

# WHAT DAMAGED HAIR LOOKS LIKE

IT'S EASY TO SPOT DAMAGED HAIR—IT'S ROUGH AT THE ENDS, FRIZZY AND SPLIT. IT ALSO FEELS DRY AND LACKS SHINE. IN ORDER TO MINIMIZE THE AMOUNT OF DAMAGE THAT YOUR HAIR INCURS, IT'S IMPORTANT TO UNDERSTAND WHY IT HAPPENS IN THE FIRST PLACE.

## WHAT'S HAPPENING

Any time that hair is exposed to a damaging element, the cuticle becomes desensitized. As the cuticle wears down and the cells roughen and flake up, the cuticle starts to break off, leaving the cortex (the soft inner part of the strand) with no means of protection—it slowly breaks down, too, becoming dry and dull. “Now, the cortex is exposed to everything damaging like water, chemicals and physical aggression,” says celebrity hairstylist Kevin Mancuso. “Once the cortex is out in the open and the bundles of microfibrils are compromised, hair starts to split and break.” Splitting and breaking typically happens at the bottom of the hair where the hair is older. “This causes a change in the structure of the shaft that weakens the hair or causes it to become dry, brittle, knotted or frizzy,” says Dr. Ziering. Damage can show its effects as soon as directly after a double process color, or it can take months to surface.

### INSIDE tip

According to Beverly Hills, CA, dermatologist Jennifer Ahdout, MD, eating healthy fats helps hair to retain moisture, so it's less likely to become dry and break.

## CHEMICAL VS. PHYSICAL DAMAGE

Hair can become damaged in one of two ways: either chemically or physically.

- ▶ **Chemical damage:** Coloring (any type), bleach, perms, relaxers, and straightening and keratin treatments all break the natural structure of the hair, leaving it damaged. “Damage occurs every time a process is done, even when it's performed by the highest level salon professional,” says Mancuso.
- ▶ **Physical damage:** Caused by excessive and aggressive brushing, back-combing and styling that strips away the cuticle. Hot tools cause physical damage, too.

*“A split end is like a wishbone that tears more as you go up the hair. It is a lever for the hair to break even further up the shaft.”*

— DR. AHDOUT

## WHY SPLIT ENDS FORM

A common sign of damaged hair is split ends. “Split ends are like a zipper ‘unzipping,’” says Living Proof chief commercialization officer Eric Spengler. “They occur because the protective outer coating has been damaged. And, the inner cortex starts to unravel.” Neglecting to cut your hair regularly can lead to split ends since the bottom part of the strand is narrow and prone to naturally splitting. “Split ends can be mended, or treated, but the effects are only temporary. The only way to really eliminate them is to cut them off with a good haircut.”

## PAY ATTENTION TO YOUR SCALP

Your scalp has a direct influence on the health of your hair and, even though damage can stem from a multitude of things other than your scalp, if your scalp isn't healthy your hair won't grow healthy. “The scalp is where hair grows. Beneath the scalp's surface is where the follicle (the only living part of hair) gets its blood supply and nourishment for a long and healthy growing cycle,” Mancuso explains. A proper diet, with enough iron, vitamin D, zinc, biotin, calcium and protein, rest and stress reduction are all important for great hair.

BEFORE



AFTER



The Inphenom by Mibon treatment helped repair damage and seal color. Makeover by Kazumi Morton for Jonathan & George Salon, Beverly Hills, CA.

## STRAND STRENGTHENER

Dr. Dennis Gross is known for his ability to transform the skin and now he's doing it for the scalp. The **Root Resilience Nourishing Scalp Conditioner** works to seriously hydrate and nourish both the scalp and hair by delivering a dose of anti-agers to the hair follicle and sealing them in with a vitamin C-infused “shield.” \$38, [sephora.com](http://sephora.com)



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## CUT OR TREAT?

It's always easier to prevent damage before it occurs than treating it once it exists. A good haircut is a surefire way to rid your hair of damaged ends, but the right treatments can help, too.

- ▶ **Cut your hair if...** The cuticle is severely damaged and past the point of any repair. Extreme split ends need to be cut to permanently rectify the problem.
- ▶ **Treat your hair if...** It is brittle and dry. "One of the best treatments for severely damaged hair is Nexxus Emergencée Restorative Strength Conditioning Treatment because it reduces damage before and between chemical processes," says Mancuso. \$15, [nexxus.com](http://nexxus.com)

## WHY YOU NEED A GOOD CONDITIONER

The best weapon in the fight against damage is a good conditioner that's packed with hair helpers like protein, panthenol, shea butter, glycerin, dimethicone and fatty alcohols as well as coconut, olive, avocado, sunflower, jojoba, sweet almond and argan oils. Conditioner helps reinforce the cortex with moisture and allows it to be retained, so that the cuticle can stay intact. "When hair is damaged, holes form, which can be filled in with a deep conditioner," says celebrity colorist Kyle White. A lack of moisture also reduces the amount of hydrogen bonds in the hair causing a roughing of the cuticle, tangling, an increased static charge and difficulty styling.

### REVERSE DAMAGE

Light enough that it won't weigh down hair, but powerful enough to nourish dry, damaged hair, **Kérastase Lait Vital Irisome** restructures areas of the hair that are negatively charged, which is where most damage lives. \$42, [kerastase-usa.com](http://kerastase-usa.com)



# STOP THE CYCLE OF HAIR DAMAGE

DAMAGED HAIR AFFECTS MILLIONS OF WOMEN. A LIVING PROOF STUDY REVEALED THAT 60 PERCENT OF CONSUMERS INDICATED THAT THEY WERE CONCERNED ABOUT HAIR DAMAGE. WHILE MANY FACTORS CAN CAUSE YOUR HAIR TO BREAK AND BECOME LESS THAN IDEAL, SCALING BACK ON EXPOSURE TO DAMAGERS CAN MAKE ALL THE DIFFERENCE.

### DID YOU KNOW?

Cunnane Phillips says that the last one to two minutes of blow-drying is when the most damage is caused because the hair is closest to the dryer at this point.



## THREE EASY WAYS TO DEFEND AGAINST HAIR DAMAGE

TO DECREASE THE POTENTIAL FOR DAMAGE, FOLLOW THESE EASY-TO-DO TIPS.

1

### DON'T BRUSH YOUR HAIR WHEN IT IS WET

Sopping wet hair is more prone to breakage because the hair is more elastic and easily tangles. Use a wide-tooth comb to detangle wet hair instead of a regular brush.

2

### DON'T AGGRESSIVELY TOWEL DRY YOUR HAIR

When was the last time you saw your stylist forcefully rub your hair with a towel to remove water? Probably never. That's because, "Towel drying knots the hair and having to get the tangles out is what can damage it," says celebrity stylist Kerry Warn of John Frieda Salons.

3

### DEEP CONDITION REGULARLY

"Scalp masks as well as deep treatments are a simple way to add moisture and mitigate some of the inevitable damage from styling and normal wear and tear," says New York trichologist Elizabeth Cunnane Phillips of Philip Kingsley.

### TRADITIONAL CONDITIONER VERSUS DRY CONDITIONER: WHICH IS BETTER?

Based on the popularity of dry shampoos, dry conditioner is one of the newest hair innovations that adds shine, softness, body and moisture when sprayed onto dry hair. So, is it better to replace your standard in-the-shower conditioner for this version or stick with the classic?

**USE REGULAR CONDITIONER:** "I like traditional conditioner," says Warn. "It makes hair easier to comb, therefore it's easier to manage."

**GO FOR THE SPRAY VERSION:** Mancuso says, "Dry conditioners freshen hair with dry silicones and oils. They add shine and softness with a coating that makes the hair feel good. It's a perfect way to revive thick, coarse, dry, damaged textures but they can be heavy on fine, thin hair."

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# WHAT'S REALLY CAUSING THE DAMAGE

IT'S A GIVEN THAT EXPOSING YOUR HAIR TO HARSH CHEMICALS AND TONS OF HEAT WILL BREAK DOWN THE INTEGRITY OF YOUR STRANDS AND DAMAGE THEM. KNOWING WHAT CAN WREAK HAVOC ON YOUR HAIR CAN MAKE A BIG DIFFERENCE IN HOW SEVERE THE DAMAGE (IF ANY) WILL BE.

## NEWBEAUTYLIVE™

Find out about the three habits that damage your hair and how to avoid them at [newbeauty.com/videos](http://newbeauty.com/videos)

### HARSH CHEMICALS

#### Why it's damaging

Anything that makes use of abrasive chemicals—think straighteners and perms—physically alters the shape and curl pattern of the cortex of the hair. "Extreme overprocessing can lead to a breakage at the skin's surface and entire areas of hair loss, which can sometimes be permanent," says Dr. Ziering.

### BLOW-DRYING, FLAT-IRONING AND CURLING

#### Why it's damaging

Heat-based styling tools emit high levels of heat (some go upward of 400 degrees) that force the hydrogen bonds in the hair to change, causing water to boil inside the hair. This results in moisture loss and dryness. If you use a heat tool on a daily basis, you're going to have a lot more damage than someone who uses one only once or twice a week. Heat is also known for lifting and breaking the hair's protective cuticle. "Applying heat for too long on the hair and pressing and pulling irons that are set at 475 degrees are extremely damaging to the hair," says Mancuso.

### BRUSHING TOO MUCH

#### Why it's damaging

The old wives' tale of brushing your hair 100 times a day doesn't really do much for your hair at all. Brushing creates friction in the strand that can fray the ends and cause them to unravel and split. Using a comb (a wide-tooth one as opposed to a metal one) is best. But, if you prefer a brush, opt for one that has natural bristles, which won't damage the hair and also stimulates the scalp. "Always start at the tips instead of the root of the hair and very slowly work your way up to the root," says Dr. Ahdout.

### PULLING YOUR HAIR BACK TOO TIGHT

#### Why it's damaging

Trendy braids and ponytails can look cute, and are easy to pull off. However, wearing your hair back on a regular basis and pulling it back too tight can cause permanent damage, like traction alopecia, which causes the hair to start to miniaturize and eventually stop growing. To limit damage, Saeki suggests using soft elastic ribbon hair bands instead of more traditional rubber bands.

#### DID YOU KNOW?

For women with fine, flat or slippery hair, Mancuso says that damage at a very low level may be desirable because it can make the hair more pliable and full.

#### INSIDE tip

Avoid alcohol-based hair products of all sorts, which will only dry out your hair. Anything that's gel-based is a better choice.

### WASHING TOO MUCH

#### Why it's damaging

Washing too often can strip much needed oil from the hair. The outer layer of hair has a natural lipid barrier that is secreted by the sebaceous glands in the scalp. Washing reduces the barrier and breaks down proteins, making the hair dry and dull. In fact, Saeki says that overwashing causes the scalp to produce an excess of sebum, which can lead to an oily scalp. If you can, try and go three days between shampoos.

### PREVENT + PROTECT

**Sally Hershberger Plump Up** provides hair with one of the highest levels of heat protection available. Natural marine collagen and pearl extracts leave strands feeling silky smooth but never greasy or weighed down. [\\$13, cvs.com](http://$13, cvs.com)



#### BEFORE



#### AFTER



A Cashmere Blowout smoothed away frizz with cashmere proteins for stronger, healthier strands. Makeover by George The Salon; Chicago, IL.

### BAD EXTENSIONS

#### Why it's damaging

Poorly fitted hair extensions can cause serious damage to the hair since they put tension and stress on the root of the hair. Warn says that adhering extensions to fragile hair and using too much glue can cause damage, too. "When they are removed incorrectly damage can be done."

### PERMANENT COLORING

#### Why it's damaging

All types of color can create damage. White explains that the ammonia (it opens the cuticle) and peroxide (causes the color molecules to swell into the cortex and keep them there) do the most harm. "Peroxide and ammonia aren't in vegetable dyes, semipermanent color and glosses, which is why they are more gentle." Bleach, which is used to lighten hair, creates holes and tears in an effort to deposit the color. "Bleach and high-lift blonds are most damaging because of the amount of ammonia and high-volume peroxide that are needed to go light. But, it really depends on the health of your hair, its texture, strength of the lightener and processing time that together cause damage," says White.

### THE SUN

#### Why it's damaging

Similar to how the sun breaks down healthy skin, it does the same to healthy hair. UV rays emitted from the sun wear down keratin in the hair, causing it to become weak, dry and thirsty for moisture. "The hair becomes lighter, drier and more brittle in the sun, which are all signs of damage," says Dr. Ahdout.

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