Definition
Vitiligo is an acquired disorder characterized by selective destruction of pigment cells (melanocytes) in skin and hair matrix cells, which results in leucoderma (depigmentation of skin) and leucotrichia (depigmentation of hair).

Etiology & Pathogenesis
Vitiligo is thought to result from an aberration of immune surveillance which results in the destruction of pigment cells in the skin and hair. Additional theories in humans revolve around the possibility that there is either a neurochemical mediator that destroys pigment cells or inhibits pigment production, or that there is an intermediate metabolite in pigment syntheses that causes pigment cells destruction.

Clinical Features
There is a marked breed predisposition for vitiligo in the Belgian Tervuren. Other dogs that appear to be at increased risk include the German Shepherd Dog, Rottweiler, and Doberman Pinscher. It has also been diagnosed in various other breeds and has been reported in Siamese cats. Vitiligo generally appears in young adulthood as asymptomatic lighter colored areas on the nose, lips, muzzle, buccal mucosa, and footpads. Depigmentation of the skin and, in some cases, depigmentation of the hair occur in affected areas. Progression of lesions is variable, with lesions of some animals repigmenting, while others have permanent depigmentation. Idiopathic depigmentation of the nose can develop and may be a form of vitiligo. Lay terms for this are ‘Dudley nose’ and ‘snow nose’. There appears to be a predisposition for this in the Golden Retriever, Yellow Labrador Retriever, and Arctic breeds, such as the Siberian Husky and Alaskan Malamute. Apart from the pigment changes, the underlying skin is normal with no evident signs of inflammation. Animals do not seen to be affected by the lesions.
Differential Diagnoses
- Canine uveodermatologic syndrome
- Discoid lupus erythematosus
- Ringworm
- Systemic lupus erythematosus

Diagnostic Tests
Diagnosis is based on history, physical examination, and microscopic examination of skin biopsy samples.

Management
There is no treatment that has been shown to be of benefit, although the disease is largely only cosmetic. Depigmented skin may need protection from the sun.

**Key Point**
Vitiligo is quite common and there is no treatment.