

HYGIENE MAGAZINE



Infection control and cleaning

Science is needed,
Evidence based cleaning
is needed

Interview Tessa Lauret,
How do nurses clean
in a hospital?

Spray bottles
Is it hygienically safe to use
refillable spray bottles?

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INTRODUCTION

Vileda professional wants to share knowledge and day to day experiences in the field of professional cleaning and infection prevention/control. We hope you appreciate that and we hope you will share with us as well. Because we want to learn and improve all the time. What lies in your hand, is the birth of our first Hygiene Magazine. An informative magazine with articles written by independant experts and a few from us we want to present to you.

Prof. Dr. Paul Terpstra explains in 2 articles the VSR* research on the hygienic risks of using refillable spray bottles and scrubber dryers. We had the opportunity to interview infection control experts Tessa Lauret from the UMC Amsterdam and Corine Haesebroek from the Heilige Hart Hospital Leuven and if you want to know what factors play a role in choosing a good cleaning system, I have had the chance to share my thoughts on this. And those are just a few examples all the interesting reading material.

Enjoy reading this first edition of the Vileda Professional Hygiene Magazine. If you have any great ideas or suggestions, please let us know.

Ing. Paul Harleman
Global Application Manager | Vileda Professional

*VSR, Vereniging Schoonmaak Research (Dutch Association for Cleaning Research)



“From audits executed by infection prevention, cleaning and disinfection was 9 out of 10 times the most critical point.”

Tessa Lauret, Expert Infection Prevention, Amsterdam UMC

AMSTERDAM UMC

The University Medical Centre Amsterdam was created in 2018 from a merger of the Academic Medical Centre (AMC) and the Vrije Universiteit Medisch Centrum (VUmc), both university hospitals with a leading international reputation. In total, the two hospitals have 1735 beds and employ over 15,000 people.

INFECTIEPREVENTIE

Within the Amsterdam UMC, infection prevention is part of the Department of Medical Microbiology and Infection Prevention, or MMI for short. The MMI department pursues an active infection prevention policy with the aim of preventing nosocomial infections and solving problems related to nosocomial infections as adequately as possible.

TESSA LAURET

Tessa Lauret has a master degree in Health Science and finalized her education as an infection prevention expert in 2016 at the UMC Academy Utrecht. Within a team of colleagues of the infection prevention department, she has worked on the selection of a cleaning and disinfection system for the cleaning tasks of care employees like nurses, doctors and assistants. Care employees have specific cleaning tasks such as the cleaning and disinfection of nursing supplies. In addition, care employees sometimes have to clean up the consequences of “accidents” when the cleaning service is not available. The goal of the hospital was to be able to offer a professional and hygienically responsible solution. We talked to Tessa about the “how and why.”

HOW AND WITH WHAT WAS CLEANING DONE BEFORE?

"We used a solution of water and a professional interior cleaner and hospital nursing staff. From audits executed by infection prevention, cleaning and disinfection was 9 out of 10 times the most critical point. They didn't do it, didn't know exactly how to do it and who had to do what. We initially tried to achieve an improvement by giving infection prevention training to the infection prevention contact nurses but saw that in the end it was not a feasible method and that risky situations arose. We wanted a solution that was simpler, better, less risky and more achievable."

WHY DID YOU DECIDE TO SWITCH TO MICRONSOLO?

"Vileda Professional's method with the Single Use microfiber cloth was the best solution for us. Vileda is one of the larger suppliers, we see them at the annual congress of VHIG (editor: professional association for infection prevention experts working in different areas of health care), we know Vileda Professional by name and in a few departments the Vileda cloths have already been used satisfactorily."

HOW BIG WAS THE ROLE OF INFECTION PREVENTION IN THE FINAL DECISION?

"I think the role of infection prevention has been decisive. We saw that the cleaning and disinfection policy was poorly implemented and that outbreaks could also be linked to this. Something had to be done about that. But we deliberately did not do everything ourselves in this transition process. We wanted a broad support."

"We saw that the cleaning and disinfection policy was poorly implemented and that outbreaks could also be linked to this."

Infection prevention is part of the process and cannot carry the load alone. That's why hospital management appointed a project leader. In our case, it was someone from the facility services."

HOW STRONG IS THE VOICE OF INFECTION PREVENTION? CAN YOU FORCE PEOPLE TO FOLLOW THE RULES?

To a certain extent we can do that, but ultimately we are an advisory body. If employees do something else than the chosen policy, we can and will certainly draw their attention to it. It will also be reported and if unacceptable risks arise, we undertake action. With the purchasing department we have an agreement that if departments want to order something else than what is prescribed, purchasing will first consult with us. That works very well. It does not happen very often that people clean and disinfect in a different way than we have advised. Most colleagues acknowledge us as the infection prevention specialists and follow the policy. The current situation with Corona has acted as a catalyst. Many people know where to find us better and more is being asked of us. Where changes were previously postponed, the response is now much quicker. A tricky point is still who cleans what. We are still a long way from that. It is one of the items we have put high on the agenda."

THE MICRONSOLO CLOTH IS ONLY MOISTENED WITH WATER? WHAT, TO YOUR OPINION, ARE THE ADVANTAGES?

"From the point of view of infection prevention the great advantage is that we know from literature that microfiber cleans better than soap and water. To start with, the disadvantage of soapy water is that you have to make it. That takes a relatively long time. Audits that we carried out showed that people did not do it, did it wrong and it also happened that several rooms were cleaned with the same soap solution. Sometimes even detergents were mixed which can lead to the formation of dangerous gases. You don't have those risks if you use disposable microfibre wipes that you only moisten with water."

HAVE YOU CONSIDERED READY-TO-USE PRE-MOISTENED SINGLE USE WIPES?

"From the point of view of infection prevention, we did not really consider this because we know that the microfiber cloth is proven to do a better job than the other cloths. If you are going to switch, then you'd better choose the best possible option. That is why our position has always been, we are going to switch and we are going to do so with a microfiber cloth. Why should you switch to something that in itself is more comfortable to use for the nurses but does not solve your infection prevention problems in the best possible way."

HOW DID YOU ORGANIZE THE SWITCH TO MICRONSOLO?

"As said, we worked with a project leader who was responsible for the practical implementation. He really did a lot for us. He was the point of contact and consulted a lot with the departments. Budgetary matters, in our case the departments have to pay for it themselves, but also practical matters such as where they would like to have the dispenser on the wall and the mutual coordination of all those involved. Infection prevention has developed new protocols and trained the contact persons infection prevention". (editor: nurses or doctors' assistants who, in addition to their work, have infection prevention as their field of attention and are the first point of contact in the department when it comes to infection prevention).

"We made a video in which we show how to use the MicronSolo cloth and what the new disinfection policy is. In addition, we made an informative leaflet ourselves and distributed it everywhere. Vileda Professional helped us to provide content and did their share in cooperation with us."

WHO USES THE SINGLE USE MICRONSOLO CLOTH?

"Everyone except the cleaning service department. So the doctors, nurses, food assistants and other care providers. Anything that is not part of the cleaning service's tasks must eventually be cleaned by someone else. For these target groups, we have introduced the Vileda Professional MicronSolo Single

Use microfiber cloth. Because of Corona, the target group has even expanded a little further. People with an office job would like to clean their own workplace, we gave them an advice and management has adopted that advice. A dispenser with MicronSolo cleaning wipes will be installed in every pantry. There is always a water point in a coffee corner. If you grab a cup of coffee, you can moisten a cloth at the same time and take it with you to your workplace".

DOES THE CLEANING SERVICE NOT DO THAT, CLEANING THE WORKPLACE?

"Yes, but not every day. And the cleaning service is not allowed to move any papers or stuff around the desk. Keyboards and the computer mouse are not part of the cleaning service's duties. Office workers can now clean that themselves. In addition, the MicronSolo microfiber cloth is also used for targeted cleaning of meeting rooms between meetings."

DO THE OFFICE EMPLOYEES DISINFECT AS WELL?

"No, cleaning is sufficient. It is not good to disinfect unnecessarily for several reasons."

"If you grab a cup of coffee, you can moisten a cloth at the same time and take it with you to your workplace."



WHAT WAS THE HARDEST PART OF INTRODUCING MICRONSOLO?

“The introduction ran quite smoothly within the VUmc because for most departments it was much easier than working with buckets, soap and water. For some departments it was a bit more difficult because a water point was missing. For a department that uses relatively many wipes in one day, it is also a bit more difficult because they have to walk to the tap too often and that slightly disrupts their process”. (editor: Vileda MicroOne Single Use microfiber cloths provides a solution).

DID PEOPLE FIND IT DIFFICULT THAT THEY WERE NO LONGER ALLOWED TO USE SOAP?

“Strangely enough, no. I expected more resistance because I know the problem from my previous hospital. But now it almost didn’t happen.”

WHAT WAS THE MOST DIFFICULT THING WITH THE INTRODUCTION OF MICRONSOLO?

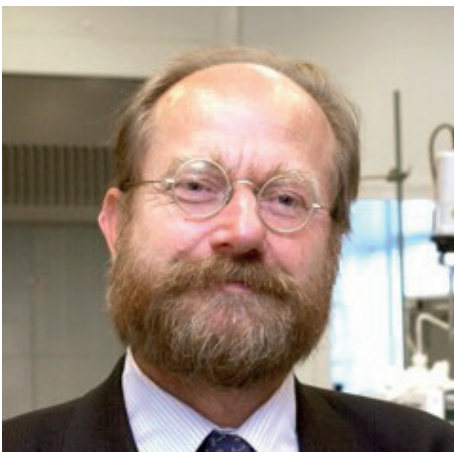
In itself, we did not encounter much resistance at the VUmc during the introduction. As I said, the new system is much less work than the method with a bucket and soap. We are now going to implement the concept at our other location, the AMC. There, care employees work a lot with a ready-to-use, pre-moistened disposable cloths and the resistance to getting rid of it is higher. For this reason, we conducted a comparative test, took photos and made an illustrated document with explanations. This clearly shows that the MicronSolo microfiber cloth cleans much better with only water than a non-microfiber cloth that is premoistened with a solution of a cleaner. That helps enormously in convincing people.

HAVE YOU ALREADY SEEN IMPROVEMENTS?

“Because of Corona, we have had less time to carry out our regular audits. However, we have collected questions that we are also going to answer. We can already see that there are fewer questions than before. We have also created new protocols and provided information during the implementation. I do think, however, that all in all the new solution with MicronSolo has become much clearer for the staff. We are pleased with it.

REFILLABLE SPRAY BOTTLES HYGIENIC?

By Prof. Dr. Paul Terpstra



Paul Terpstra is a scientific researcher and member of the technical committee of the Dutch cleaning association (VSR). He was one of the guest speakers at the Benelux Hygiene Debate 2021.

REFILLABLE OR DISPOSABLE

When cleaning a surface with the spray method, a spray bottle is used. It is filled with water or a cleaning solution. There are spray bottles with a "ready to use" content where you throw the bottle away when it is empty. But there are also spray bottles that you fill over and over again. This saves costs and reduces waste. But what about the risk of micro-organisms growing in them and spreading? That can have serious consequences. The Dutch Association for Cleaning Research (VSR) had it investigated and presented the results in March 2019.

REFILLABLE SPRAY BOTTLES, A DANGER?

The starting point of the VSR initiated research is that spray bottles can pose a risk of contamination in three ways: through the contact surfaces on the outside, through the liquid with which the vial is filled and/or through a biofilm on the inside wall of the vial.

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VSR RESEARCH

The research results show that the liquid dispensed from the refillable spray bottles used may be microbially contaminated. Of the 61 spray bottles examined in this study, micro-organisms were found in 44 bottles. The degree of contamination found with the test design applied varied. It was also found that the spray bottles contained both free and bound germs. The research results show that even after hygienic treatment in accordance with the Dutch WIP/RIVM guidelines, bound germs are still present in the spray bottles. The number of spray bottles studied is too small for a statistically substantiated confirmation of this effect, but the maximum numbers seem to be lower than in untreated spray bottles.

If, when cleaning from contaminated bottles, detergent is applied to surfaces, the micro-organisms present will also end up on these surfaces. The risk of this depends on the dosage,

the time the micro-organisms stay on the surface, the type of surface, the type of germ and the use of the surface. It is also very likely that some of the germs will get into the ambient air through aerosol formation during spraying. Both of the above hygiene risks were not investigated further in this study.

Source:

Hygiene of refillable spray bottles and Hygiene of refillable spray bottles II, Prof.Dr. P.M.J.Terpstra.

Published by the VSR (www.vsr-schoonmaak.nl)

HOW TO CHOOSE A CLEANING SYSTEM

By Ing. Paul Harleman

CLEANING SYSTEM

Before we talk about choosing a cleaning system, it is important to define what a cleaning system actually is. Concept, system and method are terms that are often used interchangeably in practice. Clarity and consistent use of the terms is therefore important. A system is an entity that is composed of several smaller components, and that shows some degree of cohesion, order and complexity through the relationships between the components. For a cleaning system, this naturally also applies and the components are: method, room policy and product type. An explanation of the components follows, but first we must talk about the criteria against which we test the components to be chosen.

WHAT IS DECISIVE

When cleaning objects, we have certain goals. Whether it's a building or a medical instrument, we want to achieve something by cleaning it. And we also have requirements as to how we achieve that goal. For example, the goal may be to achieve a certain level of hygiene (low or a germ-free surface) or a hygienic result (optimal quality). But costs, ergonomics or ease of use also play a role. In almost all cases, several requirements

play a role, but the most important criterion is leading for the choice of a cleaning system.

CHOOSING IN 3 STEPS

Step one is to choose your most important selection criterion, followed by the other criteria in order of importance. In step two you judge the components of the cleaning system (method, room policy and product type) related to your most important criterion. You then choose which method, room-policy and product type best meets your criterion. These choices together form the cleaning system best suited to your situation. The third and final step is the choice of a specific product concept within a product type.

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3 COMPONENTS

METHOD, ROOM POLICY AND PRODUCT TYPE

Method, room policy and product type are the three components of a cleaning system. What choices are there?

1. METHOD

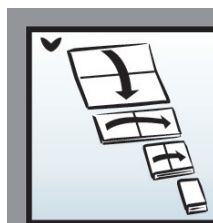
Within professional cleaning we know 4 methods:

Rinsing - cloths or mops are repeatedly rinsed in a detergent solution, wrung out and reused.

Spraying - a liquid is sprayed on the cloth or mop in order to clean a surface afterwards. The cloth/mop is not rinsed out and re-used but is washed after use.

Pre-prepared - , a number of cloths/mops are moistened at the same time with a measured amount of liquid. The cloth or mop is not rinsed out and re-used but is washed after use.

Machine cleaning - Machines are often used for cleaning larger surfaces or for specialist cleaning.



For efficient use of the cleaning cloth, it is recommended to fold the cloth 2 or 3 times and to regularly turn it to a clean side during cleaning.

2. ROOM POLICY

With room policy I introduce a new term in the cleaning professional language. Room policy has to do with preventing cross-contamination. We recognize the following choices:

One room policy - for each room using clean materials such as cloths, mops, and scouring sponges. Used materials go in the wash or, in case of Single Use, are thrown away.

Multi-room policy - materials are used in multiple rooms. If necessary, they are rinsed out in a detergent solution in between cleaning use.

3. PRODUCT TYPE

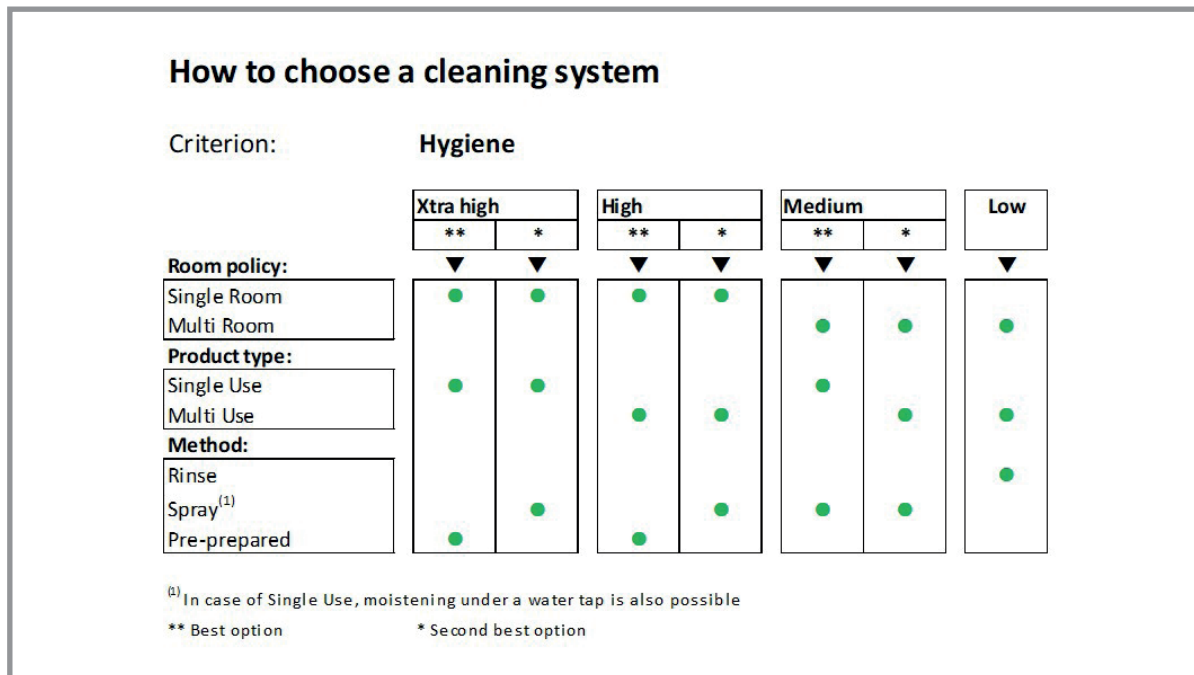
We know two product types, **washable** and **disposable** (single use). Both product types have advantages and disadvantages and often have specific applications. Washable materials require an internal or external washing and drying facility. This is important when choosing washable products.

As an example, let's take a situation with hygiene as the most important criterion. The systems you can choose have different hygiene levels. The overview shows the possibilities and the combination that gives the most hygienic result. For example, if you want the highest possible hygienic result, the cleaning system is: single room policy + single use + pre-prepared.

Obviously, you then check whether this is feasible and if not, you assess the feasibility of the second choice.

Once you have made your choice, fill in the product type with a specific product concept: suppliers often have several Single Use concepts to choose from.

EXAMPLE





“If good cleaning is sufficient and disinfection not necessary, we avoid using a disinfectant. The fact that the microfibre cloth can be moistened with only water and a cleaning detergent is in most cases not needed, certainly has advantages.”

Caroline Haesebroek, Infection Control Expert,
Sacred Heart Hospital Leuven

HEILIG HART HOSPITAL

The Heilig Hart Hospital (Sacred Heart Hospital) in Leuven (Belgium) opened its doors in 1899 with 16 patient rooms. Founded at the time by the Congregation of Franciscan Sisters of the Holy Family from Eupen, the hospital has developed into a full-grown and high-quality regional hospital. In total, the Sacred Heart Hospital has 287 authorized beds, employs almost 900 staff and is part of the Plexus group, a network of Belgium hospitals.

INFECTION CONTROL

The main objective of the hospital hygiene team is to develop, coordinate, implement and manage the strategic policy with regard to infection prevention and control within the hospital in order to reduce healthcare associated infections and optimise the quality of care throughout the hospital. Healthcare associated infections are infections acquired during or following a stay in the hospital. The hospital hygiene team consists of three employees and is supported by infection control reference nurses who monitor the hygiene aspects on the work floor (editor: a reference nurse is the intermediary between the infection control department and care providers).

CAROLINE HAESEBROEK

Caroline Haesebroek is an infection control expert at the Sacred Heart Hospital. She is also a wound care specialist, an external auditor for Qualicor (editor: a non-profit foundation offering quality audits in healthcare) and a member of the infection control task force of the NVKVV, which is an association of professional nurses. At the Sacred Heart Hospital, Caroline works closely with the head of maintenance to optimise the infection prevention and control policy in terms of cleaning and hygiene. Information is provided and agreements made about maintenance and hygiene in the hospital. Among other things, she investigated the options for cleaning and disinfection of isolation rooms and a professional solution for the cleaning tasks of care providers. The Sacred Heart Hospital thus wants to offer a professional and hygienically sound solution to care providers and the cleaning staff. After a test period, the MicroRoll Single Use microfibre cloth from Vileda Professional was chosen and introduced at the hospital at the end of 2019.

WHY DID YOU DECIDE TO SWITCH TO THE MICROROLL?

"The cleaning staff used washable microfibre cloths for cleaning isolation rooms. After use, they put them in bags and washed them using a professional washing machine and a special washing program. We found that was much too laborious. We wanted something easy but also something good and safe. We believe in cleaning with microfibrines, a technology that has proven itself. Disposable cloths therefore also had to comply with this. Subsequently, Corona made us use many more face shields. We had a lot of problems with cleaning the shields, such as scratches and stripes. With the disposable microfibre cloth you do not have these problems, the shields were cleaner and they lasted longer. Finally, because of the experience with the shields we also started using the microfibre cloths in neonatology. Cleaning incubators without scratches and streaks by nurses was always a problem. With the disposable microfibre cloth we now get a nice, clean result. Our nurses are very happy with it.

WHO ARE USING THE MICROROLL CLOTHS?

"Initially, the Single Use microfibre cloths were only used by the cleaning staff, mainly for use in isolation rooms. We use Single Use for this application because it avoids the washing logistics. That worked so well that we looked for other applications and also started using the disposable microfibre cloth with our nurses, who have to clean and disinfect specific medical nursing equipment. They needed a system that not only provides a hygienic solution but also a visibly attractive result. It was shown that, stimulated by Covid-19, non-healthcare related departments also started to use the cloth. We see, for instance, that many employees in administrative departments started to use the disposable microfibre cloth. Because of Covid-19 there was a lot of fear for contamination of the environment and with the microfibre cloth they can clean surfaces such as keyboards, door handles and workstations themselves as required. These are now gratefully used. There is also a dispenser with cleaning cloths in every meeting room. All in all, we will probably need additional dispensers."

WHAT WAS PREVIOUSLY USED BY NURSES TO CLEAN?

"Nurses use disinfectants, but when they had to apply them, they were always looking for a cloth. Sometimes they would take a towel, paper, a washing glove or whatever was available. So, we started looking for easier and better systems. In addition to pre-impregnated disinfectant wipes, which are available everywhere, we opted for the disposable microfibre cloth. With this they can apply disinfectant but also clean. In that case they moisten with cold tap water."

HOW BIG WAS THE INFLUENCE OF INFECTION CONTROL IN THE DECISION?

"Infection control played an important role. After Vileda Professional introduced the Single Use concept to us, I discussed it with the maintenance department, and we started testing it in isolation rooms. It was positive. We then introduced the MicroRoll to our medical materials committee. There we had to argue our proposal with estimated consumption, cost and which product it might replace being important factors. The cleaning department picked it up quickly because they saw and experienced the benefits. We introduced the system to nurses via the infection control reference nurses and head nurses. Now the system is being used satisfactorily and is not being disputed."

"It was striking that, stimulated by Covid-19, non-healthcare related departments also started to use the cloth."

CAN INFECTION PREVENTION BE COMPULSORY?

"I would not call it compulsory, but the intention is that people start working with the Single Use microfibre cloth. We have installed a dispenser for the microfibre cloths on every nursing ward where it is appreciated as a handy and practical cloth."

THE MICROROLL IS ONLY MOISTENED WITH WATER FOR CLEANING. WHAT ARE THE ADVANTAGES ACCORDING TO YOU?

"The most important thing for us is that when something is cleaned (such as high-touch surfaces), there is a reduction in germs. The hygienic result must be sufficient. If that can be achieved with a microfibre cloth and only water, it is a great advantage. Disinfectants can sometimes cause respiratory problems, burns or skin irritation. So if good cleaning is sufficient and disinfection is not necessary, we want to avoid using a disinfectant. The fact that the microfibre cloth can be moistened with only water and a cleaning detergent is in most cases not needed, certainly has advantages. Especially for the nurses. They really don't have a bucket of soap and water ready to moisten the cloths. From an infection prevention point of view, we also don't want that at all."

DID PEOPLE FIND IT DIFFICULT THAT THEY WERE NO LONGER ALLOWED TO USE "SOAP"?

"Yes, it does happen sometimes. People have to get used to the fact that there is no longer a 'soap scent'. Soap smells good and they miss it. We also see nurses who use a disinfectant spray because of the smell, "just to be sure" or for practical reasons, even though all they have to do is to clean. But sometimes disinfection is necessary, so it is important to define when cleaning is possible and when disinfection is necessary."

WHAT WAS THE MOST DIFFICULT PART OF IMPLEMENTING MICRO-ROLL?

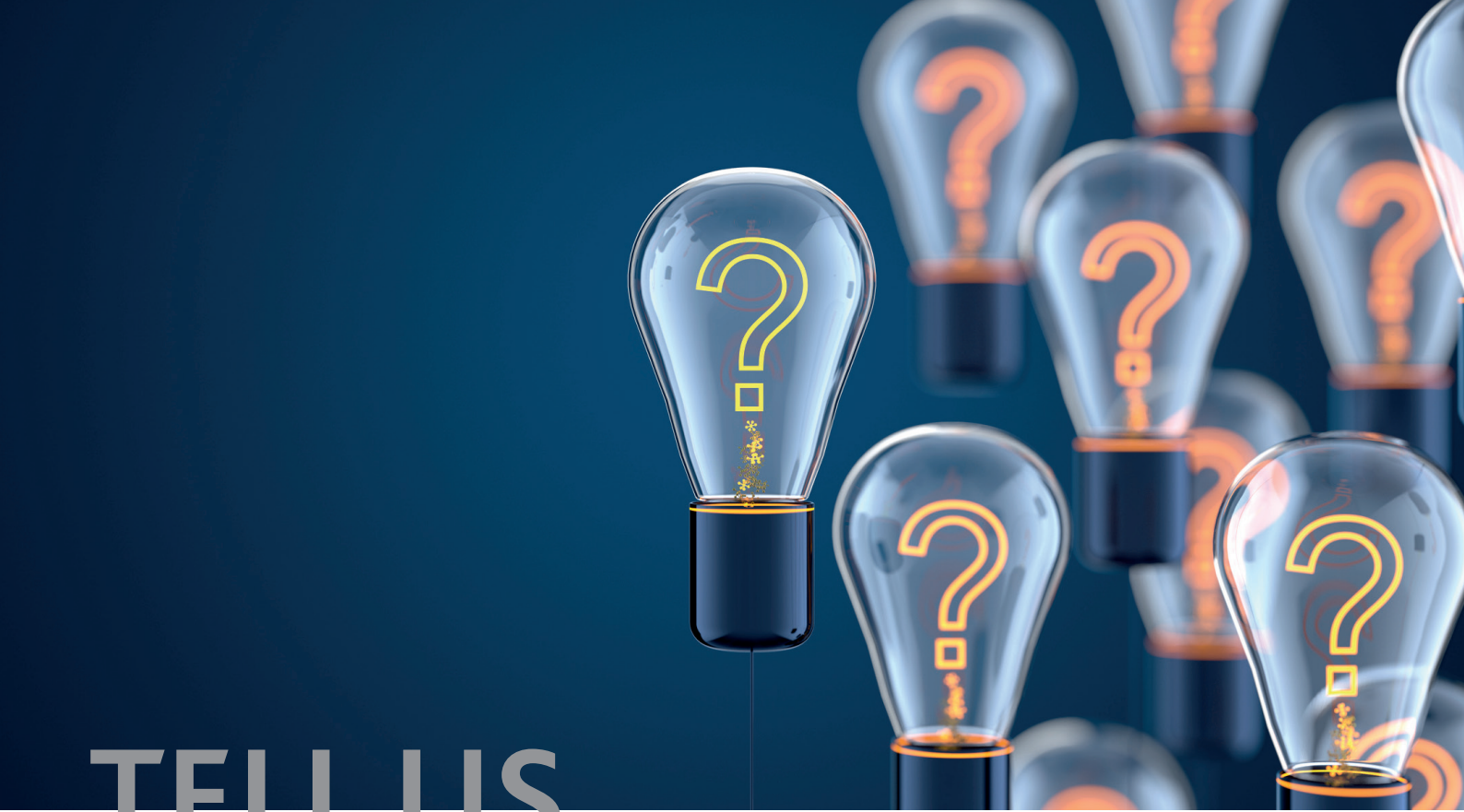
Caroline thinks for a while and comes to the conclusion: "I don't remember that there were any major hurdles to overcome. What we did run into were mainly small practical matters. But we always managed to solve it easily".

HOW DID YOU ORGANIZE THE CHANGEOVER TO THE MICRO-ROLL?

"First of all, there was the test done by the employees of the cleaning staff. At that time we already explained the system and its use to them. When a test started for the nurses we explained the system to the nurses of the wards where the test was executed. Not in a meeting room, but on the department itself. Once the system and product was tested and approved, the infection control reference nurses guided all the wards in their implementation. As far as installing the dispensers is concerned, we work with a "ticket system". We use tickets to request the technical department (TD) to install the dispensers and indicate at which locations this should be done. The TD then consults with the relevant department to determine exactly where the dispensers should be hung. We have a relatively small hospital with short management lines, so it was easy to implement."

HAVE YOU NOTICED ANY IMPROVEMENTS YET?

"We have recently started to use ATP equipment in addition to visual quality assessments of cleaned surfaces, so that we can also monitor non-visual cleaning quality. We do this for example in a patient room after the discharge of a patient. We see good results, but as we did not use ATP for this purpose before, I have no comparison. The cleaning staff was already using microfibre materials, washable ones. It is different for the nurses. They didn't use microfibre before. In the nearby future, we will use ATP technology to support the cleaning results of nurses as well."



TELL US

Tell us what you like about us, but above all, tell us what we could do better. Tell us what you still can't find a cleaning solution for and tell us what you would develop if you were a manufacturer of cleaning products. That is what we want to know from you. Because we develop cleaning solutions and products not for ourselves but for you and your colleagues.

We also want to learn from you. We want to learn how you work and what issues you run into in cleaning or disinfection. To understand you better and simply because all of us at Vileda Professional are a little bit crazy about cleaning. We just love it and get excited when someone says, "it's not possible".

And before we forget, we would also like to hear from you on how we do it. Do you think we keep our appointments, deliver well and on time, call you back quickly, don't leave questions unanswered? You name it. We do our utmost, but we are certainly not perfect. To become perfect is perhaps unrealistic, but it should meet and exceed your expectations to be almost perfect.

Therefore, we invite you all to tell us what is important to you and what you would like to have solved. It can be anything as long as it has to do with cleaning and disinfection. And if you come across an interesting study or other information you would like to share. We are happy with that as well.

HOW TO GET IN TOUCH?

Find the specific contact data in your country at www.vileda-professional.com

SCRUBBER DRYERS UNHYGIENIC?

By Prof. Dr. Paul Terpstra

DO SCRUBBER DRYERS POLLUTE THE AMBIENT AIR?

Scrubber dryers are used to clean large, free floor areas. The machines have a clean water tank and a tank for dirty water. From the clean water tank, cleaning liquid is dosed under the rotating brushes or pads. At the back of the machine, the dirty scrubbing water is sucked up into the dirty water tank. That is how it basically works.

Theoretically, the airflow leaving the scrubber dryer could be contaminated with contaminated vacuumed cleaning solution particles (aerosols). The question is, is there a risk that the air blown out of the machine will contaminate the ambient air with micro-organisms and if so, how big is the risk and is there a danger to human health.

The questions mentioned above were submitted to the Dutch Association for Cleaning Research (Vereniging Schoonmaak Research| VSR) who commissioned research on the subject.

DIRTY WATER TANK

The research was divided into two series of experiments. In the first series of tests, it was investigated to what extent the return liquid in the dirty water tank of a scrubber dryer was contaminated with micro-organisms after use in a practical situation. In 5 hospitals (spread throughout the Netherlands), the degree of contamination of the fluid in the dirt water tank immediately after use was investigated in two scrubber dryers in use. Substantial numbers of micro-organisms were found in all the dirty water tanks of the scrubber dryers that were tested. The average measured bacterial count per hospital varies from 4.4 to 7.1 Log TPC/ml.



VSR RESEARCH

EXHAUST AIR

In the second series of studies, it was investigated whether and to what extent micro-organisms in the absorbed cleaning solution are dispersed into the ambient air during the cleaning process with the machine. A series of scrubber dryer tests were carried out with a medium-sized conventional single-disc scrubber drier. The cleaning fluid in the clean water tank of this machine was artificially contaminated beforehand with a model organism (*Saccharomyces cerevisiae*). The degree of contamination was 6.9 Log cfu/ml, the same order of magnitude as the sampled dirty water tanks in the hospitals. The outgoing air was sampled during scrubbing. The yeasts present in different volumes of air were collected and applied on a growth medium. After incubation, the yeast colonies were counted and the concentration of yeast germs in the air was calculated as cfu/m³. The tests were carried out with and without the use of a HEPA filter in the scrubber dryer. In addition, the concentration of yeast germs in the ambient air was measured before and after the tests.

NO HEALTH RISKS

From the results of the research, it can be concluded that there is no indication that scrubbing with a scrubber dryer spreads micro-organisms in the air. If the machine is equipped with a HEPA filter, the exhaust air is often cleaner than the air in the room. Therefore, people present in an area that is cleaned by a scrubber dryer do not run the risk of contamination.

Source:

Possible spread of micro-organisms by scrubber dryers, Prof. Dr. P.M.J.Terpstra. Published by the VSR (www.vsr-schoonmaak.nl)

CLEANING IS TEAMWORK

Collaboration cleaning services and infection control



**“Only by collaboration
you will achieve the best
possible result.”**

Unit infection control of the University Hospital
Leiden (LUMC)

Annelies Kiel, Els van Oorschot, Haico de Graaf,
Heleen Dogterom, Irene Hoogendijk, Marguerite
Bruijning, Sandra Rijdsdijk, Yoya Braams.

CLEANING PART OF INFECTION CONTROL

Saying that cleaning is an important part of infection control needs no further explanation. Micro-organisms stay alive on dirt, the amount of micro-organisms must be as low as possible and therefore we must clean well. To put it in simply words, it comes down to this. As an infection control expert, you don't need to tell a professional cleaner how to clean - he or she will have been trained for the job as you may expect. So what can you do? What is needed to optimize cleaning in a hospital, for example?

WHO DOES WHAT

In our hospital, the cleaning tasks are divided between nurses, internal cleaning staff and a contract cleaner. How efficient and pleasant would it be if these stakeholders could achieve the best cleaning result together? Is it clear to each other who has which cleaning tasks? From conversations with the various employees, it sometimes appears that not everyone is aware of the applicable agreements and sometimes the agreements are insufficiently or not even described. It also sometimes seems that there are differences in how the agreements are interpreted. It is logical that the quality of the cleaning suffers from this.

CLEAR AND UNAMBIGUOUS

Making an unambiguous and clear protocol is difficult. Even if the protocol is clear, there is still the phenomenon that not only new but also experienced employees do not regularly consult the protocol and deviations slowly but surely 'creep in'. Not on purpose, but unnoticed. Our experience is that all hospital employees take their work seriously and want to do it as good and safe as possible. Nevertheless, they sometimes find themselves in the proverbial split due to work pressure or understaffing. All these factors mean that it is not so easy to optimise cleaning in practice.

COMMUNICATION

To illustrate that breakdowns can also occur in communication, here is an anecdote about the cleaning service at a primary school. There were many complaints that the classrooms were not cleaned well enough. Observation and research showed that the cleaner was keeping to the agreement: not touching the things of the users. It turned out that the users left many things in places that could not be cleaned because of this. They were not aware of the influence this had on the cleaning process. And the old-fashioned 'put your chair on the table' was not so bad either. This is a good example of how miscommunication can lead to poorer results and mutual misunderstanding. And this is not only the case in schools, but also in hospitals. There too, building users are often unaware of the agreed cleaning program, which sometimes creates an unjustified impression.

ATTENTION HELPS

Most departments have fulltime cleaners, but do we know these colleagues? Do you know the cleaner's name? Do you ever have a chat? Do you ever discuss the work with him or her? Is the cleaner an invisible employee? Or is he or she the one who keeps you from your work, the one who is a little too sociable?

MANAGEMENT AND DAY TO DAY PRACTICE

Cleaning contracts are made at management level. Agreements about the performance and quality to be delivered with an accompanying price. But are these agreements detailed enough

to cover all exceptions? Or are the cleaning operators 'on the floor' expected to solve practical problems themselves? In that case, can you expect this and will it work? Diligent staff can, with the best of intentions, adopt a working method that does not benefit quality.

ROLE OF INFECTION CONTROL EXPERT

The infection control expert can respond to this. As a link between the various professional groups who are jointly responsible for cleaning tasks.

Step one is listening. Let the various employees tell how they do their work and what problems they encounter. Here it is important not to form an opinion, or at least not to do so immediately. The employees must have the feeling that they can tell their story.

Step two is analysis. Are the right methods being used? Are there things that are done twice or not at all?

Step three is connecting. What agreements can we make? Can a short consultation moment be scheduled between the various people responsible in order to periodically discuss how things are going?

This is a cyclical process in which steps one to three must be gone through regularly. Experience shows that these contacts must be maintained. This can also be done by the infection control expert.

The conclusion is that we must strive for a workplace where we can be open to each other, both about the good things and about those things that could be improved. Let's stop thinking in terms of "us and them" and work together. Because only then you will achieve the best possible result.

SCIENCE

Column by Paul Harleman

ADVOCATE

A product whose effect has been scientifically proven. I'm immediately in favour of that. If independent scientists prove that something works, then you are happy as a manufacturer. But of course, so are the buyers and users. You buy something good that actually does what it promises. That is a good thing.

SCIENTIFICALLY PROVEN

Especially in the turbulent times we had with Covid-19, new products regularly appear on the market. Products where somewhere in the description it says that the effect is scientifically proven. Nothing more, that's all. But that is not all. "Scientifically proven" is an empty slogan as long as there is no substance to it.

WHAT THEN?

I specifically want to know what scientific research they are referring to. Just as I want to know what the specifications of a product are and what it costs. So that I can judge it against other providers. Until then, I will keep my purse closed and don't spend the money by just claiming the 'lowest price on the market'. So only when you know what exactly the scientific research is that suppliers are mentioning to support their offer, only when you actually can read it, judge how old it is and how valuable, only then can you assess its added value.

SHOW IT

So, if you claim that something is scientifically proven, you also have to show it. As a manufacturer I would not be vague but shout it out. How nice if you have developed a product whose effect is indisputably established and supported by independent scientific research. Top of the bill, I would say. It doesn't get any better than that. But as soon as you ask for a copy of the scientific proofs and there is silence on the other side, that is, to put it mildly, worrying. And it is also strange when you do get

the information but on the condition of confidentiality. What do you mean confidential, why?

EVIDENCE BASED

Cleaning techniques are partly based on tradition, supplemented by proven know-how. We have learned from our predecessors and they in turn from their predecessors. Is what we do and what we believe in also the best? Do we think it is the best way or do we know it. I don't want to shortchange anyone and I am part of the system myself as well, but it is good to be critical and always ask the question "why". Because a famous Dutch saying is "You shouldn't believe everything you think".

ANNEX: SOME RECENT PUBLICATIONS



AJIP - september 2021 - Infection preventionists' experiences during the first nine months of the COVID-19 pandemic: Findings from focus groups conducted with Association of Professionals in Infection Control & Epidemiology (APIC) members – Terry Rebmann



Plos One – juli 2018 - Reducing healthcare associated infections incidence by probiotic-based sanitation system: a multicentre, prospective, intervention study – Elisabetta Caselli (2016/2017)



AJIC – april 2021 - Environmental hygiene, knowledge and cleaning practice: a phenomenological study of nurses and midwives during COVID-19 – Cassy Curryer



AJIC – Juni 2021 - An effective and automated approach for reducing infection risk from contaminated privacy curtains - Jennifer Sanguinet



WHO WE ARE

Vileda Professional is a global organisation specialized in the development, production and marketing of professional cleaning products. Together with a number of other high-quality, technological and innovative companies, we are part of the Freudenberg Group, a German family business founded in 1849. Our cleaning solutions are aimed at professional users in healthcare, cleanrooms, hospitality and offices. Vileda Professional has been in business for more than 60 years and can build on a world of experience.

LISTEN, LEARN AND OBSERVE

We develop cleaning solutions for you, not for ourselves. That is why listening and learning is one of the most important characteristics of our employees. Your needs and your cleaning issues are our starting point. That is why we like to talk and walk along with you. Sometimes we even work with you. To experience where the bottlenecks are and where solutions need to be found. Because often insights, ideas and possible solutions can be found in the day to day live of cleaning operators.

CONTINUOUS IMPROVEMENT

A company that takes it easy will fall behind. We never rest. Every year, Vileda Professional invests in the development of new concepts and the improvement of existing ones. We do this with our own Research & Development colleagues, but also in collaboration with external designers and engineering partners. As part of the Freudenberg group, we also benefit from the knowledge and skills that companies within the group have to offer.

CORE VALUES

Without core values, there is no direction. Our core values are sustainability, innovation and partnership. These core values guide the activities we undertake. Sustainability and corporate social responsibility are in our genes. Even in its early years, Freudenberg was concerned about its environment and people. Today, we are particularly active in the further development of products that are even more sustainable and are increasingly geared towards a circular life cycle.

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