# Polluted Pets: Why it's Time to Connect Cleaning Products to Pet Care



Way back in 2008, the Environmental Working Group (EWG) tested 20 companion dogs and 40 cats for chemical contaminants. The pets tested positive for 48 out of 70 industrial chemicals. Can you imagine what that figure is now?

It's why the dedicated No Bull, Just Natural Health for Dogs team are noticing a rise in dog health issues linked to chemical cleaning product use.

This article will firstly uncover how home cleaning chemicals are quietly harming our beloved pets. It then explains an easy way to create a dog-friendly, protective, low-allergy and low-chemical indoor environment.

## **The Problems with Cleaning Chemicals**

The use of cleaning chemicals in the name of health and hygiene has grown exponentially since WW2; even more so since Covid. But the reality is, these chemicals are more 'anti-life' than supportive of life. They create more problems than they solve - for you, for the environment and for your dog.





Direct Skin Contact

Ingestion

Inhalation







# **Problem 1: Chemicals are Toxic for Dogs**

Jane Houlihan from EWG said at the time. "This study demonstrating the chemical body burden of dogs and cats is a wake-up call for stronger safety standards from industrial chemical exposures that will protect all members of our families, including our dogs."

But the opposite happened – and our furry friends' chemical body burden continues to grow.

#### **Toxic to Touch or Ingest**

The challenge is, most cleaning products are made from harmful chemicals such as ammonia, bleach, hydrogen peroxide, phthalates and formaldehyde. All those omnipresent sprays, wipes, concentrates, soaps, laundry products, hand wash, disinfectants and air fresheners are brim full of known toxins.

This chronic daily contamination is becoming untenable for people - but our poor dogs are even more susceptible. The EWG study found higher levels of cleaning chemical toxins in the blood samples of dogs than humans. This is no surprise - they have far smaller bodies so don't process the toxins as quickly, and their compressed life spans can increase susceptibility. They also live life nearer to the toxin-laden floor and do not have the added protection of clothing.

Dr Karen Becker recently made this statement about cats - but it applies to your dog too.

"Why should you care about what chemicals are in the cleaners you use around the house? Because every cleaning product and home scenting product you've ever purchased will end up INSIDE your cat because of this: they are clean freaks! So, choose your products very wisely!"



Our canine friends don't groom, but they do lick their paws and skin.

This is especially true if they suffer from skin issues and allergies.

As a result, dogs are at risk of short and long-term illness from touching, inhaling, swallowing or just absorbing cleaning chemicals through their skin. This can lead to health issues including:

- Nausea or vomiting
- Throat, nose and eye irritation

- Skin and respiratory allergies
- Digestive problems
- Weight changes
- Damage to the central nervous system, kidney, and liver
- Poor immunity and cancer.

But it can also be more subtle than this. Your dog may just seem very tired or quiet, or a bit out of sorts. Either way, reviewing their indoor environment can make a tangible difference to their overall health.

#### **Toxic to Inhale**

It's also not just skin contact that is the problem. Many cleaning chemicals emit volatile organic compounds (VOCs) into the air. These toxins are designed to evaporate and spread quickly throughout your house.

Its why some window cleaning sprays state 'do not breathe the mist.' And it's my belief that is why Zoflora's new resident vet says "If you have fish or reptiles in tanks, make sure they are covered over while you clean with Zoflora and for at least half an hour afterwards". (And this is for the new 'pet safe' range!)



It's also one of the reasons the Environmental Protection Agency say indoor air is two to five times more polluted than outdoor air.

This is a problem for dogs who, like us, can spend up to 90% of their day indoors.

We need to make their indoor air as clean and safe as possible.

But chemical odour control (which is really just 'scent masking') is not the answer. Commercial air fresheners release fragranced chemicals into the air that are toxic for dogs to breathe in. They also cause contamination where they fall – so your dog could step on, roll in or lick chemical air freshener that has settled on the floor.

In the same way, scented candles may smell good but they are equally risky. Most are made from petroleum wax that releases soot and smoke - known carcinogens and neurotoxins – into the air. This reduces indoor air quality, aggravates your dog's allergies and asthma and can increase their risk of cancer.

Something else to consider is that dogs have around 50 times more scent receptors than humans. Their sense of smell is a huge 10,000 to 100,000 times stronger than ours, depending

on their breed. So, if you use scented air freshener or strong-smelling floor cleaner, imagine how overpowering this is for your dog!

## **Problem 2: Chemical Cleaners are not Allergy-Friendly**

If your dog suffers from skin and respiratory allergies and sensitivities, you'll know how hard this can be for them. If the cause is environmental or seasonal it is often a relentless, life-long condition. This is because the poor animal is constantly surrounded by the allergens that play havoc with their immune system. These include dust mite, pollen, trees, flea bites, mould, grass and chemical cleaning products.

These allergens can trigger skin and respiratory symptoms, eye irritation and lethargy that is chronic or that flares up from time to time. Skin symptoms range from mild irritation to unbearable itching. Attempts to alleviate the itching by licking and scratching often make things worse. It can lead to severe rashes, dermatitis, sores, redness, flaky skin, loss of fur – and even infected wounds and hot spots. Respiratory allergy symptoms are equally uncomfortable and include wheezing, coughing, panting and a constant runny nose.



Chemical cleaning products can exacerbate allergy symptoms when dogs touch, ingest or breathe them in.

Chemical floor cleaners are especially linked to atopic allergies in dogs. This is because your dog may walk on the chemically-cleaned floor and then lick their paws or try to soothe their sore skin. And other cleaners can do the same if your dog likes to sit on top of your tables and countertops!

As an aside, some chemical floor cleaning products are 'completely pet-safe' – but only once the floor is completely dry. And only if you keep your cherished pet well away whilst using them.

In this case, it's always worth asking what happens if the floor doesn't stay dry.

Can your little darling reactivate chemical residue and absorb it through their skin after a bath or a wet walk? Or on a warm day or when the underfloor heating is on? Dogs only sweat from two places, their nose and their paws. Does this make wetting the chemically cleaned floor with sweaty paws and then licking them a cause for concern? Or could your dog swallow dried chemicals when having a messy dinner floor-licking session?

If the answers are no because the risk after drying is negligible – ask where the chemicals go. Is the floor safe but the air is full of chemicals instead? Remember, when you hear reference to VOCs, the "V" refers to chemicals that are volatile. This means they are designed to evaporate from liquid on the floor into your indoor air.



The average human breathes in considerably more air (in weight) that they eat - around 15kg every single day. Dogs take 15 - 30 breaths every single minute depending on their size. It's really worth bearing in mind the amount of chemicals they take in this way every day.

## <u>Problem 3: Chemical Cleaners Contribute to Reduced Antibiotic Effectiveness</u>

Chemical cleaners are deliberately designed to be 'anti-life'. Most boast about how many bacteria and viruses (often called 'germs') they kill. They want us to believe that the more microorganisms they kill, the better. But the problem is - although it *seems* completely unconnected - this 'anti-life' approach harms your dog's health in a significant way:

Chemical cleaning products contribute to a process called antimicrobial resistance (AMR). AMR is described as 'the development by a disease-causing microbe, through mutation or gene transfer, of the ability to survive exposure to an antimicrobial agent that was previously an effective treatment'.

In other words, it can be why your dog is back and forth to the vet with an ear infection that just won't go away. AMR makes infections – particularly bacterial infections - harder to treat because they may not respond to antibiotics (or other treatments) that used to work.

The truth is, bacteria are essential for life itself...

Bacteria get a bad press, but only a tiny minority - about 0.01% - are potentially harmful. These include MRSA, salmonella and E. coli and can cause ill health for us and our pets. But killing all the bacteria – the 'good' along with the 'bad' is never a good thing. It causes enormous problems.

Every life form on Earth originates from bacteria. They are the cornerstone of existence. Without bacteria, our bodies won't function for long. Helpful bacteria help our bodies

produce vitamin K, are essential for good digestive function - and even help our bodies fight certain illnesses. Animals have more bacteria on them - and in them - than they have cells of their own body. Some bacteria actively benefit their animal host.

Many bacteria are inert. Their role is simply to provide balance within the microbiome. The microbiome is the collection of microorganisms - bacteria, viruses and fungi - that inhabit a particular environment. Every surface has a microbiome, whether human or animal skin, inside the body, flooring, soft furnishings - even the device you are reading this on.

A healthy, balanced microbiome with plenty of friendly ('good') bacteria is the key to keeping the harmful, pathogenic ('bad') bacteria in check. It is also known to support health and immunity.

But chemical and anti-bacterial cleaning products do not discriminate. Their 'anti-life' approach wipes out the carefully balanced microbiome and kills the helpful bacteria that keep the harmful ones in check. Without this natural competition, the harmful bacteria gain the upper hand. They multiply, transform and become stronger until they develop resistance to the chemicals. Ever stronger chemicals are then needed to kill these 'superbugs.'



Pathogens share their resistance with others.

This process of antimicrobial resistance reduces the effectiveness of cleaning chemicals as well as antibiotics and other medicines. It makes infections harder to treat. The World Health Organisation (WHO) estimate AMR will cause 10m deaths a year by 2050 if we don't change our behaviour.

NOTE: The overuse and incorrect use of antibiotics in humans and animals also causes AMR. I will explain how probiotics in the LUCAA+ Pet range help to reduce AMR in a separate article.

#### **Problem 4: Chemical Cleaning Doesn't Last**

Although chemical cleaners are lauded for killing 99.9% of microorganisms in the microbiome, how long this lasts for is rarely advertised. Unfortunately, surfaces usually return to their precleaned state (in terms of microscopic organisms) less than one hour after chemical cleaning. Microorganisms are all around us, so they naturally settle back onto the surfaces.

Unfortunately, when chemical cleaning wipes out the crucial competition from the good bacteria, the ones that settle are the stronger, pathogenic bacteria.

Those surfaces you clean once a day, every day, with chemicals are often not as clean as they look. They are likely to be re-contaminated with pathogenic bacteria for 23 hours a day; but appear visually clean.

## **Problem 5: Chemicals Can be Lethal to Aquatic Life**

Do you ever read the safety data sheets or the back of the bottles of the chemicals in your cleaning cupboards? If not, it's a good idea to take a look.

"Harmful to aquatic life with long lasting effects."

"Do not allow pets (especially cats) to walk on treated surfaces until they are dry, or to lick surfaces that have been sprayed or wiped with this product."

(This bottle was on a table a beach seaside café with lots of dogs nearby).



How many – like this one - say 'lethal to aquatic life with long lasting effect'?

It's a shocking statement to see on your toilet or floor cleaner – products that are created to be flushed down the drain and into the waterways! And if it's killing the fish - what is it doing if your cheeky pup takes a sneaky drink from the toilet bowl?

You probably don't think about water pollution when flushing the toilet or pouring something down the sink or drain. But the truth is, wastewater treatment facilities don't filter out anywhere near everything. Chemicals enter rivers and oceans and fish and aquatic wildlife pay the price. Chemicals damage their renal and digestive function and can accelerate plant growth, which depletes their oxygen.

'Forever chemicals' (PFAS) used in stain and water-resistant household products are ending up in the Himalayas - and even inside polar bears.

But the point is - <u>always</u> read the safety data. Really understand the safety implications of what you are using. (If there isn't much information on the product label, each will have a Safety Data Sheet, or 'COSHH' Sheet on the supplier website).

Understand exactly what you are allowing into your home and around your dog. Check for warning statements that explain if the product risks more harm than good – for you and your unsuspecting pet. These are common examples:

- 'May produce allergic reaction' (on some 'pet safe' cleaning products)
- 'Causes serious eye irritation' (on spray bottles).
- 'Causes skin irritation' (on laundry detergent).
- 'Harmful to aquatic life with long lasting effects' (on toilet cleaner)
- 'Wear protective gloves/eye protection' (on general purpose cleaners).
- 'If ventilation is insufficient, wear respiratory protection' (on disinfectants).
- 'Toxic if inhaled. Do not breathe the mist' (on spray bottles).
- 'Toxic if swallowed' (on floor cleaners).
- 'Highly flammable liquid and vapour' (on general purpose cleaners)
- 'This material and its container must be disposed as hazardous waste'.

## **Problem 6: Chemical Ingredients may be Tested on Animals**

The UK banned all forms of animal testing for household cleaning products in 2015. It is declining everywhere because of ethical concerns and new regulations. But the RSPCA still has concerns: Some clauses can be overridden if deemed necessary to satisfy other legislation such as the EU Chemicals Regulation (REACH). And although 'end product' animal testing is rare, testing on individual ingredients still happens.

Brands don't advertise their animal testing, so it's not always easy to know which do. Cruelty-Free Soul lists some of the well-known brands that still use animal testing. You may be surprised by some of the names on the list; some newer brands that are genuinely cruelty-free have larger parent companies that still test on animals.

#### Time for the Good News!

#### What You Can Do Instead

It's time to update old-fashioned chemical cleaning - and all its inherent problems - for a healthier, research-based and less problematic approach. Unlike chemicals, EVAA+ probiotic-based home cleaning products from Provilan are intrinsically safe for your dog (and for you and the wider environment).

Even better, this simple switch helps to create a dog-friendly, low-allergen and low-chemical indoor environment. This helps to reduce canine stress and supports their general well-being and immunity.

If you have a poorly pooch who constantly needs anti-allergy medications and topical treatments (that's a story for a different article), this can really help. It tackles many of the root causes and can reduce many allergens that constantly aggravate the problem.

Although it's not possible to reduce exposure to all allergens - especially those outside - this simple change can have a big impact. It also works well alongside other recommended changes such as an appropriate diet.

## **Probiotic Cleaning Products - a Quick Overview**

EVAA+ probiotic cleaning products from Provilan are sustainable, eco-positive surfactants (the soap element). They have an added magical ingredient - carefully selected, healthy 'good' bacteria (probiotics) - and are specifically designed for your home.



The WHO describes probiotics as "live microorganisms that, when administered in adequate amounts, confer a health benefit on the host."

You may be familiar with the benefits of a follow-on course of oral probiotics – for you or your dog - after taking antibiotics. They replace the good bacteria killed by the antibiotics and restore the disrupted microbiome balance. In the same way, probiotic cleaning products replace the good bacteria destroyed by chemical cleaning.

The brand name Provilan (manufacturer of the EVAA+ and LUCAA+ ranges) is derived from French and means 'for – life – balance'. It means that introducing healthy bacteria alongside non-chemical, non-hazardous cleaning restores a healthier microflora balance to your indoor environment. This helps to create and maintain an increasingly healthier living space with every use.

#### **All EVAA+ Probiotic Cleaning Products are:**

- Safe for your dog, for you, for the environment and for aquatic life.
- Naturally sourced without toxic chemicals, VOCs, toxins or parabens.
- Low allergy and suitable for dogs (and humans) with allergies and sensitive skin.
- PETA certified as vegan and manufactured with compassion, without animal testing.
- Eco-friendly, non-polluting and quickly biodegradable.
- Safe for use around puppies, older dogs and children too.

Provilan probiotic cleaning products do not contain harmful chemicals that are toxic for your dog to inhale, touch or ingest. They are safe for you to use around your pet when wet or dry, or when sprayed into the air. This protects them from disruptive chemical exposure to their skin, digestive system and respiratory tract.

Unlike chemical air fresheners, probiotic odour remover sprays **do not pollute indoor air**. They simply eliminate organic odours such as urine and sweat at their source. They remove the odour-causing molecule and out-compete the odorous bacteria that would normally feed on it.

Probiotic cleaning products positively benefit the environment and *reduce* water pollution and the toxic burden; they do not add to it. They do not contain harmful chemicals and are safe to discard down the drain. The helpful probiotics continue to clean and consume organic waste in the wastewater, sewage, drains and pipework on its way to rivers and the ocean. They are not hazardous to fish and aquatic wildlife.

In addition, containers are made using ocean recovered plastics and – unlike many chemical products - are fully recyclable as there are no toxic contents.

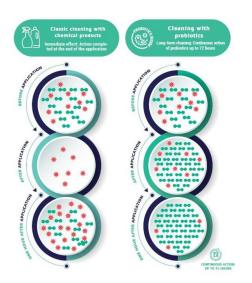


## **How do Probiotic Cleaning Products Work?**

The helpful probiotics work in a safe, natural way that does not push harmful bacteria to mutate and become superbugs. This <u>reduces</u> AMR and **helps to protect the effectiveness of antibiotics**.

The products contain huge numbers of heathy probiotic bacteria that form a protective 'army'. They simply:

 Outnumber and replace the bad bacteria that cause ill-health and take back control of the microbiome. This mechanical process is called bio-replacement.



Chemical cleaning vs probiotic cleaning recontamination times.

- Compete with the bad bacteria for natural food sources until the pathogens starve and fade away. They consume:
  - ✓ Bio-allergens that trigger allergic reactions, including pollen, dead skin cells and mite poop. This reduces the bio-allergens in the indoor environment and protects dogs with skin or respiratory allergies.
  - ✓ Odour molecules that cause bad smells.
  - ✓ Organic waste.
- Produce enzymes that breakdown organic dirt particles and assist the cleaning process.
- Remain on surfaces and keep working (and consuming bio-allergens) for up to 72 hours after application. They act as a defending army to prevent the almost immediate recontamination by pathogens that happens after cleaning with chemicals.

Their slow release, longer-lasting, deep cleaning action keeps floors and surfaces cleaner for longer. This can help to increase product value by lengthening cleaning intervals and reducing product usage over time.

## **Concerned About Making the Change?**

If you are concerned that ditching your chemicals will lead to poor hygiene – don't worry. Probiotic cleaning is proven to achieve better hygiene results: clinical studies show how probiotic cleaning reduces infection rates in hospitals. (This is so important; hospital acquired infections in the USA currently kill more people than breast and testicular cancer combined.)

Although this article focusses on bacteria, probiotic cleaning products are also effective against viruses. The eco-surfactants, like all detergents, work alongside the scrubbing action to break down the outer membrane of envelope-type viruses (including Coronavirus). New research also shows that probiotic cleaning is achieving better results against viruses compared with standard disinfection techniques (including SARS-CoV-2).

Even in the midst of Covid, it's important to raise awareness of bacterial infections as a serious issue: In the 12 months between April 2017 and April 2018, 65,000 human deaths were related to bacterial infections in England. This is similar to COVID-related death rates.

## **The Next Steps**

In summary, it is hard for dogs to feel really well if they are bombarded by constant exposure to poisons. Changing from chemical to probiotic cleaning improves indoor air quality and restores healthier ecological balance in your home. Remember, these changes also protect the health of you, other pets and everyone who lives in or visits your home – especially children and the elderly.

Switching to naturally sourced, probiotic cleaning products is easy: Simply replace the chemical cleaning products you currently use around the home for low-allergy, low-chemical, probiotic versions.

You can change as many or as few products as you wish, every little helps. The EVAA+ range has probiotic alternatives for cleaning floors, windows, surfaces, washing your hands and reducing odours. If your dog is very sensitive, it helps to replace chemicals used for carriers and kennels, your car, litter trays and even washing up their food and water bowls as well.

You can spray probiotic odour remover sprays into the air and over soft furnishings such as dog bedding, curtains, carpets and sofas. They do not contain eco-surfactants (cleaning soap) and can be with, or without scent. As dogs have around 50 times more scent receptors than humans, choose unscented if in doubt.

Or if you prefer to machine wash bedding, probiotic laundry detergent cleans dog bedding without chemicals and helps reduce bio allergens.

Click the link for more information and to discover the Provilan probiotic cleaning range: www.ingenious-probiotics.com.

Remember, all of the above (apart from the paw licking!) also applies to the health of the people you live with. Chemical cleaning can affect the health of your children (especially babies who crawl on the floor) and elderly relatives. If you have someone who does the cleaning for you, it's good to consider the impact on their health too.

Footnote: Strictly speaking, even referring to pure water as a chemical is correct. But in this context, 'chemical' refers to harsh, damaging products.



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#### **References:**

Polluted pets (Environmental Working Group - ewg.org)

Rodney report with Dr Karen Becker - household cleaners can damage pets (Facebook)

<u>Dr Karen Becker – cats and cleaning products</u> (Facebook)

Potential of an eco-sustainable probiotic-cleaning formulation in reducing infectivity of enveloped viruses

Colloidal silver for dogs: is it safe? (Dogs Naturally magazine)

The effect of chronic silver nanoparticles on aquatic system in microcosms (National Library of Medicine)

Early exposure to household cleaning products associated with asthma and wheeze in young children (Canadian Medical Journal for Children)

Cleaning product use affecting asthma more during covid-19 measures (science daily)

Health effects of indoor air quality on young people and children (The Royal College of Paediatrics and Child Health) - includes cleaning products as a heath concern.

Mass use of hand gels to control covid risks creating superbug 'armageddon' as other bacteria and viruses build up resistance, researchers warn (Mail Online)

Disinfectant overkill: what are "quats" and why are they a problem? Women's Voices of the Earth podcast - links cleaning product use to fertility issues

Health and well-being in building services (UK Chartered Institute of Building Engineering (CIBSE, TM40 recommendations section 9.4.12.4). "Emissions from cleaning products can have a significant impact on indoor air quality, affecting the regular building users and the professional cleaning teams."

Researchers find connection between household chemicals and gut microbiome (Medical Press)

8 Hidden toxins: what's lurking in your cleaning products? (Experience Life)

Pet owners warned after Zoflora disinfectant poisons dog (Metro)

The surprising dangers of cooking and cleaning - why indoor air pollution is an overlooked problem (the BBC)

<u>Continuously active disinfection: minimizing the role of surface and equipment recontamination in the transmission of healthcare pathogens</u> (PDIHC White Paper) - the speed of re-contamination when using anti-life cleaning products

Results of research on probiotic-based sanitation method (Chemical Watch) – study by esteemed microbiologist

Disinfectants 'fuelling rise of MRSA patients on wards' (The Times) - report on disinfectants and AMR

Man-made microbial resistances in built environments (Nature Communications) – links to report above

<u>Remodulating hospital microbiota cuts infections and costs</u> (Africa's Medical Brief Digest) - medical journal reports on improved hygiene results after switching from traditional anti-life cleaning to probiotic cleaning in 5 hospitals test in Europe.

<u>Testing household products on animals</u> (Animal Research)

All you need to know about animal testing in cleaning products (Cruelty-Free Soul)