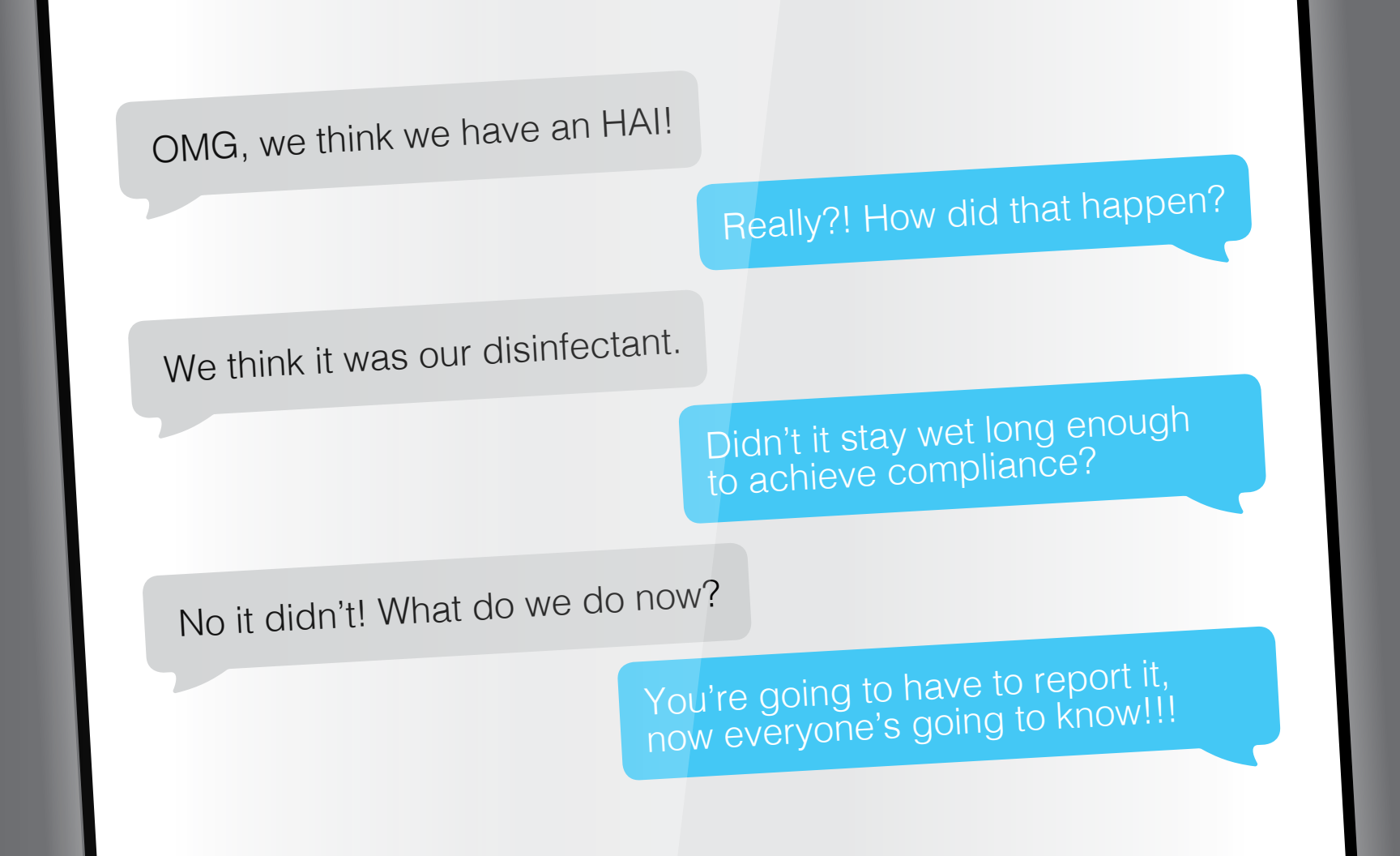
OMG!

We think we have an HAI!?

A collection of posts from the Talk CLEAN to Me blog


OMG, we think we have an HAI!
Really?! How did that happen?
We think it was our disinfectant.
Didn't it stay wet long enough to achieve compliance?
No it didn't! What do we do now?
You're going to have to report it, now everyone's going to know!!!

Reduce your risk of HAIs, visit

OMGwehaveanHAI.com

Disinfectants are the first line of defence against pathogens wanting to wage war on your healthcare facility. But is your disinfectant really providing you with the protection your patients and staff deserve?

- Some disinfectants promise disinfection in two minutes but are unable to attain the requisite wet dwell time to achieve compliance. If they dry too quickly, they're simply not doing the job.

- Some disinfectants play the numbers game by including a long list of bactericidal and virucidal kill claims but often do not include important ones like Norovirus. If the claims are not relevant, you may not be killing what you need to.

- Some disinfectants claim to feel better or have pleasant scents but still require personal protective equipment. How effective are your disinfection outcomes if your staff are concerned about their safety?

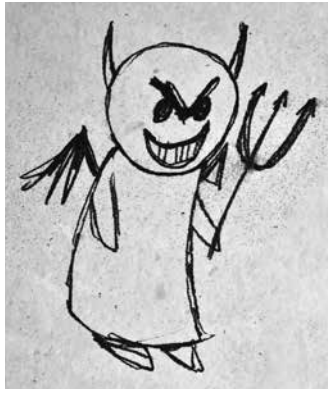
Our goal is to educate and provide the latest resources related to cleaning and disinfection. As specialists in disinfectant chemistries, environmental cleaning and disinfection, facility assessments and protocol creation, we are dedicated to helping any person or facility who uses chemical disinfectants. This booklet is a collection of **blogs** found on **www.talkcleantome.com** where we dispel misconceptions and expose the myths surrounding disinfection compliance.

IPTS Professional & Technical Services
Experts in Chemical Disinfectants for Infection Prevention
A division of Virox Technologies

VIROX® TECHNOLOGIES INC.

The little devil or the little angel, which do you choose?

Blog Date: Friday, May 2, 2014



I think we are all familiar with the visual illustration of a devious little devil and an innocent angel perched upon a person's shoulders representing the opposite positions or choices that a person can make related to a certain situation. What better way to represent the difficulty between choosing right vs. wrong; good vs. evil; or hard vs. easy than having characters that are the embodiment of right (Angel) and wrong (Devil) spouting the virtues of their position in an effort to persuade the person to choose them? I think we can all picture a time when we've been in that predicament. I would argue however, that most would not realize how many times they've chosen the devil.

Some may choose the "Devil" by driving a little more spirited from time to time, while others may opt to enjoy one too many cocktails, but how many of us choose the devil through simple inactivity or complacency?? In other words, the "Devil"

presents the easy option. By simply doing nothing you could be supporting a choice that was ineffective, inaccurate, unsafe or perhaps more costly because the alternative would require effort and time; be difficult to prove and isn't guaranteed to have a successful outcome. We may not like to admit it, but we do it.

So how does this relate to infection prevention?? Over the past several months I've had the pleasure of meeting and visiting with infection preventionists, environmental service workers and other HCWs across North America and noticed an unfortunate consistent theme. The easy or simple choice was being made. The status quo was winning out over more efficacious, safer and more cost effective infection prevention solutions! The "Devil" was being selected. Why, because these IP's and HCW's were struggling to navigate the product selection process and build an effective business case for anything new. Often times the metrics by which these organizations were evaluating new products or solutions was flawed. Quite simply, if the product was more expensive than the incumbent solution (higher price per unit of measure), then it was unlikely to be adopted.

"The product's superior ability to perform in real-world conditions wasn't being considered and most surprisingly, the total operational cost savings that could be attained by utilizing the safer, more efficacious product was also not being considered. The IP was instead forced to choose the Devil because they didn't have the tools or time available to follow the path of the Angel."

Considering how well known the cost of HAIs are and their burden on healthcare, it strikes me as common sense that we start considering the TRUE cost of our infection prevention practices and start measuring the savings we can accrue throughout an organization through the use of safer, more realistically effective solutions. For example, what direct costs are associated with the use of a disinfectant product? '**Is PPE a necessary evil?**' highlighted how many disinfectants require the utilization of PPE, while others do not. Clearly gloves, goggles and masks carry a direct cost associated with the use of that disinfectant. '**Premature Evaporation: Is your disinfectant fulfilling your every desire?**' identified how some disinfectants fail in keeping the surface wet for their entire contact time and therefore don't achieve disinfection compliance. If the surface is not completely disinfected, what direct and indirect costs are potentially associated? Higher HAIs? Citations from CMS or JCO?

As I've come to realize, the truth is that the selection of the "Devil" by IP's or HCW's is less about complacency and more about a lack of confidence in making the effective business case. Infection prevention is about collaboration. Collaborating with colleagues and departments within your facility, but more importantly collaborating with your industry partners in your efforts to implement safer, more efficacious and more cost effective solutions. Don't forget - we're here to help!

Viruses – they cause more infections than you think!

Blog Date: Wednesday, November 6, 2013

…the October edition of AJIC by Tzialla et al titled "Viral Outbreaks in neonatal intensive care units: What we do not know". Not unexpectedly, infants admitted to NICUs are at risk for contracting HAIs and certainly over the past decade, the HAI rates have steadily increased…

…A fulsome program that considers (and hopefully implements) infection **PREVENTION** measures such as changing of disinfectant solutions or increased cleaning and disinfection can certainly be implemented with relative ease and likely contribute to fewer infections. The alternative of course is having to implement **INTERVENTION** measures to help combat outbreak!

Surfaces and Wipes – the secrets of maintaining a monogamous relationship

Blog Date: Thursday, October 13, 2011

…In an environment where we know that bugs exist and the economic burden of HAIs is very real, do we really want to foster a culture where taking short cuts is acceptable when we have the science to prove we can cause harm by doing so? I think not.

Make "1 surface, 1 wipe" your facility mantra!

These Blogs can be found in their entirety at:
talkcleantome.com

Does your disinfectant wipe suffer from…

Premature Evaporation?

Many disinfectants dry on surfaces before they reach their contact times.
If your disinfectant is one of the many, are you achieving disinfection?

WET TIME

Label use directions indicate the length of time that a surface must remain wet with the disinfectant in order to achieve the product's bactericidal and virucidal kill claims.

EVAPORATION

Many disinfectants dry or evaporate well before the time to achieve label use compliance.

PATHOGENS

If your disinfectant wipes leave you dry, your healthcare facility may be left unprotected against the spread of bacteria and viruses. Alternatively, you can use a disinfectant technology that stays wet long enough to satisfy your germicidal requirements — each and every time.

Premature Evaporation: Is your disinfectant fulfilling your every desire?

Blog Date: Wednesday, August 31, 2011

The use of disinfectants remains the backbone for environmental decontamination and infection control in multiple industries including laboratories, healthcare, educational and institutional settings to name a few. Numerous peer reviewed studies have confirmed that the environment can play a role in the transmission of micro-organisms and therefore thorough attention to cleaning and disinfecting is required to minimize this as a source of contamination. Unfortunately, the requirements for the effective use of most disinfectant chemistries are often very difficult to comply with under real-life conditions.

Instructions for the proper use of a disinfectant are indicated on the label of any EPA or Health Canada registered product. Diligent compliance of these instructions is necessary for proper and complete disinfection. This is particularly true of the contact time indicated on the label. The contact time or dwell time is the length of time that the surface must remain wet with the disinfectant in order to achieve the microbicidal kill as indicated on the label. Many would argue that this is the most critical step in the disinfection process. However, current practices generally only allow time for a surface to be wiped once and allowed to air dry. This begs the question – what are the potential implications of this practice when employed with the most commonly used disinfectant chemistries?

In a recent edition of the Journal of AOAC International (Vol. 93, No. 6), Dr. Navid Omidbakhsh, VP of Open Innovation at Virox Technologies Inc., expertly studied the level of kill actually achieved using the practices that are routinely used by disinfectant end users – wipe once and allow the surface to air dry. The study compared six different disinfectant chemistries: a Quaternary Ammonium Compound (Quat), a Quat-Alcohol blend (2 concentrations of alcohol), a Phenol, a Phenol-Alcohol blend, Bleach (Sodium Hypochlorite) and Accelerated Hydrogen Peroxide. Each disinfectant chemistry was tested at its recommended use dilution to determine its performance in the following criteria: drying time and bactericidal activity during that period of time.

First, the drying time of each disinfectant was determined and compared to the product's label contact times. It was found that all disinfectants dried in less than 5 minutes with alcohol and solvent containing products drying significantly faster (less than 1 minute – some as quickly as 30 sec.). Of the chemistries tested, only a single product actually remained wet for a longer period of time than indicated on the label. Am I the only one that finds this concerning? Certainly any product that dries too quickly can be re-applied, but what are the chances of that actually occurring? Would you be confident that disinfection is being achieved with those types of disinfectants? (Figure 3 in the published study provides excellent visual comparison of the data.)

The second phase of the study tested the realistic microbicidal efficacy of each disinfectant by measuring their effectiveness against 2 key strains of bacteria at the contact time determined in the first phase of the study. For example, it was determined that Bleach dried in 3 min., therefore its bactericidal efficacy was tested at the 3 min contact time rather than the label contact time of 10 min. Not surprisingly, the only chemistry to remain wet for longer than its required contact time was the singular chemistry to achieve full bactericidal efficacy (>6 log reduction)

across both strains of bacteria that were tested. The remaining chemistries all fell short of achieving true disinfection.

> "The most alarming of which were the products containing higher concentrations of alcohol (60-70% ethanol blended with quat and/or phenol). These products dried exceedingly quickly (30 sec. or less) and in that period of time elicited minimal germicidal efficacy on the bacteria."

Despite remaining wet for upwards of 3 min. the same was also true of the concentrated quat and phenol products that carried 10 min label claims. They only achieved <2 log and <3 log reduction respectively. So our suspicions have been confirmed.

Disinfectants that do not remain wet for their entire contact time after a single application do not achieve disinfection. With this knowledge, how will you address the disinfectants that may be in use at your institution? Protocol revision to ensure the disinfectant stays wet for the required period of time? Change of disinfectant to a chemistry/product that does remain wet for the required period of time without major protocol changes? (Refer to Tables 3 & 4 in the study for the complete results.)

In summary, Dr. Omidbakhsh's study highlights the importance of selecting a disinfectant that will perform under real life conditions. As the study findings illustrate, most disinfectant chemistries are unable to elicit their full and complete effectiveness because they simply do not remain wet on the surface for a sufficient period of time. Rapid and realistic germicidal effectiveness provides end-users with the comfort and confidence that their disinfection needs will be met on a regular basis.

Dirty to Disinfected… in 60 seconds flat!!!

Blog Date: Wednesday, June 15, 2011

…The more quickly a disinfectant inactivates pathogens on a surface, the more likely its use will effectively eradicate harmful bugs from the surface thus preventing transmission to other surfaces or people…

…Disinfectants with long, unrealistic contact times (ie. 10 mins) may require multiple reapplications of the disinfectant in order to keep the surface adequately saturated with the disinfectant for the requisite period of time…

…the business case must be made by infection prevention and control professionals as to the importance of effective disinfectants with rapid and realistic contact times. In particular, that their increased initial cost will likely lead to cost savings in the end by means of effectively disinfecting the surfaces which will result in a reduction of healthcare associated infections…

Disinfectant Wipes should not be used…Say WHAT?!

Blog Date: Friday, November 9, 2012

…Many of the leading pre-moistened wipes available on the market are Quat-alcohol based products with anywhere from 2 to 5 minute contact times. As proven by science, such products will not remain wet on the surface for the contact time listed on the label as a result of the rapid evaporation rate of alcohol…

…publications investigating the effects of wipes in contaminating surfaces provide compelling evidence that we want to use 1 wipe for each surface especially if using a weak or slow-acting disinfectant in the wipe where the true chances of achieving disinfection are limited at best…

These Blogs can be found in their entirety at:
talkcleantome.com

Are you experiencing performance anxiety due to…

Disinfection Dysfunction?

To achieve disinfection, most disinfectants require multiple applications.
How confident are you that this is getting done?

ONE AND DONE

Observation of current wipe disinfection practices in busy healthcare facilities has revealed that surfaces tend to be wiped once and then left to air dry.

EVAPORATION

Many disinfectants dry or evaporate short of the time to achieve disinfection requiring re-application. The practice of "one and done" does not achieve compliance.

DISINFECTION COMPLIANCE

If your healthcare facility relies on single wipe disinfection, you may be creating conditions that invite HAIs. Alternatively, you can use a disinfectant that can achieve effective "one and done" bactericidal and virucidal performance with every application.

Disinfection – It's more than the juice you use!

Blog Date: Friday, April 4, 2014

I must first say that I have an inquisitive mind, which I will admit does get me into trouble upon occasion. I am also a Taurus (bull-headed and stubborn...) and when you mix the two together (much to the chagrin of those around me) you end up with someone who may respond to a question with "because that's the way it is," and yet at the same time does not accept that as an answer to a question that they themselves have posed!

My inquisitiveness and stubbornness does come in handy when working with a facility to solve a problem related to the use of disinfectants, particularly if the problem is how to manage an outbreak. I am also very fortunate to have a Research Team who loves to solve problems and conduct research studies so that we can improve the available science to support the correct and effective use of disinfectants.

As noted in some of our previous blogs such as '**Premature Evaporation**' and '**Dirty to Disinfected in 60 Seconds**', a key component to achieving disinfection compliance is the consideration of the contact time and dry time – disinfectants do evaporate and the faster they evaporate the less likely disinfection will or can be achieved (unless of course you are applying the product to a surface multiple times). We also highlighted in the '**Monogamous Relationship**' blog that in order to minimize transfer from surface to surface, the method of how the disinfectant is being applied needs to be considered.

What we did not realize is that the cloth itself can significantly impact the ability to achieve disinfection compliance – and no, I'm not talking about the well known fact that cotton and quat-based disinfectants do not get along. What I am talking about is the fact that the type of wipe substrate (cotton, microfiber or disposable wipe) can directly impact how the disinfectant is released onto a surface.

"The less product that is released, the less likely the appropriate contact time will be met, which means disinfection is not likely to occur. Trust me, we did not believe it until we saw it!"

We tested 5 different disinfectant chemistries with 3 different wipe substrates and found that there were distinct differences in how the wipe substrates absorbed the disinfectant, but more importantly there were differences in how they released (or didn't release) the disinfectant back onto the surface as well! We found that the amount of disinfectant needed to saturate the wipe substrate differed significantly, which has direct implications in chemical cost, and of course using a cloth that is not properly wetted is not going to help in the disinfection department because....you guessed it - The surface is not going to stay wet!

We also found that the way the disinfectant is released from the wipe substrate varied dramatically. From a disinfection perspective again, this is highly important as a wipe that "dumps" all of its liquid at the start of the cleaning process is not going to provide even distribution of the disinfectant. The ability for a wipe to have an even metered release (meaning the disinfectant is released from the substrate uniformly over a larger surface area) is going to have a very real and positive impact on

disinfection. Similarly to the children's fable of the Hare and the Tortoise, slow and steady wins the race! A wipe substrate that deposits enough disinfectant to keep the surface wet over a sizeable surface area is going to be the most effective and cost efficient to use.

You may have picked your disinfectant based on its claims or contact time, but in doing so, did you investigate how your chosen product works with the wipe substrate your environmental services staff are using? Those clusters of VRE or MRSA may have resulted from a mismatch between your disinfectant and your wipe substrate! I've always stated that effective cleaning and disinfection is about marrying product with protocol. I guess I need to change that to marrying product with wipe substrate with protocol!

Strength is NOT always found in numbers

Blog Date: Wednesday, August 17, 2011

…Contrary to the beliefs of some companies, advertising that a product kills X bugs while the closest competition only kills Y bugs is not relevant and frankly in some cases can be downright dangerous…

…If we choose a product simply based on the number of organisms it claims to kill without investigating further what those claims are we could be heading down a path to disaster. As end users and decision makers we need to look at the claims and make sure not only that the specific organisms listed are relevant to us but also to ensure that the classes of organisms we are concerned with on a day to day basis at our facilities have been proven effective by the product we choose…

Cotton – it absorbs more than just water!

Blog Date: Friday, December 6, 2013

…October 2013 edition of AJIC…"Decreased activity of commercially available disinfectants containing quaternary ammonium compounds when exposed to cotton towels"…

…we need to take more into consideration than just what a product kills, what the cost of a product is and what the material compatibility of a product is. The impact and cost to a facility due to HAIs is very real, and when choosing a disinfectant the process by which it will be used must also be taken into consideration, including further research into potential interactions between the disinfectant and cloth chosen to apply the product. This is particularly true if we are concerned about reducing HAIs and providing the safest environment for our patients as possible…

The Unintentional Consequences of Improving Infection Prevention

Blog Date: Friday, February 10, 2012

…Would you select a single cleaning product to use on all surfaces in your home? One product to clean your stainless steel fridge, hardwood dining table, glass coffee table and leather sofa? If I were to hazard a guess, I would assume you've all responded with a resounding, "NO!!". Am I right?

It seems obvious, why would we ever consider something so impractical as to expect a single chemical to be compatible with those various surfaces. So why is it that we have this expectation when disinfectants are used in commercial settings such as healthcare?…

These Blogs can be found in their entirety at:
talkcleantome.com

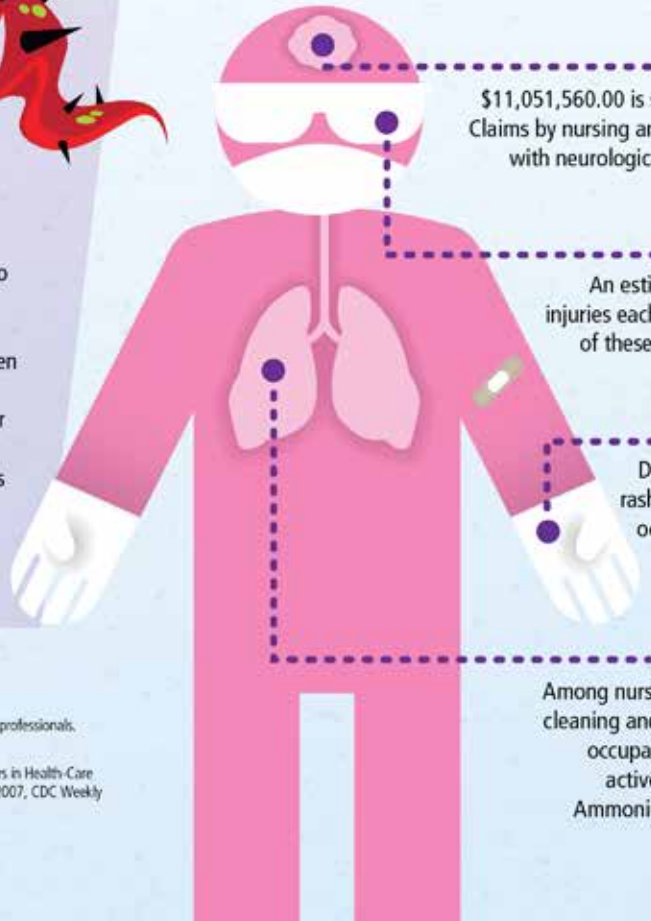
No Glove, No Love?

Is the fear of wearing Personal Protection (PPEs) affecting your compliance?

Many disinfectants pose a risk to the user and require the use of PPE.
To protect themselves are staff avoiding the use of these disinfectants?

DISINFECTANT VS PATHOGEN

A common misconception concerning a disinfectant's toxicity profile is that all disinfectants are the same. If they kill pathogens, they must be harmful to users and should not be used without personal protection: gloves, goggles and even masks in some instances. Even so, cases of eye injury, headaches and respiratory complaints occur every year resulting in occupational illness and costly claims. If your disinfectant wipes require PPE, consider an alternative that is tough on germs but avoids health and workplace dangers.



NEUROLOGICAL

$11,051,560.00 is spent each year on Worker Compensation Claims by nursing and environmental services staff associated with neurological injuries such as headaches or dizziness.

EYE

An estimated 222 healthcare workers obtain eye injuries each year from the use of disinfectants. Some of these injuries result in irreversible eye damage.

SKIN

Dermal complaints such as skin irritation or rashes are the fourth most commonly reported occupational complaint associated with the use of cleaners and disinfectants.

RESPIRATORY

Among nursing professionals, workplace exposures to cleaning and disinfectant products increase the risk of occupational induced asthma. The most common active ingredients responsible were Quaternary Ammonium Compounds and Sodium Hypochlorite.

References:

Arif et al.Occupational exposures and asthma among nursing professionals. Occup Environ Med 2009;66:274–278.

Acute Antimicrobial Pesticide-Related Illnesses Among Workers in Health-Care Facilities – California, Louisiana, Michigan, and Texas, 2002-2007, CDC Weekly Morbidity and Mortality Weekly Report, May 14, 2010.

Is PPE a necessary evil??

Blog Date: Thursday, April 10, 2014

In putting together a "surprise" for the IPAC-Canada and APIC conferences it dawned on me that while Lee & I have talked around the various areas that one should consider with respect to determining the safety profile of a disinfectant chemistry we have not got into the nitty-gritty of PPE. In my travels, I have had many a HCW tell me they use "the CANCER wipe" and that they would NEVER use the wipe without gloves (goggles and in some cases even masks). However, try as I may, I have been unable to find a wipe commercially branded under that name.

It is true that some of the chemicals used in the manufacturing of disinfectants such as phenols and 2-Butoxyethanol are listed by governing bodies as being carcinogens. It is also true that some chemistries are known sensitizing agents, are known to cause occupational asthma and are known skin, eye or respiratory irritants. In fact, it is the toxicity (safety) profile that determines what PPE needs to be worn when working with disinfectants. In later blogs we'll delve into more detail of how safety profiles are determined. For the purposes of this blog, I want to focus on the concept of HMIS Ratings (Hazardous Materials Identification System) and Precautionary Statements found on EPA or Health Canada registered disinfectants and how they should be interpreted to ensure the safe (and economical) use of disinfectants.

HMIS ratings as you may have surmised help identify the risk of the product in terms of health concerns, flammability and physical hazards which in turn determine what type of PPE a user needs to wear and if there are any specific needs in terms of storage or handling of the disinfectant. On a MSDS they are represented by a numerical rating system generally as "X/X/X" and are rated from 0 (minimal risk) to 4

(severe hazard). The health risk is represented by the first number and helps determine what PPE (gloves, goggles and/or respiratory protection) is needed. For OBVIOUS reasons, the lower the number the better! A disinfectant with a HMIS rating of 0/0/0 would be considered pretty benign and safe for the user to handle without any form of PPE.

To help illustrate safety differences between disinfectant chemistries the following table summarizes HMIS ratings and PPE requirements for the most commonly used disinfectant wipes:

HMIS Ratings & PPE Requirements of Commonly Used Healthcare Disinfectants

Active Ingredient	Health Hazard Rating	Flammability Hazard Rating	Physical Hazard Rating	Recommended Personal Protective Equipment (PPE)
Accelerated Hydrogen Peroxide	0	0	0	None
Quat	2	0	0	None*
>0.7% Quat + <25% Alcohol	2	3	0	Gloves & Goggles
Quat + >50% Alcohol	3	3	0	Wear gear as deemed necessary**
Sodium Hypochlorite (Bleach)	2	0	1	Gloves & Goggles
Phenol Blend	1	0	0	Goggles

EPA Precautionary Statement on label:
*Product causes moderate eye irritation. Contact with skin should be avoided.
**Product causes irreversible eye damage. Contact with skin should be avoided.

> "The need or lack thereof for PPE varies widely. You'll also note that while a MSDS may indicate that no PPE is required, the EPA label may specify that the product can in fact cause eye irritation or even irreversible eye damage. In my books, that means eye protection should be worn."

The economic impact to facilities with respect to Occupational Exposure to chemicals is very real. A 2010 report by the CDC highlighted that the most common active ingredients responsible for illnesses were Quats (38%), glutaraldehyde (25%), and sodium hypochlorite (18%). The majority of the types of injuries associated with the use of disinfectants were: 222 eye injuries, 130 neurologic injuries (headaches etc) and 121 respiratory injuries. Of particular interest (at least to me)

is that only 15% of the time did the injured worker wear eye protection…how many products listed above require eye protection when using? How often do you see HCWs (EVS, nurses, clinical therapists etc) wearing eye protection?

> "The economic burden of occupational injuries and illnesses are sizable, at least as large as the cost of cancer."

Particularly if you know what the cost per claim is. In the US, the cost per claim for eye injuries, neurologic injuries and respiratory injuries are $118,024, $85,012 and $64,495 respectively. Using the numbers from the CDC study that equates to $26,201,328 for eye injuries, $11,051,560 for neurologic injuries and $7,803,895! That's a whopping $45 MILLION spent over a 5 year period in just 4 US states!

Employers have a legal responsibility to provide a safe working environment. The use of disinfectants has a direct and very costly impact on worker safety. In an era where we are constantly talking about the bottom line and focusing on the cost of HAIs, perhaps we should also be considering the cost of Occupational Illness and the cost of PPE. Choosing an effective disinfectant with the safest HMIS profile will save your facility a considerable amount of money – particularly when the cost of a pair of gloves can be more than the cost of the wipe the HCW is using to clean and disinfect!

See no evil…

Blog Date: Wednesday, July 27, 2011

…chemicals such as phenols are known to leave a residue that can cause skin irritation, have been identified as carcinogens and are not to be used around children. Quaternary ammonium compounds (Quats) are also known to leave residues on surfaces and while Quats are not considered toxic, the residues they leave behind can harbour dirt and bugs that were not removed from the cleaning process and build up overtime. It is this bioburden that in some cases has been associated with continued facility outbreaks…

It's getting harder and harder to breathe!

Blog Date: Thursday, September 5, 2013

…"The prevention goal is to balance the two needs – to reduce infectious disease transmission without causing chemical related disease"…steps should be taken to reduce the potential exposure to harmful and potentially asthma causing chemicals by considering safer cleaning and disinfection options or by employing practices and protocols that will reduce a user's direct contact and risk…

These Blogs can be found in their entirety at:
talkcleantome.com

Compliance Made Easy.

Gotta be Wet to Disinfect.

If a disinfectant dried before the contact time, are you disinfecting?

Would you allow a patient to stop taking antibiotics short of the prescribed period?

EFFICACY + SAFETY

The ideal wipe disinfectant should offer a balance between efficacy and safety — powerful against pathogens yet easy on users and the environment.

Sustained Wet Time

Does not evaporate before disinfection occurs.

One & Done

One Wipe, One-Step, One Application.

PPE Free

Safe for users with the lowest HMIS rating possible.

Good for the Earth

Sustainable – minimal impact on the environment.

Disinfection Selection Made Easy

Blog Date: Friday, May 9, 2014

As I had alluded to in the opening blog for 2014, this is the year of themes. The theme for the first quarter (Q1) of 2014 was pretty obvious – pathogens, bugs, or whatever name you would like to give the pesky critters that cause us to lose sleep over managing outbreaks and HAIs. Have you picked up the theme for Q2? It's the story of how to choose a disinfectant, or in the very least areas that should and need to be considered outside of focusing on what a product kills and what a product costs so that the most effective environmental hygiene program can be justified to the powers that be.

It's a story that Lee and I have been weaving throughout our blogs since we started back in May of 2011 when we introduced the Talk Clean To Me blog and our mantra of clearing away the haze of smoke and mirrors marketing that surrounds disinfectants. As Lee discussed in last week's blog "The little devil or the little angel, which do you choose?" developing the business case to justify moving to a new disinfectant is not as easy as one would hope. The unfortunate truth being that it is more often than not easier to remain as the status quo then trying to be that fish swimming upstream.

Here's where we hope we can help. For those of you who have seen Lee or I speak, the picture used for this week's blog is a slide that is used in almost EVERY one of our presentations. If you look back through our blogs, we have written one on virtually every topic: Strength is not always found in numbers, Dirty to Disinfected in 60 seconds flat, To Clean or Not to Clean, Is PPE

the necessary evil?, What's in Your Bottle? and The Unintentional Consequences of Improving Infection Prevention, and while we recognize the importance of understanding the theory we have gone to provide the tools to simplify things and help you make the right decision for your facility.

Selection of a disinfectant really can be made as simple as tabling out the desired traits of a disinfectant and adding any criteria that is specific to the needs of your hospital. You can in turn develop a rating system that would allow you to more objectively look at the overall picture and how the product answers the needs of your facility – keeping in mind of course that you'll never have a single product for everything…well unless of course you want to be dealing with calls over ruined surfaces due to material compatibility or occupational health and safety complaints associated with occupational injury from inappropriate use of a product! Here's a snap shot of what my table would look like:

Disinfectant Product Assessment Tool

ELEMENT	EVALUATION YES	NO	RATING*	PRODUCT CHARACTERISTIC DETAILS
SAFETY PROFILE: Is the product non-toxic and low irritancy and allergenic properties?				
Does the product carry the EPA's lowest Toxicity Rating of Category IV at Use Dilutions?				
Is the HMIS Rating 0/0/0?				
Does PPE (gloves, goggles or masks) need to be worn?				
Is the product non-irritating to eyes?				
Is the product non-irritating to skin?				
Does the product carry the lowest toxicity rating for inhalation exposure?				
Is the product Volatile Organic Chemical or VOC free (e.g. free of alcohols or solvents)?				
Does the active ingredient bind with cleaning cloths (e.g. Quats and cotton)?				
Are there any compatibility issues that need to be considered with the use of the product?				
Has the active been implicated in chemical resistance?				

From an evaluation perspective, a Likert Scale can be used that assigns values from 1 to 5 such as the following:

1	2	3	4	5
Product Does Not Meet Needs	Product Somewhat Meets Needs	Neutral	Product Mostly Meets Needs	Product Meets Needs

Upon completion of the full Assessment Tool, you can then calculate a numerical rating.

Voila! You now have a comprehensive and reasonably objective Disinfectant Product Assessment Tool* that can be used to compare product to product. Certainly, bias may come through if say you have a better relationship with one supplier than another or if (as Lee stated last week) you play the part of the Devil by simple inactivity or complacency of not wanting to go through the effort of converting to a safer and more effective disinfectant.

"But, if you take the time to work though this assessment tool using the EPA Approved label and product MSDS, you may be surprised by what choice you make!"

*Available on infectionpreventionresource.com

Safe, Safer, Safely, Safest – Who knew they were "Bathroom" words!

Blog Date: Thursday, June 27, 2013

…when reviewing new disinfectant products ask yourself the following:

1. Do these claims seem too good to be true? If they do, ask to see the data used to make the claims.

2. Is the wool being pulled over my eyes? Do these claims or statements seem misleading? If so, investigate further and ask lots of questions and gather the data to support the claims.

3. Are they using "Bathroom" words? If they are, you should question the accuracy and appropriateness of such claims.

…if you are uncertain as to the appropriateness of claims or statements made on disinfectant products and their associated marketing materials you can submit an inquiry to the EPA…

What's In Your Bottle??

Blog Date: Wednesday, July 20, 2011

…Ideally, we will select a disinfectant product that carries both suitable germicidal performance for our particular application AND an environmental profile that is preferable and sustainable. Historically speaking this has been quite difficult to achieve because chemical formulators often have to play a balancing act when developing disinfectants. On one side – speed and spectrum of disinfection; on the other – safety and environmental profile…

…If a safe, environmentally preferable product was favoured, the scales would shift and disinfectant performance was often compromised and thus poor as a result. Fortunately, new, novel disinfectant chemistries are coming to market that address this flaw in many legacy disinfectants. These unique disinfectants can strike the needed balance between germicidal performance and safety (personal and environmental) profiles without compromising on either…

… don't simply rely upon fancy marketing materials or pretty green labels advertising the product as GREEN. Wherever possible, search for industry recognized Eco-Labels such as EcoLogo to ensure that the claims being made pertaining to the environmental profile of the product have been reviewed and validated against standardized criteria. This will ensure that you're not being "Greenwashed" as they call it. Lastly, double check the disinfectant claims on your "Green" disinfectant to ensure you're not giving up too much in the way of disinfectant performance to secure an environmentally preferable disinfectant…

Do You Sweat the Small Stuff? Dispelling the Myth of Efficacy Claims

Blog Date: Friday, May 10, 2013

…Infection prevention and control is not black and white nor is it one size fits all…

…When choosing a disinfectant product, ask yourself: what is relevant to my facility and my patients? If your surveillance and outbreak data reflects the fact that 90% of your concerns are due to vegetative bacteria and viruses, focus your attention on a disinfectant formulation that provides you with a responsible balance between effectiveness – broad spectrum coverage against gram-negative and gram-positive vegetative bacteria and both enveloped and non-enveloped viruses; and minimal toxicity – results in greater user compliance…

Slippery When Wet – Proper Cloth Saturation is Key for Adequate Disinfection

Blog Date: Thursday, September 6, 2012

…If the contact time is not complied with, it's likely that disinfection is simply not being achieved. Selecting a disinfectant with a rapid and realistic contact time will most certainly make this an easier goal to achieve however, we will still need to use or apply the disinfectant in such a way that its contact time is easily complied with. Not surprisingly, the saturation level of the cloth or wipe used to apply the disinfectant will play a major role in ensuring adequate coverage of the surface. But, when was the last time you incorporated a discussion on cloth saturation into your cleaning and disinfection training?

These Blogs can be found in their entirety at:
talkcleantome.com

Talk CLEAN to Me blog

The Clean Freaks

Nicole Kenny and Lee Nesbitt's passion for infection prevention has led them to author articles for several trade magazines and journals and provide seminars and webinars to educate the Infection Prevention and Environmental Services communities on the correct use of chemical disinfectants and their role in infection prevention.

Really?!

How did that happen?

A collection of posts from the Talk CLEAN to Me blog