



Joint International Tropical Medicine Meeting 2007

Presented by
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DISEASE CONTROL TEXTILES

[Established 1957]



Mission and Values

“With growing responsibility in global society,
Vestergaard Frandsen wants to fulfil the demand for
disease control textiles”

Mission Statement

imagineering · passionate people · speed of response · precision

Values



Vestergaard Frandsen

Vestergaard Frandsen is a rapidly growing company founded in Denmark in 1957. We specialise in complex emergency response and disease-control textiles, with a focus on Malaria, waterborne diseases and neglected diseases.

With headquarters in Switzerland and branch offices in USA, Denmark, India, Ghana, Nigeria, Vietnam, Kenya and UAE, and laboratories and licensed production in India, Vietnam, Thailand and Bangladesh, the Vestergaard Frandsen Group is able to provide a rapid response to complex emergencies and disease outbreaks.

Over the years, we have been associated with most non-governmental organisations and UN agencies, as well as ministries of health in countries worldwide.

Vestergaard Frandsen takes pride in its superior technological and quality standards and innovative products. We are constantly developing new products that complex emergencies require. Precision, Speed of Response, Passionate People, and Imagineering make us the leader in our field.



Global Presence





Targeted Diseases / Countering Tools

Malaria

PermaNet® Long-Lasting Insecticidal Bed Net
PermaNet® Long-Lasting Insecticide-Treated Wall Lining
PermaNet® Long-Lasting Insecticidal Curtains
ZeroFly® Long-Lasting Insecticide-Incorporated Plastic Sheeting
ZeroFly® Long-Lasting Insecticide-Treated Tents

Dengue

PermaNet® Long-Lasting Insecticidal Curtains
PermaNet® Long-Lasting Insecticide-Treated Wall Lining
ZeroFly® Long-Lasting Insecticide-Incorporated Plastic Sheeting
ZeroFly® Long-Lasting Insecticide-Treated Tents

Filariasis

PermaNet® 3.0 Long-Lasting Insecticidal Bed Net

Leishmaniasis

PermaNet® Long-Lasting Insecticidal Bed Net
PermaNet® Long-Lasting Insecticidal Curtains
PermaNet® Long-Lasting Insecticide-Treated Wall Lining

Diarrhoea / Cholera / Bacillary Dysentery / Typhoid

LifeStraw® Personal Water Purifier
LifeStraw® Family Water Purifier

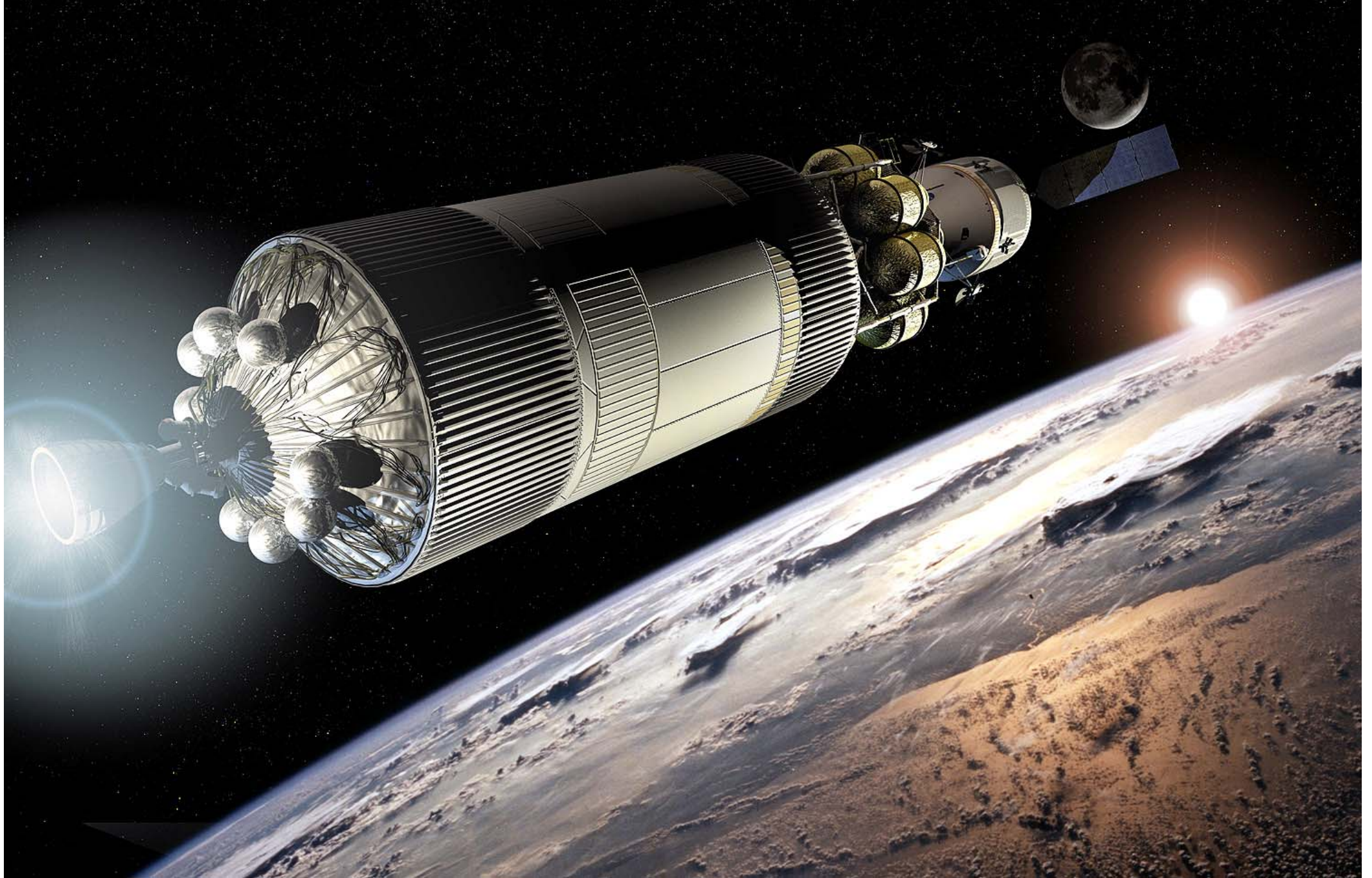
Guinea Worm Disease

Pipe Filter

Sleeping Sickness

Tsetse Traps and Targets (Insecticide-Impregnated Screens)







PermaNet® 2.0 Bed Net

Long-Lasting Insecticidal Mosquito Net



PermaNet® is a ready-to-use mosquito bed net treated with deltamethrin, which lasts up to 20 washes. PermaNet® is produced under controlled production facilities in Asia and is under constant product development.

PermaNet® has a WHOPES (World Health Organization Pesticide Evaluation Scheme) recommendation, which declares it safe and effective for the prevention and control of malaria and other vector-borne diseases.

PermaNet® Bed Net is made of 100% polyester in either 75 or 100 deniers, and is available in various colours, shapes and sizes.

Vestergaard Frandsen is a category-driver and the market leader in the LLIN segment.



Introducing PermaNet® 3.0 Bed Net

Insecticide Combination Treated net



PermaNet® 3.0 is a “combination-net” to counteract resistance. It is active against susceptible mosquitoes.

A strengthened border has been introduced for improved durability and the insecticide dose has increased for improved bio-efficacy.

The roof is active against resistant mosquitoes; it contains a synergist, which acts on the metabolic enzymes in the mosquito to enhance the efficacy of the insecticide.

Metabolic resistant mosquitoes become ‘temporarily’ susceptible to the insecticide.

The synergist leads to a hypersensitive reaction in Kdr resistant mosquitoes so they react to the insecticide in a similar way to susceptible mosquitoes.



PermaNet® Curtains

Long-Lasting Insecticidal Curtains



The efficacious PermaNet® technology has been adapted to fight other vector-borne diseases, primarily chagas, dengue, filariasis and leishmaniasis.

PermaNet® Curtains are ready-to-use; require no re-treatment or dipping as they are treated with insecticide and continue to kill and repel mosquitoes as well as house flies for 2 years. PermaNet® curtains are safe-to-use for the whole family.

PermaNet® Curtains are available in various colours, patterns and sizes.



PermaNet® Wall Lining

Long-Lasting Insecticide-Treated Wall Lining



PermaNet® Wall Lining is a long-lasting, cost effective tool as it needs to be installed only once every three to five years.

PermaNet® Wall Lining can be installed on all types of walls, including mud walls and porous surfaces. There is guaranteed uniform dosage, as the wall lining is insecticide-treated in the factory.

PermaNet® Wall Lining does not require any special equipment or trained manpower. It is safe-to-use, easy-to-install and store, as well as transport.



PermaNet® Jar Lids

Long-Lasting Insecticide-Treated Jar Lids



The concept of PermaNet® Jar Lids centres on preventing mosquitoes' access to water.

Water basins are a prime breeding site for mosquitoes - in areas where jars (more often barrels) are extensively used for water collection, there are many potential breeding sites for disease-carrying insects.

Jar lids consist of an elastic band where a net material impregnated with insecticide has been fastened, which will protect the water sources from mosquito breeding.

In addition, Jar Lid will reduce the nuisance of mosquitoes in the living quarters as well as generally increase the quality of drinking water through a reduction of the chemical applications needed to rinse and purify the water.



ZeroFly® Plastic Sheeting

Long-Lasting Insecticide Incorporated Plastic Sheeting



ZeroFly® *Plastic Sheeting* is a single solution to the dual needs for shelter and protection against vector-borne disease in complex emergencies.

The use of ZeroFly® during refugee camp construction effectively reduces malaria mortality, which may account for up to 50% of all deaths in such camps.

ZeroFly® is cost-effective as a malaria-prevention tool, as it is incorporated directly into a product that is often the first intervention in complex emergencies. When used on a large scale in a town or refugee camp, ZeroFly® *plastic sheeting* creates a 'mass effect' that brings down the population of disease vectors in that area.

ZeroFly® is highly valued by refugees, as plastic sheeting is essential for shelter and survival.



ZeroFly® Tent

Long-Lasting Insecticide-Treated Tent



ZeroFly® Tent is a disease controlling shelter making use of long-lasting insecticide impregnated materials. No other refugee tent on the market offers this long-term disease controlling effect.

The tent is equipped with double doors, with PermaNet® as inner doors and screening for the windows. The refugees can benefit from the ventilation while still being protected against vector-borne disease such as malaria.



ZeroFly® Blankets

Long-Lasting Insecticide-Treated Blankets





LifeStraw® Personal

Portable Water Purification Tool



LifeStraw® Personal is a mobile water purifier that has the potential to prevent common waterborne diseases such as cholera, bacillary dysentery, diarrhoea and typhoid.

It filters minimum 700 litres of water while killing 99.9999% of bacteria, almost 99.9% of viruses and removing particles down to 27 microns. LifeStraw® Personal can be carried around for easy access to safe and clean drinking water.

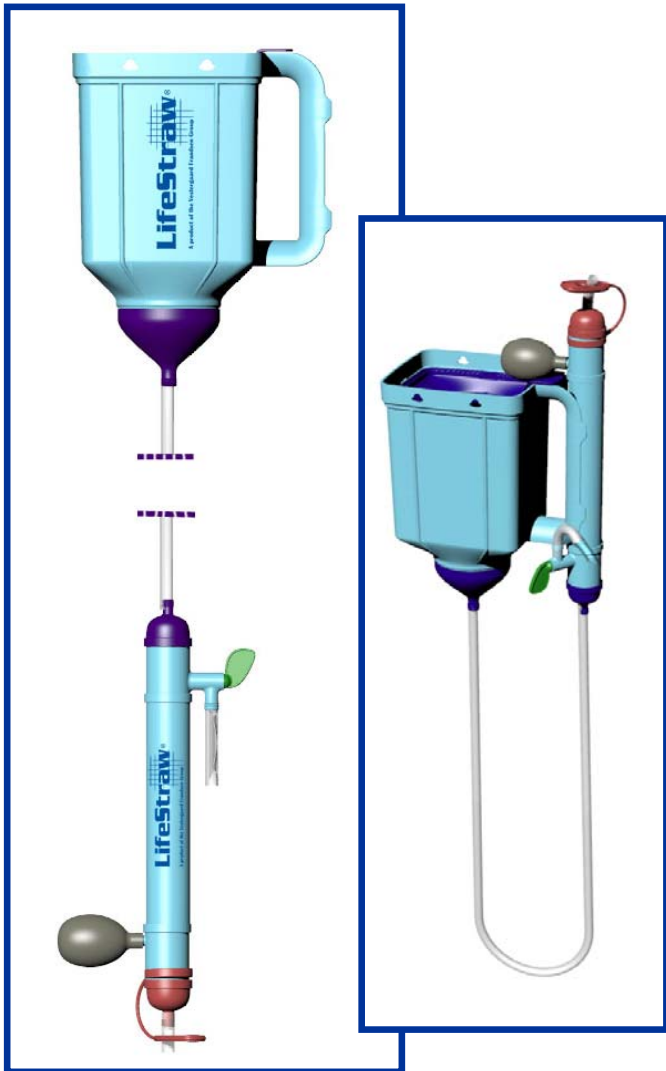
LifeStraw® Personal requires no electrical power or spare parts for the lifetime of the straw. It is easy to mass-distribute in areas where drinking water is contaminated.

A winner of INDEX: 2005 international design award and Well-Tech 2006 innovation technology award, LifeStraw® personal has also been rated 'Best Invention of 2005' by TIME magazine.



LifeStraw® Family

Household Water Purification Tool



This newly developed household filter has been designed to provide safe drinking water for the whole family for 1.5 years (calculated approximately on a family's consumption of 20 litres water/day). The product has a flow rate of 12-20 litres/hour.

LifeStraw® Family delivers minimum 10,000 litres of water as per the EPA guidelines for microbiological water purifiers – it removes 99.9999% of all bacteria, 99.99% of all viruses and 99.9% of all parasites. It even works on highly turbid water.

This simple-to-use device requires no running water, electrical power, batteries or spare parts and is easy-to-clean, easy-to-ship, carry and store.



Pipe Filter

Guinea Worm Prevention Tool



The 'Pipe Filter' is a simple mechanical filter (125 micron) used in the Carter Center's Global 2000 program that aims at eradicating the Guinea Worm disease.

This plastic pipe has a stainless steel mesh that filters out the guinea worm larvae from water.

So far, Vestergaard Frandsen has supplied 23 million Pipe Filters to The Carter Center, which have been distributed in African countries such as Sudan, Ghana, Nigeria, Togo, Mali, Burkina Faso, Niger, Cote d'Ivoire, Ethiopia, Kenya and Mauritania.





Tsetse Traps and Targets

Long-Lasting Insecticide Impregnated Screens



Vestergaard Frandsen manufactures various types of tsetse fly traps and targets. These baited traps and targets, in blue and/or black attractant cloth screens, are impregnated with deltamethrin, a biodegradable insecticide, and function by attracting the tsetse flies to the cloth screens that trap and/or kill them.

Traps and targets can both be used to eliminate a vast portion of the tsetse population. While targets are used only for control, traps can also be used for entomological surveillance. Moreover, tsetse traps have the advantage of being cost-effective and community-based. For scientific purposes, the traps can be supplied without insecticide.

Different models of traps and targets have been designed for use against specific target species in specific environments.



Screening for doors and windows





Fence

Long-Lasting Insecticide-Treated Fence





VF Quality Control Laboratories

- Vector Control Research Station, Indonesia (external and independent laboratory which belongs to WHO reference laboratories)
- Vestergaard Frandsen Textile laboratory, Vietnam
- Vestergaard Frandsen Bioassay laboratories, Vietnam
- Vestergaard Frandsen Bangkok Chemical assay Laboratories, Thailand
- Vestergaard Frandsen Hanoi Chemical assay Laboratories, Vietnam