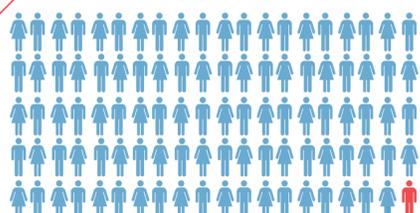


# ANTIBIOTIC RESISTANCE IN ACNE TREATMENTS



Widespread use of antibiotics across diseases has threatened our ability to treat even the most common infectious diseases, resulting in greater death and disability worldwide.



Each year  
**~2 million** people become infected with bacteria that are resistant to antibiotics  
at least  
**23,000** people die as a direct result of these infections.

While most people understand how the overuse of antibiotics to treat viral infections contributes to bacterial resistance, new data reveals that **people significantly underestimate the risks and potential consequences associated with antibiotic use for the treatment of acne**, particularly topical antibiotics, and they have low awareness of alternative options to antibiotics.

**64%**

were not aware that overuse of topical antibiotics can "make you a carrier of drug-resistant bacteria"



**more than half** of survey respondents had not spoken with their doctor about the **risk of antibiotic use to treat acne**

## Overprescribing of antibiotics in acne is a major contributor to antibiotic resistance

Over the past two years, approximately



**11.5 million**  
oral antibiotic prescriptions



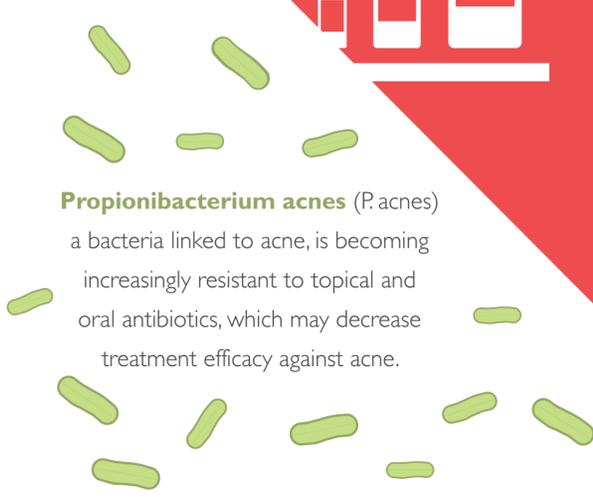
**6.9 million**  
topical antibiotic prescriptions

were dispensed for dermatology related issues, including acne.

In 2013, nearly **two-thirds** of antibiotic use in dermatology was for acne.

### Propionibacterium acnes (P. acnes)

a bacteria linked to acne, is becoming increasingly resistant to topical and oral antibiotics, which may decrease treatment efficacy against acne.



In children ages 3 to 18, frequent use of antibiotics contributed to **weight gain**, and the **contribution of antibiotics to weight gain increased with age**.

Not only does the use of topical and oral antibiotics to treat acne have the potential to impact antibiotic resistance, but also the overuse of antibiotics can increase the risk of developing **upper respiratory infections** and may have potential side effects, including **clostridium difficile-associated diarrhea**, **sensitivity to sunlight** and **yeast infections**.

## In general, those affected by acne are familiar with and concerned about antibiotic resistance

**8 in 10**

are familiar with antibiotic resistance



close to **three-quarters** are concerned by the issue



**81%**

agree that, when possible, antibiotic-free alternatives should be used first to treat sickness, skin conditions or other health issues

## Consumers need to know more about antibiotic-free acne treatment options that are available.



**68%**

of respondents who were not prescribed an antibiotic-free acne treatment are unaware of available antibiotic-free treatments for acne



**65%**

make an effort to avoid antibiotics unless it's the only option



**72%**

have never talked with their physician/medical care professionals about antibiotic-free treatment options for acne.

**97%**

of those respondents not prescribed antibiotic-free acne treatment are likely to use an antibiotic-free prescription treatment for acne if they were aware that an option, equally effective, was available.

Acne sufferers feel that the medical community has a greater responsibility to educate consumers than the government.

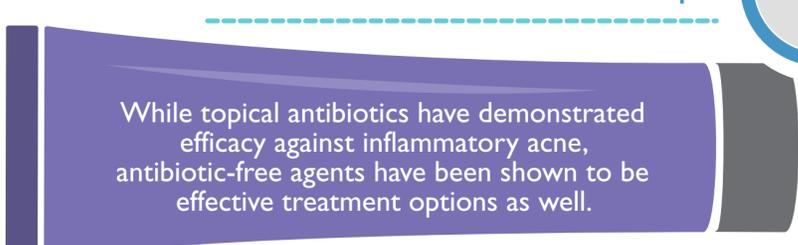


## Acne can be treated without antibiotics and antibiotic-free prescriptions can be just as effective

**Two-thirds** know that overuse of antibiotics could increase risk of developing an antibiotic-resistant infection, but **43% care more about the immediate emotional impact**



While topical antibiotics have demonstrated efficacy against inflammatory acne, antibiotic-free agents have been shown to be effective treatment options as well.



Given that **more than 40 million people** suffer from acne, including **85%** of people between the ages of 12 and 24, it's important for people to speak with their doctor about antibiotic-free alternatives for the treatment of acne.

**Learn more about antibiotic resistance from leading dermatologist Dr. Hilary Baldwin, a Galderma consultant.**



The survey was commissioned by Galderma Laboratories, L.P., a steward in appropriate antibiotic use, as part of the Centers for Disease Control's (CDC) Get Smart About Antibiotics Week 2015 (November 16-22).

\*This survey was inclusive of 809 acne sufferers (ages 17-40 years) and 210 parents of acne sufferers (child, aged 9-17 years).

**GALDERMA**

All trademarks are the property of their respective owners.