

# StaphWash for Animals -- Field Test Report

**staphWash**™

Formulated to wash MRSA and other  
Staph bacteria from skin

**For use on skin**

**StaphWash Field Test Results**

as of December 6, 2007

Confidential, not for public disclosure.  
This documentation is for use during the evaluation of a new product.

"The superbugs are here," says Martin J. Blaser, MD, president of the Infectious Diseases Society of America and the chair of New York University Medical School's department of medicine. "And it doesn't take a crystal ball to see that even more problems are coming."

## Field Trials

In November, 2006, the manufacturer began field trials to evaluate StaphWash as an anti-bacterial skin cleanser.

It has been formulated for the following applications:

1. For an open lesion which may not be infected with bacteria, application of StaphWash is intended to PREVENT staph bacteria, including MRSA, from forming a colony at the site where StaphWash is applied and used as directed.
2. For a MRSA-infected lesion, StaphWash is formulated to attack the bacteria, and allow the lesion to heal in a normal manner.

StaphWash is not a drug. It is a skin cleanser. It does not "treat" the body; it does not "heal" the body. It only kills bacteria and functions as a skin cleanser. It uses six mechanisms of action to attack MRSA and other bacteria. It tingles a bit when applied to an open lesion, but the sting is less than what would be felt if isopropyl alcohol were applied to the lesion.

Recently, StaphWash has been used by pet owners to cleanse skin lesions resulting from bacterial infection. This Field Test Report discusses some of the reports resulting from the use of StaphWash on pets and other animals.

## What is a MRSA staph infection?

Methicillin-Resistant *Staphylococcus aureus* (MRSA) is a often a skin infection. *Staphylococcus aureus* is a common etiologic organism in soft tissue infections.

## MRSA Transmission between Cows and Humans

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### Abstract

We isolated methicillin-resistant *Staphylococcus aureus* (MRSA) from cows with subclinical mastitis and from a person who worked with these animals. The bovine and human strains were indistinguishable by phenotyping and genotyping methods and were of a low frequency *spa* type. To our knowledge, this finding indicates the first documented case of direct transmission of MRSA between cows and humans.

EID Journal, Volume 13, Number 4–April 2007

<http://www.cdc.gov:80/eid/content/13/4/630.htm>

## MRSA a growing problem in horses

Methicillin-resistant staphylococcus aureus (MRSA) is a growing problem among horses, according to a report in Equine Disease Quarterly.

"Studies have reported carriage rates of 0-5% in horses in the general population, but on some farms the prevalence can exceed 50%," said Dr J. Scott Weese of the Department of Clinical Studies at the University of Guelph in Ontario, Canada.

"Colonized horses may never have any problems with MRSA, but they are more likely to develop an MRSA infection under certain conditions," he said. "Colonized horses are also of concern because they can transmit MRSA to other horses and people.

<http://www.horsetalk.co.nz/news/2007/10/021.shtml>

## MRSA Transmission between household pets and humans

Excerpt from article entitled Pets May Carry Bacteria Deadly to Humans

Monday, August 06, 2007

Ref: <http://www.foxnews.com/story/0,2933,292291,00.html>

By Robert Roy Britt

"There are multiple case reports of humans with infection with MRSA when the household pet was also found to have MRSA," Cohn told LiveScience. "Sometimes, the human infection could not be successfully eradicated until the animal was also treated."

For instance, a small 2005 British study of a vet facility, detailed in the journal Emerging Infectious Diseases, "suggests that dogs can act as reservoirs of MRSA, which can pose a public health risk to owners and veterinary staff."

A 2003 report in the journal Clinical Infectious Diseases found that two dog owners who suffered persistent MRSA infections relapsed every time they returned home from the hospital. The dog was found to carry the same strain of MSRA, but the researchers could not determine whether the dog initially acquired the infection from the humans or the other way around.

Other researchers have shown animals indeed suffer MRSA infections and that the strain, at least in some pets, can be the same as the type that infects humans.

It's also established that veterinarians are more likely to be colonized with MRSA than those uninvolved with health care, Cohn said.

"It seems likely that the bacterium can be transmitted from man to animal, and vice versa," Cohn said, adding: "We do not suspect that dogs and cats are the primary reservoir for infection of people, and there is no reason to think that a healthy pet poses a risk of MRSA infection for a healthy person."

Disease spread from animals to people is not uncommon.

Humans long ago acquired pubic lice, for example, from gorillas, researchers think. AIDS hopped from other primates to humans, and human diseases are also known to kill animals.

Ref: <http://www.foxnews.com/story/0,2933,292291,00.html>

## **MRSA Transmission from farm animals to humans**

WASHINGTON, Nov. 6 /PRNewswire-USNewswire/ -- A new study published in Veterinary Microbiology found methicillin-resistant Staphylococcus aureus (MRSA) prevalent in Canadian pig farms and pig farmers, pointing to animal agriculture as a source of the deadly bacteria.

The Veterinary Microbiology study (Khanna et al. 2007) is the first to show that North American pig farms and farmers commonly carry MRSA. The study looked for MRSA in 285 pigs in 20 Ontario farms. It found MRSA at 45% of farms (9/20) and in nearly one in four pigs (71/285). One in five pig farmers studied (5/25) also were found to carry MRSA, a much higher rate than in the general North American population. The strains of MRSA bacteria found in Ontario pigs and pig farmers included a strain common to human MRSA infections in Canada.

An estimated nine million Canadian hogs will be imported into the United States this year.

A study published last month in the Journal of the American Medical Association (JAMA) (Klevens et al. 2007) estimated almost 100,000 MRSA infections in 2005, and nearly 19,000 deaths in the United States. In comparison, HIV/AIDS killed 17,000 people that year.

## **Dogs Carry Super Staph Infection MRSA**

DogExplorer.com News - Methicillin-resistant Staphylococcus aureus or the so-called super bug known as the Staph infection MRSA could be transmitted by your dog.

According to one Veterinarian, both human and dog could carry and transmit this sometimes deadly bacteria but in most cases, as long as there is no open sore or wound the risk of actual infection is low.

<http://www.dogexplorer.com/content/view/196/1/>

## Number of MRSA cases in pets increasing

BY DELTHIA RICKS | delthia.ricks@newsday.com

October 29, 2007

Some veterinarians are documenting more and more cases of drug-resistant staph infections in dogs and cats, but say there is no reason for alarm among pet owners if they follow measures of simple hygiene.

Dr. Lewis Gelfand, a Long Beach veterinarian, said he's treating an increasing number of animals with skin eruptions infected with methicillin-resistant Staphylococcus aureus - MRSA. The cases seem to have increased in recent months, he said.

"It's definitely a rapidly expanding problem," Gelfand said, adding that he has had 19 cases in dogs in the past year. "I believe it is a significantly underdiagnosed problem. We have been seeing dermatological cases as well as open sores.

**Newsday.com**

**<http://www.newsday.com/news/health/ny-hspets295437222oct29,0,7605571.story>**

## Section 2

# StaphWash Field Test Results

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# Staph infection successfully treated in animals, using new StaphWash topical application

David Cuttino wrote: Pet #1 is a large black cat that brings joy to children at a local school. He is a bit of a celebrity at the school as evidenced by his photo in the school yearbook wearing his Harley bandana. His owner, Susan L., is an active member of a feline rescue group called Feline Rescue and Rehome (F.U.R.R). Her pet cat had an infection in his foot that led to the amputation of the middle toe. The infection returned and worked its way up his leg to the point where his whole leg was swollen and inflamed.

Fearing the worst of another more radical amputation, she contacted my wife. Marion informed her of the existence of StaphWash and its ability to kill bacteria. Susan was willing to spend any amount of money to get her pet the best care possible. She agreed to use StaphWash on her pet before doing anything else. In two days of StaphWash use, her cat was bouncing around on all fours playing with his favorite toy.

## **Vet medicine history made**

For the first time ever, StaphWash was injected into an abscess caused by a bacterial infection, as reported below.

Some time later, an abscess showed up on the right jaw of Pet #1.. It was hard and growing. Susan massaged the area with StaphWash and it became softer but it swelled to a large abscess. Susan decided to **inject the abscess with 1 cc of StaphWash**. The next day the abscess was drained due to its size. Once drained, the abscess did not fill up again as usual. Susan continued applying StaphWash to the lanced area. In four days, he was healing rapidly from the abscess. He happily returned to his job as School Cat to the joy of his loyal subjects at the school.

David Cuttino  
dmcuttino@sbcglobal.net

# Staph infection successfully treated in 3 pets

*By Susan L., pet owner*

## **Pet #1 was healed using StaphWash**

Pet #1, a cat, had an abscess in his foot, around the toe area beginning in early May, 2007. The abscess wouldn't heal. His vet suggested a surgical opening to clean out the abscess. When the surgery was performed, a tumor was found in his toe and the toe was amputated. He was given 4 rounds of Clavamox and several weeks of Baytril injections, and the foot didn't heal.

By the first of June, with the foot still bandaged, the abscessed area had spread up the leg. The area was cultured with the result being MRSA. The staph bacteria was deemed susceptible to 3 antibiotics. One was deemed safe for long term use -- Naxcel. He received 2 injections per day for two months. He also was given a round of Amikacin, an aminoglycoside antibiotic used to treat bacterial infections. Amikacin works by binding to the bacterial 30S ribosomal subunit amikacin. This drug is sometimes harmful to the kidneys. We didn't try the third drug because it was also potentially harmful to kidneys.

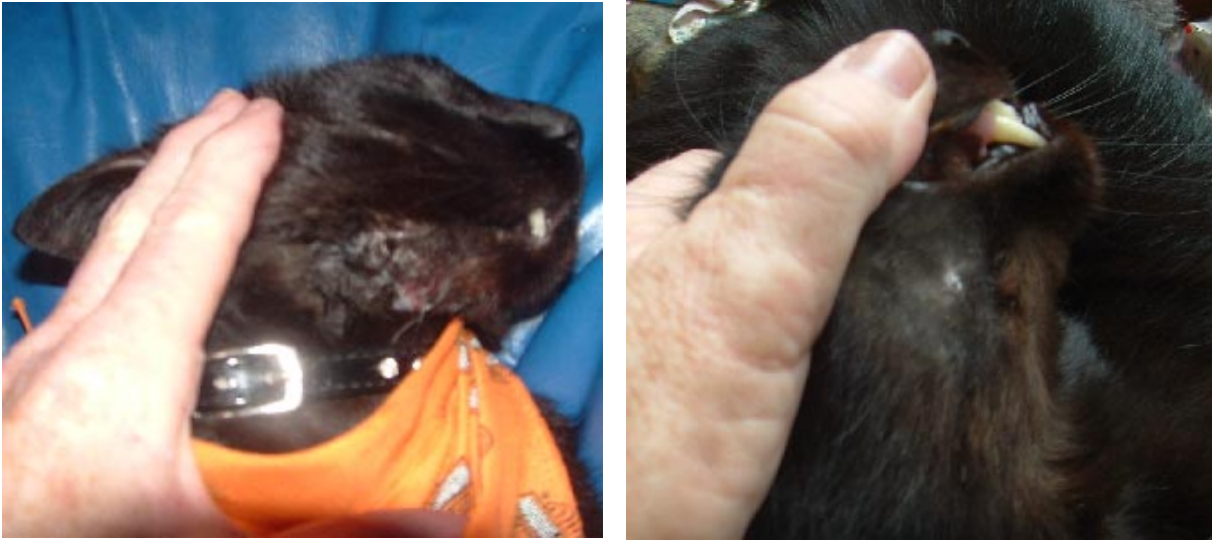
In late August the vet recommended re-culturing the area that wouldn't heal in case the staph had changed resistances. He had to go off all antibiotics before the culture. Immediately after the culture was done I started him on the **StaphWash**. I used it as a topical cleanser every for hours for the first two days and then 2-3 times a day.

The foot healed totally in 4-5 days after I began using **StaphWash** to clean the lesion.

Several weeks later he developed a huge abscess, approx. 2 inches x 1 1/2 inches, on his jaw. After draining the abscess he was again treated with the **StaphWash**; and within 10 days that huge abscess was healed. The amazing thing about the healing process is that the abscess never did re-fill as I usually see them do. It did continue to drain for 4-5 days but never did require lancing again. That is amazing. (He was given a round of Primor but not until after the abscess was almost healed.)

The **StaphWash** accomplished in days what 3 vets, 4 antibiotics and 2 sets of lab work couldn't accomplish over a period of 4+ months! It gave Pet #1 back his life!!

Below is the photo of the lesion on the jaw BEFORE **StaphWash** treatment (left photo). The photo on the right shows the skin lesion AFTER **StaphWash** treatment.



He is back at school!! Healthier and happier than he has been since early May!! I sent out an all-school email that he is here today and 3 teachers brought their classes to see him. All secondary kids -- who sometimes get more excited about him than the younger kids.

The picture is my seventh grade boys - who have grown up with this pet cat.



## **Pet #2 was healed using StaphWash**

I treated Pet #2, who had developed a huge abscess on his forehead in June, 2007. He had been given Naxcel all summer. I treated him on the same schedule as Pet #1 and now Pet #2 (right photo) is completely cured.



**Left photo:** Pet #2, showing lesion on forehead before StaphWash treatment began.

**Right photo:** Same pet, showing healing and hair regrowth 10 days after StaphWash treatment began (photo taken Monday, October 1, 2007).

## **Pet #3 was healed using StaphWash**

Pet #3 had recurring abscesses on her forehead for several years but had been completely healthy for the last couple of years, until last spring. She developed another slightly oozing sore on her forehead but never a full-blown abscess. She was cultured on September 14, 2007. I began using **StaphWash** to clean the lesion on Sept. 15th on a schedule of every four hours for the first day. As of Sept 28th, all that is left is a scab - no draining at all. Her lab work showed that she had a staph infection, but not MRSA.

Photos below are BEFORE (left) **StaphWash** treatment and AFTER (right) **StaphWash** was used as a skin cleanser to kill the bacteria.



Her lab work showed that the staph bacteria from the skin lesion was resistant to Clindamycin and susceptible to Chloro. I firmly believe that what has healed her wound is the **StaphWash**.

Susan L <pipercatmom@yahoo.com>  
[Note: on October 1, 2007  
Susan gave her permission for  
this report to be used publicly.]

## Phyllis Ferris, Florida

Phyllis has purchased two products -- Staphwash for Pet Owners and also the standard StaphWash product, StaphWash for MRSA and Staph Infections.



On September 27, 2007, I received this email from her:

*Thursday, September 27, 2007 10:08 AM*

*I believe StaphWash will work well on any skin injury.*

*I put it on myself after my cat bit me when I was playing with him. It was not a vicious bite, just a playful thing but it left a bit of a gash. The next morning it had healed a lot and the following morning it was gone. No scar and sign it happened. Compared to other things, it does its job fast.*

*PhyllisFerris@aol.com*



# Dog cured using StaphWash

*Edith Surrett, pet owner*

## Hole in dog's throat was healed using StaphWash

Edith Surrett's 12-year-old dog, Suger, is a miniature black Pomeranian, also known as a Tiny Toy Pomeranian. Her pet developed holes in the skin covering her neck and throat, as shown in the photograph below.



The condition was grave. Portions of the neck bone (skeleton) could be seen through the opening leading to the deep lesion. The condition was suspected to be MRSA, a flesh-eating bacteria. The dog's owner said, "This was a deep hole. You could put your thumb in it. I thought she was dying."

The dog was seen by a vet, who prescribed antibiotics and suggested that the pet be put to rest because there was no known cure for an animal in such an advanced stage of bacterial infection.

Edith would not give up, and decided to try StaphWash as an experimental treatment for the pet. Edith began using StaphWash on the lesions and noted a remarkable improvement almost immediately. She said "I noticed a definite improvement in only 24 hours after the first StaphWash application."

**The lesions were completely healed after 5 days of StaphWash use!**

## Hair growth resulted from the use of StaphWash

Fourteen days after the neck and throat lesions healed, Edith noticed that the area was not only healed, but that hair had begun to grow on the scar-tissue area where the StaphWash had been applied. This area, showing both the healed lesions and the hair regrowth is shown below.



The regrowth of hair over a scar-tissue area was a welcome surprise.

The throat/neck area had previously had good hair coverage, but other parts of the dog's body had lost hair due to unknown causes, perhaps allergies. Pomeranian owners have been searching for a solution to hair loss for years, because it is a common malady which often is seen in this breed. The condition is so common that it has been given a name -- Black Skin Disease.

*On 11/19/2007, Edith Surrent, pet owner, gave her permission for this report to be used publicly. Questions can be directed to Edith by email at [esurrent@lonokebroadband.net](mailto:esurrent@lonokebroadband.net)*

## Hair regrowth demonstrated using a safe non-medical topical skin cleanser

**A definite cause and effect has been established** to show that StaphWash topical cleansing results in hair regrowth. On the dog's rump, when cleansing was done regularly, hair growth resulted; and when the cleansing was suspended, some hair loss resulted.

**Sustained cleansing is best.** The results of this field test suggest that regular (perhaps every two to three days) cleansing with StaphWash is probably required to sustain hair growth.

When the American Pomeranian Club formed a Health and Genetics Committee several years ago, the committee was given "the alopecia problem" as its primary charge. Not that it is the only concern, but APC felt it was the most troublesome problem peculiar to this breed.

According to the APC, 'We have chosen to officially use "Severe Hair Loss Syndrome" as its nomenclature since we don't know how many similar conditions with various causes there might be and we didn't want it to be confused with conditions other breeds call "black skin disease," such as that found in dachshunds.' ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

We had to establish an attitude change among our breeders. Following Dr. Carmen Battaglia's advice, we offered this doctrine: Once a problem is noted generally throughout the breed, it is pointless to look backward to find "a culprit" and finger point. One must go forward and breed out the problem. Have the conviction that whatever humans have bred into a Breed has the capability of being bred out of that Breed. ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

The American Kennel Club - Canine Health Foundation put together a grant offer combining several Nordic breeds which seem to display this problem similarly. This combined funding is going to Dr. Gary Johnson at University of Missouri for DNA research. Dr. Johnson is a leading DNA researcher who also is a dog fancier himself. He has established DNA breakthroughs in other breeds. He is also conducting

research on epilepsy. He is particular suspicious that the Severe Hair Loss Syndrome might be located on the X chromosome. The Canine Health Foundation matches a percentage of funds donated through the breeds' Parent Clubs. (The American Pomeranian Club is a Parent Club of the AKC.) ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

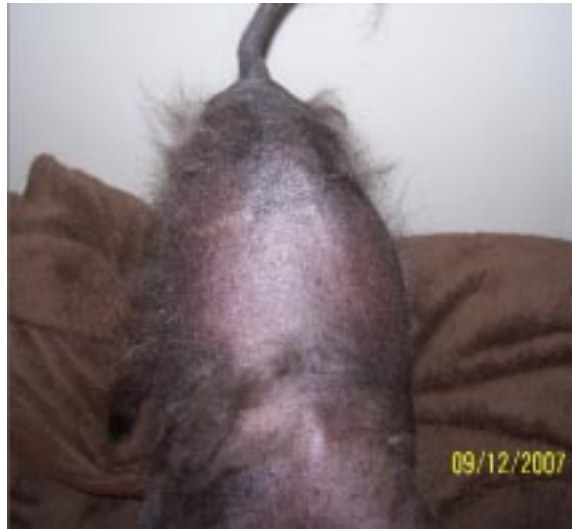
Finding a DNA marker would enable the breeders to conquer this problem. However, it is not the whole solution. The University of Missouri is the "DNA specialist". We also need answers about morphology and clinical treatment. Recently, APC has heard that Dr. Linda Frank is interested in addressing these concerns at the University of Tennessee. ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

How can breeders personally help? The study at the University of Missouri needs Pomeranian blood samples for DNA purposes. Liz Hansen is the project coordinator at the University of Missouri . Since we still have not established whether Pom alopecia has one or more causes, she has also put together a survey which is easy to fill out. Forms and instructions for either the survey or blood samples can be downloaded from their website [www.CanineGeneticDiseases.net](http://www.CanineGeneticDiseases.net). They need DNA samples from both affected and unaffected dogs, but related samples of three generations are especially needed. ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

Liz Hansen can be contacted at [HansenL@missouri.edu](mailto:HansenL@missouri.edu) or by calling 573-884-3712. She suggested sending in blood samples the same time that blood is drawn for heart worm testing. Instead of blood, they could also use tissue samples taken at time of any needed surgery such as spay or neutering. One advantage of participating in the study is that they would not charge for DNA testing of that individual once a test is established. The commercial rights to this test is their incentive for the research. But think of it this way, they must be committed to the possibility that they can establish this test. That is positive for our mutual purpose. ( Ref: <http://www.pcoc.net/black-skin-disease.htm> )

### **Black Skin Disease in the Pomeranian breed may be due to a bacterial skin infection**

When Edith noticed the regrowth of hair in the scar-tissue area which had been treated with StaphWash, she decided to try an experiment. Her pet had a severe hair loss on the back and rump, and the hair loss had sustained for more than 18 months. The hair loss areas on the back and rump are shown in the photo below.



Edith selected the area of skin on a portion of the rump for the test. She sprayed StaphWash on this area each morning and again in the evening. After three weeks, a noticeable improvement was observed in the hair growth in the area treated with StaphWash, and no improvement was observed in the area NOT treated with StaphWash.



After experiencing such **remarkable success** with hair regrowth using StaphWash on the dog's rump, the owner decided to use Strivector, a product similar to

Staphwash, on the dog's back. She applied it between the neck and the rump and the results are shown below:



Again, **amazing results** were obtained. A comparison of the photos shows the regrowth of hair on the dog's back. During this time (about a month), the cleansing was applied ONLY to the dog's back, and nowhere else. The rump area was not cleansed during this time.

Note that some hair loss resulted from the rump area, presumably because Strivector was not used as a sustained (daily) cleanser during the time her back was being cleansed on a daily basis. This area (dog's rump) had previously shown a strong hair growth (see the photo on the previous page) after treatment with StaphWash. This result suggests that regular (perhaps every two to three days) cleansing is probably required to sustain hair growth.

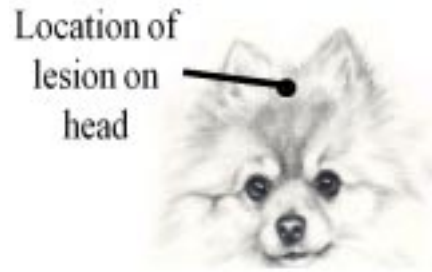
## Summary and Conclusions

Preliminary conclusions drawn from this field test are that:

1. **Severe Hair Loss Syndrome (aka Black Skin Disease) might be due in part to a bacterial infection on the skin.** This conclusion is based on the knowledge that StaphWash is an anti-bacterial skin cleanser. StaphWash does not affect the DNA of the animal, leading to a tentative thought that Severe Hair Loss Syndrome may not be due to defects located on the X chromosome, as previously thought. This tentative conclusion must be verified by similar use of StaphWash on other animals.
2. **A definite cause and effect has been established** to show that StaphWash topical cleansing results in hair regrowth. On the dog's rump, when cleansing was done regularly, hair growth resulted; and when the cleansing was suspended, some hair loss resulted.
3. **The mechanism of action is anti-bacterial in nature.** StaphWash and Strivector both are effective. Both products have been successful in growing hair. This suggests that the mechanism of action is anti-bacterial in nature, and not some special chemical effect not related to bacteria control. The two products have different chemistry, but both are strong anti-bacterial agents which have no known side effects when applied topically to skin.
4. **Sustained cleansing is best.** The results of this field test suggest that regular (perhaps every two to three days) cleansing with StaphWash and/or Strivector is probably required to sustain hair growth.
5. **The use of StaphWash and/or Strivector on other animals can be carried out quickly and easily** because these products have no known negative side effects and overdose is not a problem. No blood tests are needed and no DNA evaluation is needed.

## Another lesion healed successfully and hair regrowth demonstrated using a safe non-medical topical skin cleanser

A second lesion developed on Edith Surret's 12-year-old dog, Sugar. The dog is a miniature black Pomeranian, also known as a Tiny Toy Pomeranian. Her pet developed a lesion on her head, as shown in the photograph below.



The lesion is shown in the above photograph, on 10/18/2007, before cleansing with StaphWash. The cleansing procedure used was the same as recommended for human use for this anti-bacterial product.

After three days of StaphWash cleansing, this lesion was clearly on the way to recovery and healing.

The photograph below shows the lesion on Day 4 of StaphWash cleansing. The photograph shows a

healthy scab, and no evidence of an open wound.



Three weeks after the beginning of StaphWash treatment, the lesion was completely healed, as shown in the photograph below.

Hair had grown over the spot where the lesion, and the scab, had been. This is the fourth location, on the same dog, where hair growth (and regrowth) was achieved using either StaphWash or Strivector anti-bacterial skin cleansers.



Edith's pet, Suger, is shown below. Somehow, she seems happy to be free of her skin lesions and she is happy with her new hair growth.

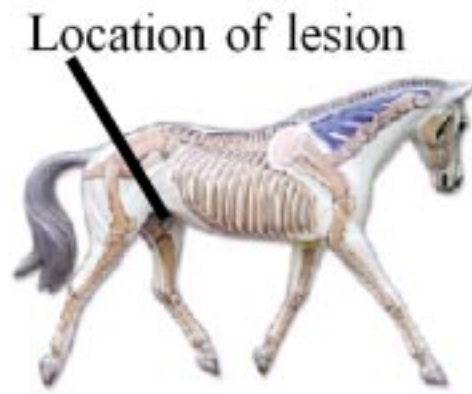


*On 11/19/2007, Edith Surrett, pet owner, gave her permission for this report to be used publicly. Questions can be directed to Edith by email at [esurrett@lonokebroadband.net](mailto:esurrett@lonokebroadband.net)*

## Penis sheath successfully treated with StaphWash

*Healed in only 5 days*

Barney is a miniature horse at Fox Lake Ranch in Florida. Barney had a lesion on his head, below the right eye; and another lesion on the sheath covering the penis. The location of the lesion is shown below.



**Day 0, before StaphWash was used**

The lesion is seen to be raw, red in color, and inflamed. According to the owner, Gloria, “the vet treated him for two weeks without results.” Because Barney’s lesion appeared to be getting progressively worse, the decision was made to treat the lesion with StaphWash.

**Day 0 -- November 1, 2007** -- The lesion was weeping and had the red color of inflamed tissue before StaphWash was used. StaphWash was applied once daily by dropping 9 drops directly on the lesion.

**Day 1 -- November 2, 2007** -- One day after Barney's first treatment using StaphWash, the following report was received: "The folks at Fox Lake Ranch are very excited this morning. StaphWash has made a dramatic improvement in Barney's condition. Today, the lesion is dry and pink."



**Day 2 -- November 3, 2007** -- On the second day after StaphWash treatment began, Jerry reported that "there was no redness remaining, and the lesion continued to heal." The photo below shows this improvement.



**Day 5 -- November 6, 2007** -- The photo below was taken on Day 5 after the first use of StaphWash.



This photo was taken by Ken, who reported that “This area is all healed. There is no redness where it was before.” With this report, we concluded this portion of the field test with a successful result.

*On November 6, 2007, Barney’s owner gave permission for this field test result to be used publicly, for the purpose of helping animal owners provide more effective care for livestock and pets. For additional information, contact [PhyllisFerris@aol.com](mailto:PhyllisFerris@aol.com)*

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## **StaphWash use was successful for Barney the horse**

Barney is a miniature horse at Fox Lake Ranch in Florida. Barney had a lesion on his head, below the right eye.



### **Day 0, before Staphwash was used**

According to the owner, Gloria, “Dr. Brad Newman, Cocoa, treated him for two weeks. A yellow anti-bacterial DMSO-based salve was used, but the condition of the lesion did not improve. Worse yet, Barney tended to rub it against posts in his stall, adding some injury to the lesion.

“We used a product called SWAT to keep the flies out of the lesion, and we also used a fly mask.

Gloria said, “Because Barney’s lesion appeared to be getting progressively worse, the decision was made to suspend the use of all other treatments and treat the lesion with StaphWash. We began the new treatment by applying StaphWash 2 times each day. We used only StaphWash for the first 5 days, and then began alternating applications of StaphWash and the yellow salve.”

The following sequence of events describes the results when StaphWash was used on Barney's lesion.

**Day 0 -- November 1, 2007** -- The lesion was weeping and had the red color of inflamed tissue before StaphWash was used. Staphwash was applied once daily by dropping 9 drops directly on the lesion.

**Day 1 -- November 2, 2007** -- One day after Barney's first treatment using StaphWash, the following report was received: "The folks at Fox Lake Ranch are very excited this morning. Staphwash has made a dramatic improvement in Barney's condition. Today, the lesion is dry and pink."



### **Day 1, 24 hours after the first use of Staphwash**

Photographs of Barney were taken to ensure the documentation of progress. The reason for this careful documentation is that when the vet learned of the rapid improvement in Barney's condition, the distributor for StaphWash, Phyllis Ferris, was invited to present information to a future meeting of vet-medicine professionals.

**Day 2 -- November 3, 2007** -- The following report was received: "I heard from Gloria this morning. Barney is doing great. He's looking better every day."

Gloria put the StaphWash on today because Jerry had to be in Kissimmee. Gloria let Barney go out in the pasture yesterday for the first time in two weeks. She put a cover on his face so he would not harm the lesion. She said StaphWash got rid of the itching, and he is no longer trying to rub his face against things.”

**Day 3 -- November 4, 2007** -- The following report was received from Jerry: “Barney has been frolicking in the pasture today as opposed to dragging around before treatment with Staphwash. The lesion is dry, with a scab, and hair is beginning to grow over the lesion.” Jerry (Jerod Moye) is the son of Barney’s owner, Ms. Gloria Moye.

**Day 22 -- November 23, 2007** -- HEALED! On Day 22, photograph on the right shows complete healing of the lesion. The rusty color is the color of the skin; not an inflamed region. There is no inflammation; the skin is healed and dry. There is no weeping and no there is no swelling.



*On November 26, 2007, Carla Moye gave permission for this report to be used publicly.*

## Section 3

# StaphWash Field Trial Results

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This documentation is for use during the evaluation of a new product

## Physician's review of StaphWash examples

Field test results reported in this document, and other relevant information was reviewed by a physician having an interest in the use of StaphWash.

The following are edited examples which were provided by the physician in summary format.

The examples below were reviewed and summarized by Dr. C.

This section is not restricted to Vet Med applications. Some of these examples are for applications in which StaphWash was used on humans. A full field test report on the use of StaphWash for humans is available online at [www.PhillipsCompany.4t.com/FieldTest.pdf](http://www.PhillipsCompany.4t.com/FieldTest.pdf)

## Example 1

Testing was conducted at a pathology laboratory certified for microbiology testing by a physician and a microbiologist. A double blind, randomized controlled experiment was conducted to evaluate the surfactant compounds against bacteria in Petri dishes.

**Bacterial strain:** Two well characterized strains of methicillin-sensitive *Staphylococcus aureus* (MSSA) and methicillin-resistant *Staphylococcus aureus* (MRSA) were used. Specifically, experiments used ATCC 29213 (MSSA) and ATCC 43330 (MRSA), both beta-lactamase positive strains, which represent greater than 90% of the respective strains in the American population.

**Petri dish preparation:** A sterile cotton swab (American Scientific Products, McGraw Park, IL) was dipped into the cultures and used to swab the entire surface of 150 X 15 mm Petri dishes containing 75 ml of standard Mueller-Hinton agar. Two Petri dishes were inoculated with ATCC 29213 (MSSA) and two Petri dishes with ATCC 43330 (MRSA). One Petri dish of each group (MSSA and MRSA) was set aside as the controls. The other two Petri dishes (MSSA and MRSA) were divided up in quadrants, and each quadrant was labeled B, C, D or E.

StaphWash is usually prepared with a surfactant concentration of 2% to 4%. To evaluate a wider range of surfactant concentrations, cleanser compositions were prepared as follows: A surfactant solution and a stock solution were mixed in various ratios to produce four skin cleanser solutions having four different surfactant concentrations of 0.5%, 1%, 2% and 8%, by volume. The amount of other ingredients in each of the four skin cleanser solutions was less than 1% concentration by volume.

**Cleanser Testing:** Four samples of the cleanser with the four different concentrations of the surfactant (0.5%, 1%, 2% and 8%) were placed into four separate, unmarked bottles. Each bottle was randomly labeled (B, C, D, or E), and the microbiologist conducting the study was unaware of any difference between the solutions.

**Application:** Holding each bottle vertically, the microbiologist added a single drop from each bottle (B, C, D, or E) to the corresponding quadrant of the labeled Petri dish. All four Petri dishes were placed in an incubator overnight at 37 degrees Celsius, and examined 20 hours later. Petri dishes were compared to the corresponding controls, and zones of inhibition were characterized by the largest point of diameter of the circle or oval.

**Results:** The solution with the lowest surfactant concentration, 0.5%, showed no difference between the controls, while the 1% and 2% concentrations inhibited approximately 50% of the colony forming units (CFUs). The 8% concentration

showed clear inhibition of the bacteria in a large circle of approximately 40 mm in diameter.

### Example 2

The same protocol as described in Example 1 above was used to test various concentrations of the surfactant compound against the MRSA strains and revealed a clear trend, with higher concentrations of the surfactant causing larger zones of inhibition [range from zero (control) to 42.3 mm (14.80% concentration)]. Inhibition zone diameters shown in the table below were averaged over three repeated experiments.

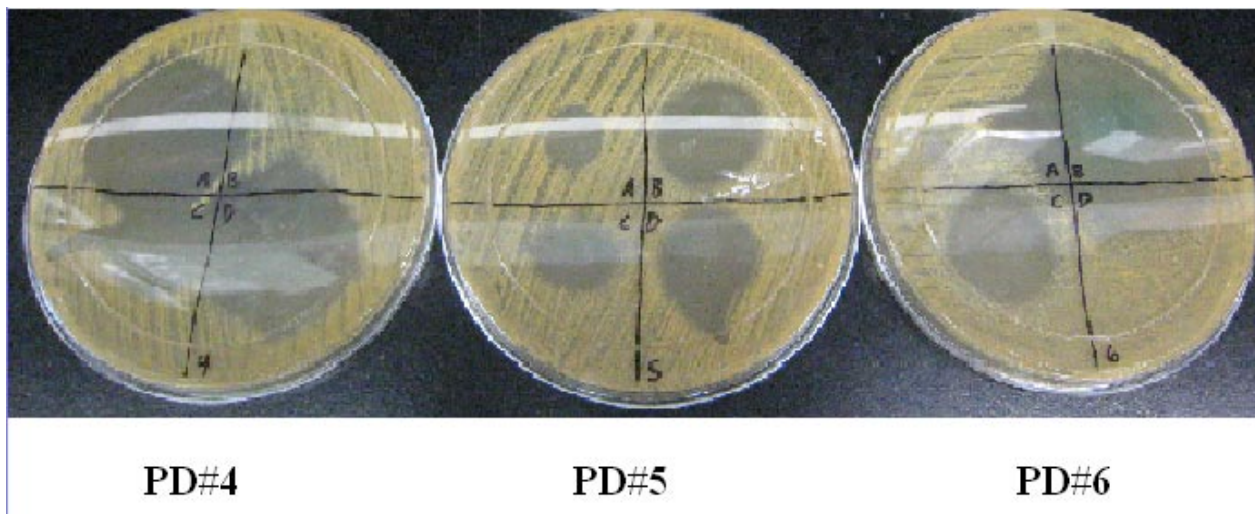
<b>Diameter of Zone of Inhibition (mm)</b>	<b>Surfactant conc. (vol. %)</b>
42.3	14.80%
41.7	4.90%
39.3	4.00%
39	6.50%
37.3	3.30%
35.3	2.30%
34	9.30%
33.7	2.50%
32.7	2.80%
No Change	1.00%
No Change	0.00%

### Example 3

Four cleanser compositions were prepared and tested in the manner described in Example 1, except that each cleanser contained a different surfactant. Four control compositions containing only the surfactants were also prepared and tested in a similar manner.

All four cleansers evaluated in this example showed definite effectiveness as anti-bacterial and anti-septic agents. Each of the four surfactants proved effective when mixed with water only and still greater efficacy in the presence of chlorine.

A 5% solution of surfactant in the stock solution (containing chlorine) was as effective as a 10% concentration of the surfactant in water (a solution lacking chlorine).



The Petri dish on the left (PD#4) shows a zone of inhibition that covers most of the upper left quadrant (quadrant A). In this zone of inhibition, the culture count was ZERO after a 1-vertical-drop of the sample solution was applied to the center of the quadrant. The active ingredient in this solution (for PD#4-A) was the same as the primary active ingredient in Staphwash. The solution used (PD#4-A) was water with a 10% concentration of the primary active ingredient, Surfactant #4.

#### Example 4

Addition of 5% dye by volume to a solution containing surfactant and chlorine dramatically improved the effectiveness of the cleanser as an anti-bacterial agent. The zone of inhibition increased 66% (from 62 mm to 80 mm diameter) when 5% (by volume) ionic dye was added. This is shown in the photograph (PD#6-B).

#### Example 5

Action against Gram-positive bacteria such as *Enterococcus*: A 68-year-old man with long history of diabetes was admitted from his hospice care home to an acute care facility hospital secondary to an infected decubitus ulcer (bedsore). This patient's sacral ulcer tested positive from culture swab for *Enterococcus*, a common Gram-positive bacterium for infecting bedsores. Immediately upon admission, the patient was placed on antibiotics (ciprofloxacin). Over the next five days, the 4 cm open, oozing ulcer with erythematous margins and discharging pus showed signs of worsening. On day five, the treating physician directly cultured the wound again with two cotton swabs. Cotton swab #1, the control, was placed directly in the sealed

container based on hospital protocol. Cotton swab #2 was placed into the sealed container, with one single vertical drop of StaphWash cleanser solution. Both swabs were sent to the lab and a count of colony-forming units (CFUs) was ordered. Forty-eight hours later, the culture of cotton swab #1 (the control) exhibited 22 CFUs, while the culture of cotton swab #2 had only two CFUs.

Moreover, the patient's ulcer showed marked improvement within 24 hours of the first application of StaphWash. There was sufficient resolution (decreased erythema, lower induration, skin color improvement from red to pink, and decrease pus discharge) of the ulcer over the next four days for the patient to leave the hospital.

### **Example 6**

Action against *Mycobacteria*: A 39-year-old female with four month long history of an infection on the posterior aspect of her right ring finger was treated. The infected areas were culture positive for mycobacteria marinum, with symptoms of infection resulting in a 4 cm long patchy zone of erythema, induration, and oozing from the wound. After failing two full courses of oral antibiotics, over the previous four months, the patient was given a third round of antibiotics, this time Clarythromycin, after her finger's condition had worsened. After eleven days of antibiotics and no change in symptoms, the patient applied two drops of StaphWash into the wound three times per day where a 5 mm biopsy had broken the skin, and applied gentle abrasion as directed. Within 24 hours of the first application, the wound showed marked improvement in the overall signs of infection. Within 72 hours, the area of the open skin lesions had a continued decrease in induration, erythema and signs of infection. The patient's symptoms ultimately improved with the combination of antibiotics and StaphWash.

### **Example 7**

Goat and other farm animals are very susceptible to infections. Often, if a bad infection occurs, the animal will be separated and sacrificed. A goat (with an ophthalmic infection resulting in large greenish discharge from both eyes for three weeks) was treated with StaphWash. The cleanser was squirted into the eyes of the goat for two days. Within 24 hours, the goat's eye infections had improved, and the goat was able to see out of one of the eyes. The treatment was continued for five days resulting in the full resolution of the goat's symptoms.

### **Example 8**

Five patients with confirmed MRSA positive infections by their doctors were treated with StaphWash by direct topical application on the surface of their skin and open lesions. Within 24 hours, three of the patients improved such that their areas of skin erythema, induration and open lesions appeared more normal. All five patient's infected area showed complete resolution of his or her acute symptoms within five days of starting the treatment.

### **Example 9**

A patient with a 12 month history of culture positive MRSA returned from a hunting trip with a dozen skin lesions on his skin from his hips to axillary region. The patient was started on oral and topical sulfamethoxazole and trimethoprim combination antibiotics, with no change in symptoms. On day 6 of the antibiotics, patient applied StaphWash on the skin of three of the 12 lesions, and experienced marked improvement over the first 24 hours and by the fourth day patients three lesions had returned to a healthy pink color. He then applied StaphWash to all twelve lesions, and after seven days of subsequent cleanser treatment, combined with the continuation of his antibiotic regiment, showed all the lesions dried up with a healthy fleshy skin toned appearance.

### **Example 10**

A 35 year old male patient was diagnosed by a physician with MRSA skin infection, with two active 1 cm and 4 cm skin lesions. The patient applied StaphWash on the small 1 cm lesion three times per day with concomitant application of gentle abrasion while leaving the larger lesion alone as the control. Within one day, the smaller lesion had dried and patient reported in the appearance and feel of the infection under the skin as well, reporting less inflammation. After ten days the smaller lesion had turned a healthy flesh toned color with no scab or other remnant, and complete resolution. On day five, the patient began using the cleanser on the larger lesion, and this larger lesion, which had been unchanged compared to the healing of the small lesion, showed immediate improvement after the application of StaphWash, with similar course of action as the smaller lesion.

###

Product	Unit Product Number	Unit Size
StaphWash for Staph 3 mL	30113	3 mL



**StaphWash™**  
 Formulated to cleanse VRE; MRSA  
 and other Staph bacteria from skin  
**Keep your skin healthy!**  
 Consistently kills 100% of bacteria  
 that cause Staph infections  
 in controlled in-vitro testing.

**+** Alcohol free. Patent pending. **+**  
 "Take it to the people"

**100% guaranteed when used as directed.**



**BENEFIT:** StaphWash™ contains a cleanser for use on skin. It is specifically formulated to remove MRSA and staph bacteria.

**DIRECTIONS FOR USE:** Use the product in this bottle on **only ONE lesion**. Use this product as a cleanser by gently rubbing one or two drops on skin with a clean Q-tip. Repeat process every 4 hours for the first 24 hours. For the next 6 days, repeat the cleansing process after each shower and 3 times per day. This bottle contains 3 mL (60 drops) — more than enough to treat **one skin location** for 7 days.

**MECHANISMS OF ACTION:** (1) Contains a skin cleanser. (2) Contains chlorine and other oxidizing agents for bacteria control. (3) Contains an anti-bacterial surfactant to wash away dirt and oil films which can harbor bacteria. (4) Formulated to slightly dry the skin. (5) Uses gentle abrasion to achieve more-effective cleansing action.

**INGREDIENTS:** Water, sodium hypochlorite (antiseptic cleanser), surface reactive agents (oil and dirt cleanser), trace amounts of calcium carbonate, sodium carbonate and silicon dioxide (gentle abrasion), and a proprietary blend for color. Contains no alcohol. Contains no animal products.

**CAUTION:** For external use only on skin. Keep out of reach of children. Eye irritant. Do not swallow or inhale. Ask a physician before use if you have unusual allergies to any ingredients listed above. When using this product, in the event of unexpected side effects, discontinue use, cleanse the area with water and see a physician. No harmful effects are known to result when used as recommended.

**NETWEIGHT:** Approximately 3 gm. **NETVOLUME:** Approximately 3 mL.