

AMIR

HEALTH INTELLIGENCE

[1 JAN 1992] - 20 MAR 1995

PLEASE RETAIN
ORIGINAL ORDER

CONFIDENTIAL
EL/WG MAY 2009

UNARCHIVES
SERIES S-1062
BOX 38
FILE 7
ACC. 1998/0284

DEPARTMENT OF DEFENCE

Prefix	File Number	Part No.
	445-16-1	1

• This cover is to be used for official file series recorded with Australian Archives.

Subject							
INTELLIGENCE							
HEALTH							
GENERAL							
Folio	Referred to	Date Referred	Actioned by (inits)	Folio	Referred to	Date Referred	Actioned by (inits)
1	Raised	1 Sep 94					
<div>COPIES</div> <div>FILED</div> <div>3/8/95</div>							
Archival Action		Disposal Action		Authority Number		Entry Number	

445-16-1

IDP BULLETIN

Update

COMASC
24/3.
Reply to
Answer

693-8-1

INTEGRATED OPERATIONS CENTRE (IOC) OPERATION RETOUR WEEKLY REPORT 13 - 19 MARCH 1995

Kigali, 20 March 1995

SUMMARY

Low numbers. Operation Retour continued to see very low numbers of people boarding vehicles to leave the IDP camps.

Movement into camps. Camp leaders reported that people continue to arrive in camps from communes, giving security fears as the main reason.

Future of the camps. The Integrated Task Force continued work on the plan to empty the IDP camps while respecting the principle of voluntary and safe return.

IOC staff. The IOC now has 21 full-time and 38 part-time personnel, a mixture of government officials and international staff.

SECURITY

General security situation

Progress is being made to establish a judicial system, with nominations for the High Court of Rwanda recently being announced by the government. However, there is high and growing frustration among many Rwandese people at the current absence of a functioning judicial system, and the consequent lack of action against the murderers of last year. The proportion of guilty people in IDP camps is now higher than at the start of Operation Retour.

Reaction to security incidents

IOC follow-up on reported security incidents is being improved. The Ministry of Defence has indicated that it will provide information swiftly on security incidents through its Liaison Officer at the IOC, to allow balanced reporting. Links with UNAMIR operations staff are being strengthened for the same purpose.

Gitarama prefecture

The RPA battalion commander for Gitarama prefecture informed UNAMIR that many militia are

IOC Kigali - Tel: 250 73744/5/6/7

operating at night in the 3 Gitarama communes closest to Kigali (Musambira, Runda, Mugina). As a result there have been numerous arrests in these communes reported over the past few weeks. It has also been reported that some people have recently left these communes because of the arrests. The motive for some to leave appears to be that they are guilty and fear rightful arrest. Others, though innocent, appear to fear wrongful arrest or mistreatment.

NUMBERS

The weekly total of people transported home under Operation Retour was 521. Most of these left Kibeho camp for Butare communes. Some others are thought to have walked from camps to their homes. There was no transport provided on 13 Mar because of an RPA security operation in Butare. The daily figures were as follows:

13 Mar - no transport	16 Mar - 69
14 Mar - 317	17 Mar - 77
15 Mar - 58	

The total number of people transported by vehicle from camps to home communes since the operation began on 29 Dec 94 now stands at 40,560.

CAMPS

Movement into camps

According to camp leaders, people have recently arrived in Gikongoro IDP camps. They are thought to number about 1,000: the exact period over which they have arrived is not known. Most claim to come from Butare communes, others from Kibuye, Kigali and Gikongoro communes.

Movement to Burundi

The chief of Munini camp estimates that 5 families leave the camp each week for Burundi. According to UNAMIR the outflow to Burundi from the south-west of Rwanda was at least 510 people during the reporting period.

Relocation of IDPs to Gikongoro

"Operation Topaz" began on 16 Mar. Arranged and coordinated locally in the Butare and Gikongoro prefectures, the operation aims to enable around 4,500 IDPs currently in the Groupe Scolaire (educational establishment) in Butare to transfer to the abandoned camp site at Murambi, 4 km north of Gikongoro. The reason for the transfer is to allow the educational facilities to reopen. The IDPs involved originate from the Gikongoro prefecture and should return to their homes in due course. A further 1,500 of these IDPs will be transferred to a newly created camp in Runyinya commune, until they are able to return to their homes.

Environment

Environmental impact studies have been carried out in Cyanika, Rukondo and Kiraro camps, by

NGOs. In general, lower slopes have been badly affected by erosion. Agriculture and reforestation programmes are being prepared to address the problems found. The recently emptied Karambi camp, however, has already been almost completely cultivated with beans and bananas.

COMMUNES

Integrated commune rehabilitation

The IOC Commune Rehabilitation Committee has produced a plan which focuses on communes instead of camps. Some international organisations have agreed to this approach, including UNICEF, World Bank, WFP, UNDP and CIDA. It is essential that this plan is integrated with other national rehabilitation and reintegration plans. In order to allow the camps to empty soon, rehabilitation of priority receiving communes must be pursued urgently.

INFORMATION CAMPAIGN

Current activity

The information campaign in the camps is currently suspended while judicial procedures and the security situation in home communes are being addressed. Field officers and IOC staff are building comprehensive information on home communes to allow a more accurate grasp of realities, commune by commune, and to enable better targeting of rehabilitation assistance to communes that will receive many IDPs.

Future plans

What is needed is a powerful information campaign to be relaunched in the camps and in the communes, encouraging discipline and tolerance and giving detailed factual information about individual communes, judicial procedures and government policies. This must however be accompanied by real improvements in the home communes if it is to have any credibility with the many in the camps who wish to go home. It is on these improvements that the Task Force and the IOC are currently focusing in order to be able to relaunch the information campaign.

DATABASE

Database partnerships

UNAMIR and WHO Kigali have both provided database information to assist the creation of the IOC integrated humanitarian database. The State University of Michigan (USA) plans also to send database information on Rwanda, compiled before April 1994, covering health, agriculture, education and population.

VISITS

CIDA Visit

A delegation from the Canadian Government Development Agency (CIDA) visited the IOC on 15 Mar and 17 Mar. On 16 Mar the IOC assisted the delegation to visit communes in southern Kigali.

prefecture with a view to funding rehabilitation programmes at commune level. The delegation made clear their desire that the government take the lead role in all rehabilitation programming and documentation, with NGOs fitting their programmes into the government-led agenda. The IOC for its part should include all concerned Ministries in rehabilitation planning.

COORDINATION

Development of future plan for camps

The government continues to make clear its consistent policy that the camps must close. At the same time, it has publicly committed itself to the principle of voluntary and safe return for those innocent of crimes. Those accused of crimes must face due legal process. The difficult task facing the government and international community in partnership is that of combining these factors into a single, workable plan.

Integrated Task Force

The main focus of the Task Force's work was again the formulation of this plan. The latest draft, developed by a working group set up by the Task Force, will be presented to the Task Force on 20 Mar. If approved by all concerned parties, it will go before Ministers for provisional approval. In the meantime efforts continue to improve the situation on the ground.

Current strategy

While further plans are being produced the strategy is to continue providing transport to those who wish to return home while tackling the problems that are hindering innocent people from deciding to return.

Integrated Operations Centre

Work continued on integrating Ministry staff with international staff, and on training new arrivals. The total number of full-time staff is now 7 Ministry officials and 14 international personnel (supplied by UNHCR, WFP, FAO, UNDP, IOM, UNAMIR and UNREO). There are 18 Ministry personnel and at least 20 international personnel working part-time. The IOC Human Rights Cell held its first full meeting on 17 Mar. The main initial focus of its work is quick practical assistance to judicial authorities in the 13 communes due to receive most IDPs.

Integrated Humanitarian Response

The office of the Humanitarian Coordinator for Rwanda has issued a comprehensive Humanitarian Situation Report (15 March 1995) which addresses a wide spectrum of issues that impact on the Integrated Humanitarian Response in Rwanda.

IDP BULLETIN

Update

COMASC

693-8-
F110 2/4/3
94
93 18/2/3
F110

INTEGRATED OPERATIONS CENTRE (IOC) OPERATION RETOUR WEEKLY REPORT 6 - 12 MARCH 1995

Kigali

13 March 1995

SUMMARY

40,000 transported

The number of IDPs transported by vehicle under Operation Retour since it began on 29 Dec 94 exceeded 40,000 on Fri 10 Mar. An estimated 40,000 have walked home in that time, giving an approximate total of around 80,000 thought to have returned home so far under Operation Retour. The rate of return to home communes remained very slow this week, with security issues still the main reason for this.

Movement into camps

There are confirmed recent cases of people walking from their homes into camps.

Future of IDP camps

The Integrated Task Force concentrated its efforts on agreeing a plan for the future of the IDP camps, in particular for those in the camps who do not wish to go home.

Environmental impact

NGOs are now conducting environmental impact surveys in abandoned camps.

? 22

SECURITY

Infiltration attempt

On 4 Mar the RPA arrested 4 men in Kigali who were in possession of mines and hand grenades. Five other men escaped. Those arrested claimed to have come from Mugunga camp in Goma in an attempt to destabilise the country.

Arrests

The RPA continued to arrest people in home communes, including recently returned IDPs, on suspicion of having participated in the genocide. This was particularly noticeable in Ntongwe and Murama communes in Gitarama prefecture. Cases are gradually being investigated as resources permit.

IOC Kigali - Rwanda - Tel: 250 73744/5/6/7

General security situation

The general security situation is complex. Recent events include cross-border insurgency, banditry, disputes over property and land, accusations of genocide, irregular arrest procedures. According to the Prefet of Kibungo, at least 21 people were reported to have been killed in the Kibungo prefecture and southern Kigali area alone in the month of February. A further 150 were reported missing. It may be that some of these are the victims of criminal or insurgent activity from Tanzania or Burundi. Others may have left the area from fear of attack.

Most returned IDPs still at home

While a number of recent security incidents were serious, the great majority of the perhaps 80,000 people who have returned home under Operation Retour appear to be living in relative security and are still in their homes.

RPA responsibilities

The two disciplined forces present throughout the country are the RPA and UNAMIR. Because police and judicial systems in most cases do not yet function, a heavy burden falls on the RPA. It is the RPA who provide security for civilians, but in most cases it is the RPA also who have the lead role in arresting and detaining suspects.

Judicial system

Civil structures in most cases still have to be put in place to ensure due process of law for those detained. Current events underline this need. Through the new Security/Military Liaison Cell of the IOC, and by local arrangements on the ground, the RPA, UNAMIR and other agencies (notably Human Rights officers, UNHCR and ICRC) monitor arrests and places of detention.

NUMBERS

A total of 840 IDPs were transported home by vehicle under Operation Retour during the reporting period. The daily breakdown showed the usual slight rise for the Monday, as follows:

6 Mar - 353	9 Mar - 186
7 Mar - 144	10 Mar - 157
8 Mar - no transport because of international holiday	

The total number of IDPs transported by vehicle to their homes since the operation began on 29 Dec 94 now stands at 40,039. An unknown number have walked home in that time - probably around 40,000.

CAMPS

New arrivals in some camps

It was confirmed that a number of people have recently walked from their homes into at least

four camps: Nyamigina, Gisunzu, Rwamiko and Kibeho. The new arrivals at Nyamigina are from Kibuye prefecture (Mwendo commune) and Gitarama (Kigoma commune); all the others are from Butare prefecture (Ntyazo, Huye, Maraba, Mbazi communes). In the case of Kibeho the new arrivals number about 170 families - proportionately a very small addition to the camp (population over 130,000). A small outflow from Kibeho camp continues, by vehicle and on foot.

Current camp composition

Otherwise there has been little change in the camps during the reporting period. There remain 9 camps in the southern half of Gikongoro prefecture, where food is distributed by the ICRC. Only one other camp - Musebeya, 15 km north-west of Gikongoro - is still open, with a population of about 2,000. A number of IDPs have moved from the Kaduha and Gikongoro areas to Nyambaragasa, 2 km south-west of Munini camp. They are considered part of Munini camp. The total population of the IDP camps is still estimated to exceed 270,000.

Environmental impact studies

At least two NGOs have been conducting environmental studies of abandoned camps in the northern Gikongoro area, including Rukondo and Cyanika camps. Reports are expected within the next two weeks.

STRATEGY

Task Force work

The Integrated Task Force established a working group to refine options for the future of the IDP camps in the Gikongoro prefecture. The refined options will be put to the Task Force at its meeting later today for provisional approval. Once approved the Task Force will present the preferred option to government Ministers and Heads of Agencies.

Future of the camps

The key problem is how to enable people to go home and the camps to close swiftly while upholding the agreed principles of Operation Retour - namely that return should be voluntary, in safety and dignity. Many in the camps do not wish to go home. A number are accused of serious crimes and should face due process of law. The government wishes soon to remove the security threat represented by the IDP camps. A joint decision on this issue by the government and the humanitarian community is therefore now urgent.

COMMUNES

The IOC Commune Rehabilitation Committee is now established under the leadership of the Director of Rehabilitation, of the Ministry of Rehabilitation and Social Reintegration. It currently includes representatives of the Ministries of Interior and Planning as well as of the UN agencies. Attracting increasing inter-agency and inter-Ministry support, it is concentrating on reinforcing the sectors of agriculture, water and sanitation, shelter, health, vulnerable children:

and women, and schools.

C INFORMATION CAMPAIGN

Immediate plans

The focus of the information campaign is currently on gathering systematic information from home communes. One avenue of such information is through local representatives of government Ministries. Information flows established to facilitate Operation Retour should benefit the government's wider humanitarian information systems.

Future plans

In due course it is intended to relaunch the information campaign in the camps. There is a strong counter-information campaign active among IDPs in the camps, which needs to be countered before large-scale return can be expected.

DATABASE

Work continued on establishing an integrated humanitarian database using digital mapping, as outlined in the last weekly report.

COORDINATION

Integrated Task Force

The Integrated Task Force continued to strengthen its work as the forum producing policy advice and operational guidance for Operation Retour. The main focus of its work is currently the plan for the future of the camps, especially the future of people who do not want to go home. A subsidiary but important concern is practical steps to improve security and security perceptions. This depends on ensuring the wide understanding, observance and monitoring of arrest and judicial procedures throughout the country.

Integrated Operations Centre

Training will be a feature of the IOC's activities over the next few months, alongside coordination of current operations. The aim is to build government capacity to take the lead in coordinating humanitarian operations, programmes and crises in Rwanda, in partnership with international organisations.

Hagih

INTEGRATED OPERATIONS CENTRE
(IOC)

Kigali

6 March 1995

OPERATION RETOUR - WEEKLY REPORT
PERIOD 27 FEBRUARY TO 5 MARCH 1995

SUMMARY

Security issues continued to dominate Operation Retour. A key local government official was shot dead. Numbers of displaced people willing to return home remained low. No major incidents, however, were reported in the camps, whose populations have largely stabilised after the recent large movements.

Operation Retour has entered a phase which requires determined action to address the major factors discouraging people from returning home. To this end the Integrated Task Force has decided to establish a Justice/Human Rights Cell and a revised Security/Military Liaison Cell within the IOC. In addition more government personnel have been made available to work alongside their international counterparts in the IOC.

SECURITY

Security concerns remain the single biggest reason for people not wishing to return home from camps. False rumour is partly responsible, but a number of confirmed security incidents have added to people's fears.

The prefet of Butare, M. Pierre Claver Rwangabo, a key government official, was shot dead in his car at 2100 hours on 4 March about 5 km north of Butare. His son and his driver were also killed, and his RPA guard wounded. There were reportedly 5 assailants in jeans and long coats. Their identity is still not known. The funeral of the prefet was held today, 6 March.

The former acting bourgmestre of Nyamagabe (the commune in which Gikongoro town lies) and the former acting bourgmestre of Rukondo were arrested on suspicion of participation in genocide. Enquiries continue.

UNAMIR reported that a UNAMIR guard post in Byumba was attacked with 2 grenades on 5 March. Two soldiers were injured. It is not known who was responsible for the attack.

The Operation Retour Weekly Report dated 20 Feb reported the abduction of a businessman from Gatigita village near Mbuga camp on 14 Feb. Investigations have since revealed that after being abducted by the RPA, the man spent 4 days in Muko jail followed by 3 days in Kaduha jail. He was then released without charge and is now at home. Reports that he was robbed and assaulted are still being investigated by the RPA.

NUMBERS

Numbers of people transported from camps to their homes remained low, largely because of security fears. The total for the week was 582, the majority of whom moved from Kibeho camp to Butare communes. The total figure transported by vehicle from camps since Operation Retour began on 29 Dec 94 now stands at 39,199. A substantial unknown number of others have walked home. No transport was provided on 2 March because of the UN holiday. Daily figures were as follows:

27 Feb - 158 1 Mar - 62
28 Feb - 176 3 Mar - 186

CAMPS

Kibeho camp was reported relatively calm since the killing of 3 inhabitants on 26 Feb by the RPA. Investigations continue into the details of that incident. No major incidents were reported in other camps. Population movements between camps are now small. The camps appear to have stabilised after the emptying of more northern camps seen over the past few weeks.

The camps now remaining are Kibeho (approx 120,000); Kamana (approx 34,000); Ndago (approx 55,000); Munini (approx 21,000), Rwamiko (approx 22,000); Ruramba (approx 11,000); Nyamigina (approx 2,000); Bivumu/Gisunzu (approx 2,000); Buhoro (approx 8,500) and Musebeya (approx 2,000). Of these, all but Musebeya are supplied with regular food distribution by the ICRC. Because of recent movements the population figures are far from precise. They do however give a rough indication of IDP distribution, and an approximate total IDP population for the Gikongoro area in excess of 270,000.

STRATEGY

The current transport strategy is to provide transport for those who wish to take advantage of it. There is a steady but small flow of people, particularly from Kibeho camp, willing to be transported home. The Integrated Task Force is examining options for the future of the camps now that movements between camps have reduced. In the meantime it continues to address the security and other issues that are discouraging IDPs from returning home.

INFORMATION CAMPAIGN

With the assistance of DeLorme Mapping USA, and their non-profit arm ResponseNet, an integrated humanitarian database is being created in the IOC using digital mapping. A number of international organisations have indicated their willingness to contribute to the system, which is some weeks away from being fully operational.

COORDINATION

Integrated Task Force Field Visit. The Integrated Task Force visited Kibeho camp, Runyinya

C commune and Butare on 27 Feb. At Kibeho they interviewed eye-witnesses of the killings of 3 people the previous day by the RPA. A large meeting was held at which questions were put by residents and responded to by the Task Force chairman, the Director-General of the Ministry of Rehabilitation and Social Reintegration. The population was jumpy, evidenced by near panic when a scare was started by ringleaders in the crowd. At Butare the Task Force discussed current operations with Operation Retour field partners and with the prefets of Butare and Gikongoro. The need for clear arrest procedures to be understood and followed was highlighted. The Task Force also received reports of recent attacks on communes apparently committed by people travelling from IDP camps or from Burundi.

New Justice/Human Rights Cell. The Task Force has requested high-level Ministry of Justice assistance to address issues concerning judicial and arrest procedure. A new Justice/Human Rights Cell in the IOC will follow these issues.

New Security/Military Liaison Cell. Similarly, the Ministry of Defence has been requested to assist work on improving security in general and respond to individual security incidents in particular. A new Security/Military Liaison Cell in the IOC will provide a forum for this.

Ministry personnel assigned to IOC. A number of government Ministry personnel have been assigned to the IOC to work alongside their international counterparts. The aim is to ensure integration of operational discussion, decision and action at every level, with the government taking the lead. The Ministry of Rehabilitation and Social Reintegration has provided most government personnel. Other Ministries involved are Defence, Interior, Justice, Planning, Information, Public Works and Health.

IDP BULLETIN

27 FEBRUARY 1995 KIGALI, RWANDA

Update

INTEGRATED OPERATIONS CENTRE (IOC) OPERATION RETOUR WEEKLY REPORT 20-27 FEBRUARY 1995

SUMMARY

Security

Security incidents took centre stage. Most serious was the killing of 3 people by the RPA in Kibeho camp on 26 February. Reports of other security incidents, especially in home communes, have risen in number over the last two to three weeks.

Figures

Numbers of people willing to be transported to their home communes from the camps fell for the fourth successive week. The total of 1,506 IDPs transported is less than one-sixth the figure four weeks ago. There is wide agreement that the rise in security incidents and the numbers of arrests is the single biggest, though not the only, reason.

SECURITY

Incidents on 21 February

There were three security incidents in the camps reported as significant during the week. Two occurred on 21 February, and are still under investigation. In the first incident, 4 people were hospitalised after being beaten in Kibeho camp. In the second incident, also in Kibeho camp, a businessman's house was entered and his wife beaten and hospitalised.

Incident on 26 February

A very serious security incident took place in Kibeho camp on 26 February. Again, investigations are still in progress but the following facts have been established from interviews held with eye-witnesses. A number of RPA soldiers were menaced by an angry crowd which surrounded the UNAMIR base where the RPA soldiers were. The RPA were there to negotiate the handover of two men in UNAMIR's custody. A grenade exploded in the base beside an RPA vehicle - accounts differ as to the origin of the grenade. The vehicle received superficial damage. No casualties resulted. Subsequently, against the advice of the local UNAMIR commander, the RPA decided to depart from the base and leave the camp, firing into the air to clear their path through a now furious crowd. Many in the crowd were threatening the soldiers with machetes, sticks and stones. One soldier was struck on the head causing bruising. At some point an RPA soldier or soldiers fired into the crowd. This resulted in 2 adults and 1 small child being killed, approximately 500 metres from the UNAMIR base. At least one other person was wounded.

south to other camps.

Likely stabilisation

Unless security incidents in the camps recur, the camp populations are likely to stabilize for the time being. Few camps remain open outside the large southern camps. The flow of people from north to south should therefore reduce. An increase in transfer of people between the southern camps is now reported, as new arrivals move to join their commune groups and seek the camp where they sense the greatest security.

Population counts

The large movements have made it very difficult to count camp populations. This in turn is causing problems with registration for food distribution and other services. Logistic resources are also stretched by the much larger numbers now in the southern camps. The overall effect is to increase confusion and reduce confidence - again negatively affecting people's readiness to return home.

FOOD

Distribution in camps

The ICRC continues to distribute food in eight southern camps, as agreed by Government and International humanitarian partners in the Integrated Task Force

COMMUNES

Comparative situation

The general situation in receiving communes in South Kigali and Kibungo prefectures appears considerably better than in Butare and Gitarama receiving communes. Some attacks in Butare and Gitarama communes reportedly come from IDP camps or from Burundi. Operation Retour is weakest in its systematic knowledge of events and conditions in home communes - hence the current shift in focus of the information campaign (see below).

Movement from camps to communes

There appears to be some movement of people from communes into camps. Suggested reasons include the increase in arrests in communes, and criminals making good their escape from arrest soon after committing a crime.

Commune Rehabilitation Committee

The Commune Rehabilitation Committee in the IOC aims to assist agencies and NGOs in ensuring the rehabilitation of communes, by providing information and a forum where common plans can be agreed.

INFORMATION CAMPAIGN

Hostile response

Information campaign personnel met with hostility in the camps on several occasions. The work of the campaign will now switch from the camps, provisionally for the next two weeks, to building up detailed knowledge of the situation in receiving communes, particularly in the Butare area where knowledge is the weakest. The campaign will then be in a better position to provide solid information to people in the camps in order to assist them to decide whether or not to return

COORDINATION DE LA SURVEILLANCE EPIDEMIOLOGIQUE
OMS/KIGALI

95/786

RAPPORT DE VISITE DE 2 CENTRES DE RECEPTION
DES REFUGIES DE 1959 A GISENYIPr. M.K. MAIGA
13.03.1995JUSTIFICATION

Au cours de la réunion de Sécurité tenue au PNUD le lundi 13.03.1995, le Représentant de l'UNAMIR a fait le compte-rendu de la visite de l'agence le 12.03.1995 dans ces 2 centres. Ils y ont constaté des conditions d'hygiène et d'assainissement désastreuses et une population totalement démunie exposée aux risques d'éclatement d'épidémie de choléra. En effet dans ces 2 centres situées dans des écoles avec une population de 9 000 personnes, les toilettes étaient bouchées depuis plusieurs jours parce que les fosses septiques étaient remplies et leur contenu de selles se déversait dans les alentours.

OBJECTIFS DE LA MISSION

Faire une investigation des risques d'épidémie de choléra dans les centres de réception des réfugiées de 1959 à Gisenyi.

Une mission de l'OMS a été dépêchée en urgence sur Gisenyi le même jour

Observations:Personnes rencontrées :

- Docteur Sarambuye B. Erasme, Directeur de l'Hôpital de Gisenyi
- Gabi Muranaka HCR Gisenyi
- Holly Berman HCR Gisenyi
- Responsables des 2 centres de réception.

BK
PB
MF
ICC
info
NPO

Pour le Directeur de l'Hôpital, il n'y a pas pour l'instant d'épidémie dans les 2 centres, mais toutes les conditions sont créées pour qu'il en est une. L'hôpital avait fourni du matériel de désinfection des toilettes à la demande des responsables des centres.

Il y a eu deux cas dictère en Janvier et en Février 1995, mais aucune recherche d'hépatite n'a été faite. Il n'y a pas eu de cas de choléra.

Au niveau du HCR, la représentation est consciente de la dégradation de la situation sanitaire dans ces centres depuis un certain temps. Le HCR collabore avec une ONG italienne COOPI pour la gestion des centres mais essentiellement pour la distribution des rations alimentaires, du matériel non alimentaire et du bois de chauffe. Les services de santé du premier centre devraient être assurés par le dispensaire à côté de l'Ecole des Infirmiers. Le deuxième centre bénéficie d'un dispensaire à l'intérieur du Collège appuyé par MSF-Belgique.

Pour l'assainissement des centres, le HCR collabore avec le Ministère de la Réhabilitation. Une opération d'assainissement de ces réfugiés dans les communes est en cours de préparation.

D'après le responsable du premier centre, les réfugiés sont rentrés à Gisenyi depuis le 24 Décembre 1994. Les conditions d'hébergement sont aléatoires.

Ils se couchent entassés à même le sol dans les salles de classe et les dortoirs des écoles. Les sanitaires ne suffisent pas pour répondre aux besoins du nombre important (4000 pour le premier centre et 5000 pour le deuxième centre) des rapatriés. Les installations sanitaires n'ont pas été renforcées pour répondre aux besoins des occupants.

Chaque jour il y a 200 à 300 personnes par centre qui fréquentent le dispensaire du centre de santé à côté et le dispensaire du Collège. Cet afflux dépasse les capacités d'accueil et de services des infrastructures. Les cas de gâle, bronchite et de la parasitoses sont très nombreux parmi les enfants.

Après ces rencontres, la mission de l'OMS a visité les toilettes, les dortoirs, les cuisines de fortune. Un certain nombre d'enfants ont été examinés. Elle a constaté à l'Ecole des Infirmières les faits suivants :

- coupure d'eau dans tous les bâtiments depuis 3 jours,
- les toilettes sont inondées de partout par les selles,
- les espaces libres de la cour servent de lieu de défécation pour les enfants et même pour certaines grandes personnes,
- les cuisines à l'air libre ne sont pas protégées,
- pas de drainage des eaux usées et pas d'enlèvement des immondices,
- chez les enfants, nous avons constaté des cas de dermatoses surinfectées, des conjonctivites et quelques cas de dysenterie, leur état nutritionnel est satisfaisant.

Analyse de la situation

La situation des rapatriés dans ces centres est marquée par une concentration humaine très importante de 9000 personnes sur un espace réduit. La grande promiscuité et la précarité de l'hygiène ainsi créées facilitent de toute évidence l'expansion rapide des épidémies de choléra, de dysenterie, de méningite, de rougeole, ou autre.

La dégradation des conditions d'hygiène est due à l'inadéquation des installations des sanitaires par rapport au nombre de personnes vivant dans les centres. L'organisation sociale interne de la population est très rudimentaire et ne permet de mener aucune activité d'ordre communautaire. Il n'y a pas de distribution de savon. L'accès aux services de santé des dispensaires est limité à cause de l'insuffisance de ressources propres et le manque d'équipement. Par exemple la distribution de médicaments au niveau des dispensaires ne couvrent pas toutes les consultations journalières. En somme les conditions d'éclatement d'une épidémie de toute nature sont réunies et aucune mesure de prévention et de contrôle n'a été mise en place.

La mission est retournée au HCR pour discuter des mesures d'urgence à prendre

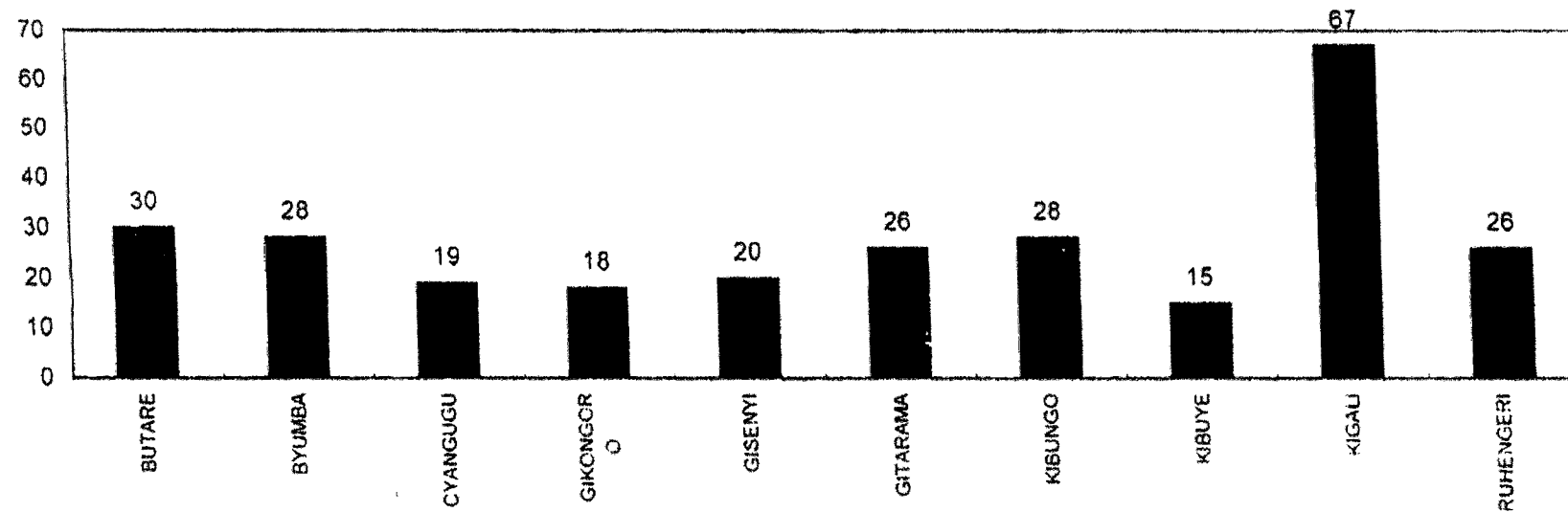
- Après la visite du 12.03.1995, l'UNAMIR a envoyé à Gisenyi le 13.03.95 un camion citerne pour faire le vidange des fosses septiques, enfouir les immondices en dehors de la ville, et après nettoyer à l'eau et désinfecter les toilettes.
- Le HCR se propose de demander à MSF Belgique de prendre en charge la couverture sanitaire des deux centres.
- Une pulvérisation des centres à l'hypochlorite de Ca est planifiée par le HCR.
- La réunion de coordination des ONG qui se tiendra le Jeudi 16.03.1995 à Gisenyi discutera du problème.

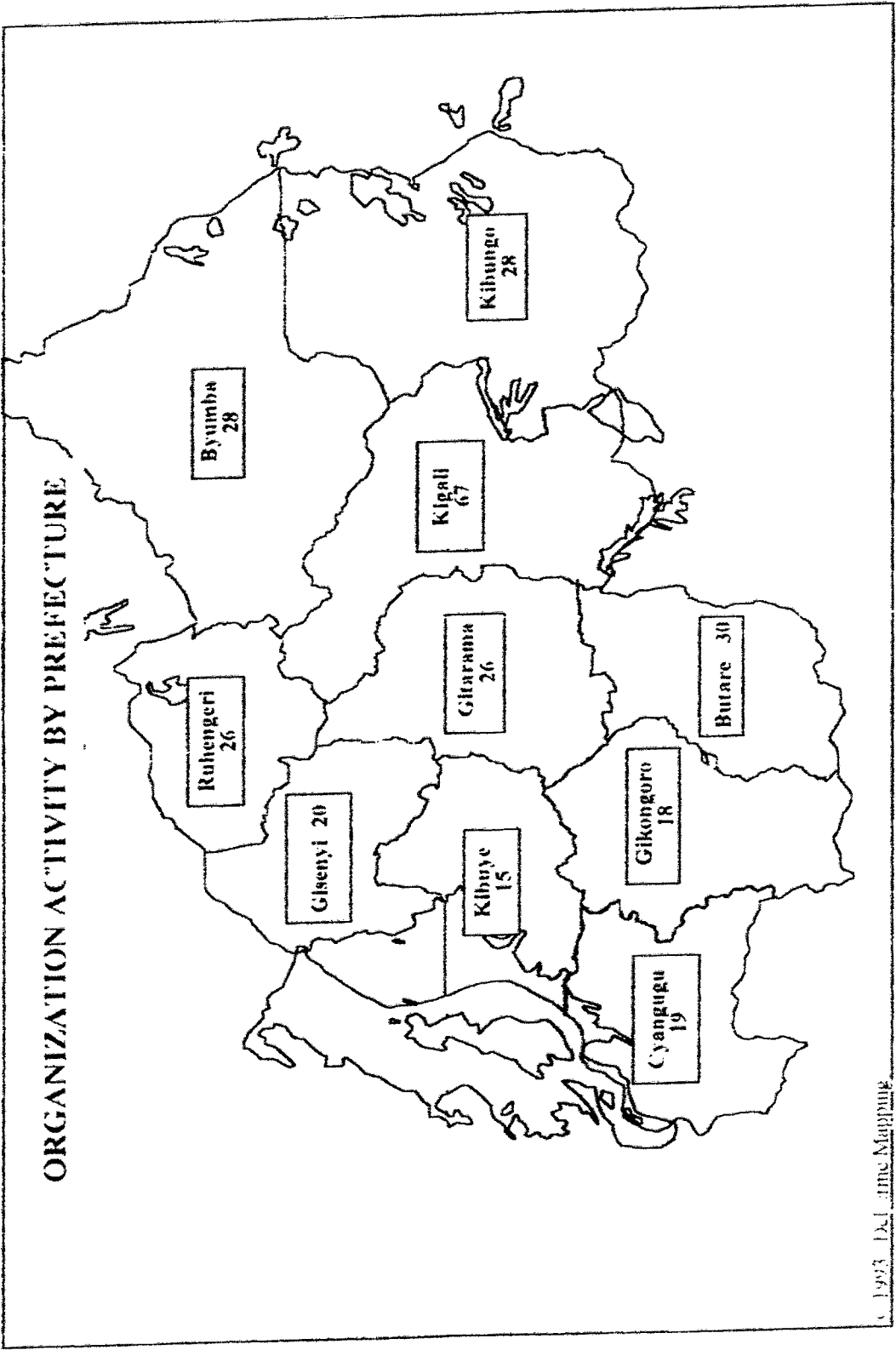
Mesures préconisées par l'OMS

- Elaboration d'un plan de contingence pour la situation d'urgence dans les 2 centres et pour contrôler les risques d'épidémie.
- Proposer un groupe de task force choléra lors de la réunion de coordination ONG/Ministère de la Réhabilitation le Jeudi 16.03.1995 à Gisenyi.
- Commander des Kits pour 10 000 personnes à mettre à la disposition des centres.
- Suivre l'évolution de la situation épidémiologique en collaboration avec le HCR et la Direction Régionale de la Santé.
- Participer régulièrement aux réunions de coordinations des ONG/Ministère de la Réhabilitation à Gisenyi pour faire le feedback de la situation sanitaire dans les 2 centres.

ORGANIZATION ACTIVITY BY PREFECTURE

PREFECTURE	# ORG'S	% IN HEALTH	% IN AGRI	% IN FOOD	% COMM DEVT	% IN W&S	% MINORS	% OTHER
BUTARE	30	23%	13%	23%	18%	8%	8%	10%
BYUMBA	28	38%	14%	19%	3%	14%	11%	3%
CYANGUGU	19	36%	20%	24%	12%	4%	0%	4%
GIKONGORO	18	27%	9%	14%	23%	8%	15%	0%
GISENYI	20	40%	15%	25%	5%	0%	10%	5%
GITARAMA	26	28%	14%	22%	10%	8%	14%	4%
KIBUNGO	28	28%	15%	9%	22%	9%	15%	2%
KIBUYE	15	28%	20%	20%	16%	8%	8%	0%
KIGALI	67	27%	12%	15%	13%	7%	19%	8%
RUHENGERI	26	28%	19%	22%	13%	9%	6%	3%





**RWANDESE AND BURUNDI
REFUGEE FIGURES ***

Country of Asylum	Country of Origin		Total	Previous total
	Burundi	Rwanda		
Burundi	—	284,000	284,000	284,000
Rwanda (1)	6,000	—	6,000	6,000
Tanzania (2)	62,000	582,000	644,000	641,000
Uganda	—	4,000	4,000	4,000
	Bukavu (3)	—	347,000	348,000
Zaire	Uvira (4)	134,000	46,000	180,000
	Goma (5)	—	743,000	743,000
TOTAL	202,000	2,006,000	2,208,000	2,205,000

* All figures are estimates excepted for Goma.

21.02/95

(1) The number of Burundi refugees should be broken down as follows :

- 2,200 in Kigeme
- 186 in Kigali ville
- 505 in Kigali rurale
- 200 in Bugarama (Cyangugu)

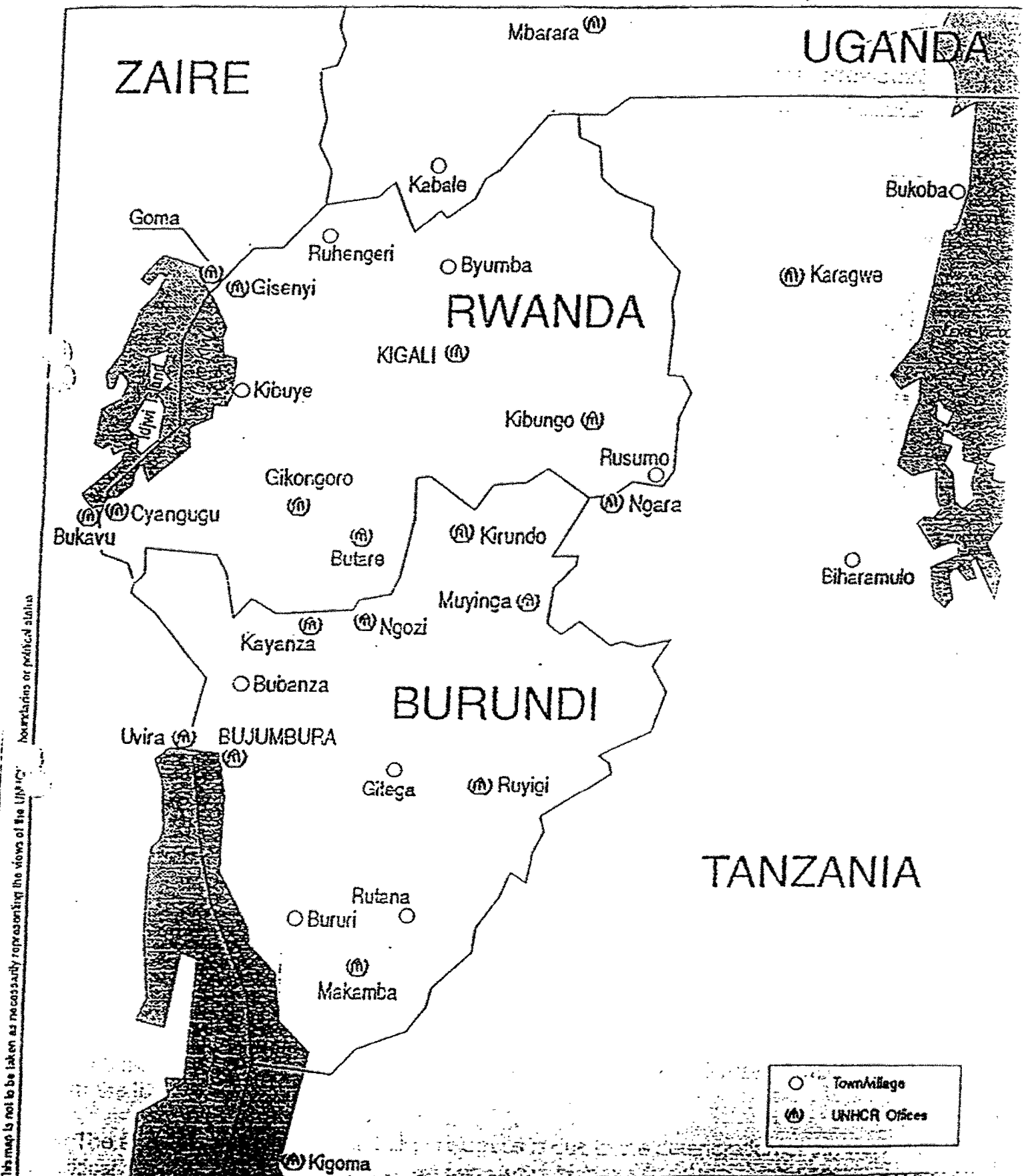
It is estimated that about 3,000 refugees are not registered with UNHCR or the Government and are "free liners" in Rwanda.

(2) Due to the deteriorating situation in Burundi, from 13 to 17 February, between 3,000 to 5,000 Rwandan refugees have entered Tanzania and another estimated 15,000 Burundi refugees are presently at the border, ready to move into Tanzania if the situation further deteriorates.

(3) During January, sub-office Bukavu carried out an informal head count which led to about two per cent reduction in the number of refugees. However, it has also been reported that about 1,000 Rwandan refugees have arrived in Bukavu coming from the IDP camps in Rwanda.

(4) The slight increase in the number of refugees is due to the deterioration of the political situation in Burundi. For the last two weeks of January, an average of 50 to 150 refugees a day were coming from Bujumbura and Cibitoke.

UNHCR OFFICES IN THE EMERGENCY AREA



This map is not to be taken as necessarily representing the views of the UNHCR. Boundaries or political status

/0109

WHS 10/17/95
SITREPS OTHERS

**FROM : WHO SPECIAL COORDINATOR
TO : UNREO
ATTENTION : IN COUNTRY REPORT**

RU
PB
Lup
IOC
MF
NGO

EPIDEMIOLOGICAL SURVEILLANCE

The most important events this week in the field of the epidemiological surveillance are as follow :

- Meeting with national programme managers of Tuberculosis and Lepra, AIDS, Malaria, EPI, and CDD/ARI to discuss about their contribution for to health data collection system put in place. The proposed forms have been improved to integrate special needs of these priority programs.
- An update training of the personnel of the epidemiological department at the MOH in Data base Mapping. This training session is an activity of the WHO support project for the reestablishment of nationwide epidemiological surveillance system.

WHO is cooperating with UNREO in setting up a common data base to monitor the returnees flow. The joint data base will provide information on returnees resettlement and on district population.

AIDS

WHO support to the national AIDS Programme is still going on. The weekly agenda is focused primarily on planing aspects.

REFUGEES

A mission has been conducted to visit Reception Centres of 1959 Refugees case load. Health conditions in these centres were very poor because of the lack of proper resources. UNHCR and WHO in conjunction with local NGOs such MSF, Caritas, Merlin and German Emergency have decided to elaborate a contingency plan to relieve the situation. A plan of action to prevent epidemics and to provide basic health care has been elaborated and will be implemented.

OTHER ACTIVITIES

After the WHO Seminar on the Adolescent health which took place in Dakar Senegal (2/27 - 3/10/1995) and in which Rwanda was represented, WHO will finance a Government project which aims to improve the adolescent accessibility to the health services.

C

CORRESPONDENCE DISTRIBUTION
COVER SHEET

for file

File No. 445-16-1

Correspondence No. _____

To: FMO *for info* Remarks/Action: 24/2

Med Ops

Med Log ☒

FHO ☒

RD 23/2

IN PASSED FROM KIDG CARRER - NOTED

Please initial and date when action complete then pass quickly.



Headquarters Australian Defence Force
Department of Defence
CANBERRA ACT 2600

44/95

SURGEON GENERAL
AUSTRALIAN DEFENCE FORCE

FACSIMILE MESSAGE / COVER**Classification: UNCLAS****Message Number: DHPI 3172/95****Precedence:****PRIORITY****Facsimile Addressee:**

LTCOL B.R. Curren,
SO HEALTH OPS ASC 2
UNAMIR II
C/- RHC
Lavarack Barracks
TOWNSVILLE QLD

Facsimile Number (077) 711 699

Telephone Number (015) 103091

Facsimile Originator:

LTCOL B. Morgan
SO1 HP (CP4-6-22)
Directorate of Health Planning and
Intelligence
Operational Health Support Branch
CANBERRA ACT

Facsimile Number (06) 266 3933

Telephone Number (06) 266 3934

Subject Title:**GENERAL MEDICAL INFORMATION REPORT**Facsimile Reference:
SG94-23168

Date 16 Feb 95

Number of Pages: 10

Releasing Officer Sign**Printed Name:****B. MORGAN****Rank/Appointment:****LTCOL / SO1 HP****Instructions/ Comments:****Please pass to LTCOL B.R. Curren.****Brian,**

Attached is a copy of a CA Post Deployment Medical (HI) Report for your information.
The contents may be useful.

*Regards,***Barry**

This affair was in Rwanda for 10 weeks - provision a M report.
Ours have been there for 6 months & have received nothing
JF.

ANNEX A
TO 1243-6 TD 94020 (DMO)
7 Dec 94

GENERAL MEDICAL INFORMATION REPORT

DEPARTMENT OF NATIONAL DEFENCE (DND)

DATE: 19 November 1994
COUNTRY: Rwanda, Central Africa
FROM: 09 August
TO: 17 October 1994
SOURCE: Medical officer 2
RELEASED TO: DSTI, DICPD, CDLS(W) CFMLO
CLASSIFICATION: Unclassified

A. GENERAL INFORMATION:

1. GEOGRAPHICAL LOCATION;
2-3 degrees south of Equator, Eastern-Central Africa
Altitude - 8000 to 9000 ft
2. MAP GRID COORDINATES;
Mareru, north/west Rwanda
3. TOPOGRAPHY;
Very hilly/mountainous around Mareru
4. CLIMATE;
Cool, wet most days
5. TEMPERATURE RANGE;
10-18 degrees C

A-1/9

6. EVACUATION POTENTIAL; (roads, airfields, ports, transport times)

Air transport (UN helicopter) - 1/2 hour to Kigali.
Road transport - 1/2 hour to Gisenye, 3/4 hour to Ruhengeri, and 3-4 hours to Kigali.

B. SOCIAL AND POLITICAL FACTORS OF MEDICAL IMPORTANCE:

1. ECONOMIC AND POLITICAL INFLUENCES;

People are very poor and very few jobs are available. The war has dislocated the peoples lives. No schools open from beginning of the conflict until October 1994 and teachers are still not paid.

2. POPULATION DENSITY AND REGIONAL DISTRIBUTION;

Many small villages dotted around the countryside. Many houses were found empty since the beginning of the war (occupants dead or have migrated to Zaire).

3. LIFE EXPECTANCY AND INFANT MORTALITY;

High infant mortality due to lack of even basic medical/hygiene facilities locally and also lack of affordable transport.

4. CUSTOMS AND RELIGIOUS PRACTICES;

Woman relatively low in hierarchy. All members of the family eat food with fingers out of communal pot, increasing transmission of diseases. Small amount of drinking water was available, no hand washing.

C. DISEASE EPIDEMIOLOGY:

1. ENTERIC OR DIARRHEAL DISEASES;

Epidemic of Shigella dysentery, tailing off at the beginning of October 1994.

- a. Occurrence

From Goma in Zaire to Ruhengeri in north/west Rwanda

- b. Methods of control

None, except for Canadian Forces Preventive Medicine Technicians work at 2nd Field Ambulance located in Mareru located between Goma and Ruhengeri in north/west Rwanda

2. RESPIRATORY DISEASES;

Lobar pneumonia

a. Occurrence

Mainly children under 5 years old, and a few elderly people. Often severe and fatal.

b. Methods of control

None. No heating in houses and clothing is inadequate for the local villages altitude (8000-9000 ft).

3. SKIN DISEASES;

Very common, especially head lice and scabies

a. Occurrence

Children (pre-pubertal)

b. Methods of control

None in local population

4. SEXUALLY TRANSMITTED DISEASES;

Common. Gonorrhea, chlamydial diseases and non-specific urethritis. AIDS is probably on the rise.

a. Occurrence

Mainly young adults.

b. Methods of control

None. No supply of condoms to local population.

5. VECTORBORNE DISEASES;

Malaria, filariasis, schistosomiasis

a. Occurrence

Malaria among people mainly from Zaire

b. Methods of control

None in local population

6. OTHER; nil

D. HYGIENE SANITATION:

1. WATER;

a. Source

Mainly stand pipes along main road, rivers and streams

b. Quality

Contaminated

c. Quantity

Considerable amount during rainy season. Much less during dry season of the year

d. Capabilities to treat and distribute

None. Local population is drinking untreated water

2. ORGANIC MATERIAL (WASTE) MANAGEMENT;

None

3. NONORGANIC MATERIAL (GARBAGE, TRASH) MANAGEMENT;

None

4. INDUSTRIAL POLLUTION

Not observed in Rhuengeri and Gisenye.

5. FLY/INSECT VECTOR POPULATION;

Flies common.

a. Occurrence

No mosquitoes in Mareru (8000-9000 ft) altitude

b. Methods of control

None in local population

6. STRAY ANIMALS;

a. Occurrence

Wild dogs

b. Methods of control

None in local population. Animals were shot when they entered the Field Hospital.

c. Rabies

None was seen or investigated

7. ILLICIT DRUG AVAILABILITY;

a. What types
Cocaine

b. Where available

A local man came to the gate of the Field Hospital with intent of selling drugs (cocaine). He was arrested, questioned and subsequently released.

8. PROSTITUTION;

a. Is solicitation legal

Not observed

b. Where does it occur

Not observed

c. Health risk estimate

Not reported

E. PLANTS AND ANIMALS OF MEDICAL IMPORTANCE:

1. PLANTS;

Not known

2. ANIMALS;

Not known

F. CIVILIAN HEALTH SERVICES:

1. PUBLIC HEALTH SERVICES:

Hospital in Gisenye was empty with no local doctors. Two MSF doctors worked there only temporarily. Hospital in Ruhengeri was also empty. However, first British, then Canadians, and finally MSF doctors worked there on the temporarily basis.

a. Organization and administration

None to be seen. Further comment is expected in a more detailed follow up report

b. Routine and emergency medical capabilities

None

c. Sanitation and living conditions

Very poor sanitation. Huts without electricity, water, and sanitation

d. Nutrition

Poor. Daily diet usually beans and potatoes or rice supplemented with vegetables (corn, cabbage, tomatoes). Rarely meat. One meal a day.

e. Drug and substance abuse

Occasional alcohol abuse among local population was observed

f. Insect and pest control measures

None locally. No organization for this at all

g. Pesticide production facilities

Not known

2. HEALTH CARE FACILITIES:

a. Location

One in town of Gisenye and one Ruhengeri

b. Proximity to airports and/or sea ports

Gisenye is very close to Goma airport across the border with Zaire (approx from 1/2 to 1 hour road transport)

c. Addresses and telephone numbers

None

d. Description;

No personnel, buildings were empty

(1) Capacity and Physical Plant

Not observed

(2) Quality and quantity of medical staff

Not observed

(3) Emergency medical services

Not observed

(4) Casualty evacuation (ground/ambulance service)

Not observed

(5) Health specialist support

Not observed

(6) Medical material support

Not observed

(7) Blood banking capabilities

Not observed

(8) Clinical laboratory capabilities

Not observed

G. MILITARY HEALTH SERVICES:1. ORGANIZATION AND STRUCTURE;

A-7/9

Not observed

2. LOGISTICS, TREATMENT, EVACUATION CAPABILITIES;

Not observed

3. QUALITY OF HEALTH CARE AND HEALTH CARE PROFESSIONALS;

Not observed

H. NARRATIVE SUMMARY:

1. For an operation as large as Op Passage, it is very advisable to have a tropical disease expert on site. CF tropical disease specialist visited us from Kigali every 2 weeks.

2. Preventive Medicine Technicians (PMed Techs) were efficient in keeping Canadians and the FD Hospital clear of epidemic diseases and maintained good field sanitation standards. However, they do not know how to teach especially primitive peoples about elementary sanitation. A golden opportunity was lost. There should have been periodic talks to the crowd waiting outside the gate perimeter of the Fd Hosp.

3. A Lab Technician who has recently done a course on the recognition of tropical diseases would be an asset and therefore it is recommended for future deployments. He should be supplied with all the necessary reagents and culture media to do an effective job.

4. The lack of a proper laboratory was a significant deficiency. The Australian hospital laboratory at Kigali was also limited, even though a good vehicle could get there and back in a day if he left early (road blocks, curfew, dangerous road conditions was making this trip difficult).

5. Even though Fd Hosp was left without a local surgical team and could evacuate to Gisenye (obstetrics only) or Rhugengeri, a minor surgical set with a bone saw, nibblers, ect.. would have been very useful for trimming traumatic amputations (land mine and grenade cases) before evacuation to limit crush syndrome and make the patient more transportable.

6. Finally, Fd Hospital staff did not receive any regular news updates and mail delivery was very slow, creating feeling of isolation. It is therefore, recommended that news papers and magazines will be available in the future operations.

SOURCE COMMENT:

1. This report was obtained from LCdr C.A. Harwood, a medical officer who spent 10 weeks with 2nd Field Ambulance, Canadian Forces in Mareru, north/west Rwanda as a part of humanitarian relief effort - Operation Passage.
2. More information on Operation Passage will be obtained from CO of 2nd Field Ambulance LCol J. Anderson in December 1994.

A-9/9

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO

Remarks/Action:

Med Ops

☒ Med Log

FHO

23/2

25/2

Keep

I have copied to Ausmed

24/2

Please initial and date when action complete then pass quickly.

Cover Sheet Classification
UNCLASEnclosure classification
UNCLASDepartment of Defence
Land Headquarters

FACSIMILE COVER SHEET

PAGE 1 OF 6

A.S.C. UNAMIR II

Folio

Folio

File Number	K . 95 00050	Fax Number:	Senders Name/Initials
PRECEDENCE	ROUTINE	DTG Sent:	
Facsimile Address		Facsimile Originator	
ASC II UNAMIR ATTN : LTCOL CURREN		Operations Branch Land Headquarters Victoria Barracks PADDINGTON NSW 2021	
Unclass Facsimile No : 0011 250 100 00		Unclass Facsimile No	(02) 3601524
Discon Fax No :		Discon Fax No	20212
Telephone No :		Telephone No	(02) 339 3009
Subject Title : PREVENTIVE MED COUNTERMEASURES			

Instructions/Comments:

Sir,
as requested, find enclosed the
documentation provided by MAT Lipnick.

Releasing Officers Name	Signature	Rank/Appointment/Date
J.S.C. WEBB		CAPT / DCPSC / 23 FEB 95

THIS FAX COVER SHEET AND ENCLOSURE ARE TO BE TRANSMITTED IN THE
REQUIREMENTS FOR THE HIGHEST SECURITY CLASSIFICATION CONTAINED HEREINEnclosure Classification
UNCLASCover Sheet Classification
UNCLAS

SG
SGADF(HSC-A) /95

JOC, LAND COMMAND (ATTN: CAPT J. Webb)

**MEDICAL PROBLEMS ASSOCIATED WITH PRISON OVERCROWDING IN RWANDA
AND PREVENTIVE MEDICINE COUNTERMEASURES**

Reference:

- A. Telecon CAPT J. Webb/MAJ R.J. Lipnick 23 Feb 95
- B. Part III, Section II, The Military Medical Officer and the Geneva Conventions

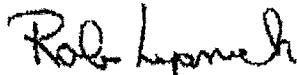
BACKGROUND

1. Overcrowding, particularly in a population of individuals who are confined to a prison in a country that has extremely high rates of infectious disease transmission (eg., tuberculosis, cholera, typhoid, meningococcal meningitis, sexually transmitted diseases including HIV/AIDS, Hepatitis B/C, scabies, pediculosis,...etc), creates the potential for a public health disaster. This situation coupled with poor sanitation, lack of adequate food and water, little or no personal hygiene, minimal medical care, no physical activity, and inadequate shelter from the elements will compound this problem many fold.

2. As requested (Reference A), the following information is provided for the FMO, HQ ASC UNAMIR on some recommended preventive medicine countermeasures for prison overcrowding in Rwanda. Also, attached for his information is a portion of the chapter from The Military Medical Officer and the Geneva Conventions, International Committee of Military Medicine and Pharmacy. (Reference B)

- a. Prison overcrowding must be reduced. Each individual will require some minimal number of square meters. Particularly when sleeping, the distance between individuals should be maximised (ie., sleeping head to foot)
- b. All prisoners currently held need to be medically screened and treated, if appropriate. Those individuals with selected infectious diseases need to be isolated until they are no longer contagious. Pregnant women prisoners will require additional medical support. All new prisoners should be isolated until they are medically evaluated before being placed in the general population. Medical personnel need to make daily rounds in order to identify and treat new medical problems. The use of selected immunisations or drugs should be considered to control or eliminate the potential for epidemics.
- c. All prisoners should be issued new or clean clothing and be required to launder them regularly.
- d. All prisoners should have access to such items as soap, for personal hygiene and washing of their clothes, toilet paper...etc, and their use enforced.
- e. Men and women segregated.

- f. Adequate, nutritious and culturally acceptable food needs to be provided.
 - g. Sufficient quantities of potable water for consumption, food preparation and personal hygiene available.
 - h. Every day individuals should be engaged in some of physical activity/recreation.
 - i. Adequate ventilation, illumination, and heating are essential in reducing disease risk.
 - j. Religious services/practices should be considered.
 - k. High levels of sanitation maintained throughout the prison; proper siting of toilets and food preparation areas; consumption of food in an area distinct from where individuals sleep; proper disposal of refuse; and, control of disease vectors are all critical.
3. The above list is far from complete and it was put together without knowing what specific information was desired. The Health Officer in Rwanda should serve as an excellent source of information in this area. If additional information is required, please contact the undersigned either at the office or home (06-2497651).



R.J. LIPNICK
SO2 PVNTMED
CP4-7-13
Tel 266-3909

23 Feb 95

Enclosure:

1. Reference B

PART III

CAPTIVITY

This part is divided into different sections and chapters dealing with the condition of prisoners in their daily life. For a general view of this part of the Convention, the reader shall refer to the plan here above in the introduction. With the exception of some chapters presenting a very great interest for the military doctor (Section II, chapters III and IV: hygiene and medical attention; status of the medical personnel and chaplains retained to assist prisoners of war), most of the provisions, having a general character for all prisoners of war, will be only summarized.

Section I

BEGINNING OF THE CAPTIVITY

Summary : After his capture, the questioning of a prisoner of war shall be carried out in a language which he understands (Article 17). He is bound to give only his surname, first name and rank, date of birth and army, regimental, personal or serial number, or failing this, equivalent information. No physical or mental tortures, nor any other form of coercion may be inflicted on prisoners of war to secure from them information of any kind whatever. Prisoners of war who refuse to answer may not be threatened, insulted, or exposed to any unpleasant or disadvantageous treatment of any kind.

Prisoners of war who, owing to their physical or mental condition, are unable to state their identity shall be handed over to the medical services.

All their personal effects remain in their possession. Objects which are taken from them shall be returned to prisoners of war at the end of their captivity (Article 18).

Prisoners of war shall be evacuated, as soon as possible after their capture, to camps situated in an area far enough from the combat zone for them to be out of danger.

The Detaining Power shall supply prisoners of war who are being evacuated with sufficient food and potable water, and with the necessary clothing and medical attention (Articles 19 and 20).

Section II

INTERNMENT OF PRISONERS OF WAR

Chapter I

GENERAL OBSERVATIONS

Summary : Most often, prisoners of war are subjected to internment, what involves a restriction of their freedom of motion. However, it cannot be total. According to Article 21, "subject to the provisions of the present Convention relative to penal and disciplinary sanctions, prisoners of war may not be held in close confinement, except where necessary to safeguard their health" (1).

Prisoners of war may be partially or wholly released on parole or promise. Such measures shall be taken particularly in cases where this may contribute to the improvement of their state of health (Article 21, al. 2). Prisoners of war may be interned only in premises located on land and affording every guarantee of hygiene and healthfulness (Article 22 and infra Articles 29 to 32).

Finally, as previously mentioned, no prisoner of war may at any time be sent to, or detained in, areas where he may be exposed to the fire of the combat zone.

Prisoners of war shall have shelters against air bombardment and other hazards of war, to the same extent as the local civilian population (Article 23).

Detaining Power shall give the Powers concerned, through the intermediary of the Protecting Powers, all useful information regarding the geographical location of prisoners of war camps. Whenever military considerations permit, prisoners of war camps shall be indicated in the day-time by the letters PW or PG, placed so as to be clearly visible from the air (Article 24).

(1) Cf. infra Articles 52 to 108.

Chapter II

QUARTERS, FOOD AND CLOTHING OF PRISONERS OF WAR

Summary : Prisoners of war shall be quartered under conditions as favourable as those for the forces of the Detaining Power who are billeted in the same area (Article 25). The said conditions shall make allowance for the habits and customs of the prisoners and shall in no case be prejudicial to their health (minimum cubic space, ventilation, heating, lighting, etc.). In any camps in which women prisoners of war, as well as men, are accommodated, separate dormitories shall be provided for them. The basic daily food rations shall be sufficient in quantity, quality and variety to keep prisoners of war in good health. Clothing, underwear and footwear shall be supplied to prisoners of war in sufficient quantities by the Detaining Power, which shall make allowance for the climate of the region where the prisoners are detained (Articles 28 and 27).

Chapter III

HYGIENE AND MEDICAL ATTENTION

By reason of the importance of this chapter for medical officers, we reproduce it in its whole. A special attention must be given to Article 31 regarding prisoners of war exercising medical functions, but not belonging to the armed forces upon which they depend. Their status is different for the status of the medical personnel, members of the military medical service of the army, and retained for the medical assistance of prisoners belonging to their own armies : this retained medical personnel shall not be considered as prisoners of war (see here below, chapter IV).

ARTICLE 29 - Hygiene.

The Detaining Power shall be bound to take all sanitary measures necessary to ensure the cleanliness and healthfulness of camps, and to prevent epidemics.

Prisoners of war shall have for their use, day and night, conveniences which conform to the rules of hygiene and are maintained in a constant state of cleanliness. In any camps in which women prisoners of war are accommodated, separate conveniences shall be provided for them.

Also, apart from the baths and showers with which the camps shall be furnished, prisoners of war shall be provided with sufficient water and soap for their personal toilet and for washing their personal laundry; the necessary installations, facilities and time shall be granted them for that purpose.

ARTICLE 30 - Medical attention.

Every camp shall have an adequate infirmary where prisoners of war may have the attention they require, as well as appropriate diet. Isolation wards shall, if necessary, be set aside for cases of contagious or mental diseases.

Prisoners of war suffering from serious disease, or whose condition necessitates special treatment, a surgical operation or hospital care, must be admitted to any military or civil medical unit where such treatment can be given, even if their repatriation is contemplated in the near future. Special facilities shall be afforded for the care to be given to the disabled, in particular to the blind, and for their rehabilitation, pending repatriation.

Prisoners of war shall have the attention, preferably, of medical personnel of the Power on which they depend and, if possible, of their nationality.

Prisoners of war may not be prevented from presenting themselves to the medical authorities for examination. The detaining authorities shall, upon request, issue to every prisoner who has undergone treatment, an official certificate indicating the nature of his illness or injury, and the duration and kind of treatment received. A duplicate of this certificate shall be forwarded to the Central Prisoners of War Agency.

The costs of treatment, including those of any apparatus necessary for the maintenance of prisoners of war in good health, particularly dentures and other artificial appliances, and spectacles, shall be borne by the Detaining Power.

ARTICLE 31 - Medical inspections.

Medical inspections of prisoners of war shall be made at least once a month. They shall include the checking and the recording of the weight of each prisoner of war. Their purpose shall be, in particular, to supervise the general state of health, nutrition and cleanliness of prisoners and to detect contagious diseases, especially tuberculosis, malaria and venereal diseases. For this purpose the most efficient methods available shall be employed, e.g. periodic mass miniature radiography for the early detection of tuberculosis.

of the Condition of the Wounded and Sick in Armed Forces in the Field of August 12, 1949. This senior medical officer, as well as chaplains, shall have the right to deal with the competent authorities of the camp on all questions relating to their duties. Such authorities shall afford them all necessary facilities for correspondence relating to these questions.

c) Although they shall be subject to the internal discipline of the camp in which they are retained, such personnel may not be compelled to carry out any work other than that concerned with their medical or religious duties.

During hostilities, the Parties to the conflict shall agree concerning the possible relief of retained personnel and shall settle the procedure to be followed.

None of the preceding provisions shall relieve the Detaining Power of its obligations with regard to prisoners of war from the medical or spiritual point of view.

Chapter V

RELIGIOUS, INTELLECTUAL AND PHYSICAL ACTIVITIES

Summary : The Third Convention affords to prisoners of war religious freedom. Adequate premises shall be provided where religious services may be held (Article 34). Chaplains who are retained (Article 35) and prisoners of war who are ministers of religion (Article 36) shall be at liberty, whatever their denomination, to minister freely to the members of their community; they shall not be obliged to do any other work. When prisoners of war have not the assistance of a retained chaplain or of a prisoner of war minister of their faith, a minister belonging to the prisoners' or a minister of another denomination, or in his absence a qualified layman, shall be appointed at the request of the prisoners concerned to fill this office (Article 37).

The Detaining Power shall encourage the practice of intellectual, educational, and recreational pursuits, sports and games amongst prisoners, and shall take the measures necessary to ensure the exercise thereof by providing them with adequate premises and necessary equipment. Prisoners shall have opportunities for taking physical exercises including sports and games and for being out of doors. Sufficient open spaces shall be provided for this purpose in all camps (Article 38).

Article 34
Article 35
Article 36
Article 37
Article 38

ARTICLE 32 - Prisoners engaged on medical duties.

Prisoners of war who, though not attached to the medical service of their armed forces, are physicians, surgeons, dentists, nurses or medical orderlies, may be required by the Detaining Power to exercise their medical functions in the interests of prisoners of war dependent on the same Power. In that case they shall continue to be prisoners of war, but shall receive the same treatment as corresponding medical personnel retained by the Detaining Power. They shall be exempted from any other work under Article 46.

Chapter IV

MEDICAL PERSONNEL AND CHAPLAINS RETAINED TO ASSIST PRISONERS OF WAR

ARTICLE 33 - Rights and privileges of retained personnel.

Members of the medical personnel and chaplains while retained by the Detaining Power with a view to assisting prisoners of war, shall not be considered as prisoners of war. They shall, however, receive as a minimum the benefits and protection of the present Convention, and shall also be granted all facilities necessary to provide for the medical care of, and religious instruction to prisoners of war.

They shall continue to exercise their medical and spiritual functions for the benefit of prisoners of war, preferably those belonging to the armed forces upon which they depend, within the scope of the military laws and regulations of the Detaining Power and under the control of its competent services, in accordance with their professional etiquette. They shall also benefit by the following facilities in the exercise of their medical or spiritual functions :

a) They shall be authorized to visit periodically prisoners of war situated in working detachments or in hospitals outside the camp. For this purpose, the Detaining Power shall place at their disposal the necessary means of transport.

b) The senior medical officer in each camp shall be responsible to the camp military authorities for everything connected with the activities of retained medical personnel. For this purpose, Parties to the conflict shall agree at the outbreak of hostilities on the subject of the corresponding ranks of the medical personnel, including that of societies mentioned in Article 36 of the Geneva Convention for the Amelioration

INTERNAL INCIDENT REPORT UNAMIR 2

ALL DEPARTMENTS TO COMPLETE

REGT. NUMBER: 0130097

RANK: SDCN

NAME: CANKW

D.O.B: 010247

APPOINTMENT: MO

DEPT.: ICU

WITNESS: MASON WRIGHT / COL NARM.

OCCURRENCE: - headle stuck whilst sitting a
gong chel i drow down..

INJURY: yz to @ hand

DEPT. HEAD: Cgd Owtm.

ACTION TAKEN: Immediate down i Discharge work

DEPT. HEAD COMMENT.

SIGNATURE: ADULTIN

DATE: 22 JAN 95

SNO COMMENTS.

unavoidable accident
all care had been taken

SIGNATURE: B. Wright

DATE: 22 Jan 95

OC COMMENTS

Accidental incident. Procs
followed.

SIGNATURE: [Signature]

DATE: 22 JAN 95

NL BURUM LES 492400054=SRVS X 1-FEB-1995 15:20:34 187840

C
kigali

to : unreo base -



fm : unreo delta - bujumbura

cc : all field offices

primo - political situation

president of Uprona party Charles Mukasi has considered presidential decrees countersigned by P.M. Kanyenko dismissing both Uprona Ministers which have not showed up at the extraordinary cabinet meeting two days ago as null and void.

He also called for Uprona partisans not to go to work today and a major demonstration is planned in Bujumbura on Saturday.

According to Mukasi, these decrees violate the spirit of the Convention of Government. As the P.M. has been expelled from the Uprona party, Mukasi considers that the breakdown in government postings is not following the spirit of the Convention calling for representative nominations after consensus between the political parties.

SRSG Abdallah is confirmed to the Conference in London about Burundi, and will return on Sunday

Secundo - IDPS

Meeting today with Pat Banks and Head of Agencies about the IDP preparatory document for the Bujumbura Conference. A second draft will be made with inputs from agencies for next week.

Tertio - Zaire

a field trip report to Bukavu will be sent tomorrow

regards

01 FEB. 1995

RK
MF
CK/CM
CP
IOC
SO
info

95/041

NL BURUM LES 492400054=SRVS X 2-FEB-1995 07:08:30 193208

042

to : unreo base -

kiC.i

fm : unreo delta - bujumbura

02 FEB. 1995

cc : all field offices

2.2.1995

primo - field trip report bukavu - zaïre on 31.1.95

following car exchange in cyangugu, meeting with HCR bukavu delegate, philippe de sousa, to discuss situation of rwandese refugees. UNHC and deputy had met with HCR in December 1994. While the situation is described as 'uneasy calm' in the camps, some of the latest elements are described hereunder.

General situation

Following meetings with HCR Cyangugu, HCR Bukavu seems to view ORC as pillar of the voluntary repatriation strategy. The main issue for repatriation seems not to be so much the dichotomy between tutsis and hutus but between extremists and moderates in both groups. HCR therefore recommends that ORCs must be in the hand of moderate elements to attract the confidence of the returnees.

Security

The Rwandese military have been largely segregated into camps, but not the militia as such a segregation appears impossible without harming innocent refugees. It is recommended that plans for ORCs would have a better chance of success if they included prior meetings between moderate leaders from current and previous regimes. HCR states that the current perception is that as long as extremists are in control in kigali the UN system will be impotent to offer effective protection to returnees, issue which must be addressed by the ORCs.

Rwandese returnees in Bukavu 683 over the last fifteen days.

TRENDS

In some camps (Kashusha, Inera, Adi-Kivu) the militia are more active, with on-going physical training, and talk of re-entry by force in the next six months (camps with a large concentration of refugees)

in camps where militia presence less marked, up to 40 pct might be willing to return home if HCR can guarantee their security (very rough HCR estimates to camps with smaller concentration of refugees)

HCR recommends a pro-active stance from Bukavu to be taken in terms of countering adverse propaganda through accurate reports from HCR Cyangugu, Kibuye and Gikongoro on actual security incidents and 'success stories' of returnee integration.

Political

RK
MF
CK/CP
IOC
has copy SO
MF
CP

...nor of South Kivu keeps requesting quick repatriation as adverse
effects of the refugee presence are being felt on the economy and
environment of the region in view of forthcoming political elections.

On the subject of relocation of refugees the Governor identified
some sites hundreds of kilometres to the South-West of Bukavu. In
this case, any relocation to the interior would however give a sense
of permanence and militate against speedy repatriation. To be
followed.

HCR is not thinking of major relocation until the issue is re-
examined in April.

FIGURES

Latest HCR count for Bukavu area : 348,107 refugees (including 40,000,
in Idjwi island to be verified)

Inter-camp transfers amount to 5,500 people.

ASSISTANCE

Erratic food supply and lowering food baskets have been reported,
however without any major impact on the already very low death rate
in camps.

OTHERS

SST pulled out of Bukavu on 15.12.94.

SECUNDO - BURUNDI

General situation relatively calm with usual daily share of shooting,
grenade explosion and deaths. A strike called for yesterday by the
President of the Uprona party has been unequally followed in
Bujumbura. Although the president of Uprona has called for 'toppling
the Government', both the UN Security Council and the US Ambassador
have condemned the extremist position of Uprona and reaffirmed their
support to the actual Government.

Today some barricades may have been erected in the city, and last
night shooting was heard, this morning grenade explosions, near the
residence of the Bujumbura UNREO staff.

Will keep you posted

Best regards

→ HI file

To: Mr Randolph Kent

From: GÖRAN BAUGE, GISENYI, BY RADIO.

**VOLCANO MEETING IN GISENYI
6 FEBRUARY 1995 BETWEEN 11.00 AND 13.00**

Participants: Logan RK Federation Geneva
Manon, security officer, ICRC
Mj. B M Mandé, UNREO (?)
Milobs, Gisenyi
UNHCR, Gisenyi
RPA, Gisenyi
Tunbatt, Sector 5

06 FEB. 1995

All boxes

There is 2 of the volcanoes that can erupt.

One smaller, Nyamulagira, and one bigger, Nyiragongo.

The smaller is located about 25-30 km north of Goma, and the bigger is about 12-15 km north of Goma.

The estimation is that the smaller can erupt between middle of February and end of March, this volcano is not very dangerous. It has a very thick lava, and will move very slow.

The bigger can erupt at any time, and is very dangerous. The lava is very thin (like water) and will move with a speed of up to 100 km/h.

No instruments is available on the spot at this moment. With help of instrument it is possible to foresee an eruption about 1 month before an eruption. Without it is possible just about 2 days, if visual check-up of the volcano lake, and study of the animals around the volcano.

Instrument is very necessary, and is available is USA, delivery time 10 days.

The Volcano "belong" to the Japanese, and it can be diplomatic problem if someone else starts to measure.

One Italian volcano expert, Dario Tedesco, has today climbed up on the bigger volcano, to check the volcano lake. He was send by DHA, Geneva.

If the volcano erupt, there is nothing to do. The question is if and when it will happen.

The lava will flow straight South, between Goma and Bugunga camp, and will threat them both. Also Gisenyi can be threatened.

If Nyiragongo will erupt, it will also be at threat against the Goma airport, because of volcano ashes.

The biggest risk at this moment is that it can be panic in the camps, specially Bugunga, but also the other camps. Therefor there is a preparations for a information campaign in the camps. The danger is the doubtfulness and not correct information.

People in danger: 400.000 local Zairian
200.000 - 350.000 refugees

UNHCR and Milobs Gisenyi has started to do a contingency plan. This is probably available at UNHCR Kigali.

A new boarder post must be opened for refugees, and for UN and NGO personnel, that will be involved, also food transport to Rwanda.

Also a second new boarder post, straight east of Kibumba camp must be opened.

The government of Rwanda must be informed of all boarder crossings.

Next meeting the 15 of February.

End of meeting.

1. I have a very big need of a Capsat.

2. I want to have a visit of Mr Kent in Goma.

Best Regards

Göran Bauge / through Jan Emanuelsson

05/103

HQ UNAMIR II



MINUTE

445-16-1

UNAMIR HQ 12/95

AS MSF

HEALTH INTELLIGENCE SURVEY SECTOR 1

- 1 The AUS MED EHS is to conduct a Health Intelligence Survey of Sector 1 over the period 9 - 11 Jan 95. The survey is to be centred around the BYUMBA township and surrounding rural area.
2. An accommodation site for the Section will be available in the Nigerian compound located in BYUMBA.
- 3 The survey report is to be forwarded to the Force Health Officer NLT 18 Jan 95

W.P. RAMSEY
COL
FMO

5 Jan 95

HQ UNAMIR II




MINUTE

445-16-1
UNAMIR HQ 39 /95

AS MSF

PROPOSED EHS ITINERARY

1. Below is a list of proposed dates for the EHS visits to Sector areas to finalise the Health Intelligence Survey of Rwanda:
 - a. KIBUYE 27 - 29 Jan 95;
 - b. GISENYI 1 - 3 Feb 95 ;
 - c. BUTARE & GIKONGORO 6 - 9 Feb 95 ;
 - d. KIBUNGO 9 Feb 95 (Sgt TZ to accompany FHO) ;
2. In all cases there will be a requirement for a protection party to accompany the EHS and FHO on these tasks.
3. The FHO will brief the EHS on their tasking the day prior to their departure.
4. All reports from the visits are to be sent to the FHO NLT 5 days after the completion of the survey. The FHO is to correlate and produce a survey report to be presented to the FMO prior to re-deployment to Australia.
5. Contact the FHO if these proposed dates are unsuitable.


M. WAIXEL
CAPT
FHO

13 Jan 95

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 145-16-1

Correspondence No. _____

To: ~~EMO~~

Remarks/Action: _____

Med Ops

9/1

Med Log

~~EHO~~

OPS WO



ps. - Steve copy for me pls.

*Copy to HI file for Sector 6 ?
and copy to Health Agency file.*

Please initial and date when action complete then pass quickly.

HQ UNAMIR II



MINUTE

445-16-1

UNAMIR HQ 20 /95


G3 MED LOG

G4 MED OPS

INDBATT MEDICAL FACILITY

1. The FMO and the FHO visited the medical facility of INDBATT on Friday 6 Jan 95. Following is a list of their capabilities and equipment shortfall:
 - a. the RAP's consist of:
 - (1) 2 x Doctors (Maj Karan & Maj Kak) ,
 - (2) 1 x HLTH WO ,
 - (3) 4 x NA ,
 - (4) 2 x OP THR TECH ,
 - (5) 3x AMB DVR ,
 - (6) 8 x Stretcher bearers , and
 - (7) 2 x ambulances.
 - b. The teams will be divided into 2 RAP's which will have a Minor Op capability and have a 3 bed holding capability.
 - c. The RAP treats on an average 250 civilian patients per day , of which Malaria , Meningitis , T.B , HIV , STD , and Trauma are the main ailments. The majority of the civilian patients are from Kanombe , Remera and Nyakabanda areas.
 - d. Before the war , these people were able to obtain medical treatment from CHK , King Fisal Hospital and the Military Hospital located in Remera . Due to the closure of the Military Hospital and the distance to King Fisal and CHK , the local population are attending the INDBATT clinic.

- e. There will be a Laboratory set up in the next week , but will have only limited diagnostic capabilities and will require assistance from AUSMED Pathology for detailed analytical assessments.
- f. The Dental Section consists of:
- (1) 1 x Dentist (LTCOL Meshem) ,
 - (2) 1 x Hyg , and
 - (3) 1 x DA.
- g. The FMO has stated that INDBATT will provide Dental and after hours Medical care for UNAMIR HQ pers .
- h. The RAP located at Kanombe requires the following stores to safely and humanely treat the local population:
- (1) shelter from the elements ,
 - (2) children's suspension drugs ,
 - (3) field cots or stretchers ,
 - (4) blankets ,
 - (5) sheets ,
 - (6) pillows , and
 - (7) bench style seating.



M. WAIXEL
CAPT
FHO
9 Jan 95

FROM : RMO, MALAWI CONTINGENT
TO : FORCE MEDICAL OFFICER, FORCE HQ - KIGALI
DATE : 30TH DECEMBER, 1994
SUBJECT : DRUGS AND EQUIPMENT ORDER
FOR KIBAYE (GD 8498)

1. Enclosed is the drug order for the above named Clinic as requested in your message of 101245Z December, 1994.

2. Factors of interest are :-

- * Population as of yesterday registered are 9004
- Previous patient daily attendance on average was 50.
- Meanwhile the Clinic does not have a single drug or medical equipment.
- Sectors that would benefit from the Clinic are Mukomacara, Mukindo and Joma.
- The nearest Clinic meanwhile in operation is at Muganza Commune. GD 8407.
- The only medical person identified is only one nurse who used to work there before.

3. MUGANZA CLINIC GD 8407

- Population covered is 16,000 according to the local authorities there.
- Patient attendance per day on average is 80.
- Meanwhile it is being ran by LVIA but unfortunately it is rumoured that they will stop running it in January, 1995.
- The main pressing problem is shortage of drugs and lack of medical supplies.

4. RECOMMENDATIONS

- a. Kibaye Clinic should be reopened soon as a matter of urgency considering the ever increasing number of returnees in the area.
- b. There will be need to identify a Medical Assistant to work there immediately.

- c. As for Muganza Clinic it is of the utmost importance that there is continuity at this medical facility if it is really true that L.V.I.A will be moving out.
 - d. The drug and medical personnel problem at Muganza should be given special attention if possible.
5. Overall these two medical facilities are of vital importance to the community of these areas that there is need for urgent attention to the problem.

F F TEMBO
Lieutenant
R M O
MALAWI CONTINGENT

HQ UNAMIR II



MINUTE

445-16-1

UNAMIR HQ 20 /95

G3 MED LOG

G4 MED OPS

INDBATT MEDICAL FACILITY

1. The FMO and the FHO visited the medical facility of INDBATT on Friday 6 Jan 95. Following is a list of their capabilities and equipment shortfall:

a. the RAP's consist of:

- (1) 2 x Doctors (Maj Karan & Maj Kak) ,
- (2) 1 x HLTH WO ,
- (3) 4 x NA ,
- (4) 2 x OP THR TECH ,
- (5) 3x AMB DVR ,
- (6) 8 x Stretcher bearers , and
- (7) 2 x ambulances.

b. The teams will be divided into 2 RAP's which will have a Minor Op capability and have a 3 bed holding capability.

c. The RAP treats on an average 250 civilian patients per day , of which Malaria , Meningitis , T.B , HIV , STD , and Trauma are the main ailments. The majority of the civilian patients are from Kanombe , Remera and Nyakabanda areas.

d. Before the war , these people were able to obtain medical treatment from CHK , King Fisal Hospital and the Military Hospital located in Remera . Due to the closure of the Military Hospital and the distance to King Fisal and CHK , the local population are attending the INDBATT clinic.

- e. There will be a Laboratory set up in the next week , but will have only limited diagnostic capabilities and will require assistance from AUSMED Pathology for detailed analytical assessments.
- f. The Dental Section consists of:
- (1) 1 x Dentist (LTCOL Meshem) ,
 - (2) 1 x Hyg , and
 - (3) 1 x DA.
- g. The FMO has stated that INDBATT will provide Dental and after hours Medical care for UNAMIR HQ pers .
- h. The RAP located at Kanombe requires the following stores to safely and humanely treat the local population:
- (1) shelter from the elements ,
 - (2) children's suspension drugs ,
 - (3) field cots or stretchers ,
 - (4) blankets ,
 - (5) sheets ,
 - (6) pillows , and
 - (7) bench style seating.



M. WAIXEL

CAPT

FHO

9 Jan 95

HQ UNAMIR II



MINUTE

445-16-1

UNAMIR HQ /A/ 1995

AS MSF

WATER POINT SURVEY

1. The EHS is to conduct a Water Point Survey of Kigali and the surrounding area.
2. The survey is to include current and previous water drawing points , and is to include the following information
 - a. grid reference .
 - b. access route .
 - c. water flow .
 - d. water source .
 - e. known water quality before & after treatment ,
 - f. daily drawing rate ,
 - g. machinery in use or available ,
 - h. machinery condition ,
 - i. method of sedimentation , filtration , chlorination ,
 - j. chlorination rate and percentage available ,
 - k. collected by .
 - l. vehicle type . and
 - m. vehicle condition

Survey report to be forwarded to the Force health Officer NLT 30 Jan 95.

W. P. Ramsey

W.P. RAMSEY
COL
FMO

5 Jan 95

HQ UNAMIR II




MINUTE

445-16-1
UNAMIR HQ 23 Dec 94

AS MSF

HEALTH INTELLIGENCE SURVEY , SECTOR 2

1. It is requested that WO1 Reidy conduct a Health Intelligence Survey of Sector 2 over the period 19 - 23 Dec 94.
2. Purpose of survey is to identify endemic & potential disease sources and identify current local infrastructure that may have an effect on UNAMIR troops deployed to the Sector.
3. The conduction of the survey is to be concentrated mainly around the town ship of KIBUNGO.
4. It is requested that a copy of the survey report be forwarded to the FHO NLT 1 Jan 95.


W. RAMSEY
COL
FMO

22 Dec 94

HQ UNAMIR II



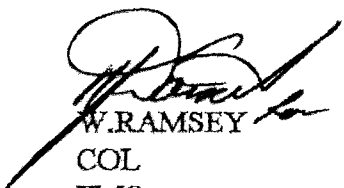
MINUTE

445-16-1
UNAMIR HQ 243/94

AS MSF

MALARIA OCCURRENCE GHANBATT

1. There has been a significant increase in the number of malaria cases reported amongst GHANBATT personnel.
2. It is requested that WO1 Reidy deploys to KIBUNGO to conduct an investigation as to why the increase in cases has occurred and to assess the need for future instruction of GHANBATT personnel on anti-malarial procedures.
3. It is expected that the deployment should not be longer than one - two days.
4. Deployment date to be no later than Sunday 11 Dec 94.
5. Force Health Officer will conduct a briefing as to the requirements of the investigation at a date and time to be nominated once a deployment date has been set.


W. RAMSEY
COL
FMO

9 Dec 94

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO

Remarks/Action: _____

Med Ops

Med Log

FHO

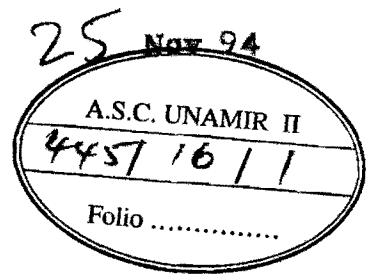
Smokery

Ascentin who was the originator
of the reference and send reply to
originator.

Please initial and date when action complete then pass quickly.

CAPT WAIVER 28/11

082/UNAMIR/A

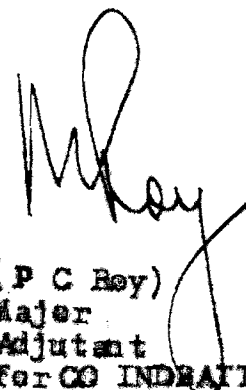


From : INDEBATT

To : UNAMIR HQ

Subject - EMPLOYMENT OF CIVILIAN PERSONNEL
AT UNAMIR MEDICAL FACILITIES

1. Refer to your letter No 202/94 dated 23 Nov 94.
2. Nil.


(P C Roy)
Major
Adjutant
for CO INDEBATT

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO 16/11

Remarks/Action: _____

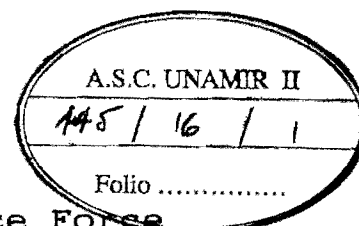
Med Ops _____

Med Log _____

FHO _____

WR
↓
Matt, please ask A.
↳ They should pay for duplication of slides
+ photos. PD

Please initial and date when action complete then pass quickly.



Headquarters Australian Defence Force

MINUTE

SG93-26180
SGADF 6097/94

LHQ (Attn: A/COL HLTH)

For Information:

HQ UNAMIR (Attn: COMASC)

HEALTH INTELLIGENCE - RWANDA

1. SGADF HI cell is building a library of 35 mm slides for presentations, briefs and training purposes. Slides taken during UN operations will be of particular interest.

2. HI cell would therefore appreciate 35 mm slides which could be provided from ASC UNAMIR depicting any aspect of health intelligence. Such slides would foreseeably include (but not be limited to) the following:

- a. extreme environmental hazards (climate, pollution, traffic incidents etc);
- b. disease, conditions conducive to the outbreak of disease, disease vectors;
- c. dangerous animals and plants, results of human contact with these, endemic animal diseases which may affect humans or quarantine requirements for RTA;
- d. depictions of medical counter measures being employed against any of the hazards listed above; and
- e. good or bad aspects of civilian or military health support (infrastructure, personnel, equipment, CASEVAC etc).

3. Both rural and urban situations would be ideal. Your support in this matter would be greatly appreciated.

A handwritten signature in cursive script, appearing to read 'J. Smith'.

J. SMITH
WGCDR
SO1 HI
OSGADF

4 Nov 94

HQ UNAMIR II




MINUTE

445-16-1
HQ UNAMIR 202/94

See Distribution List

EMPLOYMENT OF CIVILIAN PERSONNEL AT UNAMIR MEDICAL FACILITIES.

1. All Medical Officers are requested to supply the following information to the Force Health Officer by Wednesday 30 Nov 94 :
 - a. number of civilians employed and the area in which they are employed ,
 - b. name and identification number for each civilian employed ,
 - c. sex and age of each civilian employed , and
 - d. location of these personnel.
2. The information requested is for all civilian personnel employed in medical facilities within the unit area or areas in which the unit is conducting operations.
3. This request for information is as a result of an inquiry from the Ministry of Health for knowledge on the number and location of civilians employed by UNAMIR units.


M. WAIXEL
CAPT
FHO

23 Nov 94

Distribution

AS MSF
CANCOM
ETHIOBATT
FRAFBATT
GHANBATT
INDBATT
MALAWI COY
MALI COY
NICOY
TUNBATT
ZAMBATT

HQ UNAMIR II



MINUTE

*DEOS (SP) should
lead on this.*
14/11

445-16-1

HQ UNAMIR /94

FMO

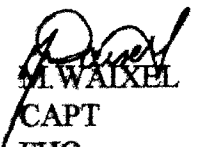
For information:

G3 OPS

G4 MED

RESPONSIBILITY FOR COLLECTION AND BURIAL OF BODIES

1. After extensive discussions with a number of departments within UNAMIR HQ and NGO personnel, it has become obvious that there is no clear directive regarding the removal for burial, bodies found within UNAMIR localities.
2. The RPA LO suggested that the Prefecture for the areas in which the bodies are found would be responsible for their removal and burial. Previous attempts to have bodies removed and buried has proven to be ineffective due to governmental and political policies.
3. The removal and burial of bodies would normally be a Logistical responsibility and if the Prefecture was unable to conduct such an operation then logistical support from UNAMIR should be requested.
4. Advice on the burial or cremation of human remains can be obtained from the FHO.
5. It is requested that UNAMIR approaches the Minister of Health to produce a directive detailing that the Prefecture of the area in which the bodies are found be responsible for the collection and burial of the remains.
6. For your consideration.


M. WALXEL
CAPT
FHO

9 Nov 94

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO

Remarks/Action: WR

Med Ops 5/11

Med Log

FHO *

JB
we are investigating.
An investigating through UNR80, FAM, FHO.

Please initial and date when action complete then pass quickly.

04/11/94 13:08:36 Received Message:
VZCZCRFA941
RAARZHSW RAYRNN 1512 3080712-RRRR--RAYJBA.
ZNY RRRRR
R 040309Z NOV 94
FM LHQAUST
TO ASC UNAMIR II (RWANDA)
BT

R E S T R I C T E D
SIC IAD

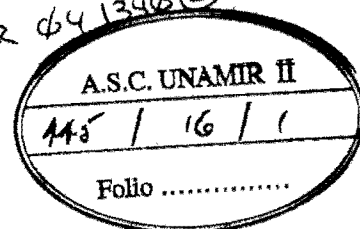
HLTH 00196/94
READDRESSALL
R 020242Z NOV 94
F66YDF CANBERRA

TO LHQAUST
R E S T R I C T E D
SIC IAD/PPL
9918/SGADF
FOR A/COL HLTH
SUBJ: RWANDA

1. REQUEST CONFIRMATION FROM COMASC OF REPORTED OUTBREAKS OF FOOT AND
MOUTH DISEASE IN EAST AND NORTH EAST RWANDA

BT
RAYWHH 9918 3060255
RAYRNN 614 3080531
#1512

IN 856/17
TOR 641346(E) NOV



NNNN

A.S.C. UNAMIR II
4451 16 L1
Folio

P 312050E OCT 94

FM SECTION , FIDELBA/AN/GE 1400

TO CHAIR HQ KIGALI

225

UNCLAS EMOY/LES 103

SUBJ: DAILY SITREP COVERING PERIOD 01 APR 68 - 03 APR 68 04

1. GEN SITUATION. CASE
2. FRACTIONAL ACTIVITIES. EPA. FOR Q-STEP REPORTS OF THE
AND COUNCIL EATING AND DRINKING

12

23.

3. OWN MIL ACTIVITIES. THE PATROL WENT TO MANYAGIRO AND KIVUTE GRID 674317 AND GRID 183383 RESPECTIVELY AT MANYAGIRO CLINIC. THE SICK WERE LIE ON THE BARE FLOOR. THE MEDICAL STAFF MET THE NON-AVAILABILITY OF DRUGS AND BEDS. THE COMMON DISEASES THE PATROL IDENTIFIED ARE MENINGITIS, CHOLERA, DIARRHEA, PALAR A AND SKIN DISEASES. AT KIVUTE, THE PATROL TEAM MET CHAIRMAN WHO CEE ABOUT TEN THOUSAND RETURNEES. THE HIGH NUMBER OF REFUGEES HAVE MET WITH PROBLEMS OF ADAPTATION AS

Hern for Min Sante.

2147

ce

Copy to Fred

14

Arch: Offshoot and the

[illegible]

ALL THREE IN A WHOLE WERE RELEASED
 OTHERS AS AHEAD OF THEM. TWO OF THEM
 WERE GIVEN MEDICAL ASSISTANCE IN OWN
 MEDICAL CENTER. PLEASE ACK

This CAP has humanitarian stores.

#0174

Received 10-31-1994 21:45:44

10/10

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO Remarks/Action: _____

Med Op _____

Med log _____

FHO 10/10

WP
F

[Signature]

[Signature]

Please initial and date when action complete then pass quickly.

10 Oct 94

G2/5000

See Distribution

RECCE REPORT - KIBUYE MASS GRAVE SITES

1. On 09 Oct 94 a recce was conducted of reported mass grave sites in and around the town of KIBUYE. Previous reports spoke of 8 sites in the area but owing to time constraints it was only possible to visit 4 of these sites and 1 other (previously unreported) site.

2. The stadium in KIBUYE (GR 273718) is said to contain approx 4000 bodies. The playing surface would appear to be intact and shows no sign of having being disturbed and relaid. Immediately behind the goal posts at the northern end of the pitch is an area of ground that has been disturbed. This area is liberally covered with bones but it is suspected that they are mainly the bones of cattle. Locals claim that French troops used earth moving equipment to bury the bodies.

3. Immediately outside the wall of the stadium at the north west corner there is an area of earth measuring approx 15 x 10m. Bulldozers have obviously been used in the area and there are no signs of human bones although there are a number of articles of clothing scattered around. The mounds of earth are indicative of a mass grave. It is claimed that approx 4000 bodies are buried in the 2 stadium sites but it is not possible to verify this claim without a large scale exhumation. There is nothing to suggest that either of these sites poses an obvious health risk or that there is any water source nearby.

4. The steep hill feature to the north of the stadium (GR 273719) has a number of unburied skeletal remains scattered randomly about. Not a single whole skeleton was seen as most have been broken up and carried away by dogs. Because of the wooded nature of the hillside it would be necessary to carry out a thorough search find all of the bodies. Approx 15 were located during the recce.

5. Another mass grave was located at GR 266723. The grave is on the road side approx 10m from the lake. Human bones/skulls are in evidence on the surface despite what looks like a recent attempt to cover them with more earth. The number of bodies contained in this site is impossible to estimate but locals claim 50-100.

6. The last 2 sites to be visited were both close to the church of Home St Jean (GR 284717). It is claimed that 7000 bodies are buried here. It is not possible to verify this but the number would appear to be a vast exaggeration owing to the size of the graves. There are a few human bones apparent at one of the sites and 1 human skull was found. One of the sites is on a hillside and looks as if heavy rain would wash the contents down the hill

into the lake.

7. Any assessments that I have made on the health threat are based purely on the proximity of the sites to the nearest obvious water supply and the evidence, or otherwise, of remains on the surface.



S H MOORHOUSE
Capt
For FC

Distribution:

Internal:

Action:

Information:

DCOS Ops

10/10

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: IMO Remarks/Action: _____

Mod Op

Mod log

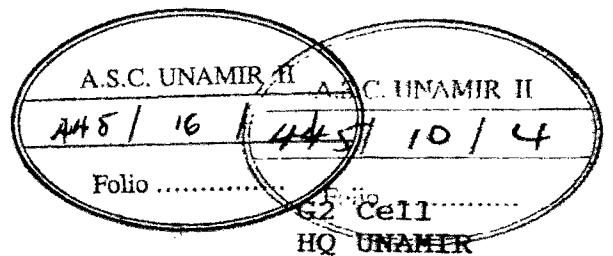
IMO 11/10

WP

P.

P.

Please initial and date when action complete then pass quickly.



10 Oct 94

G2/5000

See Distribution

MASS GRAVE LIST

1. The UNAMIR mass graves list as at 091000B Oct 94 is attached for your information.
2. Owing to a variety of technical problems, which I am loathe to enter into at this moment, I know that a few previously reported sights are missing. It is requested that all addressees should have a quick trawl through their records in order to establish whether or not they have any grave sites which are not listed on the enclosure.
3. Any sites that you have and that we do not please make a note of them and pass them to this HQ by 18 Oct 94.
4. Your assistance in this particularly onerous task is appreciated.

S H MOORHOUSE
Capt
S03 G2

Enclosure:

1. MASS GRAVES LIST AS AT 091000B OCT 94.

Distribution:

External:

Action:

TAC HQ - For G2
MILOB HQ - For G2
AUSMED - For Mil Info Sect
BRITCON - For Mil Info Sect
1 CDHSR - For IO

MASS GRAVE LIST AS AT 091000B OCT 94

NUMBER	LOCATION	GRID	BODIES	COMMENTS	CONFIRM
001	GITARAMA	727681		20M DIAM X 7M DEEP	Y
002	GITARAMA	723676		1 ACRE AREA	Y
003	RUHANGO	758533		15M DIAM X 5M DEEP	Y
004	RUHANGO	751544		20M DIAM X 7M DEEP	Y
005	RUHANGO	748546		20M DIAM X 5M DEEP	Y
006	RUHANGO	769527		1 ACRE AREA	Y
007	RUGOGWE	6956S3	30-40	WHERE???	Y
008	SAVE	7411S3	1750	WHERE???	Y
009	BYUMBA	0725S1	40	WHERE???	Y
010	NTARAMA	064666S2	3-400	CHURCH	Y
011	NYAMATA	096635	100?	BURIED TO REAR OF WEST SHELL STN	Y
012	KAYUMBA	094648	100?	ALL OVER HILLSIDE	Y
013	ZAZA	482626	1000	IN COMUNE BUILDINGS	Y
014	KIGALI GIKONDO	098824 PERES PALLOTIN	60	BURIED BEHIND CHAPEL	Y
015	GITARAMA	724710	100	COMPOUND BY MAIN CHURCH	Y
016	BYIMANA	7062S3		NO MORE INFO	N
017	TAMBWE	7956S3		NO MORE INFO	Y
018	KIBYI	715677S3	71	NO MORE INFO	Y
019	GAFUNZO	8935	2-6000	BY CHURCH	N
020		8725	33	PARTIALLY BURIED	N

021	NZIGE	381762S2	22	COMMUNE	Y
022	MUSHA	380882S2		CHURCH	N
023	NYARUTUJA	7093		NO OF SITES MAYOR WILL DIRECT	N
024	NR SAVE	746193	2500	LAKE BEHIND DAM	N
025	KARAMA	764477		N OF TRACK	Y
026	NYUMBA	6405	20000	TOTAL INCL 027 BELOW	N
027	NYAKIBANDA	6708		SEE 026	N
028	RUKARA	2001S1			N
029	RARANZIGE	580084		8M X 4M	N
030	NYUNDO	248117	25	SEPTIC TANK BEHIND CHURCH	N
031	RUTONDE	494847	150	IN BANANA GROVE	Y
032	CYANGUGU	774246			Y
033	KIYANZI	847395S2	100	UNBURIED & AP MINES IN AREA	Y
034	CYANIKA	563054	7500	3 SITES	Y
035	NYARBUYE		500+	SCHOOL & CHURCH	Y
036	S OF KAGASA 1	885400	10-15	UNBURIED	Y
037	RWAMATAMU	1557S4B	15-20		N
038	RUGANDO	797486	20	IN A WELL	N
039	SABUNGE	796486	60		N
040	MUBUGA	238645	1000	FRONT OF CHURCH	N
041	MUBUGA	237648	100	HOSPITAL	N
042	MGOMA	212591	5500	2 SITES	N
043	GATAGARA			3 SITES NEAR CHURCH	Y
044	KIBUYE	273718	1000	STADIUM	Y
045	KIBUYE	280716		LAKESIDE 2 SITES	N
046	KIBUYE	286708		ESTUARY	N

047	KIBUYE	278710		NR ETOL	N
048	KIBUYE	284717		IN FRONT OF CHURCH 2 SITES	Y
049	KIBUYE	266723	50-100	LAKESIDE	Y
050	KIBUYE	278713		NR ETOL	N

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: FMO 16/11

Remarks/Action: _____

Med Ops

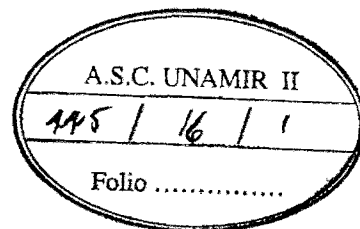
Med Log

FHO

Must have been good check tests eh! P.

Math, as discussed. P.
Comcare has sent reply for

Please initial and date when action complete then pass quickly.



RESTRICTED

Headquarters Australian Defence Force

MINUTE

SG93-26180
SGADF 6073/94

LHQ (Attn: SO1 HLTH OPS)

For Information:

HQ UNAMIR II (Attn: COMASC)

HEALTH INTELLIGENCE - MEDICAL FACILITIES

References:

- A. SGADF 3827/94 dated 26 Aug 94 (NOTAL)
- B. MED 85/94 dated 3 Oct 94 (NOTAL)

1. Reference A requested SO1 LANDOPS (ADFCC) to task UNAMIR liaison officer in Nairobi with providing a report on major hospitals there. The liaison officer subsequently requested specialist support from Med Br HQ UNAMIR to undertake this task.
2. Reports on three hospitals in Nairobi were subsequently produced by MAJ Crawford (SO2 MED OPS), and provided to HI cell at Reference B. A copy of the reports is enclosed (LHQ only).
3. The reports are well prepared and particularly valuable to HI cell given the current situation and ongoing UN interest in Africa. Would you kindly pass on my appreciation to MAJ Crawford for the considerable effort he has taken in compiling these reports.
4. If possible we would also appreciate some information on the hospitals in Kigali. Does COMASC assess the Kigali Central and King Faisal hospitals as being suitable

RESTRICTED

RESTRICTED

- 2 -

for use by Western defence personnel after the eventual withdrawal of the UN and NGOs? If affirmative to any degree, could a report on these hospitals please be supplied?



J. SMITH
WGCDR
SO1 HI
OSGADF

27 Oct 94

Enclosure:

1. Reports on Hospitals in Nairobi

RESTRICTED

A/10

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: IMO Remarks/Action: _____

Mod Op
Mod log A/10

Seen by MAJ Press, WOI Kelly
instructed to return, 5 Oct, and make
report/recommendations on return.

Please initial and date when action complete then pass quickly.

Em

GAAUZYUW UCCVDC0126 2771624-UUUU--UCCVVDA.

ZNR UUUUU

O 041612B OCT 94

FM SECTOR 1//STARLIGHT HEALTH/AUS MED//

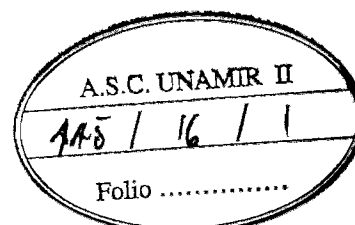
TO UNHQ KIGALI//SUNRAY HEALTH/M93//

BT

UNCLAS SECT 1-126

SUBJ: RESULTS OF HEALTH INT. SURVEY

1. HAVE COMPLETED HEALTH INTELLIGENCE SURVEY OF THIS LOC. ARE CURRENTLY LIASING WITH RPA ELEMENT TO VISIT HOSPITAL FACILITY THIS LOCATION.
2. REQUEST THAT CONSIDERATION BE GIVEN TO FOLLOWING POINTS PRIOR TO MY ARRIVAL TO YOUR LOCATION.
 - A. ANTI MALARIAL TABLETS FOR APPROXIMATELY 350 SOLDIERS FOR 5 MONTHS.
 - B. SOURCE - INSECTICIDE REPELLANT PERSONAL ISSUE.
 - C. WARNING ORDER FOR ENVIRONMENT HEALTH SECTION TO CONDUCT ENVIRONMENTAL HEALTH TASKS THIS LOC 12 OCT 94.
 - D. AVAILABILITY OF PESTICIDES & INSECTICIDE SPRAYING DISPERSAL EQUIPMENT.
3. AS I HAVE COMPLETED PRIMARY TASKS AND A VEHICLE FROM THIS LOC WILL BE RETURNING TO YOUR LOC POS. TOMORROW, I REQUEST TO RETURN TO YOUR LOC ON THE AVAILABLE VEHICLE.



CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 44-16-1

Correspondence No. _____

To: FMQ

Remarks/Action: _____

WR

Mod Op 8/10

Mod key

Phone

MI file for Sector 3.

Please initial and date when action complete then pass quickly.

REPORT

MEDICAL FACILITY / BUTARE DISTRICT HOSPITAL GR 7120

1. DR PABLO (MSF)
2. KOEN, CALVOUTE (MSF NURSE)
3. N/A
4. N/A
5. STAFFING: AS AT 26 SEP 94, PERSONNEL NUMBER INCREASING SLOWLY.
 - A. 1x SURGEON
 - 1x GP, PAEDIATRICIAN, ANAESTHETIST
 - 1x GP, (LOCAL - DR JOSEPH)
 - B. 17x RWANDAN
 - 3x MSF
 - 1x MIDWIFE (MSF)
 - 1x NUTRITIONIST
 - C. 20x RWANDAN
 - D. NIL - EXTRACTIONS PERFORMED BY SURGEON
6. 130 WITH CAPABILITY TO EXPAND BY 40 UNDER TENTAGE
 - A. 10 BUT NO EQUIPMENT
 - B. 25
 - C. 85 (COMBINED MEDICAL/PAEDIATRIC)
 - D. -
 - E. 10
7. CURRENTLY 100+ PER DAY
8.
 - A. BASIC PATH TESTS DUE TO START THIS WEEK (26 SEP 94) UPON ARRIVAL OF LAB TECHNICIAN
 - B. NIL
 - C. EMERGENCY AND GENERAL SURGERY ONLY
 - D. NIL - NO REFRIGERATOR
9. MEDECINS SANS FRONTIERES
10. BASIC ESSENTIAL MEDICINES ONLY
11. 15000 LITRE BLADDER FOR HOSPITAL USE ONLY IRREGULARLY RESUPPLIED BY UNHCR. MSF IS IN THE PROCESS OF UPGRADING A WATER TRUCK FOR THEIR USE.

12. 100 KVA GENERATOR.
13. DEEP TRENCH LATRINES
14. MALARIA; PNEUMONIA; DYSENTRY; INFECTED WOUNDS
15. NIL - FAMILY RESPONSIBILITY. IF DECEASED IS UNACCOMPANIED, THE BODY IS TAKEN TO NGOMA FOR BURIAL
16. 3 HOUSES IN QUARTER BUYE, BUTALE
17. APPROX 1 KM.
18. NIL - MSF USE THEIR TWO VEHICLES IN URGENT CASES
19. SEALED ROAD MAINLY WITH APPROX 400M UNSEALED ROAD.
20. LESS THAN 5 MINUTES FROM AIRSTRIP TO HOSPITAL
21. 700,000
22. UNKNOWN - CURRENTLY POPULATION IN THE REGION OF 300,000 PEOPLE, A LARGE PROPORTION OF WHOM ARE RETURNEES AND DESCENDANTS OF REFUGEES THAT FLED TO BURUNDI IN PREVIOUS WARS.

REPORT

WO2 WHITE

MEDICAL FACILITY / UNIVERSITY HOSPITAL BUTARE

1. RWAGACONDO, CLAUDE-ÉMIL
2. AS ABOVE
3. N/A
4. UNR BUTARE
5. A 2x GYNAECOLOGIST/OBSTETRICIAN, 2x SURGEONS, 2x G.P., 1x INTERN, 1x PAEDIATRICIAN
1x ANAESTHETIST, 1x PUBLIC HEALTH DOCTOR
- B. 30
- C. -
- D. NIL
6. 450 (BEFORE WAR)
- A. ICU = 4 (PREVIOUSLY 10) HDU 0 (PREVIOUSLY 8)
- B. UNKNOWN
- C. 150
- D. 45
- E. 84 FOR GYNAE/OBSTETRICS
7. APPROX 150
8. A. LABORATORY DAMAGED AND LOOTED
- B. SOME X-RAY EQUIPMENT AVAILABLE - UNKNOWN IF DAMAGED
- C. ONLY ~~ONE~~ TWO SURGEONS AVAILABLE
- D. NIL
- E. PREVENT MED CAPABILITY
9. A. MSF ASSISTS WITH ABDOMINAL AND GYNAECOLOGICAL OPERATIONS AND EQUILIBE FOR WATER
- B. AS ABOVE
10. NIL - SOME VETERINARY MEDICINES ONLY
11. LARGE RESERVOIR (SIZE LNK) RESUPPLIED DAILY BY EQUILIBE
12. PREVIOUSLY ON GRID. CURRENTLY GENERATOR IS INOPERABLE DUE TO WATER IN FUEL.
13. OWN SEWAGE FARM - CURRENTLY OPERATIONAL
14. MALARIA, RESPIRATORY INCLUDING ASTHMA, SPORADIC DYSENTERY, DIABETES
15. UNIVERSITY CAMPUS GRAVEYARD AND NGOHA CEMETERY
16. DOCTORS HOUSED BY GOVERNMENT OTHER STAFF ARE ACCOMMODATED PRIVATELY

17. 2 KM (RUTARE AIRSTRIP)

18. NIL

19. SEALED ROAD, 5 MINUTES MAXIMUM TO AIRSTRIP.

20. AS ABOVE

21. UNKNOWN

22. UNKNOWN.

NOTE: THIS HOSPITAL USED TO SERVICE SOME 30,000 PEOPLE BEFORE THE WAR.

IT ALSO ACCEPTED REFERRALS AND TRANSFERS FROM DISTRICT HOSPITALS

LOCATED AT:

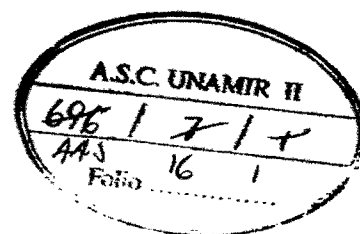
NYANZA

KIGOME

GIKOMA

THE PUBLIC HEALTH DOCTOR IS THE SAME AS PRIOR TO THE WAR.

AS MED SPT FORCE RWANDA
MED COY
MINUTE



01/RA/94

OC Med Coy

KIBUNGO HOSPITAL SURGICAL RECON. OF 13 SEPT 1994

Reference:

A. Conversation COL Atkinson / MAJ Wright of 13 Sep 94.

1. A reconnosance visit to the Kibungo Hospital was undertaken by Australian and Canadian medical and nursing personnel to ascertain the suitability, and requirements, of the facility for periodic health and surgical support visits.
2. The hospital is located approximately two hours drive, by bitumen road, from Kigali. There were the usual number of RPA checkpoints, with only one re-routing required.
3. The "new" hospital is just a shell and was being built by the Chinese Government, and was twelve months from completion prior to the war. The "old" hospital is a smaller version of the NGO wards at the CHK. There are approximately 80 - 100 patients in total.
4. There are two Operating Rooms, of which only one has lights that function with the use of a small generator. There is no functional anaesthetic equipment. All surgery is performed under Local Anaesthetic or Ketamine. The only surgeon left a month ago and trauma now goes to Rwamagana Hospital. A replacement IMC surgeon may arrive in the next month.
5. The X-Ray Department has been trashed and is not functioning. A radiographer has been seen in Kibungo recently. The equipment requires 3-phase power which normally comes from Kigali.
6. The Surgical Wards have male and female sections, which are clean and organised in the same manner as the NGO CHK wards.
7. The Medical Wards were assessed by SQDNLDR Peter Clarke.
8. The Pathology Department was assessed by LTCOL Ken Scott.
9. The Latrines (See Prev Med Report) were positioned on a hillside with long drops, and were flyblown.
10. There was a spring and pump for water, which is currently being tested by the Canadians. Water is frequently unavailable at the hospital and they are dependant on rain water to fill their containers. These containers were empty on the day of our visit.

11. There were two "old" dead bodies in the hospital area.
12. There is no refrigeration for blood.
13. The Personnel at hospital are:
 - a. one U.S. ex-Army medic with Intensive Care training (Johnathan);
 - b. one U.S. Registered Nurse (Julie);
 - c. one Kenyan Nurse Administrator (Louisa);
 - d. one Medical Officer (Victor) - ? Rwandian;
 - e. one Rwandian Nurse, and
 - f. one third year Rwandian medical student.
14. The IMC personnel do have HF radio, and their frequency can be obtained from their HQ in Kigali.
15. Other visitors were:
 - a. a Sociologist from Uganda, who was returning after thirty years. He said he was trying to encourage doctors and nurses to return to Rwanda, which we could also train, but this visit, like ours, was one of assessment, and
 - b. two Belgians representatives from the UNHCR, who appreciated our presence.
16. A Surgical Ward Round was conducted with the Kibungo Hospital personnel, the Canadian and Australian medical and nursing staff. Four cases were identified during the round for surgery. All the dressings that had been removed were re-dressed by the Canadian and Australian Medics or Nurses, including one patient who had some metal and sequestrum removed from her hand.
17. The Surgical Cases that have been identified are:
 - a. Reduction of Right fractured forearm;
 - b. Split Skin Graft to the skull;
 - c. Delayed primary closure to amputated Left shoulder, and
 - d. Debridement of the Left elbow.

3.

18. Items that were identified as being urgently required were:

- a. Intravenous Normal Saline;
- b. Skin preparations - alcoholic or Betadine;
- c. Tetanus Toxoid;
- d. Steinman Pins;
- e. Gauze and/or Abdominal Packs, and
- f. Sutures - 0, 1, and 2/0 "of anything".

19. The sterilization of instruments was by insertion into a container, and then boiling over a kerosene / bunsen burner apparatus. The sterilizers, although antiquated could possibly be made functional once some form of power is available.

20. Traction apparatus that was rigged up for a young girl was made of bamboo poles, rope and a bucket containing rocks.

21. A visit was made by this officer to the Rwamagana Hospital, and contact was made with the Director Doctor Jean Bosco. His English is poor, and details were unable to be obtained, however, it is understood that the hospital has the following capability:

- a. Obs & Gynae;
- b. Medical;
- c. Surgical;
- d. Orthopaedic, and
- e. X-Ray.

? 22. Apparently, the Log Coy has an orphanage in this town.

23. **Recommendations are:**


- a. That the Surgical Team (x 4 pers) return Saturday 16th September 94, and perform the four surgical cases under Ketamine anaesthesia;
- b. That the Radiographer deploy with the surgical team to assess the X-ray Department and equipment for repair, and possible return of the local radiographer;
- c. That Prev. Med. relocate the latrines away from the surgical ward (See Prev Med report);

4.

- d. That there is some commitment, surgically, either once or twice a week that will also involve the Canadians, eg: Tuesday and Saturday;
- e. That 6 - 12 units of (possibly) O Negative blood be provided if refrigeration can be established; ??
- f. That the Physiotherapist deploy with the surgical team for post-operative physiotherapy advise and training, and to assess the feasibility of an Out Patient service / training at the hospital;
- g. That a Ward Round be conducted at the Rwamagana Hospital, in passing;
- h. That a safe water supply be established;
- i. That all of the above needs to be balanced against diluting the commitment to Level Three medical support in Kigali. ✓✓

R.N. ATKINSON
COL
Orthopaedic Consultant Surgeon

Sep 94


R.A. BELL
MAJ
OIC Operating Suite

14 Sep 94

ASC UNAMIR II



MINUTE

436-1-1

See Distribution List

HEALTH ADVICE ON LOCAL CIVILIAN RESTAURANTS

1. A number of restaurants that have reopened in the Kigali area have been inspected by the Force Health Officer (FHO), CAPT M. Waixel.
2. Following is a list of those premises inspected, with observations and recommendations:
 - a. Snack la Palmier (TUM TUM). Boulevard de la Revolution:
 - (1) Observations:
 - (a) the food served in the premise is mainly goat that is slaughtered on site,
 - (b) there is no food refrigeration and all meats are stored in the open ,
 - (c) cooking and slaughtering are done in an area behind the premise,
 - (d) dogs and chickens (which roam freely) are in contact with the meat;
 - (e) all cooking is done over a charcoal fire using large cooking pots,
 - (f) these pots had a large build up of charcoal on the outside and dried mouldy food remains in the inside of the pot,
 - (g) utensils used to slaughter the goat were used to cut the meat and to serve the food,
 - (h) crockery was of formica instead of china,
 - (i) crockery was only wiped down after use and not washed in hot soapy water,
 - (j) there was no evidence of there being an area for the washing of crockery or cutlery, and
 - (k) the only refrigeration on site was used to chill drinks.

- (2) Recommendation: It is recommended that UN troops should be encouraged not to eat at the restaurant Snack la Palmier, and the consumption of drinks be limited to those manufactured in Uganda.

b. Le petit Kigali, Rue du lac Mpanga.

(1) Observations:

- (a) there is a variety of meats and fish available to the diner,
- (b) all meats and fish are refrigerated,
- (c) the kitchen on each inspection was in the process of or had already been scrubbed clean after the previous days activities.
- (d) all crockery and cutlery is cleaned after use in hot soapy water,
- (e) wines, beer and soft drinks are imported, and
- (f) no meat is slaughtered on site.

- (2) Recommendation: It is recommended that UN troops should be encouraged to eat at the restaurant Le petit Kigali, and the only drink not to be consumed is the local beer called Primus.

c. Joker : Rue de l'Akagera.

(1) Observation:

- (a) this restaurant has no power, no sanitation and at present is located off a dirt road,
- (b) all meats are cooked in the same manner as the local food stalls, and
- (c) there are no cleaning facilities available.

- (2) Recommendation: It is recommended that UN troops should not visit this restaurant.

d. Kigali Nightclub.

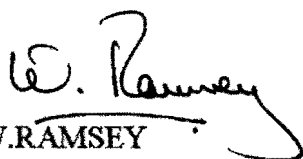
(1) Observation:

- (a) this club serves ice cold drinks consisting of wines, spirits, beers and soft drinks,
- (b) there are available at night goat kebabs (on steel skewer) cooked over a charcoal fire,
- (c) the goat kebabs are made prior to sale from goats slaughtered on site, and
- (d) dancing is available at night (disco ?).

- (2) Recommendation: It is recommended that UN troops who are allowed to visit this club, should be encouraged not to eat the kebabs.

3. If any new restaurants open, or members have concern for the on going suitability of a restaurant that has already been inspected, they should contact the FHO through AUSMED or the HLTH SVC BR.

4. UN and NGO personnel are strongly encouraged not to eat at a local restaurant unless that restaurant has been inspected by the FHO or his staff.



W.RAMSEY
COL
FMO

Sep 94

Distribution:

HQ UNAMIR
UNREO (for all NGO)



Office of the DFC/COS
UNAMIR Force HQ
KIGALI
Rwanda

1000.7(DFC)/A/1

10th September, 1994

See Distribution.

OUTBREAK OF MALARIA IN SECTOR 4

1. The rate at which troops are contracting malaria in the mission area especially in Sector 4 is alarming and it is becoming a source of worry to Command. At this rate, it can only be adduced that tps are not taking the necessary preventive measures. It must be remembered that before the civil war, we lost two of our civilian colleagues through malaria attack.
2. Again the tendency of tps carelessly littering the area with empty canned food containers (a source of mosquito breeding) can not be ruled out. And with the onset of the rainy season, the situation will become worse if this practice is not checked.
3. Units are therefore advised to caution troops to dispose off these empty cans at the appropriate dumps and also to be advised to take the necessary preventive measures to avert the outbreak of malaria in the mission area.
4. Submitted for your necessary action.

HK ANYIDOHU
Brig Gen
DFC/COS

See CD

Distribution:

Action:

Info:

ALL BATTALIONS/UNITS
COYS
MILOB GP HQ

MA TO FC
CAO
CHIEF MED OFFICER

10/9

C

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

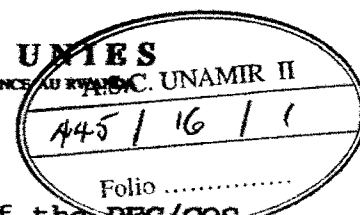
To: Fmo 10/9
Med Ops
Med Leg

Remarks/Action:

WR
F
[Signature]

Please initial and date when action complete then pass quickly.

.....



Office of the DFC/COS
UNAMIR Force HQ
KIGALI
Rwanda

1000.7(DFC)/A/1

10 September, 1994

See Distribution

OUTBREAK OF MALARIA IN SECTOR 4

1. The rate at which troops are contracting malaria in the mission area especially in Sector 4 is alarming and it is becoming a source of worry to Command. At this rate, it can only be adduced that tps are not taking the necessary preventive measures. It must be remembered that before the civil war, we lost two of our civilian colleagues through malaria attack.
2. Again the tendency of tps carelessly littering the area with empty canned food containers (a source of mosquito breeding) can not be ruled out. And with the onset of the rainy season, the situation will become worse if this practice is not checked.
3. Units are therefore advised to caution troops to dispose off these empty cans at the appropriate dumps and also to be advised to take the necessary preventive measures to avert the outbreak of malaria in the mission area.
4. Submitted for your necessary action.

HK ANYIDOHO
Brig Gen
DFC/COS

Distribution:
Action:

ALL BATTALIONS/UNITS
COYS
MILOB GP HQ

Info:

MA TO FC
CAO
CHIEF MED OFFICER

MED COY AUS MSF

FORMAT FOR MEDICAL FACILITY REPORT

FROM:

TO: HQ MSF

FOR OPS

OC MED COY

MEDICAL FACILITY (insert name) GR (insert GR)

1. NAME OF DIRECTOR
2. NAME OF ENGLISH SPEAKING CONTACT
3. CONTACT PHONE/FAX NUMBERS
4. POSTAL ADDRESS
5. STAFFING
 - A. DOCTORS - NUMBER AND SPECIALTIES
 - B. NURSES - NUMBER AND SPECIALTIES
 - C. MED ASSISTS - NUMBER
 - D. DENTAL - NUMBER AND CAPABILITY
6. BEDS BY DEPARTMENTS - TOTAL
 - A. ICU/HDU
 - B. SUGICAL
 - C. MEDICAL
 - D. PAEDIATRICS
 - E. MATERNITY
7. OUTPATIENT NUMBERS SEEN DAILY
8. ANCILLARY SERVICES
 - A. PATH INCLUDE TESTS POSSIBLE AND EQUIPMENT DETAILS
 - B. XRAY INCLUDE EQUIPMENT DETAILS
 - C. THEATRE CAPABILITY
 - D. BLOOD BANKING CAPABILITY
9. NGO SUPPORT
 - A. ORGANISATION
 - B. CAPABILITY
10. MEDICAL SUPPLIES
11. WATER SITUATION AND SOURCE
12. POWER SOURCE (include details of previous power availability)
13. SEWERAGE SYSTEM
14. PREVALANT DISEASES
15. BURIAL FACILITIES
16. ACCOMODATION
17. LZ/ AIRPORT AVAILABILITY AND DISTANCE TO HOSPITAL
18. AMBULANCES AVAILABLE LOCALLY
19. ROAD CONDITIONS AND ROUTES
20. TRAVEL TIME
21. PREVIOUS LOCAL POPULATION - NUMBER
22. REFUGEE POPULATION - NUMBER

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-1

Correspondence No. _____

To: Comasc

Remarks/Action:

Med Ops

Med log

CC LK

This is the form Med Coy are
using to gather info on Med facy. L

Copy also to ACH/Int file.

WSP
Done

Please initial and date when action complete then pass quickly.

MED COY AUS MSF

FORMAT FOR MEDICAL FACILITY REPORT

FROM:

TO: HQ MSF

FOR OPS

OC MED COY

MEDICAL FACILITY (insert name) GR (insert GR)

1. NAME OF DIRECTOR
2. NAME OF ENGLISH SPEAKING CONTACT
3. CONTACT PHONE/FAX NUMBERS
4. POSTAL ADDRESS
5. STAFFING
 - A. DOCTORS - NUMBER AND SPECIALTIES
 - B. NURSES - NUMBER AND SPECIALITIES
 - C. MED ASSISTS - NUMBER
 - D. DENTAL - NUMBER AND CAPABILITY
6. BEDS BY DEPARTMENTS - TOTAL
 - A. ICU/HDU
 - B. SUGICAL
 - C. MEDICAL
 - D. PAEDIATRICS
 - E. MATERNITY
7. OUTPATIENT NUMBERS SEEN DAILY
8. ANCILLARY SERVICES
 - A. PATH INCLUDE TESTS POSSIBLE AND EQUIPMENT DETAILS
 - B. XRAY INCLUDE EQUIPMENT DETAILS
 - C. THEATRE CAPABILITY
 - D. BLOOD BANKING CAPABILITY
9. NGO SUPPORT
 - A. ORGANISATION
 - B. CAPABILITY
10. MEDICAL SUPPLIES
11. WATER SITUATION AND SOURCE
12. POWER SOURCE (include details of previous power availability)
13. SEWERAGE SYSTEM
14. PREVALANT DISEASES
15. BURIAL FACILITIES
16. ACCOMODATION
17. LZ/ AIRPORT AVAILABILITY AND DISTANCE TO HOSPITAL
18. AMBULANCES AVAILABLE LOCALLY
19. ROAD CONDITIONS AND ROUTES
20. TRAVEL TIME
21. PREVIOUS LOCAL POPULATION - NUMBER
22. REFUGEE POPULATION - NUMBER

ASC UNAMIR II



MINUTE

ASC UNAMIR II IO003/94

HQ UNAMIR (For COO and FMEDO)

MEDICAL/HYGIENE INSPECTION REPORT-RECON TO KIBUYE

A. Map sheet 21, Kibuye, Series Z723, Edition 1, 1:50 000. 1994.

General

1. During the period 30 Aug -2 Sep a recon/advance party visited Kibuye in Sector 4B. The group comprised:
 - a. CSM Med Coy - Comd;
 - b. Supervisor Communications (SC); and
 - c. Preventative Medicine, dental and pathology representatives.

Medical Support Provided

2. The advance party/recon group were to provide information and establish liaison with FRAFBATT, before HQ AUSMED would dispatch a main body element to provide the detailed medical support. Due to the poor condition of the roads and the initial information provided, it was decided not to send a main body to marry up with the recon group. This recon group then provided medical support within their capabilities. In summary they achieved:
 - a. 30 FRAFBATT pers were bled to determine their blood groups. These results are now available and will be dispatched safe hand to FRAFBATT personnel on Sun 11 Sep 94.
 - b. 35 patients requiring dental care were examined by a Dental Assistant. Work required includes surgical extractions and fillings. These tasks will be undertaken from 11 Sep 94.
 - c. Preventative Medicine noted a number of problem areas and these are contained in this report.

Refugee/Displaced Persons Camps

3. NDABA (vis GS 4373) . A displaced persons camp of between 4000 and 5000, operated by the Adventist Development & Relief Agency (ADRA) is located in Ndaba. The proprietor is Barry

Chapman. There are four doctors and two nurses. It was apparent that the displaced persons were quite happy with their situation and showed no desire to return to their homes.

4 The displaced persons did not indicate that they feared retribution or the RPA, however they were concerned about how they would feed themselves at home and were concerned about the general security situation (looting etc) outside the camp.

5 The feeling AS personnel gained was that the camps provided food and security forces and so the people were happy to stay there. Comment: If the security forces were patrolling actively throughout the AO, and reduced the amount of soldiers in the camps, perhaps people would become more confident to return to their homes and begin cultivating the land.

6 MABANZA (vic GS 3473). This is a displaced person/refugee camp of 8000 to 10 000. This camp was not visited but it was determined that Medicine San Frontiere are the operators.

FRAFBAT Outpost

7 The FRAFBAT outpost visited is Pl sized and is located at Rugabono village, GR 424 667 of Reference A.

8 Refugee numbers in the area are approximately 6000 with very little movement in or out. Sanitation is very poor, with pit latrines only. There is no power or fuel for lights, the water supply is intermittent and untreated from ground water sources and there have been no food deliveries since 13 August.

9 There does not appear to be an NGO operating in the area. The identified camp leaders are Lukelilibaye Simon and Ruremesha Antoine.

10. Medical assistance is provided by two nurses and two aids during daytime only. They are unpaid and now demand 200 Rwanda francs for their services and most refugees can not afford to pay. There are no drugs and very limited medical supplies. Some assistance is provided by the FRAFBAT out of their own resources.

11. There were no signs of militia or major security problems, however three armed men were disarmed by FRAFBAT a few days before the AS element arrived.

12. Prevalent diseases are giardia, dysentery being the major problem, associated with acute malnutrition, particularly amongst the children. Malaria is also becoming a concern due to lack of drugs. There are no anti-biotics at all. Syringes are re-used with elementary sterilisation by boiling.

13. Tentage and camp stretchers are required for FRAFBAT members as none currently exist. FRAFBAT soldiers find many insect pests in their bedding. In Rugabano they are currently living in a school. When the building is required as a school again, they will have no shelter at all. Shelter for FRAFBAT members will become a high priority in the wet season in the following outposts:

- a. Rugabano,
- b. Nalaba,
- c. Mwendo,

- d. Mabaga, and
- e. Gishyita.

14. The following equipment is required to assist the FRAFBAT in attaining a more healthy environment for their deployment.

- a. lime for bodies/ latrines in field;
- b. shower buckets.;
- c. latrine field;
- d. chlorine for water treatment plant;
- e. cyanide or other poison to hand bait dogs, which are a big problem in the area;
- f. possible repair / replacement of milipore;
- g. supply endobroth and filters (field monitors);
- h. detergent and disinfectant; and
- i. fly control for latrines.

15. Water for the water treatment plant is sourced from the surrounding mountains and collected and transported by agricultural pipes located two to three metres below ground. The water is possibly contaminated by faecal material as cattle graze over all these areas.

16. The water treatment plant is running very low on chlorine with only 45kg left. Due to this, chlorine level is:

- a. total - 0.6ppm;
- b. free - 0.4ppm;
- c. residual - 0.2ppm; and
- d. pH 7.1.

17. The visit to the hospital showed that there was poor hygiene in all areas, needles and syringes are re-used and there is no disinfectant available at all. All latrines require fly control measures to be taken.

18. An orphanage was visited which had approximately 200 children and this figure is growing each week. The following hygiene problems were noted:

- a. the latrines are in an extremely poor hygiene state;
- b. flies are a large problem;
- c. there is no disinfectant available; and
- d. the rooms have a very noticeable faecal/urine odour.

Route

19. The road in is quite poor and travelling time from Kibuye to Gitarama is approximately two hours at 20km/h average speed, distance is approx 35 to 40km. After rain this road is likely to be impassable to wheeled traffic.

Conclusion


20. The visit to Kibuye proved to be valuable as a number of people were treated using AS resources. A good idea of what is required to help reduce the amount of disease and non-battle casualties amongst UNAMIR troops and civilians in the vicinity of Kibuye is now known. Planning is underway for the move of a dental element and preventative medicine detachment to Kibuye from 11 Sep 94. Further information relating to the refugees/displaced persons and there motives /feelings was also gathered.

21. It appears that people are remaining in the camps because that is where the food is and the security forces are also seen to be there.

Recommendations

22. It is recommended that:

- a. HQ UNAMIR Logistic Staff consider the supply of the materials and equipment identified in this report, to improve the hygiene of deployed UNAMIR troops in Sector 4B; and
- b. UNAMIR troops continue to increase their profile within the entire AO, by patrolling, rather than static tasks around displaced persons camps. This will have the effect of encouraging the population to return to their homes.


R.F. Mc INTOSH
LTCOL
CO AUSMED

5 SEP 94

CORRESPONDENCE DISTRIBUTION
COVER SHEET

31/8

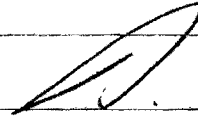
File No. 445-16-1

Correspondence No. _____

To: Comasc 31/8 Remarks/Action: _____

Med Ops

Med log



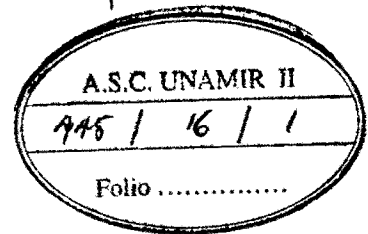
Please initial and date when action complete then pass quickly.

UNCLASSIFIED
Medical-In-Confidence

ASC UNAMIR II



MINUTE



445-10-4
ASC UNAMIR II OPS04/94

See Distribution

MEDICAL INTELLIGENCE REPORT 01/94

1. The deployment of AUSMED assets to locations in the south, south west and west of Rwanda have provided valuable information on some of the medical conditions existing in these areas. The following information has been collected to date:

a. Cyangugu:

(1) Three displaced persons camps in the Mururu area, GS 7521, have the following statistics:

- | | | | |
|-----|------------------|---|---------|
| (a) | Malaria | - | 10%; |
| (b) | Cholera | - | 4%; |
| (c) | Flu | - | 10%;and |
| (d) | Bloody diahorrea | - | 6%. |

(2) These statistics were provided by liaison with NGOs working in the area.

(3) On 30 Aug 94 our MO provided a clinic to one of the camps and treated the following conditions:

- | | | | |
|-----|------------------------------------|---|------------------|
| (a) | Malaria | - | 5 patients; |
| (b) | Scabies | - | 180 patients;and |
| (c) | Infected wounds and skin disorders | - | 80 patients. |

(4) Prev med elms sprayed accommodation areas to eradicate scabies vector and chemically analysed water samples.

b. Gikongoro:

(1) A number of severe measles cases are reported around this area, but not epidemic. It is believed that before the war 75% of the population were immunized against measles. NGO are now immunizing more children in the area for measles.

(2) At least a dozen cases of Meningitis have appeared in two displaced persons camps holding thousands of people. NGO intend to screen for Meningitis this week. Latex tests show that the organism is N. Meningitis Group A. It is unclear if the situation is an early epidemic or endemic.

(3) Treatment Section Group is not expecting a lot of work from GHANBATT, due to

Medical-In-Confidence
UNCLASSIFIED

UNCLASSIFIED
Medical-In-Confidence

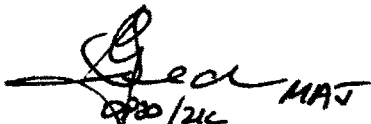
their own facilities. Some dental work is expected.

c. Butare:

- (1) A copy of a report on the capability and needs of the University Hospital at Butare is enclosed. The situation clearly requires coordination at a Government and UNREO level or this facility will not regain its potential capability. Request that FMedO office initiate action to alert these agencies to the urgent requirements. AUSMED will continue to assist where possible.
- (2) Water sources in the area reveal a high count E-COLIE and require sterilizing even before non-potable use AUSMED requirements are to be treated by Prev Med staff.

d. Kibuye:

- (1) Hospital has power and water, although it now holds very limited medical supplies.
- (2) FRAFBATT have at least 35 dental patients. A plan for treating these soldiers will be formulated and advised by 5 Sep 94.


P.F. MC INTOSH
LTCOL
CO

31 Aug 94

Attachment: 1. Health Intelligence Report on University Hospital in Butare.

Distribution:

HQ UNAMIR (For FMedO)

Internal:

CO (For diary)
Health Officer
OC MED COY
OC TSG
File

Medical-In-Confidence
UNCLASSIFIED

OC 33
Revised Feb 89

Department of Defence

MESSAGE FORM NOTE: Shaded areas are for COMMCEN/SIGS use only
SECURITY CLASSIFICATION AND
SPECIAL HANDLING INSTRUCTIONS

LINE 1									
LINE 2									
LINE 3									
LINE 4									
LINE 5									
PRECEDENCE ACTION		PRECEDENCE INFO ROUTINE		DATE-TIME GROUP		MESSAGE INSTRUCTIONS			
ROUTINE									
ROUTING INDICATORS		NOTE: Write only one addressee per line						SIG/ORIG NO	
		FROM TSG - BUTARE							
		TO HQ AUSMED							
		SUBJ: HEALTH INT REPORT						GR	
		ON UNI HOSPITAL BUTARE							
		1. INFO FROM CONVERSATION BETWEEN							
		MAJ BRIDGORD AND A DR RWAGACONGO,							
		CO ORDINATOR OF MEDICAL ACTIVITIES,							
		UNIVERSITY HOSPITAL.							
		2. THIS HOSPITAL ONLY TEACHING HOSPITAL							
		IN SOUTH OF RWANDA. MAIN/ONLY							
		HOSPITAL FOR MEDICAL SCHOOL.							
		3. 400 BED CAPACITY, CURRENTLY 85							
		INPATIENTS. DID SEEING 175 PATIENTS/							
		DAY, BUT MANY REFUSED ADMISSION DUE TO							
		LACK OF RESOURCES.							
		4. MAJOR LACK OF RESOURCES ID.							
		A. WATER. NO RUNNING WATER, CURRENTLY							
		NO POTABLE WATER OTHER THAN GATHERED							
		IN TERNY CANS. RAINWATER TANK USED							
		FOR WASHING. WILL TEST THIS. RPA							
		WATER TANKER CURRENTLY US, THIS							
		PACU INVESTIGATING REPAIR AND							
		SHORT TERM DELIVERY OF WATER SOLUTIONS							
		RUNNING WATER MAY NOT BE POSSIBLE							
		UNTIL A 20,000 L STILT TANK CAN							
		BE FILLED, WHICH REQ EITHER TOWN							
		POWER OR A 30 KVA GENERATOR TO							
		POWER THE PUMP WHICH USED TO DO THE							
		JOB. WATER SOURCE FOR TANK STILL INTACT.							
PAGE NO		DRAFTER'S NAME AND TITLE				PHONE NO		REF FILE NO	
1								MED INT	
NO OF PAGES		RELEASES'S NAME AND TITLE				BRANCH/UNIT		SIGNATURE	
4								30 Aug 94	
FOR OPS USE	DATE	TIME	SYSTEM	OPERATOR	DATE	TIME	SYSTEM	OPERATOR	SECURITY CLASSIFICATION
									UNCLAS

Stock No 7520 66 094 6819

MESSAGE FORM

NOTE: Shaded areas are for COMMCEN/SIGS use only

LINE 1		SECURITY CLASSIFICATION AND SPECIAL HANDLING INSTRUCTIONS	
LINE 2		UNCLAS	
LINE 3			
LINE 4			
LINE 5			
PRECEDENCE ACTION	PRECEDENCE INFO ROUTINE	DATE TIME GROUP	MESSAGE INSTRUCTIONS
ROUTINE			
ROUTING INDICATORS	NOTE: Write only one addressee per line		SIG/ORIG NO
	FROM		
	TO		
	B. POWER. TWO LARGE BACK UP GENERATORS ARE SERVICABLE BUT THERE IS NO DIESEL TO RUN THEM.		GR
	M) UNAMIR PROMISED FUEL THROUGHOUT TWO WEEKS AGO, BUT NONE HAS COME. BULK STORAGE IN THE TOWN IS A PROBLEM AS IS SECURITY OF THE FILLED TANKS. THE QUANTITY NEEDED IS 1,000 TO 2,000 L PER WEEK. NO POWER IN HOSPITAL AT ALL AT MOMOU.		
	C. WAGES. NO FOOD OR MONEY BEING PAID TO STAFF AT ALL. EVERY DAY FEWER HELPERS, NURSES AND DOCTORS AT HOSPITAL BECAUSE GOING TO KKAU WHERE THEY CAN BE PAID. UNICEF AND PREFECT NEGOTIATING BUT NO SOLUTION IN NEAR FUTURE.		
	D. WORK OUTPUT. MOST STAFF HAVE POST TRAUMATIC STRESS SYMPTOMS, AND COMBINED WITH TIME SPENT WALKING TO WORK, POOR RESOURCES, HAVING TO LOOK FOR FOOD AND WATER THEMSELVES AND FAMILY EACH DAY, THEY CAN ONLY WORK THREE HALF DAYS / WEEK. TWO TEAMS COVER MON-SAT. NO NIGHT OR SUNDAY COVER.		
	E. DRUGS AND EQUIPMENT. THERE ARE		
PAGE NO	DRAFTER'S NAME AND TITLE	PHONE NO	REF FILE NO
2			HEA INT
NO OF PAGES	RELEASER'S NAME AND TITLE	BRANCH/UNIT	SIGNATURE
4			30 Aug 1994
DATE	TIME	SYSTEM	OPERATOR
DATE	TIME	SYSTEM	OPERATOR
SECURITY CLASSIFICATION			
UNCLAS			

MESSAGE FORM

NOTE: Shaded areas are for COMMUNICATING UNIT'S SECURITY CLASSIFICATION AND SPECIAL HANDLING INSTRUCTIONS

LINE 1	UNCLAS
LINE 2	
LINE 3	
LINE 4	
LINE 5	

PRECEDENCE ACTION ROUTINE	PRECEDENCE INFO ROUTINE	DATE TIME GROUP	MESSAGE INSTRUCTIONS
-------------------------------------	----------------------------	-----------------	----------------------

ROUTING INDICATORS	NOTE: Write only one addressee per line	SIG/ORIG NO
	FROM	
	TO	

	SHORTAGES OF MOST DRUGS AND BEST SUPPLIES WILL LAST 3-4 WEEKS. THERE ARE LARGE SHORTAGES OF SURGICAL EQUIPMENT AND CONSUMABLES. ATTACHED IS A LIST OF DESIRED ITEMS (IN FRENCH), AND DRUGS HAVE BEEN ORDERED AND ONE MONTH SUPPLY AMOUNTS THROUGH PSF. STERILIZING EQUIPMENT WORKS BUT NO POWER. NO BLOOD BANK / PATH / XRAY. ONLY BASIC LIFE SAVING AND OPD SURGERY BEING DONE. NO TUBE INCINERATOR, NO MORTUARY, NO SPECIALIST CLINICS. 5. TYPES OF PATIENTS ON WARDS ARE IDENTICAL TO THOSE IN CHK. 6. SUMMARY. THE SITUATION IS CRITICAL FOR THIS HOSPITAL. WITHOUT MAJOR EFFORT TO SUPPORT IT, THE SOUTH OF THE COUNTRY WILL LOSE ITS TERTIARY REFERRAL CENTRE AND MEDICAL SCHOOL. MEDICAL SERVICES WILL BE RESTRICTED TO A MIXTURE OF THIRD WORLD MEDICAL MANAGEMENT AT DISTRICT HEALTH CENTRES, AND SCATTERED NGO INPUT. NGO SPONSORED SPECIALIST CENTRES OUTSIDE OF UNI HOSPITAL WILL ONLY CONTRIBUTE TO ITS DISEASE, AS IT WILL	GR
--	--	----

PAGE NO 3	DRAFTER'S NAME AND TITLE	PHONE NO	REF FILE NO MED INT
NO OF PAGES 4	RELEASER'S NAME AND TITLE	BRANCH/UNIT	SIGNATURE 30 Aug 94
OR PS SE	R	DATE	TIME
SYSTEM	OPERATOR	D	DATE
TIME	SYSTEM	OPERATOR	SECURITY CLASSIFICATION UNCLAS

Department of R...

MESSAGE FORM

NOTE: Shaded areas are for COMMCEN/SIGS use only.

SECURITY CLASSIFICATION AND
SPECIAL HANDLING INSTRUCTIONS

UNCLAS

MESSAGE FORM		NOTE: Shaded areas are for COMMCEN/SIGS use only.
LINE 1		SECURITY CLASSIFICATION AND SPECIAL HANDLING INSTRUCTIONS UNCLAS
LINE 2		
LINE 3		
LINE 4		
LINE 5		

PRECEDENCE ACTION	PRECEDENCE INFO ROUTINE	DATE TIME GROUP	MESSAGE INSTRUCTIONS
ROUTINE			
ROUTING INDICATORS	NOTE: Write only one addressee per line		SIG/ORIG NO
	FROM		
	TO		
	DRAW PATIENTS AND STAFF		OR
	FROM THE PACU. A COORDINATED		
	EFFORT BY THE RWANDAN GOVT,		
	THE HOSPITAL STAFF, AND NGO, HEALTH		
	DEPARTMENTS, RATHER THAN THE		
	WHOLE HOSPITAL, IS NEEDED. THIS		
	LOOKS UNLIKELY IN THE NEAR		
	FUTURE AND IT WILL PROBABLY		
	BE MONTHS IF NOT YEARS BEFORE		
	THE HOSPITAL IS OPERATING IN A		
	FASHION SIMILAR TO BEFORE THE		
	WAR.		
	Z. ACK		

PAGE NO 4	DRAFTER'S NAME AND TITLE DAY OCT89	PHONE NO —	REF FILE NO MED INT
NO OF PAGES 4	RELEASER'S NAME AND TITLE AS ABOVE	BRANCH/UNIT AS MED SPT FORCE.	SIGNATURE <i>M. J. Day</i>
DATE	TIME	SYSTEM	DATE
R R E			30 Aug 91
OPERATOR	DATE	TIME	SECURITY CLASSIFICATION
D			UNCLAS

ATTACHMENT TO
~~HEALTH~~ HEALTH INTEREST
30 AUG 94

**MATERIAL CHIRURGICAL DONT ON A LE PLUS
MATERIEL A L'HOSPITAL UNIVERSITAIRE.**

1. Chirurgie du cou :
 - Matériel de Traction
2. Chirurgie de la colonne :
 - Matériel de traction orthopédique
 - Matériel de Stabilisation:
 - Harrington
 - Genuell - Rebois
 - Plaque
3. Chirurgie de la hanche :
 - Clous - plaques et matériel de pose
 - Prothèses de Hesse et Hesse + matériel de pose
 - Prothèses totales et ciment + matériel de pose
4. Chirurgie fémur :
 - Clous courts - médullaires + matériel de pose
 - Plaque vissée :
 - Vis corticales + matériel de pose
 - Vis spongieuses
5. Chirurgie du genou :
 - Lames - plaques + matériel de pose
(condyliennes)
 - Fils de sutures + matériel de pose
 - Plaque en T pour plateau
 - Vis spongieuses
6. Chirurgie du tibia :
 - Clous tibiaux + matériel de pose
 - Plaque tibiaux + matériel de pose
 - Plaque pour extrémités inférieures et leurs Vis + matériel de pose
 - Vis métalliques
 - Broches de Kirschner pour métastases
7. Chirurgie membre supérieur :
 - Bandage pour membre et matériel de pose
 - Bandage pour avant-bras
 - Plaque vissée pour avant-bras et matériel de pose
8. Pour les fractures ouvertes :
 - Plaque externe et matériel de pose
Hoffman et Fourn ou Polikarov
9. Boite de laparotomie (chirurgie générale) (4 boites)
10. Boite de traction
 - Broches : Steinmann
Kirschner
Harris
Pelle
Attelle de Roux
11. Boite de Chirurgie Thoracique + écarteur Thoracique grand format
(Finchay)
12. Boite de chirurgie urologique (Prostatectomie néphrectomie, cystectomie etc...)
13. Boite de chirurgie digestive
(gastroectomie, colectomie, gastro-entérectomie + vagotomie) (4 boites)
14. Boite de suture (4 boites)
15. Appareil de Suture électrique

14. Instruments pour linge opératoire (6 tambours)

- Gants, Alèses, Klammes
- Compresseur abdominal
- Curettes
- Boute de gaz
- Spandrop

15. Fil : soie vertix, chromé, catgut

- Gants, gaze
- Rétracteur

POUR LA GYNÉCOLOGIE

1. Deux boîtes pour éclamie
2. Deux boîtes de laparotomie
3. Deux boîtes pour la chirurgie vaginale
4. Matériel chirurgical pour salle d'accouchement

POUR LA MÉDECINE INTERNE

1. Radiographe
2. Electro-encephalogramme
3. Glucostat
4. Tensiometre

Fait à Butare le 26/08/1994

Dr. RWAGABO Claude

Coordonnateur des activités
Médicales et Paramédicales
à l'Hôpital Universitaire

Prof. Dr. MUKWINDO Etienne

Médecin-Directeur adj.
de l'Hôpital Universitaire



S/ Directeur
de Nursing

26/8

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. 445-16-4

Correspondence No. 1.

To COMASC 27/8
CCW

Remarks: W.R. forward to
cc Wad Gay for info
Done

27/8

UNCLAS
Cover Sheet Classification

Enclosure Classification

Department of Defence
Land Headquarters

FACSIMILE COVER SHEET

Page 1 of 2

File No K94 01047	FAX No 19
Precedence ROUTINE	DTG FAX Out Operator Name Signature
Facsimile Addressee COL W. P. Ramsey COMASC UNAMIR II	Facsimile Originator LTCOL G. A. LAW SO1 HLTH OPS HLTH SVCS BR LHQ VICTORIA BKS PADDINGTON NSW 2021
UNCLAS FAX No: DISCON FAX No: Telephone No:	UNCLAS FAX No: 02 229 5654 DISCON FAX No: Telephone No: 02 330 3148

Subject Title:

Reaction following meningococcal vaccination

Instructions/Comments

for your information.

Releasing Officer	Signature	Rank/Appointment	Date
Michelle Brodrick	<i>Ch Brodrick</i>	ASO1	26/8/94

THIS FAX COVER SHEET AND ENCLOSURE ARE TO BE TRANSMITTED LAW THE REQUIREMENTS FOR THE HIGHEST SECURITY CLASSIFICATION CONTAINED HEREIN

Enclosure Classification

UNCLAS
Cover Sheet Classification

REACTION FOLLOWING MENINGOCOCCAL VACCINATION IN PATIENTS WITH A PREVIOUS HISTORY OF DISEASE

Heath Kelly, Public Health Unit, Southern Health Authority, Western Australia

Late last year, investigation of a case of meningococcal disease led to the identification of a family cluster of infection, and subsequent investigation of possible immune deficiency in the family. As part of the investigation, quadrivalent meningococcal vaccine was administered to the family, and the two members who had previously had invasive disease suffered reactions following the vaccination.

The investigation had begun in October 1993, when a 16 year old asplenic female boarder at an agricultural college in Western Australia died from overwhelming septicæmia due to *Neisseria meningitidis* (serogroup W135). Investigation of this episode led to the identification of two other cases of meningococcal disease associated with the same agricultural college over a period of seven years¹.

The first of these cases was a 14 year old school boy who had severe meningococcal septicæmia in August 1986 and who spent a total of three months in hospital, finally losing two digits from his right hand due to peripheral vascular complications of his infection. At the time this boy was attending the high school in the same town as the agricultural college and an elder

brother was attending the agricultural college. The elder brother was a nasopharyngeal carrier of *Neisseria meningitidis* identified by polyvalent antiserum as serogroup X, Y, Z or W135. The second case, a younger brother of the first case, was treated for meningococcal meningitis in 1991. *Neisseria meningitidis* was again identified by polyvalent antiserum as belonging to serogroup X, Y, Z or W135. This boy was 15 years old at the time and was attending the agricultural college in the same town as the previous two cases.

Two brothers from one family were therefore identified as having had disease due to *Neisseria meningitidis* of serogroup X, Y, Z or W135. There are two other brothers in this family, one, the carrier referred to above and the other, the youngest, now attending the agricultural college. The youngest brother was immunised using the quadrivalent meningococcal vaccine against serogroups A, C, Y and W135 (Mencevax, SmithKline Beecham). Previous infection with *Neisseria meningitidis* was confirmed by the manufacturers of the vaccine as not being a contraindication to meningococcal vaccination, so as part of an investigation into possible immune deficiency in the family, all other members of the family were also immunised with the quadrivalent

vaccine, with the intention of estimating meningococcal antibodies after a period of three months. In the event this estimation was not performed but immunoglobulin concentrations, C3 and C4 concentrations and CH50 estimations were normal for all family members, indicating no homozygous deficiency in the complement pathway. Deficiencies in the terminal components of the complement pathway are recognised as predisposing risk factors to infection with *Neisseria meningitidis*, especially serogroups X, Y, Z or W135 in older children².

There were no reactions following the meningococcal vaccination in the mother, father or the two brothers who had had no previous meningococcal disease but in both the brothers who had previously had meningococcal disease there was a flu like illness. In the first case the reaction was relatively mild and lasted three days but in the second case the reaction was more severe, lasting one week, with symptoms of rigors, fever, anorexia and arthralgia. In both cases the local general practitioner elected to treat these episodes with antibiotics, in the former case with oral antibiotics and in the latter case with parenteral antibiotics. Both young men have made a complete recovery.

The adverse reaction following immunisation with the quadrivalent meningococcal vaccine (Mencevax) was discussed with the manufacturers SmithKline Beecham, who contacted their principals in Belgium. They confirmed that the vaccine was not contraindi-

cated in persons with a previous history of meningococcal disease and, moreover, there was no record of any similar presumed vaccine reaction. A company specific drug reaction form was completed and the company indicated it would forward the information to the Adverse Drug Reactions Advisory Committee.

Meningococcal vaccine is recommended for travellers to areas where *Neisseria meningitidis* is endemic, for persons who are anatomically or functionally asplenic and for family members with a properdin or terminal complement pathway component deficiency³. This report is aimed at alerting practitioners to a possible reaction associated with administering a quadrivalent meningococcal vaccine to persons who have a previous history of meningococcal disease.

References

1. Kelly H, Corrigan A, Wong M. Invasive meningococcal disease in a rural agricultural college. *Comm Dis Intell* 1994;18:62-164.
2. Fijen CAP, Kiusper EJ, Hannema AJ, Sjöholm AG, van Patten JPM. Complement deficiencies in patients over ten years old with meningococcal disease due to uncommon serogroups. *Lancet* 1989;2:585-588.
3. National Health and Medical Research Council. *Immunisation Procedures*. 4th ed. Canberra: Australian Government Publishing Service, 1991.

29/6

CORRESPONDENCE DISTRIBUTION
COVER SHEET

File No. A45-16-1 Correspondence No. _____

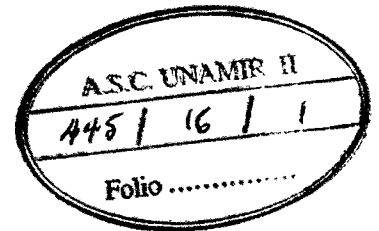
To: COMASC 9/9 Remarks/Action: WR

_____	_____
_____	_____
<u>CCik</u>	_____

Please initial and date when action complete then pass quickly.

.....

Department of Defence
Base Administrative Support Centre Liverpool



MINUTE

→ FMO

436-1-29

*Obtained from Taffy
Cueans prior to leaving
Australia
copy → AS MSF Health Off
8/9*

See Distribution List

**DESTRUCTION AND TESTING FOR PATHOGENS IN WATER SUPPLIES USED
FOR HUMAN CONSUMPTION**

References:

- A. Telecon SME Basic Fd Eng Wing/Hlth Sect BASC Liverpool 28 Jul 94
- B. Discussion 1 Fd Sqn Personnel/Hlth Sect BASC Liverpool 28 Jul 94
- C. Control of Communicable Disease in Man 15th Edition 1990
- D. Mansons Tropical Diseases 19th Edition
- E. MLW Part 2 Med & Dent Trg Vol 2 Pam 1 - Preventive Medicine 1986

Introduction

1. The information contained in this minute and associated annexes has been generated in response to requests for the provision of information in regard to the destruction and description of the causative organism of Cholera. Additionally, a request for literature on the procedures and field kits involved with the testing of water was also made (Ref A and B refers).

2. All in-service water purification units will destroy the organism of Cholera and other pathogens (including viruses) provided there is sufficient contact period with the organism and the sterilising agent (minimum of 30 minutes). The identification, distribution, description and methods of destruction of the cholera organisms and other pathogens, as well as the procedures for conducting bacteriological and chemical testing of water are described in the following text.

Identification

3. Cholera is described as an acute bacterial enteric disease with sudden onset, profuse painless watery stools, occasional vomiting, rapid dehydration, acidosis and circulatory collapse. In severe untreated cases, death may occur within a few hours and the case fatality rate may exceed 50%. With proper treatment, the rate is below 1% (Reference C refers).

Geographical Distribution

4. Cholera occurs endemically in India, Pakistan, Bangladesh, Afghanistan and many parts of the Far East. Epidemics occur periodically in the Middle East and in Africa and major pandemics spreading to almost all the world have occurred in the past. Classical cholera caused by *Vibrio cholerae* is limited to the Indian Pakistan subcontinent while the El Tor vibrio is responsible elsewhere. Isolated countries, such as the Andaman Islands and Australia and New Zealand, have escaped (Reference C refers)..

Description/Destruction of the Cholera Vibrio

5. The cholera vibrio is a very minute organism, 1.5 - 2 μm in length by 0.5 - 0.6 μm in breadth. It is generally curved like a comma, hence its name. Growth is arrested below 15°C or above 42°C; a temperature over 50°C kills the vibrio. It multiplies rapidly without curdling in milk; it dies rapidly in distilled water; it survives longer if salt is added to the water and survives for up to 285 days in sea water.

Disinfection of Water Supplies

6. This procedure involves the destruction of all harmful micro-organisms. All drinking water must be sterilised whether or not it is filtered. Chlorine is effective in small quantities and its action is rapid and reliable. However chlorine is absorbed by organic matter and a sufficient quantity must be added to oxidise the organic matter and other impurities. This must then leave a balance of 'free chlorine' (2 parts per million) in the water to kill the bacteria. Sunlight and time will reduce the amount of free chlorine remaining. Whilst chlorine is the most common large scale sterilising agent there are other methods.

Note: Potassium per-manganate (Condy's Crystals) at a dilution of 1:500 000 (faint pink colour) kills Cholera vibrios in a short time. ie. 2 ml per 1000 litres of water.

Disinfecting Agent

7. Sodium hypochlorite solution is the most common product used to chlorinate water - calcium hypochlorite powder is occasionally used but it is more hazardous to handle and may cause an explosion if it comes in contact with organic material (e.g. petrol, oils, etc.).

8. Extreme care must be taken when using sodium hypochlorite solution or calcium hypochlorite. They are corrosive and give off fumes which are irritant to the skin, eyes and nasal passage and can quickly overcome a person in a confined area. Inhalation must therefore be avoided and the use of gloves is recommended. Prolonged storage (greater than 4 months) of sodium hypochlorite is not recommended and the capacity of the solution to maintain its strength depends on its

storage temperature, exposure to light, the initial strength of the solution and contamination by iron or other metal. Strength is lost quickly with an increase in temperature and strong light decomposes the solution. Weaker solutions lose their strength at a slower rate to that of strong solutions so if the solution must be stored for a period of time it could be diluted with clean water and the weaker solution then stored. Storage of calcium hypochlorite for longer than 1 year is not recommended - it should be stored in a cool, dark place away from organic materials.

Concentration of Disinfecting Agent (Dose) Recommended for Use

9. Fresh sodium hypochlorite solution has 10-13% available free chlorine. Calcium hypochlorite powder has 70% available free chlorine and therefore this product is more concentrated and less is required to be added to water.

10. It is a usual practice to add 3-5 mg/L of chlorine to clear waters and 5-10 mg/L to dirty waters. If the tank is uncovered then the higher dose rates will be required as sunlight rapidly destroys the added chlorine. Using 5 mg/L as the common dose rate, a table showing volume and dose requirements and example calculations for proper water sterilisation is at Annex A to this minute.

Application of Disinfecting Agent in Tank Water

11. It is important that the small amount of sodium or calcium hypochlorite be added to the entire volume of the water requiring treatment, i.e. it is important that the chlorine is distributed throughout the tank. Add the chlorine while the tank is filling - the full tank will then contain 3-5 mg/L of chlorine. It is essential that free chlorine is available to kill bacteria for at least one hour after being added. A smell and taste of chlorine will be present but will probably disappear in a few days, if not overnight. It is important to remember that the nationals of some overseas countries will not consume water that smell or taste of chemicals. Care must therefore be taken to provide these societies with water that has between .05 and 1 part per million free chlorine. Tank water, if treated correctly and protected from contamination, should be safe to drink one hour after treatment.

12. If the tank is already full of water it is advisable not to add concentrated hypochlorite solution or powder directly to the tank (inadequate mixing will occur) but it is better to add the hypochlorite to 5-10 buckets (40-80 litres) of water and pour this more diluted solution into the tank so as to ensure mixing. Then stir with a wooden paddle (not metal) to mix the contents.

Diseases Endemic to Africa

13. Diseases endemic to Africa are shown at Annex B.

Individual Water Treatment

14. Instructions for individual water treatment are at Annex C.

Puritabs/ Potable Aqua Tablets

15. Instructions for the use of Puritabs and Potable Aqua tablets are at Annex D.

Field Water Test Kit

16. Instructions for the use of the Millepore Bacteriological Test Kit are at Annex E.

Field Water Chemical Test Kit (HACH DREL 5)

17. Instructions for the use of the HACH DREL 5 are at Annex F.

Conclusion

18. The information/guidelines contained in this paper and associated Annexes can be passed to personnel being deployed overseas, it is compatible with NATO members ie. USA, Canada and the UK Defence Forces. For any further information regarding this matter contact SGT P. Magnussen on 600 4668.

K.E. EVANS
CAPT
Area Health Officer
6004566

Jul 94

Annexes:

- A. Water Chemical Dose/Example Calculations
- B. Diseases Endemic to Africa
- C. Instructions for Individual Water Treatment
- D. Bacteriological Water Test Kit (Millepore)
- E. Chemical Water Test Kit (HACH DREL 5)

Distribution:

SME for Basic Field Engineer Wing
1 CER for 1Fd Sqn
1 Fd Hosp for Hlth Sect

For information:

SMO 1 Bde
CO BASC Liverpool

**ANNEX A TO
BASC LIVERPOOL 436-1-29
DATED 29 JUL 94**

CONCENTRATION OF DISINFECTING AGENT (DOSE) RECOMMENDED FOR USE

Volume of water to be treated		Volume of sodium hypochlorite * solution required for 5 mg/L dose		Amount of calcium hypochlorite powder required for 5 mg/L dose	
Gallons	Litres	Pints	Litres	Pounds	Kilograms
1,000	4,600	0.4	0.2	0.07	0.03
10,000	46,000	4	2.3	0.7	0.3
22,000	100,000	9	5.1	1.5	0.7
100,000	460,000	40	23	7	3.2
220,000	1,000,000	90	51	15	7

*assuming 10% available chlorine.

Example Calculation

1. To achieve 5 mg/L free chlorine in a volume of water:
 - a. Sodium hypochlorite - assuming only 10% available free chlorine, use the formula:

$$\frac{\text{Tank Volume (L)}}{20,000} = \text{Volume (L) of sodium hypochlorite}$$

e.g. for a 10,000 L tank, volume of sodium hypochlorite

$$= \frac{10,000}{20,000} = 0.5 \text{ Litres of}$$

A2

- b. Calcium hypochlorite - assuming 70% available free chlorine, use the formula:

$$\frac{\text{Tank Volume (L)}}{140,000} = \text{Amount (kg) of calcium hypochlorite}$$

e.g. for a 10,000 L tank, amount of calcium hypochlorite

$$\frac{10,000}{140,000} = 0.07 \text{ kg i.e. 70 g}$$

ANNEX B TO
BASC LIVERPOOL 436-1-29
DATED

WATERBORNE DISEASE ENDEMIC TO AFRICA

1. Described in the table below are typical waterborne diseases endemic to Africa:

Pathogen	Type of Micro-organism	Disease Symptoms Produced
Vibrio cholerae	Bacterium	Cholera
Salmonella typhi	Bacterium	Typhoid
Shigella	Bacterium	Gastroenteritis
Campylobacter	Bacterium	Gastroenteritis
Hepatitis	Virus	Hepatitis
Norwalk agent	Virus	Gastroenteritis
Giardia lamblia	Protozoan	Gastroenteritis
Entamoeba histolytica	Protozoan	Amoebic dysentery
Schistosoma Mansoni	Helminth (Blood Fluke)	Schistosomiasis

2. Remember, proper clarification and sterilisation of water will destroy all pathogens.

INDIVIDUAL WATER TREATMENT

General

1. There are times when the source of water hasn't been, or is not able to be, tested prior to its being used for consumption. In such instances individuals must undertake its treatment using:

- a. Water Bottles,
- b. Millbank Filters, and
- c. Water Sterilising Tablets, to carry out the two stages of purification - **CLARIFICATION and STERILISATION.**

Millbank Filter

2. This is a green, chain woven bag of stout cotton treated to render it rot and mould proof. It measures 140 x 140 x 20 mm, weights 20 grams, and is carried in the pocket on the water bottle cover. The weave of the bag filters out suspended matter **(including Amoebic Cysts)** while allowing the water to pass through and discharge into a water bottle from the bottom corner of the bag which runs to a point. The procedure to follow is:

- a. **THOROUGHLY WET THE BAG.** As the material is nearly water proof it is necessary for it to be thoroughly wet before use. This is done by turning the bag inside out and soaking the lower part - up to the black line - in water.
- b. **REVERSE THE BAG.** Turn the bag back to its correct side out.
- c. **FILL THE BAG TO THE TOP.** Use a cups canteen.
- d. **SUSPEND THE BAG BY ITS EYELETS.** Attach it to a stake or tree branch.
- e. **ALLOW THE FIRST HALF LITRE TO RUN TO WASTE.** Do not attempt to collect the water until the level is down to the black-line mark on the bag. In other words allow the first half litre to run to waste in order that the external of the bag is rid of any solid matter which might contaminate the water you are going to collect.

- f. **FILL THE WATER BOTTLE.** When the water level reaches the black-line place a water bottle below the lowest point. The filtered water will run down the outside of the bag to the pointed end and drip into the bottle. Providing the bag is thoroughly wet a bottle will fill within 5-8 minutes.

REMEMBER: Don't squeeze the bag or enlarge the hole size at the pointed end because all you are doing is defeating its purpose and leaving yourself open to consumption of un-potable, diseased water.

Sterilisation

3. Sterilisation is best done chemically by the use of PURITABS or POTABLE AQUA TABLETS. The procedure is as follows:

- a. **RINSE AND FILL THE WATER BOTTLE.** As previously described;
- b. **ADD ONE PURITAB TABLET OR TWO POTABLE AQUA TABS.**
- c. **RECAP THE BOTTLE AND WAIT 5 MINUTES.** This ensures that the tablet is thoroughly dissolved and its chemical properties are thoroughly mixed throughout the water in the container;
- d. **WAIT A FURTHER 20 MINUTES.** This is the time required to allow the tablet(s) to take full effect. If the water is consumed prior to this time, the chemical action will not have taken effect and it will have a bitter, iodine taste.

Dosage Action

4. One puritab tablet (17mg Sodium dichlorisocyanurate) dissolved in one litre of water, produces a concentration of 10 ppm of available chlorine, and a pH of 6. (Hypochlorite = 9.0).

5. Sterilisation tablets **ARE NOT INTENDED FOR ORAL ADMINISTRATION OTHER THAN IN WATER.**

6. **USE.** The recommended user doses for individuals are:

- a. One Puritab sterilises one litre (1.75 pints) of water if allowed to stand for 10 minutes or 2 litres if left for 30 minutes;
- b. **For water suspected or known to be heavily contaminated, use 2 Puritabs per litre; and**

l.

- c. For washing fruit or vegetables, add one Puritab to one litre of water and soak for at least 10 minutes, then rinse in a litre of water containing two Puritabs.

Puritabs Maxi

7. One Puritab Maxi will sterilise 25 litres (approx 5.5 gallons) or a **JERRY CAN** of water in ten minutes or 50 litres if allowed to stand for half an hour. They are available in packs of 30 tablets (3 strips of 10) each of which contains 425 mg of Sodium Dichlorisocyanurate.

NOTE 1: Puritabs/Puritabs Maxi are effective for up to four days after which the water should be replenished and retreated.

NOTE 2: 6850-66-135-2321 Water Purification Tablet Iodine (**POTABLE AQUA**) may be the sterilisation agent of choice for use in Rwanda. If this is the case follow the same directions as for Puritab sterilisation incorporating two sterilisation tablets as per instructions below:

Directions for use (Potable Aqua Tabs):

- a. Add two tablets to a canteen (one litre) of clear water;
- b. Replace canteen cap loosely;
- c. Wait five minutes and then shake well, allowing leakage;
- d. Tighten cap. Wait an additional thirty minutes before using for any purpose. **DO NOT** add anything to the water during this thirty minutes disinfection period ie. cordial etc.

Dosage Action

8. Water purification tablets, Iodine, contains Sodium Acid Pyrophosphate, Aniltdrous 83.3 PCT, Tetraglycine Hydroperdide 16.5 PCT, Titratable Iodine 6.68 PCT and yields 8 mg of iodine, 12,s.

MILLEPORE BACTERIOLOGICAL TEST KIT

Reference: A. Biological Analysis of Water & Waste Water Millepore Application Manual AM 302

General

0. The Millepore Bacteriological test kit is a light field incubator and test kit. The kit tests for total coliform and coliform colonies and has a capacity to test for yeast and mould bacteria.

The Kit

2. The test kit is housed in a blue fibreglass case with aluminium fittings. As with all water analysis and test kits the equipment is susceptible to damage if handled carelessly.

Capabilities

3. The capabilities of the Millepore are as follows:
- a. The incubator unit operates off several power sources - 6, 12 and 24 volt DC as well as 115 and 230 volt AC and DC.
 - b. Power cord adaptors are supplied to connect to battery terminals on vehicles.
 - c. The stainless steel rack has a capacity for 30 millepore field monitors. The racks are rust proof.

Controls

4. The apparatus has a temperature control and an input voltage selector switch.
-

Operation

5. Operation instructions are listed below:

- a. **Before connecting to a Power Source turn the voltage regular to the correct voltage.** Failure to ensure this will result in damage to the equipment and will blow the safety fuse and pilot lamp.

Note: Ensure spare fuses are carried.

- b. When the correct voltage is selected plug the female connection of the power cord into its respective male counterpart on the right hand side of the casing.
- c. After connecting the other end into your power source the incubator will commence heating. No on/off switch is provided or needed.
- d. The thermometer on the stainless steel rack will indicate the inside temperature of the incubator. Temperature can be controlled at this stage by adjusting the control knob.
- e. The pilot light which works in conjunction with a thermostat will control the temperature. **FOR WATER TESTING THE DESIRED TEMPERATURE IS 35°C FOR TOTAL COLIFORM PLATE COUNTS AND 43°C FOR FAECAL COLIFORM CULTURES.**

Formula for Determining Colonies

$$\frac{\text{No of Sheen Colonies}}{\text{ml of Sample}} \times 100 = \text{Bacteria Per 100ml of sample}$$

ANNEX E TO
BASC LIVERPOOL 436-1-29
DATED 29 JUL 94

FIELD CHEMICAL WATER TEST KIT (HACH DREL 5)

The Kit (General)

1. The Hach DREL is a lightweight portable chemical analysis kit. Capable of testing for forty eight specific chemical compositions. It has a AC/DC power capability and is completely self contained.

What is it Used for?

2. The kit is a field chemical analysis kit used to give an accurate chemical picture of a water source.

The Kit

3. The hach DREL has several important features which must be understood and these are dealt with in the following sub-paragraphs:

- a. **Light Control.** The light control operates a shutter which controls the amount of light reaching the Photocell. This control is adjusted with each procedure to produce a zero setting prior to the test being carried out.
- b. **Light Shield.** A light shield covers the light photocell and **MUST BE CLOSED** when tests are being carried out.
- c. **Colour Filters.** A total of nine colour filters are supplied with each kit (later kits may have a disc) the colour filters corresponding with meter scales must be used to obtain the correct result.
- d. **Meter Scales.** The kit has meter scales which are thin cards with clearly printed scales on their faces. Damaged or bent cards should not be used.
- e. **Meter Unit.** A meter scale is positioned centrally on the kit. At the left and side of the meter scale is a slot. Where meter scales are inserted care must be taken when inserting and removing the meter scales as rough handling could damage the meter needle and or meter scale.

- f. **Colimeter bottles.** Two clean square bottles are supplied with the kit. Both bottles are matched for light intensity and damages or scratched bottles should not be used. The exterior of these bottles should be clean and free from water or chemical re-agents.
 - g. **Filtrate Stand (Furette Stand).** This is a small stand which when used in conjunction with the bottle droppers dispenses a measured amount of re-agent.
 - h. **Volumetric Cylinder.** This is a glass or clear plastic tube graduated in 1ml marks and is used for specific amounts of re-agent or water.
 - i. **Demineralised Water.** This is used to clean colimeter bottles and measuring flasks to ensure accurate test results.
 - j. **Reagents.** These come in solution or powder form and are the chemicals required to give test results.
 - k. **Pipette Tube.** Used to measure parts of a ml and graduated in tenths for easy reading.
 - l. **Methods Manual.** A complete instruction booklet setting out step by step procedures for tests and fault finding diagrams - **Ensure that this is included in your kit without it unfamiliar and even experienced personnel cannot use the kit.**
-

Clinical

1

(Août 94)

DYSENTERIE BACILLAIRE.

DEFINITION: Est considérée comme atteinte de dysenterie bacillaire toute personne ayant une diarrhée avec présence de sang visible dans les selles.

TRAITEMENT.

A) TRAITEMENT DE SOUTIEN.

- Alimenter le malade durant toute la maladie. En cas de manque d'appétit donner les aliments en petite quantité et par intervalles réguliers.
- Poursuivre l'allaitement maternel durant toute la maladie. Donner à têter plus fréquemment que d'habitude.
- Réhydrater le malade en accord avec les principes directeurs de l'OMS (voir dépliant Prise en charge du diarrhéique) .

TOUTE PERSONNE ATTEINTE DE DYSENTERIE BACILLAIRE DOIT SUIVRE CE TRAITEMENT DES LE DEBUT DE LA MALADIE.

B) TRAITEMENT PAR ANTIBIOTIQUE.

- Mettre sous traitement à l'acide nalidixique (Negram) tout malade qui se présente avec du sang dans les selles observées par un personnel soignant en plus du traitement de soutien.
- Hospitaliser les malades répondant aux critères suivants:

under 6 yrs

- . les enfants en bas-âge (moins de 6 ans)
- . les personnes âgées (plus de 50 ans) *persons older than 50 yrs*
- . les personnes sévèrement malnourries *malnourished persons*
- . les personnes déshydratées *dehydration*
- . les personnes présentant une température égale ou supérieure à 38°C. *Persons with Temp of 38°C*

- Administrer l'acide nalidixique comme suit:

ADULTE: 1 gr 4 fois par jour pendant 5 jours.

ENFANT: 55 mgr/Kg par jour divisés en 4 prises (ne pas dépasser 4 gr par jour) pendant 5 jours.

ATTENTION!!! AVANT DE DONNER L'ACIDE NALIDIXIQUE VERIFIER LE DOSAGE DES COMPRIMES (250 ou 500 ou 1000 mg).

- Après 72 heures (3 jours) de traitement, s'il n'y a pas d'amélioration, arrêter tout antibiotique et continuer le traitement de soutien.

supportive

(Août 94)

DYSENTERIE BACILLAIRE**MESURES PREVENTIVES.****DANS LES FOYERS:** *IN THE FOCUS*

- Se laver les mains avec du savon:
WASH HANDS WITH SOAP
 - . après les selles; *after toilet*
 - . après avoir nettoyé un enfant qui vient de faire les selles; *after cleaning a child with Diarrhoea*
 - . avant de préparer la nourriture; *Before preparing food*
 - . avant de manger; *Before supper*
 - . avant de nourrir un enfant; *Before feeding a child*
- Allaiter les enfants au sein maternel.
- Enfouir dans le sol les selles y compris celles des petits enfants ou les jeter dans une latrine.
- Faire bouillir ou chlorer l'eau de boisson (3 gouttes de la solution mère de chlore à 1 % dans 1 litre d'eau), si elle est d'origine douteuse.
- Bien conserver l'eau de boisson dans des jerrycans munis de bouchons ou dans des récipients avec couvercle.
- Utiliser une puisette munie d'un long manche pour puiser dans le récipient et boire dans un second gobelet.
- Bien cuire les aliments et les manger chauds ou réchauffés.
- S'abstenir de manger des crudités, à l'exception des fruits récemment et hygiéniquement pelés.

DANS LES ETABLISSEMENTS DE SOINS:

Le personnel de santé s'occupant des malades atteints de dysenterie bacillaire doit obligatoirement:

- se laver les mains avant et après avoir examiné chaque malade;
- se couper régulièrement les ongles;
- bien se laver les mains après les soins post-mortem;
- éviter de préparer eux-mêmes les solutions de réhydratation pour les malades;

(Août 94)

DYSENTERIE BACILLAIRE.

MESSAGES EDUCATIFS

COMMENT LA DYSENTERIE BACILLAIRE SE TRANSMET-ELLE ?

1. Le germe qui provoque la dysenterie bacillaire se trouve dans les selles.
2. Une personne en bonne santé devient malade de la dysenterie bacillaire lorsque le germe entre dans son corps par la bouche. Ceci survient lorsque l'on porte à la bouche tout objet souillé par les selles du malade: mains, aliments, eau ou tout autre objet.

(Août 94)

DYSENTERIE BACILLAIRE.**MESSAGES EDUCATIFS****COMMENT EVITER DE TOMBER MALADE
DE LA DYSENTERIE BACILLAIRE ?**

Pour éviter de tomber malade de la dysenterie bacillaire il faut:

1. Se laver les mains avec du savon:
 - . après les selles;
 - . après avoir nettoyé un enfant qui vient de faire les selles;
 - . avant de préparer la nourriture;
 - . avant de manger;
 - . avant de nourrir un enfant;
2. Allaiter les enfants au sein.
3. Enfouir dans le sol les selles y compris celles des petits enfants ou les jeter dans une latrine.
4. Bien cuire les aliments et les manger chauds ou réchauffés.
5. S'abstenir de manger des crudités, à l'exception des fruits récemment et hygiéniquement pelés.
6. Faire bouillir ou chlorer l'eau de boisson, si elle est d'origine douteuse.
7. Bien conserver l'eau de boisson dans des jerrycans munis de bouchons ou dans des récipients avec couvercle.
8. Utiliser une pissette munie d'un long manche pour puiser dans le récipient et boire dans un second gobelet.
9. Bouillir et laver le plus souvent possible les habits du malade atteint de dysenterie.

(Août 94)

DYSENTÉRIE BACILLAIRE

MESSAGES ÉDUCATIFS

COMMENT SE SOIGNER CORRECTEMENT
QUAND ON EST ATTEINT DE LA DYSENTÉRIE BACILLAIRE ?

1. Aller rapidement dès le début de la maladie dans une formation sanitaire ;
2. suivre méticuleusement la prescription médicale du point de vue de la dose et de la durée du traitement ;
3. ne pas arrêter le traitement avant cinq jours, sauf décision du prescripteur ;
4. continuer à manger et à boire, même en cas de manque d'appétit .

(A081 04)

ENVIRONNEMENT BACTERIEN

MESSAGES EDUCATIFS

A) DESINFECTION DE L'EAU PAR CHLORATION

1. PREPARATION DE LA SOLUTION MERE DE CHLORE / 12.

Ajouter à un litre d'eau:

- . 15 grammes d'HYPOCHLORITE DE CALCIUM (70%) ou
- . 110 millilitres d'HYPOCHLORITE DE SODIUM (10%) ou
- . 250 millilitres d'HYPOCHLORITE DE SODIUM (5%) .

ATTENTION !!! Conserver la solution mère dans un récipient fermé opaque et la tenir dans un endroit frais. L'utiliser au plus tard dans le mois.

2. UTILISATION DE LA SOLUTION MERE POUR DESINFECTER L'EAU:

Diluer la solution mère selon les proportions suivantes et bien mélanger.

- . 3 gouttes de solution mère à mélanger avec 1 litre d'eau ;
- . 30 gouttes de solution mère à mélanger avec 10 litres d'eau ;
- . 300 gouttes de solution mère à mélanger avec 100 litres d'eau .

ATTENTION !!!

1. Laisser agir pendant 30 minutes avant utilisation.
2. Si l'eau est trouble:
 - la filtrer avant chloration ou
 - remplacer la chloration par une ébullition.

B) DESINFECTION DE L'EAU PAR EBULLITION

FAIRE BOUILLIR L'EAU A GROS BOUILLONS PENDANT 1 MINUTE.

O.N.G.	FORMATION SANITAIRE	PERIODE				
		18-24 JUI	25-31 JUI	1-7 AOU	8-14 AOU	15-21 AOU
	R.S. KIGALI					
WORLD WISION	C.S. KABUSUNZU				X	
MSF	C.S. KACYIRU			X	X	
AIDE SWISS CATASTROPHE	C.S. MUHIMA				X	X
MSF	DISP. STADE AMAHORO			X	X	
CICR	C.M.S. BIRYOGO				X	
MSF	C.S. KICUKIRO			X	X	
ACTION NORD SUD	HOP. RUTONGO				X	X
MDM	C.S. GIKONDO					
	R.S. BYUMBA					
SCF/AMREF	C.S. MANYAGIRO			X		
SCF/AMREF	C.S. YARAMBA			X		
SCF/AMREF	C.S. KIVUYE			X		
SCF/AMREF	C.S. MIYOVE			X		
GOAL	C.S. MUKARANGE					X
INTER SOS	C.S. MUHURA				X	
	HOP. NGARAMA	X	X			
	R.S. RUHENGERI					
	HOP. NEMBA				X	
	R.S. KIBUNGO					
	HOP. KIBUNGO				X	

RESUME PAR REGION SANITAIRES (1)

R. S. KIGALI

MORBIDITE PAR SEMAINE - <5 ANS

NOUVEAUX CAS

PERIODE	PALU	DIA.S.	DIA.NO S.	L.R.A.	A.PEAU/Y	CHOL.	ROUG.	MENING.	M.S.T.	TRAUMA	AUTRES	T.N.CONS
1-7/8	98	3	30	85	55	0	0	0	0	4	57	332
8-14/8	247	52	86	218	131	0	2	0	0	22	493	1251

MORBIDITE PAR SEMAINE - >5 ANS

NOUVEAUX CAS

PERIODE	PALU	DIA.S.	DIA.NO S.	L.R.A.	A.PEAU/Y	CHOL.	ROUG.	MENING.	M.S.T.	TRAUMA	AUTRES	T.N.CONS
1-7/8	585	32	51	140	75	0	0	0	6	25	395	1309
8-14/8	1643	251	195	441	204	2	0	0	3	59	1094	3892

R.S. BYUMBA

MORBIDITE PAR SEMAINE - <5 ANS

NOUVEAUX CAS

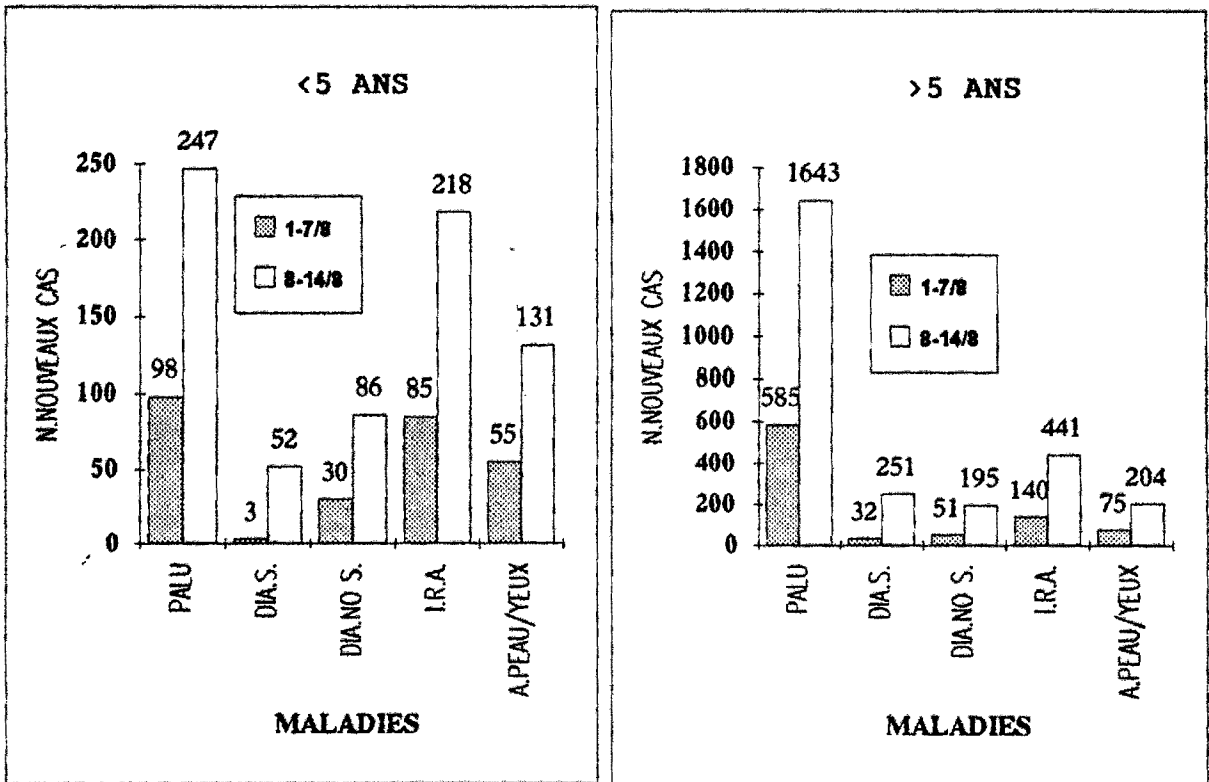
PERIODE	PALU	DIA.S.	DIA.NO S.	L.R.A.	A.PEAU/Y	CHOL.	ROUG.	MENING.	M.S.T.	TRAUMA	AUTRES	T.N.CONS
1/07/08	38	10	76	93	47	0	0	0	0	9	59	332

NOUVEAUX CAS

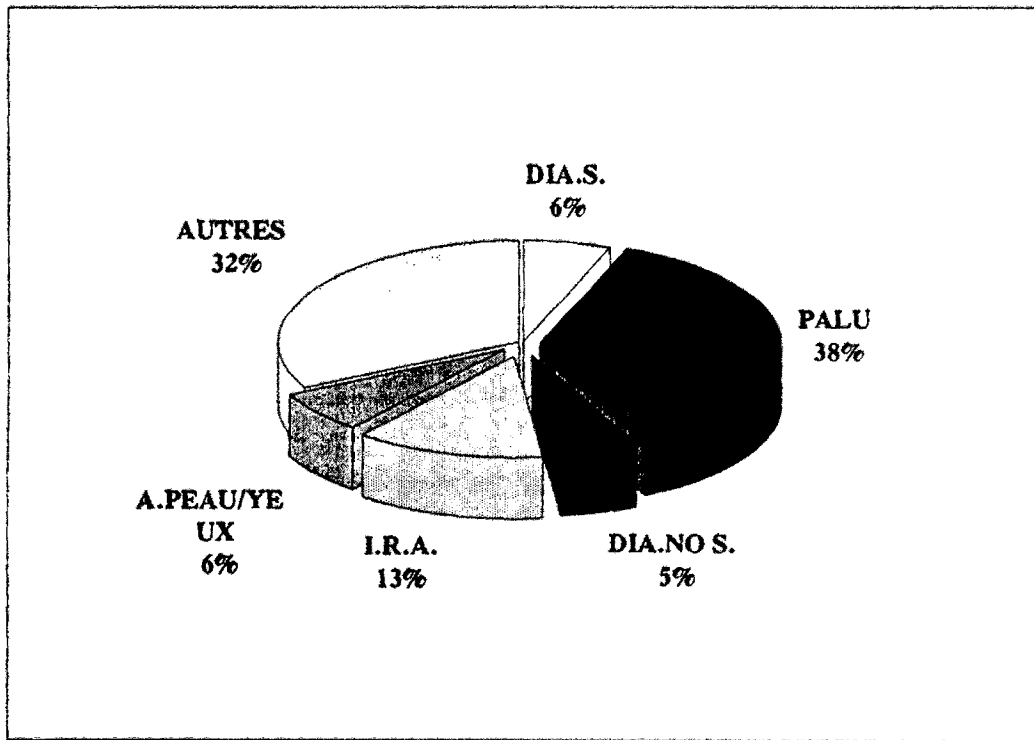
PERIODE	PALU	DIA.S.	DIA.NO S.	L.R.A.	A.PEAU/Y	CHOL.	ROUG.	MENING.	M.S.T.	TRAUMA	AUTRES	T.N.CONS
1/07/08	353	24	185	240	104	0	0	3	7	14	343	1273

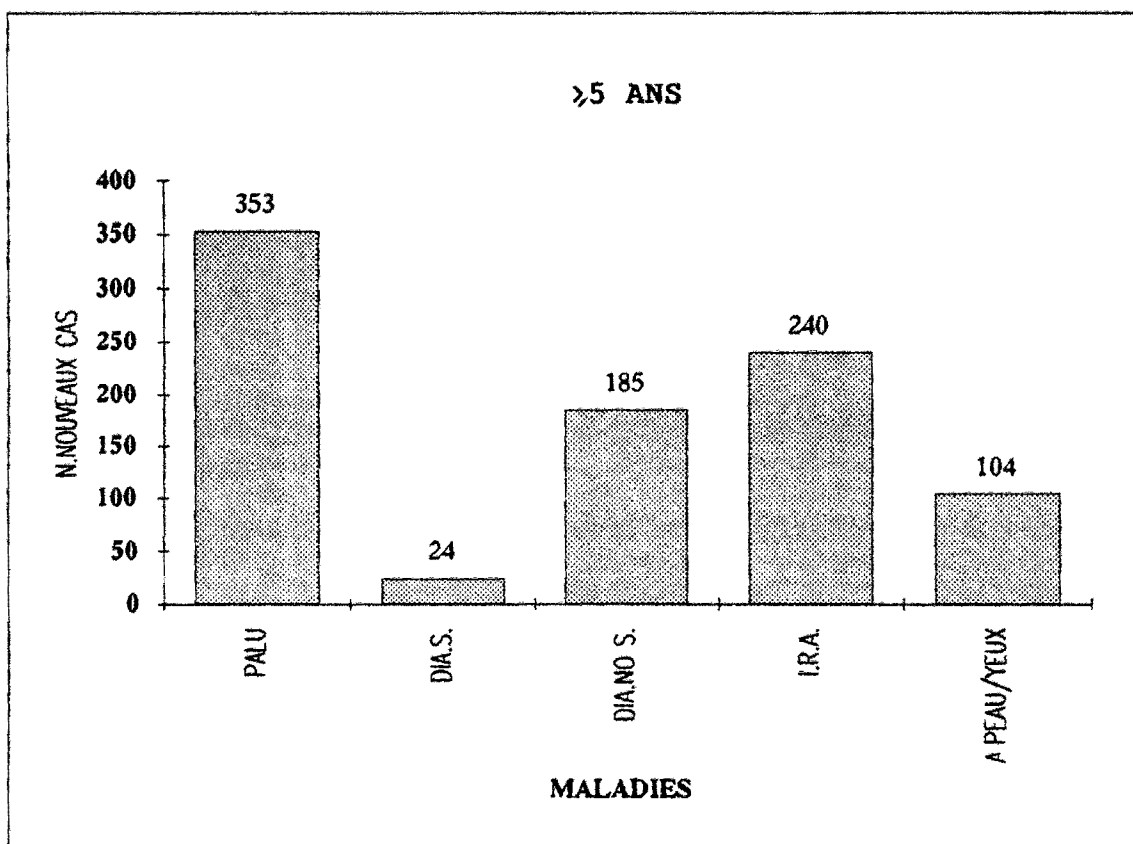
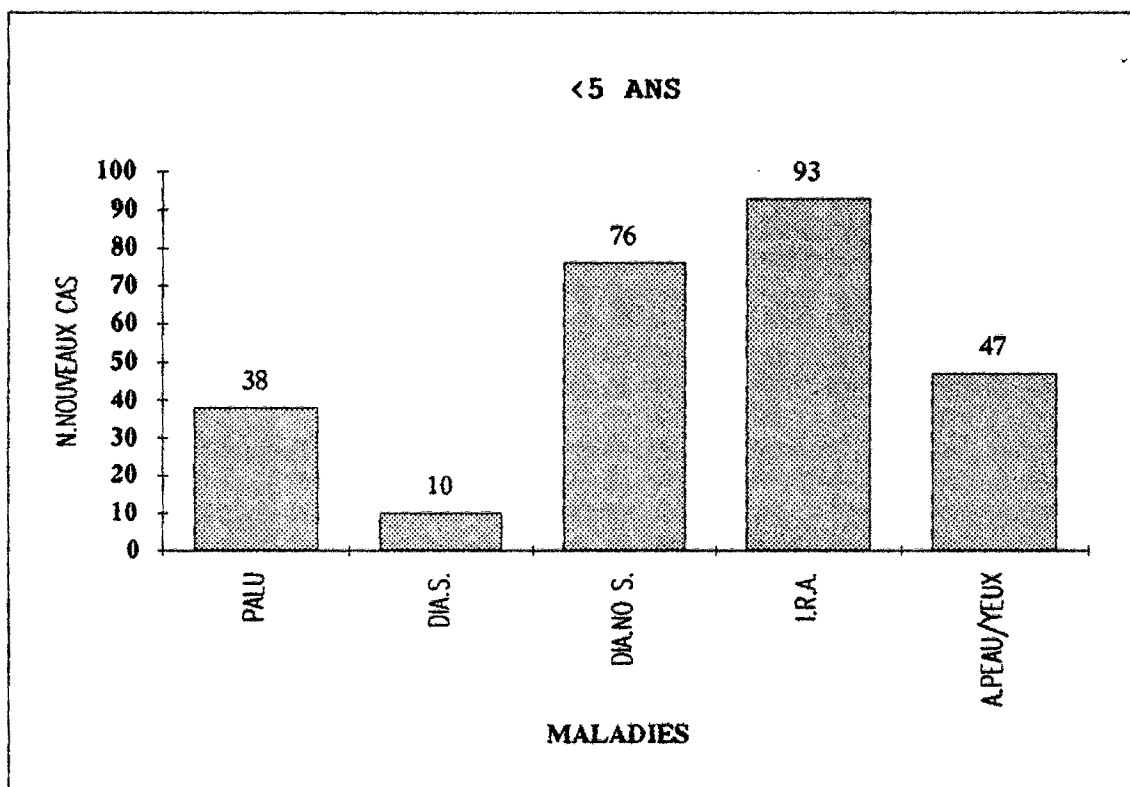
(1) Pour la region sanitaire de Kigali, pendant la periode du 1 au 7 aout, seulement 3 formations sanitaires avaient transmis les donnees epidemiologiques et pendant la periode du 8 au 14 aout seulement 7 formations sanitaires. Pour la region sanitaire de Byumba, pendant la periode du 1 au 7 Aout, 4 formation sanitaires avaient transmis le donnees epidem.

MORBIDITE PAR SEMAINE



MORBIDITE PROPORTIONNELLE DU 8 AU 14 AOUT





WVPC

HEALTH BRIEF - RWANDA

7

ENVIRONMENTAL HAZARDS

Animal, Insect and Plant Hazards

1.(R) Animal hazards in Rwanda include limited numbers of lions, gorillas, elephants and warthogs. There are also a number of venomous snakes including African Puff Adder, Green Mamba, Vipers, Cobras and Boomslang. Although there are antivenenes available, the terrain and isolation compound the medical problems associated with snake bite. Insect hazards include centipedes, scorpions and Black Widow and Brown spiders. Disease associated invertebrates include ticks, mosquitos, tsetse fly, sandfly and water snails that carry the larvae of schistosomiasis. Many plants are considered irritants and some, such as Virginbower, purgin croton and plumbgain produce a contact vesicant. The threat from animal, insect and plant hazards is assessed by DIO as medium.

Food and Water Supplies

2.(R) Outside of the major population centres the civilian infrastructure is very limited, resulting in primitive sanitation and a high probability of contaminated food supplies if local sources of resupply are used. Although there are numerous water sources, most municipal and rural water supplies are obtained directly from contaminated sources. Larger cities treat water but treatment system failures and line breaks result in contaminated water. The threat from contaminated food and water supply, if local resources are used, is high.

3.(C) The greatest problem with the water supply at present is the lack of useable water in the camps. There is now no more than 10 to 14 days' supply available, and no source for further supplies has been identified. Once supplies of potable water are exhausted, the disease problems will intensify.

Health Hazards

4.(R) Rwanda presents significant environmental health threat risks. Throughout Rwanda, living and sanitary conditions reflect those of one of the world's poorest and most densely populated nations. Urban conditions, only slightly better than those in rural areas, continue to decline. urban housing consists of one-story concrete buildings without electricity, sewage or water services. Overcrowded living conditions are common. Septic tanks and pit latrines are used for waste disposal. Solid waste, collected only occasionally, is disposed of in open dumps near the city and attracts vermin. Indiscriminate defecation is common. Rural houses are often plastered with untreated animal excrement. Garbage is not collected. The persistent discharge of untreated sewage into surface waters is Rwanda's

most serious ongoing pollution problem. The threat from health hazards is assessed as high.

Disease Hazards

5.(R) Commonly occurring contagious diseases include malaria, typhoid, sleeping sickness, pneumonia, tuberculosis, dysentery, diphtheria and meningitis. Aids is reported to infect 80% of the prostitutes in Rwanda. Rwandan roads are crowded with fleeing refugees who reportedly have suffered outbreaks of typhoid, cholera and dysentery. Many refugees have severe wounds from machete attacks which further increases their vulnerability to disease. While mass graves have been constructed in several locations, there are numerous unburied bodies. The full range of diseases assessed to be prevalent in Rwanda is as follows:

6.(C) (viewgraph) - The range of diseases present means that vaccination protection would take one month to achieve 60% cover, two months to achieve 100% cover. While a recon party could be sent prior to this, they would not have been able to have the live vector vaccinations such as for typhoid, and would have to undergo eradication courses on return, which are not particularly pleasant. The main diseases to worry about on this list are the acute diarrhoeal diseases, malaria, cholera and typhoid. Meningococcal meningitis, which is a potentially fatal airborne virus, has been reported as a problem, but the ADF routinely vaccinates against this and given the lead time it is not a major threat. Leishmaniasis is transmitted by a sandfly small enough to go through a standard mosquito net. It is highly localised, and exposure depends on whether you are in the small location inhabited by the flies. An infection may take from five months to two years to appear. While the disease can be treated successfully once diagnosed, it causes ulcerations, and the mosquito net problem needs to be investigated.

Health Infrastructure

7.(R) Prior to the war Rwanda had 220 hospitals, one per 36,000 people, and 178 doctors, or one per 44,400 people. No information can be provided about the status of either hospitals or medical staff. As a result of the civilian fighting it is likely that hospitals will be crowded, under-resourced and inadequate to handle the present situation.

8.(R) Medecins Sans Frontieres has fifty volunteer medical staff in Rwanda, including Kigali, and as at 17 May more doctors were preparing to go.

9.(R) ICRC is the only agency with a true presence in the south, working with displaced persons in Kabgayi with relief items flown in through Burundi. There is also reported to be a German Field Hospital in one refugee camp.

10.(R) Outside of Rwanda, there is a good hospital on Lake

Victoria, and hospitals in Nairobi are also reported to be good. Daar Es Salaam is not recommended.

Other Health Considerations

11.(U) Dermatological problems such as fungal infections and secondary wound infections are very common and can deteriorate very quickly. Upper respiratory tract infections are very common. Traffic accidents are historically the most common cause of morbidity and mortality in tourists. MSF describes the most prevalent disease in the camps as dysentery, and notes that there is no medication against this except clean water.

Environmental Threat

12.(R) Overall, the environmental threat is assessed by DIO as **very high**. This threat may be modified to **high** with adequate organic medical support and various countermeasures including vaccinations and chemoprophylaxis.

Refugees/Displaced Persons

13.(R) Displaced Persons. Within the boundaries of Rwanda, an estimated 900,000 persons have been displaced by war with the majority of them having sought refuge in the 91 displaced persons camps that have been identified by both the Rwanda Government Forces (RGF) and the Rwanda Patriotic Front (RPF).

14.(R) Refugees. There are still an estimated 80,000 Burundi refugees living in the south of Rwanda whose dependence on assistance from the UNHCR was complete. There are approximately 400,000 Rwandan refugees in Tanzania, Burundi and Zaire. The largest camp is in Tanzania at Ngare, near the Rwandan border. This is run by Care Australia, the Tanzanian Red Cross and Concern (an Irish organisation). Care does not believe UN assistance is needed at this camp.

15.(R) Drought and War Affected Farmers. Prior to the war, 800,000 daily rations were prescribed as a temporary remedy for persons identified as victims of a serious drought that severely reduced local production, particularly in the south. These people never received the assistance required and their condition can only be expected to have deteriorated. Productive agricultural areas have become war zones and production in many of them has been completely disrupted.

Agreement for Humanitarian Assistance

16.(R) While in principle both of the warring parties have agreed to allow humanitarian assistance, numerous incidents indicate they are not abiding to this agreement.

a. The Red Cross has lost an unprecedented 52 local

staff members in five weeks of fighting.

- b. Incidents have been recorded of militia stopping ambulances and removing and killing the patients.
- c. Militia entered the safe haven compound of the ICRC in Kabgaye and murdered seven persons in front of ICRC staff.
- d. ICRC staff attempting to extract food from warehouses were prevented by direct fire.
- e. UN advance humanitarian team staff have been fired upon with rockets en route to delivery of relief items to the south and have come under direct and peripheral fire.
- f. Following the delivery of relief items to a displaced community, the UN Advance Humanitarian Team, journalists and UN drivers were threatened and nearly killed by the recipients of the relief items they had just delivered.

PLAN DE TRAITEMENT B POUR TRAITER LA DESHYDRATATION

QUANTITE APPROXIMATIVE DE SOLUTION DE SRO A ADMINISTRER AU
COURS DES 4 PREMIERES HEURES:

Age*	Moins de 4 mois	4-11 mois	12-23 mois	2-4 ans	5-14 ans	15 ans ou plus
Poids:	Moins de 5 kg	5-7,9 kg	8-10,9 kg	11-15,9 kg	16-29,9 kg	30 kg ou plus
En ml:	200-400	400-600	600-800	800-1200	1200-2200	2200-4000
En mesure locale						

* Ne se baser sur l'âge du malade que si l'on ne connaît pas son poids. La quantité approximative de SRO nécessaire (en ml) peut aussi être calculée en multipliant le poids du malade (en kg) par 75.

- Si l'enfant veut boire plus de SRO, lui en donner plus.
- Encourager la mère à continuer à allaiter son enfant.
- Dans le cas d'enfants de moins de 6 mois qui ne sont pas nourris au sein, donner également 100-200 ml d'eau propre pendant cette période.

OBSERVER SOIGNEUSEMENT L'ENFANT ET AIDER LA MERE A LUI ADMINISTRER LA SOLUTION DE SRO:

- Lui montrer quelle quantité de solution donner à l'enfant.
- Lui montrer comment la donner - une petite cuillère toutes les 1 à 2 minutes à l'enfant de moins de 2 ans; de fréquentes gorgées à la tasse à l'enfant plus âgé.
- Vérifier de temps en temps qu'il n'y a pas de problème.
- Si l'enfant vomit, attendre 10 minutes puis continuer à administrer les SRO, mais plus lentement, par exemple une cuillère toutes les 2 à 3 minutes.
- Si les paupières de l'enfant sont gonflées, cesser de donner des SRO et donner de l'eau pure ou du lait maternel. Donner des SRO comme indiqué dans le Plan A une fois que le gonflement a disparu.

AU BOUT DE 4 HEURES, REEXAMINER L'ENFANT EN UTILISANT LE TABLEAU DES SIGNES DE DESHYDRATATION, PUIS CHOISIR LE PLAN DE TRAITEMENT APPROPRIE (A, B, C).

- S'il n'y a pas de signes de déshydratation, appliquer le Plan A. Une fois la déshydratation corrigée, l'enfant urine généralement et peut aussi être fatigué et s'endormir.
- S'il y a encore des signes évidents de déshydratation, répéter le Plan B mais en commençant à offrir à l'enfant des aliments, du lait et des jus de fruits comme indiqué dans le Plan A.
- Si les signes d'une déshydratation sévère sont apparus, appliquer le Plan C.

SI LA MERE DOIT REPARTIR AVANT LA FIN DU PLAN DE TRAITEMENT B:

- Lui montrer la quantité de solution de SRO à administrer pour terminer le traitement de 4 heures à domicile.
- Lui donner assez de sachets de SRO pour terminer le traitement de réhydratation et pour continuer à administrer des SRO à l'enfant pendant encore 2 jours comme indiqué dans le Plan A.
- Lui montrer comment préparer la solution.
- Lui expliquer les trois règles du Plan A pour le traitement de son enfant à domicile:
 - donner des SRO ou d'autres liquides jusqu'à ce que la diarrhée ait cessé;
 - alimenter l'enfant;
 - ramener l'enfant à l'agent de santé si nécessaire.

UTILISATION DE MEDICAMENTS CHEZ L'ENFANT DIARRHEIQUE

- Utiliser les ANTIBIOTIQUES UNIQUEMENT pour les cas de dysentérie et les cas suspects de choléra qui présentent une déshydratation sévère. Dans les autres cas, ils sont inefficaces et NE doivent PAS être administrés.
- Utiliser les médicaments ANTIPARASITAIRES pour les cas suivants UNIQUEMENT:
 - amibiase, lorsque le traitement de la diarrhée sanglante par un antibiotique contre *Shigella* a échoué ou que l'on a trouvé dans les selles des trophozoïtes de *E. histolytica* contenant des hématies.
 - giardiase, lorsque la diarrhée dure depuis au moins 14 jours et que l'on a trouvé des kystes ou des trophozoïtes de *Giardia* dans les selles ou le liquide de l'intestin grêle.
- NE JAMAIS utiliser d'ANTI-DIARRHEIQUES ni d'ANTIEMETIQUES. Aucun de ces médicaments n'a prouvé son efficacité. Certains sont dangereux.

PLAN DE TRAITEMENT C POUR TRAITER RAPIDEMENT LA DESHYDRATATION SEVERE

SUIVRE LES FLECHES. SI LA REPONSE A LA QUESTION EST «OUI», FAIRE CE QUI EST INDIQUE A DROITE.
SI C'EST «NON», PASSER A LA QUESTION SUIVANTE.

COMMENCER ICI

Est-ce que le malade a pu prendre immédiatement à jeun la perfusion intraveineuse (IV)?

OUI

- Mettre immédiatement en place la perfusion. Si le malade peut boire, lui donner des SRO à boire en attendant que la perfusion commence. Lui administrer 100 ml/kg de solution de Ringer au lactate (ou s'il n'y en a pas, de sérum physiologique) répartis comme suit:

Age	Administrer d'abord 30 ml/kg en:	Puis administrer 70 ml/kg en:
Nourissons de moins de 12 mois	1 heure*	5 heures
Enfants plus âgés	30 minutes*	2 h 30

* Répétez une fois si le pouls est encore très faible ou imperceptible.

- Réexaminer le malade toutes les 1 à 2 heures. Si la déshydratation ne s'atténue pas, accélérer la perfusion.
- Donner aussi des SRO (environ 5 ml/kg/heure) dès que le malade peut boire: généralement au bout de 3 à 4 heures (nourissons) ou de 1 à 2 heures (malades plus âgés).
- Au bout de 6 heures (nourissons) ou de 3 heures (malades plus âgés), réexaminer le malade en se servant du tableau des signes de déshydratation. Puis choisir le Plan approprié (A, B ou C) pour la poursuite du traitement.

NON

Y a-t-il possibilité (à 30 minutes de l'arrivée ou moins) d'un service de santé local pour prendre la perfusion?

OUI

- Envoyer immédiatement l'enfant dans ce service pour y être perfusé.
- Si l'enfant peut boire, donner à sa mère de la solution de SRO et lui montrer comment l'administrer pendant le transport.

NON

Avait-on la formation nécessaire pour utiliser une sonde nasogastrique pour la réhydratation?

OUI

- Commencer la réhydratation à l'aide de la sonde nasogastrique en administrant de la solution de SRO à raison de 20 ml/kg/heure pendant 6 heures (total 120 ml/kg).
- Réexaminer le malade toutes les 1 à 2 heures:
 - en cas de vomissements répétés ou de distension abdominale, administrer le liquide plus lentement;
 - si la déshydratation ne s'atténue pas au bout de 3 heures, envoyer le malade dans un service où l'on pourra le traiter par perfusion intraveineuse (IV).
- Au bout de 6 heures, réexaminer le malade et choisir le plan de traitement approprié.

NON

Le malade peut-il boire?

OUI

- Commencer la réhydratation par voie orale en administrant de la solution de SRO à raison de 20 ml/kg/heure pendant 6 heures (total de 120 ml/kg).
- Réexaminer le malade toutes les 1 à 2 heures:
 - en cas de vomissements répétés, administrer le liquide plus lentement;
 - si la déshydratation ne s'atténue pas au bout de 3 heures, envoyer le malade dans un service où l'on pourra le traiter par perfusion.
- Au bout de 6 heures, réexaminer le malade et choisir le plan de traitement approprié.

NON

URGENT: Envoyer le malade dans un service où l'on pourra procéder à la réhydratation par voie intraveineuse ou avec une sonde nasogastrique.

NOTES:

- Une fois la réhydratation achevée, garder, si possible, le malade en observation au moins 6 heures pour s'assurer que la mère sait maintenir l'hydratation en lui administrant des SRO par voie buccale.
- Si le malade a plus de 2 ans et s'il y a des cas de choléra dans votre région, administrer un antibiotique oral approprié une fois le malade sorti de son apathie.



Organisation mondiale de la Santé



Programme de
LUTTE CONTRE LES MALADIES DIARRHEIQUES

PRISE EN CHARGE DU DIARRHEIQUE

CONSULTEZ CE TABLEAU SI LE MALADE

• a des selles molles ou liquides

• a des selles molles avec du sang

1992

D'ABORD, RECHERCHER LES SIGNES DE DESHYDRATATION

C

• Léthargique ou inconscient; apathique •	Très enfoncés et secs		• S'efface très lentement •	Si le malade a deux de ces signes ou plus, dont au moins un «signe», en conclure qu'il y a DESHYDRATATION SEVERE	Peser le malade et appliquer le Plan de traitement C de TOUTE URGENCE
Absentes					
Très sèches					
• Boit à peine ou est incapable de boire •					

B

• Agité, irritable •	Enfoncés		• S'efface lentement •	Si le malade a deux de ces signes ou plus, dont au moins un «signe», en conclure qu'il y a des SIGNES EVIDENTS DE DESHYDRATATION	Peser le malade si possible et appliquer le Plan de traitement B
Absentes					
Sèches					
• Assoupli, boit avec avidité •					

A

Normal éveillé			S'efface rapidement	Le malade n'a PAS DE SIGNES DE DESHYDRATATION	Appliquer le Plan de traitement A
Normaux					
Présentes					
Humides					
Boit normalement, n'est pas assoupli					

1. OBSERVER: ETAT GENERAL	2. PALPER: PULSATION	3. CONCLURE:	4. TRAITER:
YEUX			
LARMES			
BOUCHE et LANGUE			
SOIF			

PUIS, LES SIGNES D'AUTRES PROBLEMES

IL Y A DU SANG DANS LES SELLES:

- Administrer pendant 5 jours un antibiotique oral recommandé pour le traitement de la dysenterie à **Shigella** dans la région.
- Apprendre à la mère à nourrir son enfant comme indiqué dans le Plan A.
- Revoir l'enfant au bout de 2 jours:
 - s'il a moins d'un an
 - s'il était déshydraté au départ
 - s'il a encore du sang dans les selles
 - s'il ne va pas mieux
- Si les selles sont encore sanglantes au bout de 2 jours, passer à un deuxième antibiotique oral recommandé pour le traitement de la dysenterie à **Shigella** dans la région. L'administrer pendant 5 jours.

SI L'EPISODE DURE DEPUIS AU MOINS 2 SEMAINES:

- Envoyer l'enfant à l'hôpital:
 - s'il a moins de 6 mois;
 - s'il est déshydraté (envoyer l'enfant après traitement de la déshydratation).
- Sinon, apprendre à la mère à nourrir son enfant comme indiqué dans le Plan A, avec toutefois les modifications suivantes:
 - ne donner que la moitié de la quantité habituelle de lait ou le remplacer par un laitage fermenté tel que du yaourt;
 - assurer à l'enfant un apport énergétique suffisant en lui offrant 6 repas par jour composés de céréales épaisses additionnées d'huile, mélangées à des légumes, des légumineuses, de la viande ou du poisson.
- Dire à la mère de ramener son enfant au bout de 5 jours:
 - si la diarrhée n'a pas cessé, envoyer l'enfant à l'hôpital;
 - si la diarrhée a cessé, dire à la mère de:
 - continuer à donner les mêmes types d'aliments pour l'alimentation normale de l'enfant;
 - au bout d'une semaine, réintroduire progressivement le lait animal habituel;
 - donner un repas supplémentaire par jour à l'enfant pendant au moins 1 mois.

SI L'ENFANT PRESENTE UNE MALNUTRITION SEVERE

- Ne pas essayer de le réhydrater: l'envoyer à l'hôpital pour y être traité.
- Donner à la mère de la solution de SRO et lui montrer comment l'administrer à raison de 5 ml/kg/heure pendant le transport à l'hôpital.

SI L'ENFANT A MOINS DE 2 MOIS:

- Le réhydrater de manière appropriée. Ensuite, s'il a de la fièvre (38°C ou plus), l'envoyer à l'hôpital. Ne pas donner de paracétamol ni d'antipaludique.

SI L'ENFANT A 2 MOIS OU PLUS:

- Si la température est égale ou supérieure à 39°C, administrer du paracétamol.
- S'il y a des cas de paludisme à falciparum dans la région et si l'enfant a de la fièvre (38°C ou plus) ou en a eu au cours des 5 derniers jours, lui administrer un antipaludique (ou le traiter selon les recommandations du programme antipaludique local).

PLAN DE TRAITEMENT A POUR TRAITER LA DIARRHEE A DOMICILE

UTILISER CE PLAN POUR APPRENDRE A LA MERE A:

- Continuer à traiter à domicile le présent épisode diarrhéique de son enfant.
- Commencer rapidement le traitement lors de futurs épisodes diarrhéiques.

EXPLIQUER LES TROIS REGLES DU TRAITEMENT DE LA DIARRHEE A DOMICILE:

1. FAIRE BOIRE A L'ENFANT PLUS DE LIQUIDES QUE D'HABITUDE POUR PREVENIR LA DESHYDRATATION:

- Donner des liquides maison recommandés. Il peut s'agir d'une solution de SRO, de préparations liquides à base d'aliments (soupe, eau de riz ou yaourt liquide, par exemple) ou d'eau pure. Donner de la solution de SRO aux enfants dont le cas correspond au cas décrit dans l'encadré ci-après. (Note: si l'enfant a moins de 6 mois et ne mange pas encore d'aliments solides, lui donner de la solution de SRO ou de l'eau plutôt qu'une préparation liquide à base d'aliments.)
- Donner à boire à l'enfant autant qu'il en a envie. Prendre comme guide les quantités indiquées ci-après pour les SRO.
- Continuer à lui donner des boissons jusqu'à ce que la diarrhée cesse.

2. DONNER A MANGER EN ABONDANCE A L'ENFANT POUR PREVENIR LA MALNUTRITION:

- Continuer à lui donner le sein fréquemment.
- Si l'enfant n'est pas nourri au sein, lui donner le lait habituel.
- Si l'enfant a 6 mois ou plus, ou prend déjà des aliments solides:
 - Lui donner aussi des céréales ou des féculents, mélangés si possible avec des légumineuses, des légumes et de la viande ou du poisson. Ajouter une ou deux petites cuillères d'huile végétale à chaque portion.
 - Lui donner du jus de fruits frais ou des bananes écrasées qui apportent du potassium.
 - Lui donner des aliments fraîchement préparés, bien cuits et écrasés en purée.
 - Encourager l'enfant à manger: lui donner à manger au moins 6 fois par jour
 - Continuer à lui donner ces mêmes types d'aliments une fois que la diarrhée a cessé et lui donner un repas supplémentaire par jour pendant 2 semaines.

3. AMENER L'ENFANT A L'AGENT DE SANTE S'IL NE VA PAS MIEUX DANS LES 3 JOURS OU SI L'UN DES SYMPTOMES SUIVANTS APPARAÎT:

- Nombreuses selles liquides
- Vomissements répétés
- Soif prononcée
- Manque d'appétit, absence de soit
- Fièvre
- Sang dans les selles

ADMINISTRER DE LA SOLUTION DE SRO A L'ENFANT A DOMICILE SI:

- Le Plan de traitement B ou C lui a déjà été appliqué.
- On ne peut le ramener à l'agent de santé si la diarrhée s'aggrave.
- Les autorités sanitaires nationales ont adopté pour principe de donner des SRO à tous les enfants amenés à un agent de santé pour une diarrhée.

SI L'ENFANT DOIT RECEVOIR DES SRO A DOMICILE, IL FAUT MONTRER A LA MERE QUELLE QUANTITE ADMINISTRER APRES CHAQUE SELLE MOLLE ET LUI DONNER ASSEZ DE SACHETS DE SRO POUR 2 JOURS:

Age	Quantité de SRO à donner après chaque selle molle	Quantité de SRO à fournir pour le traitement à domicile
Moins de 24 mois	50-100 ml	500 ml/jour
2 à 10 ans	100-200 ml	1000 ml/jour
10 ans ou plus	Autant qu'il en voudra	2000 ml/jour

- Décrire et montrer, en se servant d'une mesure locale, la quantité à donner après chaque selle.

MONTRER A LA MERE COMMENT PREPARER LA SOLUTION DE SRO

LUI MONTRER COMMENT L'ADMINISTRER:

- Donner une petite cuillère de solution toutes les 1 à 2 minutes aux enfants de moins de 2 ans.
- Donner fréquemment à boire dans une tasse aux enfants plus âgés.
- Si l'enfant vomit, attendre 10 minutes. Puis lui donner la solution plus lentement (par exemple, une cuillère toutes les 2 à 3 minutes).
- Si la diarrhée continue une fois les sachets de SRO finis, donner à l'enfant d'autres liquides comme ceux qui sont décrits dans la première règle du traitement à domicile ou revenir chercher d'autres sachets de SRO

D'ABORD, RECHERCHER LES SIGNES DE DESHYDRATATION

1. OBSERVER: ETAT GENERAL YEUX LARMES BOUCHE et LANGUE SOIF	
2. PALPER: PL/CUTANE	
3. CONCLURE:	
4. TRAITER:	

Normal, éveillé	
Normaux	
Présentes	
Humides	
Boit normalement, n'est pas assoiffé	
S'efface rapidement	
Le malade n'a PAS DE SIGNES DE DESHYDRATATION	
Appliquer le Plan de traitement A	

• Agité, irritable •	
Enfoncés	
Absentes	
Sèches	
• Assouffé, boit avec avidité •	
• S'efface lentement •	
Si le malade a deux de ces signes ou plus, dont au moins un «signe», en conclure qu'il y a des SIGNES EVIDENTS DE DESHYDRATATION	
Peser le malade si possible et appliquer le Plan de traitement B	

• Lethargique ou inconscient; apathique •	
Très enfoncés et secs	
Absentes	
Très sèches	
• Boit à peine ou est incapable de boire •	
• S'efface très lentement •	
Si le malade a deux de ces signes ou plus, dont au moins un «signe», en conclure qu'il y a DESHYDRATATION SEVERE	
Peser le malade et appliquer le Plan de traitement C de TOUTE URGENCE	

PUIS, LES SIGNES D'AUTRES PROBLEMES

IL Y A DU SANG DANS LES SELLES:

- Administrer pendant 5 jours un antibiotique oral recommandé pour le traitement de la dysenterie à **Shigella** dans la région.
- Apprendre à la mère à nourrir son enfant comme indiqué dans le Plan A.
- Revoir l'enfant au bout de 2 jours:
 - s'il a moins d'un an
 - s'il était déshydraté au départ
 - s'il a encore du sang dans les selles
 - s'il ne va pas mieux
- Si les selles sont encore sanglantes au bout de 2 jours, passer à un deuxième antibiotique oral recommandé pour le traitement de la dysenterie à **Shigella** dans la région. L'administrer pendant 5 jours.

SI L'EPISODE DURE DEPUIS AU MOINS 2 SEMAINES:

- Envoyer l'enfant à l'hôpital:
 - s'il a moins de 6 mois;
 - s'il est déshydraté (envoyer l'enfant après traitement de la déshydratation).
- Sinon, apprendre à la mère à nourrir son enfant comme indiqué dans le Plan A, avec toutefois les modifications suivantes:
 - ne donner que la moitié de la quantité habituelle de lait ou le remplacer par un laitage fermenté tel que du yaourt;
 - assurer à l'enfant un apport énergétique suffisant en lui offrant 6 repas par jour composés de céréales épaisses additionnées d'huile, mélangées à des légumes, des légumineuses, de la viande ou du poisson.
- Dire à la mère de ramener son enfant au bout de 5 jours:
 - si la diarrhée n'a pas cessé, envoyer l'enfant à l'hôpital;
 - si la diarrhée a cessé, dire à la mère de:
 - continuer à donner les mêmes types d'aliments pour l'alimentation normale de l'enfant;
 - au bout d'une semaine, réintroduire progressivement le lait animal habituel;
 - donner un repas supplémentaire par jour à l'enfant pendant au moins 1 mois.

SI L'ENFANT PRESENTE UNE MALNUTRITION SEVERE

- Ne pas essayer de le réhydrater: l'envoyer à l'hôpital pour y être traité.
- Donner à la mère de la solution de SRO et lui montrer comment l'administrer à raison de 5 ml/kg/heure pendant le transport à l'hôpital.

SI L'ENFANT A MOINS DE 2 MOIS:

- Le réhydrater de manière appropriée. Ensuite, s'il a de la fièvre (38°C ou plus), l'envoyer à l'hôpital. Ne pas donner de paracétamol ni d'antipaludique.

SI L'ENFANT A 2 MOIS OU PLUS:

- Si la température est égale ou supérieure à 39°C, administrer du paracétamol.
- S'il y a des cas de paludisme à falciparum dans la région et si l'enfant a de la fièvre (38°C ou plus) ou en a eu au cours des 5 derniers jours, lui administrer un antipaludique (ou le traiter selon les recommandations du programme antipaludique local).

PLAN DE TRAITEMENT A POUR TRAITER LA DIARRHEE A DOMICILE

UTILISER CE PLAN POUR APPRENDRE A LA MERE A:

- Continuer à traiter à domicile le présent épisode diarrhéique de son enfant.
- Commencer rapidement le traitement lors de futurs épisodes diarrhéiques.

EXPLIQUER LES TROIS REGLES DU TRAITEMENT DE LA DIARRHEE A DOMICILE:

1. FAIRE BOIRE A L'ENFANT PLUS DE LIQUIDES QUE D'HABITUDE POUR PREVENIR LA DESHYDRATATION:

- Donner des liquides maison recommandés. Il peut s'agir d'une solution de SRO, de préparations liquides à base d'aliments (soupe, eau de riz ou yaourt liquide, par exemple) ou d'eau pure. Donner de la solution de SRO aux enfants dont le cas correspond au cas décrit dans l'encadré ci-après. (Note: si l'enfant a moins de 6 mois et ne mange pas encore d'aliments solides, lui donner de la solution de SRO ou de l'eau plutôt qu'une préparation liquide à base d'aliments.)
- Donner à boire à l'enfant autant qu'il en a envie. Prendre comme guide les quantités indiquées ci-après pour les SRO.
- Continuer à lui donner ces boissons jusqu'à ce que la diarrhée cesse

2. DONNER A MANGER EN ABONDANCE A L'ENFANT POUR PREVENIR LA MALNUTRITION:

- Continuer à lui donner le sein fréquemment.
- Si l'enfant n'est pas nourri au sein, lui donner le lait habituel
- Si l'enfant a 6 mois ou plus, ou prend déjà des aliments solides:
 - Lui donner aussi des céréales ou des féculents, mélangés si possible avec des légumineuses, des légumes et de la viande ou du poisson. Ajouter une ou deux petites cuillères d'huile végétale à chaque portion.
 - Lui donner du jus de fruits frais ou des bananes écrasées qui apportent du potassium.
 - Lui donner des aliments fraîchement préparés, bien cuits et écrasés en purée.
 - Encourager l'enfant à manger: lui donner à manger au moins 6 fois par jour.
 - Continuer à lui donner ces mêmes types d'aliments une fois que la diarrhée a cessé et lui donner un repas supplémentaire par jour pendant 2 semaines.

3. AMENER L'ENFANT A L'AGENT DE SANTE S'IL NE VA PAS MIEUX DANS LES 3 JOURS OU SI L'UN DES SYMPTOMES SUIVANTS APPARAIT:

- Nombreuses selles liquides
- Vomissements répétés
- Soif prononcée
- Manque d'appétit, absence de soif
- Fièvre
- Sang dans les selles

ADMINISTRER DE LA SOLUTION DE SRO A L'ENFANT A DOMICILE SI:

- Le Plan de traitement B ou C lui a déjà été appliqué.
- On ne peut le ramener à l'agent de santé si la diarrhée s'aggrave.
- Les autorités sanitaires nationales ont adopté pour principe de donner des SRO à tous les enfants amenés à un agent de santé pour une diarrhée.

SI L'ENFANT DOIT RECEVOIR DES SRO A DOMICILE, IL FAUT MONTRER A LA MERE QUELLE QUANTITE ADMINISTRER APRES CHAQUE SELLE MOLLE ET LUI DONNER ASSEZ DE SACHETS DE SRO POUR 2 JOURS:

Age	Quantité de SRO à donner après chaque selle molle	Quantité de SRO à fournir pour le traitement à domicile
Moins de 24 mois	50 -100 ml	500 ml/jour
2 à 10 ans	100 -200 ml	1000 ml/jour
10 ans ou plus	Autant qu'il en voudra	2000 ml/jour

- Décerner et montrer, en se servant d'une mesure locale, la quantité à donner après chaque selle.

MONTRER A LA MERE COMMENT PREPARER LA SOLUTION DE SRO

LUI MONTRER COMMENT L'ADMINISTRER:

- Donner une petite cuillère de solution toutes les 1 à 2 minutes aux enfants de moins de 2 ans.
- Donner fréquemment à boire dans une tasse aux enfants plus âgés.
- Si l'enfant vomit, attendre 10 minutes. Puis lui donner la solution plus lentement (par exemple, une cuillère toutes les 2 à 3 minutes).
- Si la diarrhée continue une fois les sachets de SRO finis, donner à l'enfant d'autres liquides comme ceux qui sont décrits dans la première règle du traitement à domicile ou revenir chercher d'autres sachets de SRO.

PLAN DE TRAITEMENT B POUR TRAITER LA DESHYDRATATION

QUANTITE APPROXIMATIVE DE SOLUTION DE SRO A ADMINISTRER AU COURS DES 4 PREMIERES HEURES:

Age:	Moins de 4 mois	4-11 mois	12-23 mois	2-4 ans	5-14 ans	15 ans ou plus
Poids:	Moins de 5 kg	5-7,9 kg	8-10,9 kg	11-15,9 kg	16-29,9 kg	30 kg ou plus
En ml:	200-400	400-600	600-800	800-1200	1200-2200	2200-4000
En mesure locale						

* Ne se baser sur l'âge du malade que si l'on ne connaît pas son poids. La quantité approximative de SRO nécessaire (en ml) peut aussi être calculée en multipliant le poids du malade (en kg) par 75.

- Si l'enfant veut boire plus de SRO, lui en donner plus.
- Encourager la mère à continuer à allaiter son enfant.
- Dans le cas d'enfants de moins de 6 mois qui ne sont pas nourris au sein, donner également 100-200 ml d'eau propre pendant cette période.

OBSERVER SOIGNEUSEMENT L'ENFANT ET AIDER LA MERE A LUI ADMINISTRER LA SOLUTION DE SRO:

- Lui montrer quelle quantité de solution donner à l'enfant.
- Lui montrer comment la donner - une petite cuillère toutes les 1 à 2 minutes à l'enfant de moins de 2 ans; de fréquentes gorgées à la tasse à l'enfant plus âgé.
- Vérifier de temps en temps qu'il n'y a pas de problème.
- Si l'enfant vomit, attendre 10 minutes puis continuer à administrer les SRO, mais plus lentement, par exemple une cuillerée toutes les 2 à 3 minutes.
- Si les paupières de l'enfant sont gonflées, cesser de donner des SRO et donner de l'eau pure ou du lait maternel. Donner des SRO comme indiqué dans le Plan A une fois que le gonflement a disparu.

AU BOUT DE 4 HEURES, REEXAMINER L'ENFANT EN UTILISANT LE TABLEAU DES SIGNES DE DESHYDRATATION, PUIS CHOISIR LE PLAN DE TRAITEMENT APPROPRIE (A, B, C).

- S'il n'y a pas de signes de déshydratation, appliquer le Plan A. Une fois la déshydratation corrigée, l'enfant urine généralement et peut aussi être fatigué et s'endormir.
- S'il y a encore des signes évidents de déshydratation, répéter le Plan B mais en commençant à offrir à l'enfant des aliments, du lait et des jus de fruits comme indiqué dans le Plan A.
- Si les signes d'une déshydratation sévère sont apparus, appliquer le Plan C.

SI LA MERE DOIT REPARTIR AVANT LA FIN DU PLAN DE TRAITEMENT B:

- Lui montrer la quantité de solution de SRO à administrer pour terminer le traitement de 4 heures à domicile.
- Lui donner assez de sachets de SRO pour terminer le traitement de réhydratation et pour continuer à administrer des SRO à l'enfant pendant encore 2 jours comme indiqué dans le Plan A.
- Lui montrer comment préparer la solution.
- Lui expliquer les trois règles du Plan A pour le traitement de son enfant à domicile:
 - donner des SRO ou d'autres liquides jusqu'à ce que la diarrhée ait cessé;
 - alimenter l'enfant;
 - ramener l'enfant à l'agent de santé si nécessaire.

UTILISATION DE MEDICAMENTS CHEZ L'ENFANT DIARRHEIQUE

- Utiliser les ANTIBIOTIQUES UNIQUEMENT pour les cas de dysentérie et les cas suspects de choléra qui présentent une déshydratation sévère. Dans les autres cas, ils sont inefficaces et NE doivent PAS être administrés.
- Utiliser les médicaments ANTIPARASITAIRES pour les cas suivants UNIQUEMENT:
 - amibiase, lorsque le traitement de la diarrhée sanglante par un antibiotique contre *Shigella* a échoué ou que l'on a trouvé dans les selles des trophozoites de *E. histolytica* contenant des hématies.
 - giardiase, lorsque la diarrhée dure depuis au moins 14 jours et que l'on a trouvé des kystes ou des trophozoites de *Giardia* dans les selles ou le liquide de l'intestin grêle.
- NE JAMAIS utiliser d'ANTIDIARRHEIQUES ni d'ANTIEMETIQUES. Aucun de ces médicaments n'a prouvé son efficacité. Certains sont dangereux.

PLAN DE TRAITEMENT C POUR TRAITER RAPIDEMENT LA DESHYDRATATION SEVERE

SUIVRE LES FLECHES. SI LA REPONSE A LA QUESTION EST «OUI», FAIRE CE QUI EST INDIQUE A DROITE. SI C'EST «NON», PASSER A LA QUESTION SUIVANTE.

COMMENCER ICI

Est-ce que le malade a une déshydratation sévère (1)?

OUI

- Mettre immédiatement en place la perfusion. Si le malade peut boire, lui donner des SRO à boire en attendant que la perfusion commence. Lui administrer 100 ml/kg de solution de Ringer au lactate (ou s'il n'y a pas, de sérum physiologique) répartis comme suit:

Age	Administrer d'abord 30 ml/kg en:	Puis administrer 70 ml/kg en:
Nourissons de moins de 12 mois	1 heure*	5 heures
Enfants plus âgés	30 minutes*	2 h 30

* Répétez une fois si le pouls est encore très faible ou imperceptible.

- Réexaminer le malade toutes les 1 à 2 heures. Si la déshydratation ne s'atténue pas, accélérer la perfusion.
- Donner aussi des SRO (environ 5 ml/kg/heure) dès que le malade peut boire; généralement au bout de 3 à 4 heures (nourissons) ou de 1 à 2 heures (malades plus âgés).
- Au bout de 6 heures (nourissons) ou de 3 heures (malades plus âgés), réexaminer le malade en se servant du tableau des signes de déshydratation. Puis choisir le Plan approprié (A, B ou C) pour la poursuite du traitement.

OUI

Y a-t-il eu au moins 30 minutes de diarrhée ou plus de 10 gorgées de lait ou de jus de fruits pour produire la perfusion?

OUI

- Envoyer immédiatement l'enfant dans ce service pour y être perfusé.
- Si l'enfant peut boire, donner à sa mère de la solution de SRO et lui montrer comment l'administrer pendant le transport.

NON

Aviez-vous la formation nécessaire pour utiliser une sonde nasogastrique pour la réhydratation?

OUI

- Commencer la réhydratation à l'aide de la sonde nasogastrique en administrant de la solution de SRO à raison de 20 ml/kg/heure pendant 6 heures (total 120 ml/kg).
- Réexaminer le malade toutes les 1 à 2 heures:
 - en cas de vomissements répétés ou de distension abdominale, administrer le liquide plus lentement;
 - si la déshydratation ne s'atténue pas au bout de 3 heures, envoyer le malade dans un service où l'on pourra le traiter par perfusion intraveineuse (IV).
- Au bout de 6 heures, réexaminer le malade et choisir le plan de traitement approprié.

NON

La malade peut-elle boire?

OUI

- Commencer la réhydratation par voie orale en administrant de la solution de SRO à raison de 20 ml/kg/heure pendant 6 heures (total de 120 ml/kg).
- Réexaminer le malade toutes les 1 à 2 heures:
 - en cas de vomissements répétés, administrer le liquide plus lentement;
 - si la déshydratation ne s'atténue pas au bout de 3 heures, envoyer le malade dans un service où l'on pourra le traiter par perfusion.
- Au bout de 6 heures, réexaminer le malade et choisir le plan de traitement approprié.

NON

URGENT! Envoyer le malade dans un service où l'on pourra commencer la réhydratation par voie intraveineuse ou avec une sonde nasogastrique.

NOTES:

- Une fois la réhydratation achevée, garder, si possible, le malade en observation au moins 6 heures pour s'assurer que la mère sait maintenir l'hydratation en lui administrant des SRO par voie buccale.
- Si le malade a plus de 2 ans et s'il y a des cas de choléra dans votre région, administrer un antibiotique oral approprié une fois le malade sorti de son apathie.



Organisation mondiale de la Santé



Programme de LUTTE CONTRE LES MALADIES DIARRHEIQUES

PRISE EN CHARGE DU DIARRHEIQUE

CONSULTEZ CE TABLEAU SI LE MALADE

- a des selles molles ou liquides
- a des selles molles avec du sang

1992

UNCLASSIFIED

Annex 2.5 to
RWANDA Area Study
Date 29 Jan 1994

MEDICAL

1.(U) Public Health. Health care is not free and not widely available outside the capital. RWANDA has 232 hospitals, with a total of 7,882 beds. The ratio of physicians per capita is 0.3:1000. The leading causes of death (per 100,000 population) are:

- a. complications of pregnancy, childbirth, and birth injury: 192.4;
- b. infectious and parasitic diseases: 11.8;
- c. disease of the digestive system: 10.3;
- d. disease of the nervous system: 10.1; and
- e. accidents, poisoning, and violence: 5.2. This last figure has substantially increased recently due to the civil war.

2.(U) Health Concerns:

- a. Contagious Diseases. The following are commonly occurring contagious diseases malaria, typhoid, sleeping sickness, pneumonia, tuberculosis, dysentery, diphtheria, and meningitis. Aids is estimated to infect 80% of the prostitutes in RWANDA. There is a distinct lack of medical services in RWANDA. Personal medication should be carried by each individual. Clean needles are scarce and if injections are required it is advised to bring syringes.
- b. Hazardous animals and plants.
 - (1) Snakes:
 - (a) African puff adder (*Bitis arietans*);

F-1/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RW/DA Area Study
Date: 11 Jun 1994

- (b) Green mamba (*Dendroaspis jamesoni*);
 - (c) Vipers (*Echis* spp. and *Bitis* spp.); and
 - (d) Boomslang (*Dispholidus typus*).
- (2) Invertebrate: Centipedes, scorpions and black widow and brown spiders are found in RWANDA.
- (3) Plants: Virgin-bower, purgin crotch and plumbagin produce a contact vesicant.

3.(U) Diseases and Treatments:

- a. Vector-borne diseases: Malaria is endemic year round, and countrywide, including urban areas. Risk may be decreased in the northwest prefecture of RUHENGERI because of elevation. *Plasmodium falciparum* reportedly accounts for approximately 90% of the cases, presumably followed by *P. malaria* and *P. ovale*. Chloroquine-resistant *falciparum* malaria presumably occurs in all areas. Amodiaquine and Fansidar resistance has been noted in central, northwest, and southeast (KIGALI and KIBUNGO) areas. Transmission of malaria in the community of RUHENGERI is lower than other areas of the country.
- b. Foci of Trypanosomiasis occur in the AKAGERA Game Park and presumably persist in the NASHO Lake vicinity. Current incidence data are not available, but sporadic cases of the rhodesiense form were reported among foreign travellers to the AKAGERA Game Park, and sporadic cases have also been reported from the Akagera Game Park and the NASHO Lake vicinity.
- c. Louse-borne Typhus is endemic. Most cases occur in the southwestern part of the country.

F-2/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Dated 2 Jun 1994

- d. Risk of intestinal Schistosomiasis, caused by *Schistosoma mansoni*, presumably are focally distributed in the northwest prefecture of RUHENGERI (around Lakes BURERA and RUHONDO), along Lake KIVU (particularly CYANGUGU), in the south around Lake COHOHA, and in the KIGALI vicinity. Foci also have been reported in BYUMBA and BUTARE Prefectures, and around Lake MUHAZI. Current incidence data are not available, but infection rates during the early 1980s generally were around 5%, exceeding 20% in some lake side localities.

4.(U)

Disease vector information:

- a. *Anopheles funestus* and *An. gambiae* are the primary vectors of malaria. *An. funestus* is an open-country mosquito. It breeds in fresh, semi-permanent to permanent, sunlit swamps, large rivers or grassy stream margins and artificial containers. It rarely travels more than 1/2 mile from its breeding site. Feeds mostly on humans at night and indoors, also resting indoors.
- b. *An. gambiae* is a peri-domestic mosquito which breeds in sunlit pools, footprints, puddles, and artificial containers. It prefers human to animal blood, feeding mainly indoors between 0200 and 0400 hours.
- c. Data is fragmented on the extent of *Schistosoma mansoni* distribution, but the entire country should be considered infected. The shores of the Lake KIVU area are known to be affected.
- d. *Trypanosoma gambiense* and *T. rhodesiense* have historically had foci along the border of TANZANIA (eastern focus is rhodesiense; southern foci is gambiense). The vector of the gambian form is *Glossina palpalis*. It must have close contact with man and is found in heavily populated areas, and along the shores of rivers, lakes and forest woodlands.
- e. *Glossina morsitans* is the vector of *T. rhodesiense*. It inhabits many types of woodlands, prefers wild game and domestic cattle,

F-3/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Dated 2 Jun 1994

but will attack man. Adults are found in sparsely populated woodlands in the dry, hot months. Pupae are found in shady areas. Both sexes of *G. palpalis* and *G. morsitans* are blood feeders and diurnal biters, and can fly 5 to 15 miles per day, but usually only 200 meters a week, usually returning to the same resting sites.

- f. The body louse, *Pediculus humanus*, is the vector of Louse-Borne Typhus. Lice inhabit the under surface of garments, attaching themselves to the skin several times a day to feed. Overcrowding and use heavy clothing are predisposing factors in the spread of Louse-Borne Typhus, which can also be transmitted man to man, and can be contracted from absorption or inhalation (laboratory: media containing viable rickettsia; hospitals/laundries: dust containing feces of infected lice).
- g. Rift Valley Fever is transmitted by *Aedes* and *Anopheles* mosquitoes. *Aedes aegypti* is the most probable vector of Rift Valley Fever and urban Yellow Fever. It breeds exclusively in artificial containers and around human habitations throughout the year. It seldom flies more than 25 to 100 yards from its breeding site. Prefers human blood, biting about the ankles and neck during early morning and late afternoon.
- h. Information is scanty on the extent of Filariasis, *Wuchereria bancrofti*, but the probable vector is *Anopheles gambiae*.

5.(U) * Disease and vector control program: Malaria chemoprophylaxis should be mandatory. Yellow Fever immunizations should be current. Prevention and control of other vector-borne diseases is limited to avoiding the bites of potential vectors by the mandatory use of personal protective measures and/or direct control efforts against the vector. Personal protective measures should include: screened eating and sleeping areas, bed nets, protective clothing, insect repellent (DEET) and the use of insecticide aerosols in sleeping quarters.

F-4/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Date 10 Jun 1994

6.(U) Gastrointestinal Diseases:

- a. High risk. These health threats will probably have the greatest operational impact on personnel. Crowding and generally poor sanitation country-wide make the potential for gastrointestinal diseases a major problem. Traveller's diarrhoea (usually caused by E. Coli) is the most common of these threats. Other GI diseases known to have high endemic rates in this country include: various enteric viruses, typhoid and paratyphoid fevers, salmonellosis, shigellosis, viral hepatitis, amebiasis, giardiasis, and helminthiasis. It is now clear that in many parts of the developing world, more than 50% of clinical cases of enterically transmitted hepatitis among adults are caused by hepatitis E. Historically, cholera cases have been reported from some areas of this region, but cholera does not pose a serious operational threat to Canadian personnel.
- b. Preventive Measures.
 - (1) The most important preventive measure for these diseases is avoidance of potentially contaminated water and food. Presume all local water (including ice) is not safe to drink even in hotels and restaurants. All consumed fluids should be bottled (preferably carbonated) or treated. Uncooked foods likely to be contaminated with local water (for example: lettuce, unpeeled fruits and vegetables) should be avoided. Local street food vendors should be avoided. Meat should be thoroughly cooked. Raw milk and raw fish should not be consumed.
 - (2) Typhoid immunizations confer partial protection and should be up-to-date. All persons should have completed a polio vaccine series. According to the CDC, some adults may need a booster dose of either TOPV or IPV if travelling to polio endemic areas. Anyone born after 1955 without a documented polio booster as an adult, a polio immunization in recruit training or during officer accession training, or

F-5/12

UNCLASSIFIED

UNCLASSIFIED

Annex 6 to
RWANDA Area Study
Date: 1 Jun 1994

extensive/household exposure to children just after such children have received TOPV should be considered for a polio booster.

- (3) Cholera immunizations are not routinely recommended. Rarely, some immigration officials in other countries mistakenly believe evidence of cholera vaccination is still required in their countries, but this is becoming less frequent.
- (4) Immune Globulin (IG) for Hepatitis A is not routinely recommended for brief (several days) visits or port visits in urban or tourist areas. One can minimize exposure to hepatitis A by avoiding potentially contaminated water or food, as noted above. Immune globulin is recommended, however, for most travellers, particularly those who travel outside usual tourist routes, those who may be unavoidably exposed to food or drinking water in settings of questionable sanitation (example: certain locally-hosted receptions), those who will be in contact with young children in settings of poor sanitation, and those who will be in-country for prolonged periods (more than several days). Most lots of U.S. made IG probably do not contain protective levels of antibody against hepatitis E virus.
- (5) Diarrhoea-causing enteric bacteria, particularly enterotoxigenic E. Coli (ETEC) and shigella, are likely to be sulfa/trimethoprim and/or tetracycline resistant. Ciprofloxacin is an excellent backup or primary treatment when antibiotics are indicated.

F-6/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Dated 2 Jun 1994

7.(U)

Malaria.

- a. High risk. The predominant species is *Plasmodium falciparum* (90%). Risk of infection exists throughout the year in all areas, including cities, although there is some evidence of decreased risk in the prefecture of RUHENGERI, in northern RWANDA. Chloroquine-resistance is strongly suspected countrywide, and Fansidar-resistance is reported.
- b. Preventive Measures. Personal protective measures (such as proper clothing, DEET, and bed nets) must always be stressed - these are the most important malaria prevention measures.
- c. Due to chloroquine resistant *falciparum* malaria, chemoprophylaxis with doxycycline or mefloquine is recommended unless neither drug is available.
- d. The recommended regimen is doxycycline, 100mg daily, beginning 1-2 days prior to arrival, and continuing for 28-30 days after departure from the malarious area. Doxycycline is contraindicated in pregnancy and in children less than 8 years old. It may cause gastrointestinal disturbances which should be minimized by taking the medication with meals. Another common side effect of doxycycline is photosensitivity (exaggerated sunburn) reaction which can be minimized by proper use of clothing and sunscreens.
- e. Mefloquine is a recently approved drug and may not be readily available. Mefloquine dosage recommended for military personnel is 250 mg weekly, beginning 1 week prior to entering the malarious area and continuing for a minimum of four weeks (4 doses) after departure. Mefloquine may be associated with dizziness and/or mild gastrointestinal disturbances (minimized by taking with food), and should not be given to personnel using beta blockers or drugs that prolong or alter cardiac conduction, individuals with epilepsy or moderate to severe psychiatric

F-7/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Dated 2 Jun 1994

disorders, pregnant women, children under 15 kg body weight, or to personnel on flight status (doxycycline should be prescribed instead of mefloquine for aviators).

- f. If neither of the above regimens is possible, chloroquine is recommended, though a greater risk of falciparum malaria may then exist. The usual dose of chloroquine is 300 mg base (500mg salt) weekly, beginning 1-2 weeks before entering a malarious area and continuing 4-8 weeks after departure. If the individual on chloroquine prophylaxis will not have medical care readily accessible (within 24 hours), one option is for them to carry three Fansidar tablets to be taken all at once in the event of a febrile illness. Although this often successfully treats malaria, Fansidar-resistant falciparum malaria may also occur. These persons should always seek medical care as soon as possible if they become ill.
- g. Terminal prophylaxis with primaquine to eradicate the liver phase of vivax (or ovale) malaria is almost always recommended with whichever of the above drugs is taken. There are three possible primaquine regimens: 1) 45 mg primaquine once per week for eight (8) weeks after leaving the malaria-risk area, along with whichever other of the above medications is used, 2) 45 mg primaquine once per week for eight (8) weeks after leaving the area as part of the combination chloroquine/primaquine tablet (even if doxycycline or mefloquine is used), and 3) 15 mg primaquine once per day for fourteen (14) days. NOTE: The additional medication (Doxycycline, Mefloquine or Chloroquine) must still be taken weekly for four (4) to eight (8) weeks even if the fourteen (14) day primaquine regimen is used.
- h. Some G6PD-deficient persons who cannot take primaquine should instead be counselled that they have some risk of developing clinical vivax (or ovale) malaria for years after leaving the malarious area. They should seek medical attention in the event of any febrile illness.

F-8/12

UNCLASSIFIED

UNCLASSIFIED

Annex I to
RW 1118 Area Study
Date 2 Jun 1994

- j. The first two primaquine regimens are generally preferable because if inadvertently given to a G6PD-deficient individual, hemolysis is not likely. If hemolysis occurs it is not likely to be severe. The third regimen often causes significant gastrointestinal problems and may cause severe hemolysis in people with some types of G6PD deficiency. Though a fourteen (14) day regimen may result in better compliance for purposes of vivax malaria terminal prophylaxis, it is fraught with a considerable risk of confusion about the need to take the more important four-to-eight week course of terminal prevention of life-threatening recrudescence of falciparum malaria. Whichever method is used (including the C-P combination tablet), doxycycline should continue to be taken for 28 days, mefloquine for four weeks, or chloroquine for 4-8 weeks after departure from the malarious area. If time in-country is brief (less than 2-3 weeks) and mosquito exposure very minimal, it may not be necessary to give terminal primaquine. The decision not to give primaquine should be made on a case-by-case basis in consultation with NEPMU-7.

8.(U) Medical Department personnel should review the laboratory and clinical diagnosis of malaria, as well as various treatment regimens. An adequate supply of treatment drugs such as Fansidar, quinine or quinidine, tetracycline, and/or mefloquine should be readily available. No regimen is perfect and any suspect illness should be treated as malaria promptly. Although identification of the malaria species is important in determining the course of treatment, all malaria in the fleet or field setting must be treated as if it were *P. falciparum* initially because this is the most deadly type. A recommended reference is the Navy Medical Department Guide to Malaria Prevention and Control. A new edition is being distributed now and is available upon request.

9.(U) Other Vector Borne Diseases.

- a. Low risk. Diseases reported to be present, current levels unclear, include: Trypanosomiasis, Leishmaniasis, Filariasis, various Hemorrhagic Fevers, Arboviral diseases, Tick Borne Relapsing Fever, Tick Borne Typhus, and Dengue. Several cases of

F-9/12

UNCLASSIFIED

UNCLASSIFIED

Annex F to
RWANDA Area Study
Dated 2 Jun 1994

Trypanosomiasis have been acquired in short-term American travellers visiting Rwanda.

- b. The country is in the Yellow Fever endemic zone although no cases have been reported in recent years. Yellow Fever immunizations should be up to date. An International Certificate of Vaccination with evidence of YF vaccination is required of all travellers. Personal protective measures against insects (DEET, netting, etc.) will minimize the occurrence of vectorborne diseases.
- c. Viral Hemorrhagic Fevers. Marburg, Ebola, West Nile, Congo-Crimean Hemorrhagic fever (CCHF), and Rift Valley Fever are endemic in nearby Kenya. If Hemorrhagic fevers are encountered, it should be remembered that CCHF, Ebola and possibly Marburg viruses may be transmitted from person-to-person, e.g., in hospital environments, and may produce significant mortality. Personal protective measures against insects (DEET, netting, etc.) will minimize the occurrence of vector-borne diseases.
- d. Plague has been reported in this region. Plague vaccine is seldom warranted. The basic series is required only for FMF and SeaBee units, and this requirement will soon be dropped. Other use, including booster doses is generally discouraged. Booster doses are recommended only for individuals who are at high exposure risk, such as those in the field in rural mountain or upland regions of a proven plague-endemic area in which ground rodent die-offs due to sylvatic plague are known to be occurring. If exposure will be significant, tetracycline chemoprophylaxis and use of pyrethrin-based flea repellents must be emphasized (this is where the real effort should be focused in such situations -- not on creating a false sense of security from "booster" doses of a minimally effective vaccine).

F-10/12

UNCLASSIFIED

UNCLASSIFIED

Annex 11
RWANDA Area Study
Date 12 Jun 1994

10.(U) Sexually Transmitted Diseases.

- a. High risk. All forms are reported to be present. PPNG is present. A recent (1986) blood bank screening for HIV antibody indicated up to 10 percent of donated blood was seroreactive for HIV antibody. Prevalence of AIDS or AIDS-Related-Complex is estimated at 80 to 100 cases per 100,000 population. Officially reported AIDS cases total 3407 as of JUN 90.
- b. Avoidance of sexual contact is the only certain means of STD prevention, but if contacts occur, "safer" sexual practices, such as use of condoms, are strongly advised. Hepatitis B vaccination should be strongly considered for those who have an STD or are known to be promiscuous. Treatments and contact management should be followed per NAVMEDCOMINST 6222.1 and the 1989 CDC STD Treatment Guidelines.

11.(U) Animal Associated Diseases.

- a. Low risk. Rabies is reported to be enzootic, although the exact level is unclear. Risk should be considered for all urban and rural areas. It is recommended that personnel be prudent in their contact with all domestic and wild animals. General guidance for the management of animal bites is found in NAVMEDCOMINST 6220.4, "Rabies Prevention and Control." If there are any questions, bites of any kind should be reported promptly to local public health authorities. It is advisable to have Human diploid cell rabies vaccine (HDVC) and rabies immune globulin (RIG) for post-exposure treatment should it be indicated.

12.(U) Other Health Considerations.

- a. Variable Risk. No data available to estimate risk of Schistosomiasis after exposure to freshwater impoundments. Exposure to freshwater impoundments should be avoided or, if impossible, minimized. Automobile accidents are the most common cause of serious morbidity and mortality in tourists. Seat

F-11/12

UNCLASSIFIED

UNCLASSIFIED

Annex 1
RVN Area Study
Draft 1994

- belt use is mandated by DND policy if they are available. Traffic accidents in areas not well served medically are more likely to be fatal. Additionally, traffic accident-related trauma may necessitate blood transfusions. In some areas of the developing world, the high HIV seroprevalence rate combined with inadequate blood bank screening procedures necessitates additional caution in this area.

- b. Dermatologic problems such as fungal infections and secondary wound infections are very common and can deteriorate quickly. It is advisable to treat early and aggressively. Upper respiratory tract infections (URIs) are also very common and can be the leading cause of morbidity during or after a visit. Spread can be minimized by good personal hygienic practices, especially hand-washing. Tuberculosis is common in the indigenous population and all personnel should be PPD screened per NAVMEDCOMINST 6224.1 and COMUSMACVCOM 080230Z APR 89. Meningococcal vaccine is usually not necessary for personnel, but should be considered if time in-country will be more than a few weeks.

- c. Unknown risk level. In many developing countries, indoor air pollution probably poses a significant health threat to persons with prolonged exposure. Tobacco smoke poses the greatest long-term risk. These risks may be minimized by eliminating avoidable exposures to tobacco smoke, etc.

13.(U) Climate Considerations. Terrain is mostly grassy uplands and hills, with mountains in the west, which moderates the temperate to tropical climate. Major rainy seasons occur during February-April and November-January. Frost and snow is possible in the mountains. Adequate fluids, eye and skin protection are recommended.

F-12/12

UNCLASSIFIED