



Authoritative facts about the skin from the [New Zealand Dermatological Society Incorporated](#).

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Inflammatory lesions in acne

Inflammatory lesions in [acne](#) (pimples or zits) include small red bumps (papules), pustules, large red bumps (nodules) and cysts (these are fluctuant nodules). They are often painful.

Inflammatory acne



What is the cause of inflammatory acne?

They usually result from rupture of the wall of the closed [comedone](#) but may arise from normal-appearing skin.

The factors contributing to inflammation are:

- [Bacteria](#) Chemicals produced by *Propionibacterium acnes* diffuse into the surrounding skin (dermis) and attract white blood cells (polymorphonucleocytes and monocytes).
- Immunological reaction For unknown reasons, the cells lining the sebaceous ducts also produce inflammatory mediators (IL-1a, IL-1b and tumour necrosis factor) so pimples may occur in the absence of bacteria.
- Foreign body reaction White blood cells (macrophages and giant cells) removing the debris may cause a more severe granulomatous inflammatory reaction.
- Irritation by lipids Free fatty acids and [sebum](#) penetrate the dermis after the duct has ruptured
- Hypersensitivity to *P. acnes* Hypersensitivity (allergy) to *P. acnes* is thought to be the cause of the severe skin condition, [acne fulminans](#).

Related information

On DermNet NZ:

- [Acne and other follicular disorders](#)
- [Acne vulgaris](#)

Books about skin diseases:

See the [DermNet NZ bookstore](#)

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DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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