 1800 Frederiksberg, Denmark Email: mikkelsen@bloddonor.dk
International Federation of Red Cross and Red Crescent Societies (IFRCRC)	Dr Rudolf Schwabe Director Service de transfusion sanguine CRS Laupenstrasse 37, Postfach 5510 CH 3001 Bern, Switzerland Email: rudolf.schwabe@redcross.ch (Unable to attend)
International Plasma Fractionation Association (IPFA)	Mr Theo Evers Executive Director, International Plasma Fractionation Association (IPFA) Plesmanlaan 125 PO Box 9190, 1006 AD Amsterdam, The Netherlands Email: ipfa@sanquin.nl (Unable to attend)
	Mrs Anne Clarke Director of Scientific and Public Affairs International Plasma Fractionation Association Plesmanlaan 125, PO Box 9190 1006 AD Amsterdam, The Netherlands Email: ipfa@sanquin.nl
International Society of Blood Transfusion (ISBT)	Dr Paul Strengers Secretary-General, ISBT Central Office Jan Goyenkade 11 NL-1075 HP Amsterdam, The Netherlands Email: isbt@eurocongres.com
International Trauma Anaesthesia and Critical Care Society	Dr Maureen McCunn International Trauma Anaesthesia and Critical Care Society Department of Anesthesiology University of Maryland School of Medicine 22 South Greene Street, Room T4R10 Baltimore, Maryland 21201-1595, USA Email: mmccunn@gmail.com (Unable to attend)
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South Asian Association of Transfusion Medicine (SAATM)	Dr R M Bindusara President, SAATM Director, National Blood Transfusion Service, Sri Lanka 555 Elvitigala Mavatha Colombo 05, Sri Lanka Email: bindusaranbts@yahoo.com ; drmm@sltnet.lk
Swiss Red Cross	Dr Guy Levy Medical Director Blood Transfusion Service SRC Laupenstrasse 37, Postfach 5510 3001 Bern, Switzerland Email: guy.levy@redcross.ch
Thalassaemia International Federation (TIF)	Dr Androulla Eleftheriou Scientific Director, Thalassaemia International Federation 31 Ifigeneias Street, 2007 Strovolos, Nicosia, Cyprus Email: thalassaemia@cytanet.com.cy (Unable to attend)
Therapeutic Goods Administration (TGA) Laboratories, Australia	Dr Albert Farrugia Senior Adviser and Head, Blood and Tissue Unit, Office of Devices, Blood and Tissues Therapeutic Goods Administration P.O. Box 100, Woden, ACT, Australia 2606 Email: albert.farrugia@health.gov.au (Unable to attend)
World Federation of Hemophilia (WFH)	Dr Claudia Black Interim CEO/Executive Director World Federation of Hemophilia 1425 René-Lévesque Blvd. West, Suite 1010 Montréal QC H3G 1T7, Canada Email: cbkacj@wfh.org (Unable to attend)
World Health Organization (WHO)	Dr Neelam Dhingra Coordinator, Blood Transfusion Safety Department of Essential Health Technologies World Health Organization-HQ Avenue Appia 20, CH-1211 Geneva 27, Switzerland Email: dhingran@who.int

WHO Collaborating Centres	
African Region	
Zimbabwe	Dr M.E.Chitiyo Medical Director, National Blood Transfusion Service Mazowe Street North PO Box A101, Avondale, Harare, Zimbabwe Email: nbts@africaonline.co.zw (Unable to attend)
Americas Region	
Brazil	Dra. Márcia Otani Mitiko Chefe Depto Controle de Qualidade Serologia Fundação Pró-Sangue Hemocentro de São Paulo Av. Enéas de Carvalho Aguiar, 155 CEP 05403-000 São Paulo SP, Brazil Email: otanimarcia@uol.com.br (Unable to attend)
Eastern Mediterranean Region	
Tunisia	Prof. Kamel Boukef Director, National Blood Transfusion Centre Ministry of Public Health 3 rue Djebel Lakhdar, Bab Saadoun Tunis, 1006, Tunisia Email: kamel.boukef@rns.tn (Unable to attend)
European Region	
Belgium	Dr Luc Kestens Director, Department of Microbiology Institute of Tropical Medicine 155 Nationalestraat B-2000 Antwerp, Belgium Email: ikestens@itg.be (Unable to attend)
Germany	Professor Rainer Seitz Director, Paul-Ehrlich-Institute (PEI) Paul Ehrlich Str. 51-59 D-63225 Langen, Germany Email: seira@pei.de
Finland	Dr Thomas Krusius Medical Director Finnish Red Cross Blood Transfusion Service Kivihaantie 7, FIN-00310 Helsinki, Finland Email: tom.krusius@bts.redcross.fi (Unable to attend)
Slovenia	Dr Irena Razboršek Specialist in Transfusion Medicine Blood Transfusion Centre of Slovenia Šlajmerjeva 6, SI-1000 Ljubljana, Slovenia Email: irena.razborsek@ztn.si (Unable to attend)
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United Kingdom of Great Britain and Northern Ireland	Mrs Anne Bradshaw Director, Department of Haematology Imperial College of Medicine Hammersmith Hospital Campus Ducane Road, London W12 0HS, United Kingdom Email: abradshaw@hhnt.org (Unable to attend)
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South-East Asian Region	
Thailand	Dr Soisaang Phikulsod Acting Director, National Blood Centre The Thai Red Cross Society 1780 Henri Dunant Road, Pathomawan, Bangkok, Thailand Email: drsoi195@yahoo.com (Unable to attend)
Western Pacific Region	
Australia	Prof. Elizabeth M. Dax Director, National Serology Reference Laboratory (NRL) St Vincent's Institute of Medical Research 4 th floor, Healey Building, 41 Victoria Parade Fitzroy, Victoria 3065, Australia Email: liz@nrl.gov.au
Peoples' Republic of China	Prof. ZHU Yongming President, Shanghai Blood Center #1191, Hongqiao Rd., Shanghai 200051, P.R. China Email: ymzhu@sbc.org.cn (Unable to attend)
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Individual capacity as expert	
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South Africa	Mr Duncan Armstrong Executive Director, National Bioproducts Institute 10 Eden Road, Pinetown 3610, Private Bag X9043 Pinetown 3600, South Africa Email: armstrongd@nbi-kzn.org.za (Unable to attend)
Uganda	Dr Peter K. Kataaha Senior Medical Consultant, Ministry of Health PO Box 1772, Kampala, Uganda Email: director@ubts.go.ug (Unable to attend)
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Americas Region	
Argentina	Dr Ana Emilia del Pozo National Coordinato, Clinical Use of Blood Commission International Affairs Secretary, Asociación Argentina de Hemoterapia e Immunohematología Chacabuco 824, CP 1069, Buenos Aires, Argentina Email: anaemiliad03@yahoo.com.ar adelpozo@speedy.com.ar (Unable to attend)
Brazil	Dr Silvano Wendel (Chairperson) Medical Director, Blood Bank, Hospital Sírio-Libanês Rua Dona Adma Jafet 91, 20 Andar São Paulo 01308-050, Brazil Email: snwendel@uninet.com.br
Honduras	Dr Elizabeth Vinelli Medical Director, National Blood Programme Cruz Roja Hondureña 2a Avenida, Entre 6a y 7a calle Comayagüela, MDC, Honduras Email: cenasa@honduras.cruzroja.org (Unable to attend)
USA	Dr Jerry Holmberg Senior Advisor for Blood Policy and Executive Secretary Advisory Committee on Blood Safety and Availability Department of Health and Human Services 1101 Wootton Parkway, Suite 250 Rockville, MD 20852, USA Email: Jholmberg@osophs.dhhs.gov
USA	Prof. John Hess Professor of Pathology and Medicine University of Maryland 5606 Oak Place, Bethesda, MD 20817, USA Email: jhess@umm.edu (Unable to attend)

USA	Dr Roger Y. Dodd Executive Director, Biomedical Safety American Red Cross Holland Laboratory 15601 Crabbs Branch Way Rockville MD 20855, USA Email: dodd@usa.redcross.org
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European Region	
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The Netherlands	Prof. Dr Cees Th. Smit Sibinga Academic Institute for International Development of Transfusion Medicine, University Medical Centre Groningen, University of Groningen Sanquin Consulting Services and WHO Collaborating Centre Triade Building E3.06, UMCG, The Netherlands P.O. Box 11085, Groningen, 9700 CB, The Netherlands Email: c.sibinga@planet.nl ; c.smitsibinga@sanquin.nl
Russian Federation	Prof. Evgueni Selivanov Director, Russian Institute of Haematology and Transfusiology 2 nd Sovetskaya Street 16 St Petersburg 193024, Russian Federation Email: evgsell@mail.wplus.net (Unable to attend)
United Kingdom	Dr Brian McClelland Scottish National Blood Transfusion Service WHO Expert Advisory Panel Member 21 Ellen's Glen Road Liberton, Edinburgh EH17 7QT, United Kingdom Email: brian.mcclelland@snbts.csa.scot.nhs.uk
SEARO	
India	Dr Zarin S. Bharucha Transfusion Medicine Expert, 4/40 Wadia Baug, G D Ambekar Road, Mumbai, 400033, India Email: zsbharucha@rediffmail.com

India	Dr Nabajyoti Choudhury Medical Director, Prathama Blood Center Jivraj Mehta Hospital, Vasna, Ahmedabad-380007, India Email: nc@prathama.org ; Nabajyoti_2000@yahoo.com (Unable to attend)
Western Pacific Region	
Hong Kong, China	Dr Che Kit Lin Chief Executive Hong Kong Red Cross Blood Transfusion Service 15 King's Park Rise, Kowloon, Hong Kong Email: cklin@ha.org.hk
Japan	Dr Kenji Tadokoro Executive Officer, Blood Service Headquarters Japanese Red Cross Society 1-1-3 Shiba-Daimon, Minato-ku Tokyo 105-8521, Japan Email: k-tadokoro@bs.jrc.or.jp (Unable to attend)
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Viet Nam	Prof. Nguyen Anh Tri Director of National Institute of Haematology & Blood Transfusion 78 Giai Phong Street Hanoi Email: trihvn@yahoo.com ; plan.dept.nihbt@vnn.vn (Unable to attend)
Invited Organizations/Speakers	
Blood Systems Foundation, USA	Dr Michael Busch Vice-President, Research/Scientific Services Professor in Residence, Laboratory Medicine University of California, San Francisco Blood Centers of the Pacific Irwin Center, 270 Masonic Avenue San Francisco, CA 94118, USA Email mpbusch@itsa.ucsf.edu ; mbusch@bloodsystems.org
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Institut National de Santé Publique du Québec, Canada	Dr Pierre Robillard Institut National de Santé Publique du Québec 190 Crémazie est Montréal, QC H2P 1E2, Canada Email: pierre.robillard@inspq.qc.ca
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University of Yaoundé, Cameroun	Prof. Dora Mbanya Professor, Department of Haematology Faculty of Medicine and Biomedical Sciences WHO Expert Advisory Panel Member University of Yaoundé I BP 8046, Yaoundé, Cameroun Email: dmbanya1@yahoo.co.uk
Observers from GCBS Participating Organizations / WHO Collaborating Centres	
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Centers for Disease Control and Prevention (CDC), USA	Mr John Pitman Project Officer, Blood Safety Team, HIV Prevention Branch Global AIDS Program, ATA Services Centers for Disease Control and Prevention 1600 Clifton Road NE (E-04), Atlanta, GA 30333, USA Email: cgx5@cdc.gov
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International Council for Commonality in Blood Bank Automation (ICCBBA)	Dr Pat Distler Technical Director, ICCBBA, Inc. 204 St Charles Way, Unit 179E York PA 17402, USA Email: pat.distler@iccbba.org
Iranian Blood Transfusion Organization (IBTO)	Dr Ahmad Gharehbaghian Deputy Managing Director, Research & Education Affairs Iranian Blood Transfusion Organization IBTO bldg Hemmat, Exp. Way Teheran, Iran Email: gharehbaghian@ibto.ir
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South Asian Association of Transfusion Medicine	Dr H.A. Champa S. Manchanayake Executive Committee Member South Asian Association of Transfusion Medicine Senior Medical Officer National Blood Transfusion Service Narahenpita, Colombo 05, Sri Lanka Email: champasubodhinie@yahoo.com

Thalassaemia International Federation (TIF)	Mr Panos Englezos President, Thalassaemia International Federation P.O. Box 28807, 31 Ifigenias, 2007 Strovolos Nicosia, Cyprus Email: thalassaemia@cytanet.com.cy
Invited Observer Organizations / Experts for 2007 General Meeting	
Averting Maternal Death and Disability Program (AMDD)	Dr Lynn P. Freedman Director, Averting Maternal Death and Disability Program Heilbrunn Department of Population and Family Health Mailman School of Public Health, Columbia University 60 Haven Avenue, B3, New York, NY 10032, USA Email: lpf1@columbia.edu (Unable to attend)
Blood Banks & Transfusion Society of Turkey (BBTST)	Dr N. Nuri Solaz Blood Banks & Transfusion Society of Turkey Ankara University Serpil Akdag Blood Center Ankara Üniversitesi Cebece Hastanesi Mamak Cad. Dikimevi, Ankara, Turkey Email: nsolaz@kmttd.org.tr
Controle de Qualidade Sorologia	Dr Ester Sabino Controle de Qualidade Sorologia Av. Dr. Enéas de Carvalho Aguiar 155-1 andar Cerqueira Cesar São Paulo, Brazil Email: sabinoec@gmail.com
International Development of Transfusion Medicine (IDTM)	Prof. Dr Cees Th. Smit Sibinga Academic Institute for International Development of Transfusion Medicine, University Medical Centre Groningen, University of Groningen Sanquin Consulting Services and WHO Collaborating Centre Triade Building E3.06, UMCG, The Netherlands P.O. Box 11085, Groningen, 9700 CB, The Netherlands Email: c.sibinga@planet.nl ; c.smitsibinga@sanquin.nl ;
International Patient Organisation for Primary Immunodeficiencies (IPOPI)	Dr David Watters Executive Director, International Patient Organisation for Primary Immunodeficiencies Firside, Main Road, Downton, PL11 3LE, United Kingdom Email: david.watters1@gmail.com
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Safe Blood International, USA	Dr James Van Hasselt Acting Executive Director, Safe Blood for Africa Foundation Nelson Mandela Square 2nd Floor, West Tower, Maude Street Sandown P.O. Box 783902, Sandton 2146 Johannesburg, South Africa Email: jamesvh@global.co.za
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UN Organizations	
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	Dr Teiji Takei Senior Adviser on Monitoring and Evaluation Joint United Nations Programme on HIV/AIDS 20 Avenue Appia, 1211 Geneva, Switzerland Email: takeit@unaids.org
	Terhi Aaltonen Programme Officer, Prevention, Care and Support Unit Joint United Nations Programme on HIV/AIDS 20 Avenue Appia, 1211 Geneva, Switzerland Email: aaltonent@unaids.org
UNFPA	Ms Purnima Mane Deputy Executive Director (Programme) United Nations Population Fund 220 East 42 nd Street New York, NY 10017, USA (Unable to attend)
	Mrs Siri Tellier Director, UNFPA Office in Geneva International Environment House 11, Chemin des Anémones CH-1219 Châtelaine, Geneva, Switzerland Email: tellier@unfpa.org
	Mr Vincent Fauveau Senior Adviser on Maternal Health, UNFPA Office in Geneva International Environment House 11, Chemin des Anémones CH-1219 Châtelaine, Geneva, Switzerland Email: fauveau@unfpa.org
	Ms Paola Maresca Consultant, UNFPA Office in Geneva International Environment House 11, Chemin des Anémones CH-1219 Châtelaine, Geneva, Switzerland
UNICEF	Nancy Terreri Health Section, Programme Division UNICEF Three United Nations Plaza New York, NY 10017 USA (Unable to attend)

Special Invitees	
United Arab Emirates	H.E. Mr Obaid Salem Al Zaabi Ambassador Permanent Mission of the United Arab Emirates to the United Nations Office and other Specialized Agencies at Geneva Rue de Moillebeau 56, 1209 Genève, Switzerland (Unable to attend)
	Miss Najla Al Qassimi First Secretary Permanent Mission of the United Arab Emirates to the United Nations Office and other Specialized Agencies at Geneva Rue de Moillebeau 56, 1209 Genève, Switzerland (Unable to attend)
WHO Secretariat	
Regional Offices	
Dr Jean-Baptiste Tapko Regional Adviser, Blood Safety WHO Regional Office for Africa (AFRO)	Email: tapkoj@afro.who.int
Dr Nabila Metwalli Regional Adviser, Laboratory WHO Office for Eastern Mediterranean (EMRO)	Email: metwallin@emro.who.int
Dr Valentina Hafner Medical Officer WHO Regional Office for European (EURO) (Unable to attend)	Email: VHA@euro.who.int
Dr Jose Ramiro Cruz Regional Adviser, Laboratory WHO/PAHO AMRO, Regional Office for the Americas (Unable to attend)	Email: CRUZJOSE@paho.org
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Headquarters	
Dr Anders Nordström Assistant Director-General Health Systems and Services	Email: nordstroma@who.int
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