SAFETYMATTERS

vir Newsletter from ► Boskalis

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Staying healthy in the tropics

Anyone who is sent abroad will face special health risks. This particularly applies to those who are sent to work in the tropics. How can you protect yourself? And what can you expect Boskalis to do?



Henk Koene and Perry van Genderen

Prevention is better than a cure. If you are aware of the health risks in the area you are staying in, you can prepare yourself by getting the right vaccinations, taking protective measures and exercising proper hygiene. Should someone nevertheless fall ill, it is important to act quickly. This is the advice of Dr Perry van Genderen, director of the Travel Clinic in Rotterdam.

"Never underestimate tropical diseases. As a foreigner you do not have the 'natural resistance' that local people have. You will therefore become seriously ill more quickly."

Good organization

The Travel Clinic is Boskalis' healthcare partner. The Travel Clinic examines employees, provides

To be continued on page 2

THE BAD NEWS IS THAT YOU HAVE SOMETHING THAT NO ONE HAS EVER HEARD OF. THE GOOD NEWS IS THAT WE WANT TO NAME IT AFTER YOU!



George van Buren (Project Manager) caught malaria in Gabon

"It is crucial to act quickly."

"I have lived and worked in the tropics all my life, so I was surprised that I had caught malaria. I thought I had built up immunity, but that was clearly not the case. It all started with a fever, a high temperature coupled with shivering, nausea, tiredness and sleeplessness. I immediately got tested at a clinic that works for foreign companies. They couldn't find anything, but I was still prescribed anti-malaria medication. My condition was worsening all the time. Eventually, doctors at a military hospital did find traces of malaria. By now my blood levels were extremely low, so I was given all kinds of medication via a drip. As soon as I had recovered enough, I got the first flight home.

I suffered from acute tiredness for many months after that.

My experience abroad has

taught me how important it is to respond quickly to any fever. I know that another three expats from other companies in Gabon caught malaria at the same time as me. Two of them died because they were too far away from a hospital. That is why I always impress on people to take these things seriously at all times."





for malaria. Immediately after the test we gave him Malarone tablets. We then went to the hospital for additional medication." Kevin believes it gives him peace of mind to know that, in the event of any doubt, he can always call a Travel Clinic doctor for a second opinion. After all, should an employee became seriously ill or injured, anywhere in the world, they can always observe proceedings and consult with local doctors. As Henk Koene, Project Manager at the Travel Clinic, explains, "That's why I always have my emergency telephone with me."

Staying healthy in the tropics is a question of taking responsibility and being able to count on the care offered via the organization.

Continued from page 1

information, gives vaccinations and, if asked to do so, will assess the quality of healthcare in a particular region or country. The Travel Clinic is part of the worldwide Geo Sentinel network of 56 clinics which continually exchange information on the new and emerging infectious diseases they come across. For example, Boskalis always has an up-to-date risk profile of a particular region.

Dr Perry van Genderen adds,

"Boskalis is leading the way as far as caring for the health of its employees and a willingness to invest are concerned."

As Kevin Swinkels, Project Manager in Cameroon, is aware, the proper organization of healthcare for a project or site requires a tailor-made approach. In that country, 21 expats are working on three different projects. "In order to evaluate

the health risks in the area we were going to work in, I researched the prevalent diseases and the recommended vaccinations. I contacted our clients in order to get an insight into the quality of local healthcare. These were oil and gas companies that have a lot of expats among their staff. They have contracts with local hospitals which we are also able to use. We visited these hospitals ourselves and talked to the specialists. I then drew up a list of reliable nearby hospitals."

Back-up

Kevin often works in areas affected by malaria. For that reason he did a special course at the Travel Clinic. One of the things he learned during the course was how to use the malaria test kit. This knowledge saves time, particularly in small-scale projects where there is no on-site health clinic. The test kit is an easy way of determining whether someone has malaria. All that is required are a couple of drops of blood. As Kevin explains, "Since I started using the kit, one person has tested positive

Top 5 health issues affecting employees in the tropics

- 1 Fever
- 2 Skin rash
- 3 Stomach problems (diarrhea)
- 4 Bronchial problems
- 5 Work-related accidents

What are the main tropical diseases?

Disease	Cause	Prevention?
Malaria	parasite	prophylaxis + anti-mosquito measures
		(long-sleeves long trousers, apply
		Deet mosquito repellent)
Dengue fever	virus	anti-mosquito measures
Mucosal inflammation	bacteria	good hygiene
Typhoid	bacteria	vaccination
Weil's disease	bacteria	good hygiene
Jaundice	virus	vaccination
Rabies	virus	vaccination
Tuberculosis	bacteria	vaccination



Make sure you get anti-malaria medication as soon as you can!

Malaria is transferred to humans by mosquitoes. The malaria parasite breaks down your red blood cells and this causes a reduction in the amount of oxygen in your blood. This can be fatal. You can protect yourself against malaria by wearing the right clothing (long trousers and a long-sleeved shirt), by applying Deet mosquito repellent and by taking anti-malaria medication (prophylaxes such as Malarone or Lariam). The last step is one that people often avoid.

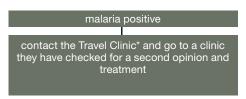
Based on his own research of Boskalis projects, Dr Perry van Genderen from the Travel Clinic knows that only half of expats take the prescribed malaria prophylaxis. "They believe the scarestories that people tell about the medicines, or simply play down the risks. They forget that a prophylaxis is the first line of defense against a possibly fatal disease. If you don't use it, you have to hope that treatment is successful, if indeed such treatment is available locally. Prescribing malaria prophylaxis is not something we do lightly. We assess the likelihood of

catching malaria in the country in question, the quality of the local diagnostic services and whether medication is available to treat a serious infection. We then weigh this up against the chance of possible side-effects. Western employees will never be immune to malaria, so any malaria infection can have dramatic effects. That is why it makes more sense to prevent malaria than having to treat emergency cases of the disease."

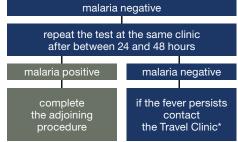


What to do in the event of a fever?

Get a malaria test at a clinic recognized by the organization



*or another recognized specialist service



Did you know...

... a standard cofferdam has been developed for the Line of Business Dredging? It has a revolutionary design by which it is no longer necessary for employees to climb inside and perform dangerous tasks.

A cofferdam is used to dump water in a controlled fashion. It is traditionally a piece of equipment that is put together on site, without being subject to any guidelines or requirements. Indeed, there were no records of the forces to which a cofferdam can be exposed. This was the clarification given by Ferry van der Hulst,

CTD Project Engineer, who developed a cofferdam together with constructor Henk de Lint. "It turned out to be difficult to calculate because, according to our calculations, the cofferdams used in practice should have collapsed a long time ago. However, this has only happened a couple of times, probably as a consequence of overdue maintenance. Of course, we do not want to run that risk. Our design can cope with any load."

Safety Award

The point of departure for the exercise was the double cofferdam designed by Project Manager Chris Meijer and Dump Manager Georg Jelken (retired) for which they won the Boskalis Safety Award in 2008. However, this design still required

the most dangerous work, referred to as 'piling', to take place from inside the cofferdam. This is no longer the case in the new design. The standard cofferdam is no longer accessible to people and the piling work is carried out from a mobile platform on the outside.

The standard cofferdam consists of various different parts which can be easily transported in sea containers. The various parts are painted in three different colors. This improves visibility, communication and extends their working life. The cofferdam is rented out but responsibility for maintenance remains with the CTD.

Prototype

Chris Meijer is happy with the new cofferdam. He kept a close eye on the development and went to watch the prototype being built. That prototype is now ready for its first job. The feedback from those who have worked with the cofferdam in practice is used to make improvements. As demand increases, more cofferdams will follow. In the meantime.

a smaller version has been designed, which is going to be used this spring for the SAAONE project which involves extending the A1 motorway around Amsterdam.

The development of the standard cofferdam is an excellent example of how an improved design can reduce the safety risks faced by employees.

Want to know more?

For information about the deposit container, you can contact H.J. Bogerd (Fleet Management Team A), e-mail: henk.bogerd@boskalis.com



Day in Day out

Steve van Hulle and Frans Oosterwijk swap notes on safety policy integration. Steve comes from Smit Transport Belgium and is currently working as Operations Manager at Boskalis Offshore Marine Services. Frans works as Fleet Manager in Papendrecht. This time they have invited two captains to tell their tales. One is Joren Meijer from the Union Princess tugboat and the other is Willy Hofman from the new hopper dredger, the Strandway.



(From left to right) Steve van Hulle, Joren Meijer, Willy Hofman and Frans Oosterwijk

Integratie in fasen

Steve starts by saying, "We are in the middle of the integration process. I regularly send round memos on new systems and procedures, rebranding and NINA." Joren, what is your opinion?

Joren replies, "To be honest it appears to me to be a slow process. We still do not have any Boskalis PPE, and no clarity on new procedures. Although I understand this is difficult to arrange because we are constantly at sea, I would prefer everything to be changed all in one go. Of course, some people will find it difficult to give up the blue and yellow SMIT colors and embrace the gray..."

Joren Meijer: "I like the open culture that NINA creates."

Frans adds, "I also recommend speed. After all, you want to know where you stand and proper communication is essential. We started the NINA process more than three years ago. I myself have already introduced NINA and a number of new fleet management procedures on quite a few vessels. I always felt it was a positive thing to do." What about you, Willy?

Willy continues, "We did too. Everyone can see that the ship ceases operations during the process, so it must be important. We were always properly supervised afterwards. That was also important because we had to deal with all kinds of previously unknown abbreviations. We had to fill in something called a JHA. It was like going to the moon! Luckily we were supervised by an SHE-Q expert who helped with the paperwork. That was extremely useful."

Steve adds, "We want to provide the same kind of support during the Safety Coaching

Program. But this will only be possible if we tackle the integration in phases."

Willy Hofman:

"Now we can all challenge each other on safety issues, and that is something we also actually do in practice."

How does NINA change things?

Willy continues, "As far as we were concerned, the introduction of NINA was quite a culture shock. In the old days it took us a little under an hour to change a suction head. Now we suddenly had to have a meeting first. But the approach works. If you discuss the process and commit it to paper, everyone knows what his job is. One of the main consequences of NINA is open communication. Now we can all challenge each other on safety issues, and that is something we also actually do in practice."

Joren adds, "The fact that we work in offshore means we are already used to high safety standards. I do not expect a lot to change, although the administrative tasks could be organized a lot more effectively (currently every vessel has its own way of doing things). I like the open culture that NINA creates. And even if the crew has not yet had any NINA training, I still promote it during safety meetings. And I have noticed that people are receptive."

Steve adds, "All our captains and chief engineers are now trained, the first NINA Do-it training sessions have been held and a third of the fleet has the new colors. The integration process is coming along nicely. The thing I like is that everyone generally recognizes the advantages, both for themselves and for the company."

Frans adds, "Boskalis is a company at which people from different corporate cultures have to work together. Bringing them together is the best way to ensure that they learn from each other and work responsibly. This includes the area of safety. Indeed, safety can actually make integration easier. After all, it is precisely in times of sweeping changes that people require something shared, something they all agree on. Safety can, therefore, bind people together.

After all, safety is an ever-present issue.



We look forward to hearing your ideas on how to improve safety. Please send them to: safety@boskalis.nl

In the spotlight

This time the spotlight is on the ground work and road engineering activities of the Boskalis Nederland business unit. What do these colleagues do? And what does safety mean to them?

Boskalis Nederland: at home on Dutch waterways and roads

What?

All groundwork, road and hydraulic engineering projects carried out in the Netherlands are accommodated in the BU Boskalis Nederland. The BU is subdivided into five segments, each with its own specialist field. The groundwork and road engineering in the country's economic there are 70. heart in the West of the Netherlands is accommodated in the Infra Core Field [Infra Kerngebied] segment.

Who?

The BU has a pool of, in total, 850 specialists (ranging from engineers to asphalt processors) who can be deployed in all segments. In addition, each segment has specialists who can supervise the projects. In the case of the Infra Kerngebied

How?

Boskalis Nederland has a wide variety of hydraulic

and civil engineering projects for diverse principals, ranging from the Municipality of Amsterdam to the Directorate-General for Public Works and Water Management [Rijkswaterstaat]. Often these are combination projects in which cooperation is the keyword. That cooperation begins internally with the raw materials, earth movement, concretes and asphalt specialisms.

What does safety mean to the groundwork and road engineering experts of Boskalis Nederland?



The greatest risk for everyone who works on the danger of being run into and there is the danger of running into other road users. This problem is clarified further

by Ad de Boer, Infra Kerngebied Project Director, who started his career working on the roads. "You often work at night. I can still remember looking around me constantly to check whether it was safe. You feel quite puny working close to lorries thundering past."



David Vermeire, who is Project Manager on the A4 Steenbergen project, primarily has to take into account schoolchildren who pass by the project on their way from home to

school and back (see box on page 6). Barry van der Zee, Area Manager Concrete and Project Manager IJsei for the project being carried out just behind the central station in Amsterdam on the construction of a large traffic interchange, sees 75,000 (!) passengers pass by his project every day (see box on page 6).

There are other risks as well, such as burns (asphalt is processed when hot), working at height and in enclosed spaces (concreting work during construction) and hoisting activities. As Barry explains, "In addition, we have to deal with suppliers and subcontractors. Examples are the lorry drivers who turn up unannounced to unload at a building site. We quite often see them not taking the right precautions and lifting loads incorrectly, as a result of which fingers or hands can become trapped."

Awareness

In order to ensure that the work takes place safely. roads is the traffic. There is a it is important to establish what the risks are at the front and to anticipate properly, explains Ad de Boer. "Everything revolves around awareness. This applies both to project management, which has to take the necessary measures to ensure that the work is carried out as safely as possible, and to individual employees. You have to keep asking yourself: which environment am I working in and what does that mean for my safety? Consultation and communication are also very important, just like training. For example, how do you deal with a lack of understanding and aggression by road users?"

Integration in the field of safety

The Infra Kerngebied segment as a whole is undergoing a process of integration. The introduction to NINA is planned for the 2nd half of 2014. Now the focus is primarily on converting equipment and integrating systems (reporting, recording). What does this mean for the employees?

As Barry van der Zee explains, "People are generally not crazy about change, but things are different now. Although things still go wrong and people grumble, the people I come across are predominantly enthusiastic and want to change. They realize the added value of automating systems."

Ad de Boer confirms this. "The procedures are not that different. It is mainly the recording side of things that has improved. Making the unconscious conscious." David Vermeire is happy that he now has more resources to assess risks and make work locations safer. "My feeling is that SHE-Q is now on the same side. We now see it as our joint responsibility to ensure that everyone goes home in one piece at the end of the day. The improvements we can achieve are down to each individual's behavior. It is a question of challenging each other on unsafe behavior, and that is extremely difficult in practice. I therefore have high hopes of NINA. Then we will all share the same view as regards safety."

Safety information at a secondary school





Every day 75,000 passengers pass through and over the building site behind the central station in Amsterdam where a new traffic interchange is being constructed. How do we keep all these people safe? Project Manager Barry van der Zee has learned that consultation is the key.

Het project:

"The IJsei project involves the (re)organization of the station island on the river IJ side. There are many facets to this long-term project (2003-2015). These include the construction of a road, a traffic tunnel, a covered bus station and bridges. Based on a commission by, among others, the

Project IJsei: building in Amsterdam city center

Municipality of Amsterdam, we are working together with seven contractors/combinations on a 'couple' of square meters."

Risks: "Every project has its own particular risks. However, the most important risk is what is going on around the site, meaning the traffic, pedestrians and cyclists."

Safety measures: "The most important measure is a five meter safety zone. This means there is always a five meter gap between the project and the traffic moving around us. If this is not feasible, we work at night when the station is closed. We also make sure that the fences and signposting are clear and up-to-date at all times. The site is also

subject to strict access restrictions. All suppliers have to report before they can access the site."

Safety awareness: "The level of safety awareness at the Municipality, that commissioned the project, is high. They introduced fixed weekly consultations with all the site agents. In the beginning I regarded this as an extra burden, but I soon started to see the benefits. I spend less time rearranging things on site because everyone knows what is going to happen and because everyone is aware of the importance of working safely. I have learned that proper consultation with all the parties involved is essential. This is something I am certainly going to take with me to my next project."

Project A4 Steenbergen: working among schoolchildren

How do you build a motorway with schoolchildren cycling across your construction site every day? Project Manager David Vermeire, knows that the most important thing is awareness, on the part of both cyclists and staff.

Het project: "A 15 km stretch of motorway is being built in the west of the Netherlands. It includes nine viaducts, an aqueduct and three major traffic interchanges. It is going to incorporate one million m3 of filling material and 340,000 tons of asphalt. The project is going to be completed in 2015."





Risks: "The main risk is the huge number of traffic movements on and around the site which come 'on top' of the existing traffic situation."

Safety measures: "Of course, the important thing is to create safe situations, meaning temporary roundabouts, site roads, extra traffic signs and traffic supervisors. However, the most important thing is to make people aware of the risks. We provide information at schools, for example, and allow children to sit in a truck cab so they can find out what a blind spot is. We have also developed a special signaling board which can be used to deal with any conflicting issues. As far as the staff are concerned, a proper introduction is important, which provides an opportunity to explain the rules and desired conduct. If they have any questions about safety they can always contact our safety expert. We hold toolbox meetings and every two weeks a meeting is held with all site agents to coordinate activities."

Safety awareness "Helmets have been obligatory since the beginning. Anyone who turned up on the project without a helmet after already having received two warnings was dismissed from the project. This happened on two occasions. By now it no longer feels right to walk around without a helmet on. Repetition helps to increase awareness levels. This was one of the findings of the pilot research by the Directorate-General for Public Works and Water Management

[Rijkswaterstaat] into the level of safety of the contractors we work with. We now provide instruction for employees and carry out safety management at a high level. There are still things that need to be improved, such as registration work and management training. We use this feedback to improve our approach."

Colophon

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