

EAN News

Newsletter of the EPIET Alumni Network



June 2009

Editorial

Dear EAN Friends,

Spring was quick, we hope you enjoyed it! So many things have happened in the World of EAN that it is impossible to put them all in the newsletter, although we will try.

Spring is the season for genetic mingling (some call it Love). Apparently this is true also in the viral world and a new virus was born, the H1N1. The little fellow is growing so quickly. Congratulations to the parents, whoever, wherever and whatever they are!

Many members of the Network have been pretty busy in dealing with H1N1 and we have the opportunity to read about the response to this epidemic (pandemic?) in our Special Focus on H1N1. The account of these experiences across the Network demonstrates its usefulness and urgent need in dealing with international emergencies.

Not everybody was busy with the flu during Spring. Some members tried to avoid the risk of H1N1 by travelling to Africa, a notorious safe-haven when it comes to infectious diseases. Ariane Halm (cohort 13) Lorenzo Pezzoli (cohort 12 and EAN Secretary), and Gabrielle Breugelmans (cohort 7) participated in WHO missions involving vaccination activities (Polio and Yellow Fever) in Africa. Sarika Desai (cohort 12) has been working in Zimbabwe for some months to contrast the cholera epidemic and will update us on the challenges that such a task entails.

We are also extremely proud to present the new EAN website in the Epi-Tools Section. Florian Burckhardt (cohort 12 and EAN webmaster) will describe how the new website should revolutionise communication among the EAN members.

For many of us summer will be busy, for some it will be also holidays, hopefully. Wherever you are, locked in an EOC 24/7 or sailing the Mediterranean on a boat, don't forget your copy of the EAN Newsletter, the must-read summer bestseller!

From the EAN Board

ESCAIDE

EAN is involved in the organization of the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) also this year.

ESCAIDE will take place from **26-28 October 2009** (Monday to Wednesday).

The conference venue will be the München Bryggeriet which is centrally located in **Stockholm**. The call for abstracts was opened and the deadline is 3rd July 2009. Make sure to submit your abstracts online at www.escaide.eu.

The Outreach Project for ESCAIDE

The Outreach project has been launched by the EAN for the upcoming ESCAIDE (see Spring 09 Newsletter or contact eanboard@gmail.com for details). 11 target countries have been identified; 8 member states and 3 accession countries. One has already been contacted and has responded positively. Letters, encouraging abstract preparation and submission and offering supervisory and travel grant support, will shortly be sent out to further contacts in all 11 countries. Thanks to ECDC for support with the contact details for this initiative.

Recruiting new members

The EAN is growing. We have now 209 members. Many external epidemiologists and alumni of the European field training programs are joining the EAN. All epidemiologists from European Training programs can automatically join the EAN and external applicants are also welcome. External applications need to be endorsed by 2 EAN members. Anyone interested in becoming a member should contact eanboard@gmail.com.

EAN membership fees

The yearly membership fee is €20. New fellows are exempt from this for the first year of their

fellowship. Starting from the second year of fellowship every member should pay the fee. We kindly ask you to contact Gianfranco (gfspiteri@gmail.com) and/or Chris (kitwilliams@doctors.org.uk), the EAN Treasurers, in case you want to get information on your membership payment. You should all have received a reminder about this: so please, make arrangements for overdue payments if you have not already done so. We also encourage you to pay for more than one year so to secure your membership for a longer period of time and avoid duplicating banking costs.

Please contact Gianfranco before the transfer & indicate your name and membership year as reference.

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We are also in the process of registering an EAN PayPal account to make it easier for our members to pay the fee, so watch this space!

From the EPIET Program

Selection of Cohort 15

The selection of the 15th cohort of EPIET fellows has been conducted in Stockholm between 11 and 14 May 2009

The face-to-face interviews for the selection of cohort 15 took place in an airport hotel in Stockholm, Sweden from May 11-14, 2009. The candidates were first interviewed by the EPIET/ECDC selection committee that ranked all candidates that were short-listed during the first rounds. EAN was represented by Barbara Schimmer (cohort 10 and EAN President) in the EPIET/ECDC selection committee.

After the first face-to-face round with the selection committee on Monday and Tuesday, most candidates went on to the next face-to-face round with the institutes. First on Wednesday morning there was an informal information market where host sites got the opportunity to present their activities to the candidates. On Wednesday afternoon, the candidates got interviews with host sites representatives and had to submit their ranking of their preferred host institutes. Based on all the rankings, such as the ranking of the selection committee, the ranking of the institutes by the candidates and the ranking of candidates by the institutes, the matching meeting took place on Thursday morning to match the candidates with a host institute. Also a waiting list of candidates that could not be placed was made. The final list of selected fellows will be published in the next EAN newsletter. We look forward to welcome the new cohort!

EPIET is under evaluation

EPIET was created in 1995 by the European Commission (DG-Sanco) and EU Member States and provides training and practical experience in intervention epidemiology at the national centres for surveillance and control of communicable diseases in the European Union (EU).

It has been almost 15 years already since the program started and it is time to see how we are doing. For this reason, ECDC launched a tender to Evaluate Epiet.

The main purpose is to evaluate in an independent and external approach if the established objectives and programme of work has a relevant contribution to the field epidemiology workforce strengthening in the EU. The evaluation should also identify possible shortcomings and possible improvements necessary to its structure, management and working practices.

The application closed on the 3rd of June and we are very curious to see who will take this great task on their shoulders.

More info at:

http://ecdc.europa.eu/en/Procurement/Competitions/PROC_2009_015/Default.aspx

Special Focus on H1N1

Novel A (H1N1) Cases and contacts management in 18 countries in Europe, during the containment phase (as of 15/05/09)

Collated by *Sandra Cohuet (Epiet Cohort 12, INVS, France)* and *Chris Williams (Epiet Cohort 11, HPA, UK)* with information sent by EAN Members and Epidemiologists across the World

Europe

A review of information regarding influenza A(H1N1) the management of cases and their contacts was performed with data available as of 15 May 2009.

Cases and contacts policies were documented for 13 European countries: Cyprus, Italy, Finland, Spain, Germany, United Kingdom, Sweden, Norway, Denmark, Netherlands, Ireland, Portugal, and France) (table 1).

Case definitions

Two groups of countries could be defined:

1. A group which classifies a case as probable with a positive PCR Flu A only: **France**.
2. A group which classifies a case as probable with a PCR positive Flu A non-typable (or not "seasonal influenza"), corresponding to EU recommendations: **Cyprus, Denmark, Germany, Finland, Ireland, Norway, Portugal, Spain, Sweden and United Kingdom (UK)**.

There is no major difference in terms of definition of suspect or confirmed between these two groups of countries (Table 1).

Curative treatment and isolation of cases

The management of cases is quite heterogeneous in the 13 documented countries. Countries can be classified in 4 groups ordered by decreasing order in terms of contingency measures (Table 1).

1. Treatment with oseltamivir and systematic hospitalisation of suspect cases: **France and Cyprus**
2. Treatment with oseltamivir and home quarantine of suspect cases (6 countries):

Switzerland, Italy, Finland, Spain, Germany, and Norway.

3. Treatment with oseltamivir and self-isolation for suspected cases, hospitalisation of severe cases only: **Ireland, UK.**
4. Treatment of probable cases by oseltamivir, home quarantine for probable cases and hospitalisation for severe cases only: **Netherlands, Denmark.**

Isolation and prophylactic treatment of contacts

The management of contacts of cases was very heterogeneous in countries documented. The management ranged from the treatment and compulsory home quarantine for contacts of suspect cases to treatment decided on a case by case basis tailored on individual risk factors of complications for contact persons (table 1).

1. Prophylactic treatment of contacts of suspect cases and home quarantine for contacts: **Spain, Portugal**
2. Prophylactic treatment for contacts of probable cases and home quarantine for contacts of suspect cases: **France, Ireland**
3. Prophylactic treatment for contacts of probable cases and home quarantine of probable cases: **Denmark**
4. Prophylactic treatment for contacts of probable cases and no home quarantine: **United Kingdom**
5. Prophylactic treatment for contacts of confirmed cases and no home quarantine: **Netherlands**
6. No prophylactic treatment for contacts and home quarantine for contact of confirmed cases: **Switzerland**
7. Prophylactic treatment for contacts only if people at risk of complications: **Finland and Norway**

The implementation of the public health response has also varied. In the UK, regional flu centres assess cases and advise on testing, treatment, isolation and other public health measures such as school closures. In Germany, H1N1 field teams have been deployed to investigate clusters of infection (see below the contribution by Helen Bernard).

Table 1 H1N1 Case definition and treatment of cases and contacts, Europe, 15 May 2009

| Countries | Case Definitions | Affected areas included in the case definition | Systematic treatment of cases | Systematic hospitalisation of cases | Systematic home quarantine of cases | Isolation of close contacts | Prophylactic treatment of contacts | Last update |
|--------------------|---|---|---|--|---|---|--|-------------------|
| | 1. Suspect case | | No | No | No | No | No | |
| | 2. Probable case | | Suspect cases | Suspect cases | Suspect cases | Home quarantine | Suspect cases | |
| | 3. Confirmed case | | Probable cases | Probable cases | Probable cases | Hospitalisation | Probable cases | |
| | | | | Severe cases | | | Confirmed cases | |
| Cyprus | 1. Flu like syndrome + epidemiological links 2. Flu A positive not typable 3. A(H1N1) | Affected areas(General) | Suspect cases | Suspect cases | Not applicable | no | For contacts of probable cases | 01 May |
| Denmark | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | N/A | Probable cases | Severe cases | Suspect cases | With probable cases --> Home quarantine | For contacts of probables cases | 29 April |
| Finland | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico USA | Suspect cases | No | Recommended | N/A | Only for individual presenting increased risk of complications | 05 May |
| France | 1. Flu like syndrome + epidemiological links 2. PCR Flu A positive (Highly probable non seasonal Flu A positive) 3. A(H1N1) | Mexico USA Canada | Suspect cases | Suspect cases | - | With suspect cases --> Home quarantine | For contacts of probable cases | 13 May |
| Germany | 1. Flu like syndrome + epidemiological links WITHOUT other cause that could explain symptoms 2. Flu A positive & negative for seasonal influenza A(H1) A(H3) 3. A(H1N1) | Mexico | Suspect cases | Severe cases | Suspect cases | N/A | N/A | 02 May |
| Ireland | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico USA | Suspect cases | Severe cases | No | With suspect cases --> Home quarantine | For contacts of probable cases | 30 April |
| Italy | 1- Flu like syndrome + epidemiological links 2- PCR A positive 3- A(H1N1) | Mexico USA | N/A | Severe cases | Suspect cases | N/A | N/A | 02 May and 13 May |
| Netherlands | 1. Flu like syndrome + epidemiological links 2. PCR Flu A positive 3. A(H1N1) | Mexico + area of transmission documented by WHO | Probable cases | Severe cases | Suspect cases | No | For contacts of confirmed cases | 06 May |
| Norway | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico, USA (not Alaska), Canada (British Columbia, Alberta, Ontario, New-Scotland, Quebec et Saskatchewan) | Suspect cases | No | Fortement conseillée | N/A | Only for individual presenting increased risk of complications | 14 May |
| Portugal | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico, USA | Suspect cases according to severity of clinical signs | Suspect cases (Reference hospitals) | - | No | For contacts of suspect cases | 1st and 3rd May |
| Spain | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico, USA | Suspect cases | Hospitalisation or home quarantine of suspect cases according to logistic constrains | | With suspect cases --> Home quarantine | For contact of suspect cases | 07 May |
| Sweden | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico, USA, Canada | N/A | N/A | N/A | N/A | N/A | 30 April |
| Switzerland | 1. Flu like syndrome + journey in an affected area 3. Confirmation by National Influenza Reference Centre | Mexico USA Canada | Treatment to consider | No | Yes recommended for suspect and confirmed cases | With confirmed cases --> Home quarantine | No | 12 May |
| UK | 1. Flu like syndrome + epidemiological links 2. Flu A Positive not typable 3. A(H1N1) | Mexico USA | Suspect cases | Severe cases | No | No | For contacts of probable cases | 09 May |

Response to H1N1 from WHO Euro

By *Sabrina Bacci* (Epiet Fellow Cohort 13, SSI, Denmark)

Europe



After building capacity at WHO, Sabrina wins the swine flu

One of the most wanted activities during our two year fellowship really seem to be the “mythical” international missions. For sure one of the main drives is the fact that you are able to keep your regular job while being able to visit and work in exotic places for a limited amount of time.

Well, now back to my story. What is more exotic than Denmark for an Italian? Not many countries. Yes, I have been living in Copenhagen for a year and a half now, but is that enough not to think that Denmark is exotic? I do not think so. So when Roberta Andraghetti from WHO Regional Office for Europe requested support from the EPIET network I could not be more convinced that that was “the” mission I was waiting for. Everything became even more colourful when Roberta, another Italian, called me, and following our little conversation (in Italian, of course) we made arrangements for our first meeting.

The Italians are everywhere around the World, but I don't think that there are many in Copenhagen. The mission was therefore becoming even more interesting and the most exotic combination you could think of: having an Italian as a boss, in Denmark, and be at the same time on “an international mission”.

Besides that, I am not sure if you are aware of the fact that holidays in Denmark are concentrated in the month of May (3 long weekends over 5 weeks is quite interesting): apparently this is due to fact that it is much more exciting to enjoy a day of holiday outside in the nature during spring rather than a cold grey day at home (which would be the case of all other months). So can you imagine my enthusiasm when I realized I was going to skip these long weekends to work.

At WHO Copenhagen Danish holidays do not seem to exist. Amazing. This is what I was looking for: enjoy a nice spring day - one of the few - in the office.

I am not going to tell you on how WHO responded to the emergency, I am sure you can have your own idea which you have build up working (directly or indirectly) with the pandemic in your own country. What I would like to share with you is my personal experience and the things, which impressed me most.

I am probably banal, but I think after a few years working in “science” it was quite a change to be exposed to a different language, not so scientific, but more political correct, and to be honest, much more understandable by the crowds. I never thought about it, and believe me, I was not able at all to be proficient in a new way of writing/speaking after such a short time (of course!).

But the most interesting experience was for me dealing with the mysterious Pivot Tables. Me, the STATA expert? Yes, indeed. In my pre WHO-life I always refused to make any type of calculation with excel, yet I had to do an international mission to be faced with the fact that not everybody has Stata in his computer or even the time to think about some nice command, the perfectionism of data management, or my favourite activity, labelling variables so that you see a word and Stata reads it as a number. So here we go, next moment I find myself performing an analysis on the European cases of Influenza A H1N1 as fast as possible, learning new features, and finally mastering Pivot Tables, but most interesting, combining as much information from different countries (different variables, different codings, and different languages). What I learned is that ideally, the information should arrive to WHO in a standardized form and ideally in English (at least for me, who do not speak Russian). In reality it arrives in different forms, from emails of a couple of lines to “official case report forms of 7 pages” and the challenge is really to make the best use of as much information as possible in the most optimal way in a reasonable amount of time. Take home message: you can live without odds ratio if you struggle to have basic numbers.

Another point I could really appreciate is how difficult is to make statements, give suggestions that are valid for any country, from Tajikistan to the very rich Scandinavian countries, to the countries of the African Region. You could get a headache fairly easy just by thinking about that. And for sure I got more than one when we were discussing in one of the many conference calls with the 6 WHO Regions the forecoming Pandemic Surveillance Plan.

I was working with Roberta and Mårten (cohort 10) only for 3 weeks but I learned a lot, and most of the things cannot really be put down in words. I can just thank them for having welcomed me and found the time to explain me things in what were probably the busiest weeks since a very long time.

Oops: I realized it's late: I have to prepare a lecture for the nurses I was asked to give some time ago - I have decided to teach them how to make Pivot Tables and to use basic information. Keep it simple. Thanks Roberta!

‘As long as it’s not the swine flu...!’

By *Helen Bernard* (PAE Cohort 12, RKI, Germany)

Germany

Many epidemiologists working at national public health institutes in Europe these days know what it means to be busy with H1N1 night and day. Since the Novel Influenza A(H1N1) virus, the S-OIV, the swine flu, the piggy flu and the Mexico flu became an issue in April, the Robert Koch Institute (RKI) has run an emergency operations centre and has sent 14 outbreak investigation teams* to the regions so far to investigate confirmed cases and their household contacts. After a briefing on the study protocol and on how to use the personal protective equipment, formation of the field teams and start of the mission usually take place at very short notice.

Dirk Werber (cohort 10), Michaela Spackova (cohort 13), Julia Hermes (cohort 14), and me (cohort 12) investigated a cluster of eight H1N1 case households. We visited cases at their homes to take serum and nasal wash samples from them and their close contacts. While the serum is only taken once during the investigation, the nasal washing procedure is being repeated for several days. The sampling procedure requires the patient to say ‘kagakakakakakaka’ while the saline solution is injected in the nose to prevent it from running down their throat, making them cough and aerosolizing the whole sample including the bug. Needless to say that after one day of non-stop nasal washing while wearing silly-looking protective equipment the ‘kagakakakakakaka’ sound had entered our dreams.

The challenge for the field teams is not only to quickly become confident using the protective gear, doing the sampling, and coordinating the visits to the different households that are spread across the region, but also to juggle with political sensitivities (Germany is a federal state and the decisions regarding public health issues lie with the governments of the Bundesländer) and to learn to trade-off between theoretical and applied infectious disease control.

One of the main challenges when visiting case households in rural areas is to avoid attracting the fellow residents’ attention. Already during the short time period that has passed since H1N1 hit the stage, some case families were being shunned by their fellow residents and were asked to leave the village. While in some of the rural regions being a case household member does not seem to be easy, in others people’s attitude towards the swine flu is still more laid-back. So was the postman in one of the villages we visited who was just about to deliver mail to one of the case contacts sitting in front of her house having breakfast when she exclaimed: ‘Don’t get too close to me, I am ill!’. The postman replied: ‘Oh well, as long as it’s not the swine flu...!’, and delivered the mail.

The New Influenza A(H1N1) will probably keep us busy for a while. In the meantime, more outbreak

team members will get the chance to discover a lot more of the country in which they are working and living than they would have discovered without the pandemic, including regional differences in food, language, habits, and landscape.

*Apart from those mentioned in the text, the following current and past EPIET fellows were involved in the field teams: Doris Radun (cohort 7), Andreas Gilsdorf, Andreas Jansen (both cohort 10), Daniel Sagebiel (cohort 11), Stefan Brockmann, Mirko Faber, Oscar Kamga Wambo, Sabine Mall, Maria Wadl (all cohort 13), Steffen Geis, Alexandra Hofmann, Niels Kleinkauf, and Stine Nielsen (all cohort 14).

Immunisation Programs in Africa

The not so compulsory cold chain?

By Ariane Halm (EPIET Fellow Cohort 13, HPA/Cfl, UK)

Mali



Epidemiologist at work in the field in Mali

In 1999, more or less the first step in my career took place in a small town in Guinea (Conakry), West Africa. When I got the mission to Mali ten years later, it meant I got to go back to some of my professional roots - what a joy!

Africa not only has a better climate (in my opinion) and more sun than our fields, but it can also be home to some less good news, such as numerous infectious diseases as well as at times very scarce resources.

Most people will know that vaccines are sensitive to heat, and it is generally recommended they be kept under controlled low temperatures (2-8°C). Ensuring this “cold chain” is a challenge everywhere, but it becomes particularly difficult in settings where electricity and equipment are scarce.

What many people may not know is that despite the restrictive storage guidelines there is actually leeway in the temperatures vaccines can be stored under, and that there is potential to greatly relieve pressure on the logistics & supply chain and increase flexibility for healthcare staff.

Vaccine Vial Monitors (VVMs) are temperature- and time-sensitive stickers placed on individual vaccine vials that measure the cumulative heat exposure. They serve as indicators as to whether a vaccine is well enough preserved to be administered, or if the heat exposure endpoint has been reached and the vial should be discarded.



OPV vials with VVMs

The live-attenuated oral polio vaccine (OPV) is the most heat-sensitive of those currently included in the Expanded Programme for Immunisation. It is often used as part of national vaccination campaigns working towards the goal of global eradication of poliomyelitis. These campaigns aim to vaccinate all children under five years with OPV, and they constitute an important organisational and logistical enterprise.

During these vaccination campaigns, the cold chain faces additional problems: (1) the weight of the icepacks that have to be carried often for several hours and long distances, as well as (2) the humidity generated by the icepacks that soaks the vaccine labels often resulting in their detachment, destruction or lack of readability, consequently leaving the vaccine unusable even if the vial is still full.

Polio vaccination campaigns represent a good opportunity to perform a study of OPV under “out of the cold chain” (OCC) conditions, i.e. without icepacks. There is a need to document OCC use as it is a (re-)current practice but there is a lack of scientific literature of its field application.

Together with ex-EPIET fellow Olivier Ronveaux (cohort 3) who works at the World Health Organization in Geneva, we performed a study during the latest polio immunisation round in Mali in May/June 2009. Our aim was to demonstrate that OCC use for OPV during a mass vaccination campaign is feasible, beneficial and safe.

Besides being an interesting and meaningful area of research, it fits in nicely with my pharmacy and supply background.

We did a crossover intervention trial in the southern district of Sélingué, which actually borders my former home Guinea. All vaccination teams in the study area applied both, icepack (=cold chain) and OCC procedures on alternating days during the vaccination activities. The study was based on VVM status classification, continuous temperature recordings and a couple of questionnaires to be filled out by

vaccination teams and campaign supervisors. It was preceded by a training of all teams on VVM readings and data collection tools.

Some vaccination teams, mostly composed of people without specific or health-related training, walk for 5-20 km under the African sun (temperatures up to 40°C) carrying the filled vaccine carrier and other campaign tools (polio markers, chalks, tally sheets, etc.). For most of us, this would seem quite an outrageous undertaking.



Typical polio campaign vaccine carriers

Despite this and against some of our initial fears, the study went very well. We had a response rate from the vaccinations teams (97%) that I think would have proved difficult to achieve where I am currently working. Furthermore, our results confirm that under controlled circumstances OPV can be kept OCC without being damaged despite high ambient temperatures - good news that should be explored further.

In addition to this, I learned that woman needs to be corpulent so that man knows she is going to work hard, and was reminded afresh that it is much better to relax and not get stressed about e.g. time (not easy for a German, I can assure you), because things will mostly somehow work out anyways. And that it is better to try and see the positive side and keep your sense of humour. Admittedly, this is easier under the sunshine while being constantly fed with mangos than under the London rain.

Last but not least, the mission also included the obligatory West African music everywhere, the odd dancing experience, eating "riz sauce" with your hands, as well as the delight of the evenings' cold beer - all in all a fantastic diversion from swine flu.

Zero la vie

By *Lorenzo Pezzoli* (Epiet Cohort 12, Temporary Advisor for WHO)

Cameroon



Traditional housing in the Extreme North of Cameroon

Cameroon is often described as Africa in miniature, since most of the beautiful African landscapes and amazing wildlife species can be found there. Unfortunately, among the typical Cameroonian wildlife we can count also some dangerous members that are not exactly tourist attractions. Like elsewhere in Africa, mosquitoes are vectors of the yellow fever virus and of the malaria plasmodium, just to cite two very serious mosquito-borne infections endemic in Cameroon. Another very dangerous wild species is also present in Cameroon, the Wild poliovirus, and it is not unusual to still find cases of poliomyelitis in Cameroon and in the neighbouring countries of Nigeria, Central African Republic, and Chad.

Luckily both yellow fever (YF) and poliomyelitis (Polio) are vaccine preventable diseases and vaccination campaigns are conducted in Cameroon for primary prevention or outbreak control. The National YF and Polio Vaccination Campaign covered 62 health districts in Cameroon between the 4 and the 11 of May 2009.

I had the opportunity to work in Cameroon between 16 April and 21 May 2009 as a consultant for the World Health Organization (WHO). WHO is currently experimenting rapid techniques to evaluate vaccine coverage during vaccination campaigns to guide timely mop-up actions. With this intention, during the vaccination campaign we implemented the Lot Quality Assurance Sampling (LQAS) methodology in 17 districts at risk for low coverage across the country.

It was a very intense period of hard work for all the team, which included experts of the Ministry of Health (MoH), the National Institute of Statistics (NIS), and WHO. Protocol writing, recruiting the surveyors, training them, coordinating all the local

teams and at the same time conduct surveys ourselves, data entering, data analysis, report writing, certainly kept us busy.

The study was very rewarding and, although many of the at-risk districts were found with sub-optimal levels of coverage, we recommended an extension of the vaccination campaign of two days to increase the vaccination coverage in the areas of weakness.



The LQAS Study Team in Yaoundé (from left to right): Mr. Ndjomo (NIS), Mr. Takeu (NIS), Dr. Tchio (MoH), Mr. Dzossa (NIS), and me

This mission was also a great opportunity for me to learn more about this truly amazing country. I was very lucky to find excellent colleagues and friends, who not only supported me through the many challenges of a national vaccination campaign, but also transmitted me a very positive and enthusiastic attitude.

In five weeks in Cameroon, I not only gained more experience in vaccination coverage surveys, but I learned how to maintain optimism even when things seem not to go the way they are planned and how differences most of the time can be seen as opportunities. I have also realized that life is zero, *zero la vie*, as a famous singer from Yaoundé says, so we should make the best of it, without feeling overwhelmed by circumstances as we do too often. In addition, I have also acquired excellent skills in bargaining at the local markets, which is also very useful in the time of the credit-crunch.

Every day we learn something different and every experience should prepare us for the next one, especially, but not only, in epidemiology. I am sure

that remembering the lessons from Cameroon will be very useful here in London, the most diverse city I know, where every day something different happens.

The first thing I did once I landed was trying to discuss the price of the Heathrow Express. That did not work so well, I must say, and I still had to pay the full ticket. But after implementing the LQAS in cities like Yaoundé or Maroua, perhaps I should transfer the methods to Hampstead and check the MMR coverage.

Most importantly, I am trying to remember that life should not be a stressful business. Although, as we all know too well, nothing is 100% effective, remembering this simple lesson makes things better, sometimes... For example, when a tube strike or a signal failure on the Northern Line blocks me in the underground, now I just play *zero la vie* on my iPod and enjoy the music.



Dr Ticha (WHO) getting vaccinated in the city of Maroua to set the good example

Yellow Fever AEFI Surveillance

By *Gabrielle Breugelmans* (Epiet Cohort 7, Agence de Médecine Préventive (AMP), France)

Africa



50 dose presentation of diluent for yellow fever vaccine

Although I have been working for the last six years in vaccines it was not until I started working at AMP two years ago that I became more familiar with the ins and outs of vaccine safety monitoring. As we all know, vaccines are a major public health triumph by protecting the individual and the public from vaccine preventable diseases. Although modern vaccines are safe, no vaccine is entirely without risk. Some people experience events after vaccination ranging from mild side effects to life-threatening, but rare, illnesses. In some cases, these reactions or events are caused by the vaccine; in others, they are caused by an error in the administration of the vaccine; and in the majority of cases, there is no relationship. Whatever the cause, when somebody experiences an Adverse Event Following an Immunization (the so-called AEFI or “MAPI” in French) this can have a big impact to the extent that people refuse further vaccinations for themselves or their children, with all kind of possible consequences.

Luckily for most of us in Europe vaccine safety is strictly regulated and any notice of a possible vaccine related AEFI well investigated. This is unfortunately not the case for those in Africa where surveillance to monitor the safety of vaccines, medications or medical devices is sorely lacking.

Like Lorenzo, I had the opportunity to go several times to Cameroon over the past four months as member of the Yellow Fever partnership to support Ministries of Health in West and Central Africa to implement yellow fever AEFI surveillance as part of their mass yellow fever vaccination campaigns. Although my missions to Cameroon were mainly concentrated in lush green, hilly, and temperate Yaoundé, the political capital of Cameroon (Douala is Cameroon’s economic hub), it was a very pleasant change of West Africa (e.g. Burkina Faso, Mali) where temperatures easily reach $>40^{\circ}\text{C}$ in the dry season.

Cameroon falls in the so-called Yellow Fever Belt in Africa and Yellow Fever is endemic in the country. In 2007 Cameroon, which is a GAVI (Global Alliance for Vaccines and Immunization) eligible country (i.e., its’ gross national income per capita was US\$ 1000 or less in 2003), applied to the Yellow Fever Initiative for funding to conduct its preventive Yellow Fever campaign. This Initiative, led by WHO and UNICEF, with the support of GAVI, targets the implementation of Yellow Fever immunization campaigns between 2006 and 2013 in 12 African countries. Furthermore, the Initiative will provide funding in the amount of approximately 290 million US\$ to vaccinate 180 million people with the highly effective attenuated 17D YF vaccine. Within the framework of the Initiative, the 12 Member States and WHO will identify specific target populations to vaccinate, with the aim of both preventing outbreaks and managing epidemics, and consequently increasing immunization coverage. One condition to obtain funding is to include AEFI surveillance as an integral part of the yellow fever campaign.



Local poster to announce the combined yellow fever / polio vaccination campaign

Setting up AEFI surveillance in a country with no existing pharmacovigilance system is no small task. As nothing was in place six weeks before the start of the campaign many hours were spent in developing an operational guide, preparing notification and investigations forms, operational procedures for biological sample collection and management, training on AEFI surveillance for the different actors in the field, and last but certainly not least communication tools for crisis management. Although time was extremely limited (isn’t it always!) the team at the Ministry of Health still managed to have

Stories from the Field

In Zimbabwe

By *Sarika Desai* (Epiet Cohort 12, Merlin, Harare, Zimbabwe)

everything ready on May 4th, the first day of the vaccination campaign. Between May 4 - 11, in total 7.5 million people 9 months and older (pregnant women, the extremely ill, and those with egg allergy excluded) in 62 districts in Cameroon were vaccinated. Although the vaccination campaign lasted only one week the AEFI monitoring period lasted until June 10 (30 days after the end of the vaccination activities) in order not to miss possible serious AEFIs that may develop up to four weeks after vaccination.

As we speak (June 22, 2009), the personnel of the EPI (Expanded Program on Immunisation) office of the Ministry of Health in Yaoundé are still busy with data entry of hundreds of forms while preparing at the same time for the upcoming measles campaign at the end of this month.

Working with the EPI and WHO personnel in Cameroon was a true pleasure and I admire the enthusiasm and perseverance of the staff as working in the public health sector in Cameroon is just plain challenging due a constant lack of materials, funds, high morbidity and mortality rates and so forth. I have very fond memories of the good times and stories shared over a cold Castle beer, steamed or fried plantains (type of banana that is omnipresent) and a plate of Ndole, which is made of boiled, shredded bitterleaf (a type of green), peanuts, and melon seeds. It is seasoned with spices and hot oil, and can be cooked with fish or meat. Ndole is definitely not a "light" dish but extremely tasty and should be enjoyed slowly, like many things in Africa!

I arrived in Harare at the end of March to a blazing sun, a virtually empty international airport and the all important photo of President Mugabe welcoming me into his country. I admit I'm not nearly as patient as I would like to be so to find myself waiting in an unending queue for visas and then to discover that the Zimbabwean rugby team's luggage took precedence over mine so that my luggage was left languishing in Johannesburg airport until the next flight in was hugely frustrating. Obviously, this is no big hardship but the thought of my spanking new work laptop lying in one of the suitcases was worrying especially when the stories of theft and robbery in Joburg airport emerged during the next few hours. To my great relief I was spared the embarrassment of explaining the loss of the laptop and possibly more importantly the large pile of EU posters and stickers I had been entrusted with and in the process I had already learnt two very valuable lessons - things happen in their own time in Africa and never leave a laptop in hold luggage.

Since then I have been working on the cholera response for Merlin, a UK-based NGO which has recently begun operations in Zimbabwe. From the media, I had expected to find myself in a humanitarian disaster situation and had I arrived two months earlier this would have been true but by April, cholera was mostly under control with small pockets of disease remaining. It is those very hotspots which have largely preoccupied me. Although based in Harare, the capital, I have spent countless hours in 4x4s experiencing first hand Zimbabwe's roads, which are riddled with potholes and which turn into dirt tracks in rural areas that are impassable in the rainy season. But these have also been some of my best hours in Zimbabwe. Not only did I have the opportunity to see the beautiful Zimbabwean countryside but I also learnt a lot about cholera.

We were making these trips to assess and monitor the cholera situation in rural Zimbabwe. On one such trip we were in Gokwe North, a district about 5 hours from the capital and heard of an increase in cholera in a nearby village. During Easter members of the apostolic faith had travelled on a church trip to a town a few hours away and when they came back there were reports of diarrhoeal illness. Unfortunately, because these apostolics belonged to the branch which does not believe in medical treatment, four deaths had also occurred. The district medical staff took drastic action by taking police with them to visit the community and convince them that they should seek treatment because taking oral rehydration salts (ORS), the mainstay of cholera treatment, was nothing but sugar and salt. We responded by visiting the same community the next day, meeting the headman and agreeing to set up an

oral rehydration point (ORP) in his homestead. ORPs are basic medical posts where mild or moderate cholera cases can be treated with ORS; these sites reduce the burden in cholera treatment centres (CTCs) and improve access to treatment especially in remote areas. Setting up an ORP only takes a few hours - it's a matter of setting up the buckets and equipment, recruiting two volunteers and training on infection control methods, case definition, dehydration assessment, treatment and data reporting. The impact was instantaneous and substantial - people including apostolic men, many of whom only came under the cover of night, sought treatment and the case load reduced rapidly.



Rural ORP set up in the community in response to the cholera outbreak in Gokwe North.

Over 98,000 suspected cases and 4000 deaths have been reported from across the country since August 2008. During the peak of the outbreak, this was over 7000 cases each week but now numbers have dropped to below 100. I am now occupied with working with the Ministry of Health to retrospectively dissect the outbreak. Very few studies have been conducted during this outbreak and one of the many remaining questions is why community deaths were so high with some districts reporting over 75% of deaths as community deaths. Although response is still an important component of the Merlin strategy, the focus is shifting to preparedness and risk reduction. This entails training of all cadres of health staff and prepositioning of CTC and ORP kits in preparation for the next outbreak because it is likely there will be another one in the coming rainy season. The underlying causes of this outbreak, the weak water and sanitation infrastructure, although being slowly addressed still remain causes of concern.

Outside work, my life is very enjoyable. Harare is a lovely and pleasant city to live in - I've never seen so many tree lined streets. People's friendliness and openness is a refreshing change as is the relaxed pace of lifestyle. What has been special about my stay is witnessing Zimbabwe's transition. Even in my short stay here the quantity and variety of food has improved and the number of cars on the road have multiplied so much that we even experience traffic now! Even though there is a long way to go before Zimbabwe can reclaim being one of the most developed countries in Africa, there is optimism in the air that a positive change can and will come about.

EPI Tools

Epietalum.net: the final frontier of EAN

By Florian Buckhardt (PAE Cohort 12, Webmaster EAN)

Hello everyone,

After years of digital care by Chikwe Ihekweazu (cohort 9) I took over managing the Epiet Alumni Network website (<http://www.epietalum.net>).

Please register & contribute!

The goals of knitting together past, present and future EPIETs and their friends from associated programs and of professional career support remain the same. The means to these ends have changed a bit/byte.

The new website is powered by Drupal, an open source content and community management system with strong collaborative features. As webmaster (or rather web-janitor) I will mainly keep the site running.

Editorial responsibility (and the power to kick users) lies with EAN-board, so you better behave...

The most notable feature of the new site is that registered users (i.e. you) can comment virtually anything and can also create own content.

Anyone who hasn't spent the last 5 years in a cave (*NdEditor: Florian, Some Caves in Afghanistan have WiFi apparently*) is familiar with this "Web 2.0-user-generated-content" concept which helped to turn the internet into an ever bigger collection of hyperlinked irrelevance.

Alas, epietalum.net is different!

- Have a stats question? Post it in the stats-forum (<http://www.epietalum.net/forum/21>).

- Want to tell the world about your Epiet/WHO/... field mission? Post it in the "stories from the field" forum (<http://www.epietalum.net/forum/23>).

- Discovered new epi software? Tell everyone here (<http://www.epietalum.net/forum/7>).

- Read an exceptionally good (or bad) article? Critically appraise it here (<http://www.epietalum.net/forum/8>) so that others may benefit.

- Looking for something? Move over google, here comes our twice a day updated full text searchable index.

Information is the only resource that doesn't diminish when shared.

However, most of us use information on the internet one way: taking without giving back. Epietalum.net can only be as good as we make it.

Stats questions can only get answered and articles appraised if people (i.e. you) sacrifice time and effort to do so. But just imagine epietalum.net two years from now: an information powerhouse and virtual community for intervention epidemiologists.

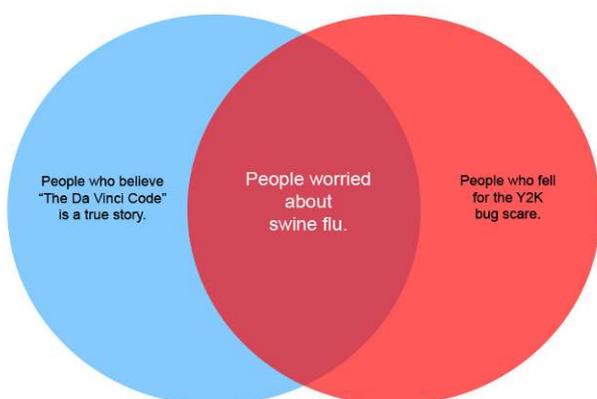
Epidemic crowd intelligence.



Upcoming Conferences and Courses

- [6-17 July 2009, Assessing Public Health in Emergency Situations \(APHES\), Leuven, Belgium](#)
- [20 July – 28 August 2009, Diploma in Humanitarian Assistance, Wits Rural Facility, Kruger National Park, South Africa](#)
- [14-16 September 2009, Health Protection 2009, Warwick, UK](#)
- [23-25 September 2009, eHealth 2009: 2nd International ICST Conference on electronic healthcare for the 21st century, Istanbul, Turkey](#)
- [23-26 September 2009, BALTIC CONGRESS ON INFECTIOUS DISEASES, St Petersburg, Russia](#)
- [26-28 October 2009, 3rd European Scientific Conference on Applied Infectious Disease Epidemiology \(ESCAIDE\), Stockholm, Sweden](#)
- [7-11 December 2009, Concepts of Epidemiology: crash course, Edinburgh, UK](#)
- [10-11 December 2009, 5th National Workshop of Veterinary Epidemiology, Torino, Italy](#)

EPI Cartoon



Contribute to the next EAN Newsletter!

We are currently looking for contributions for the Autumn Newsletter. Would you like to share an interesting experience? Are you doing an exciting job somewhere in the World and beyond? Please e-mail your story to EANboard@gmail.com.