

KASHECHEWAN MARCH, 2016 IMPETIGO OUTBREAK

IMPETIGO

A number of children in Kashechewan have impetigo. Impetigo is a bacterial infection of the skin caused by Group B Haemolytic Stretococcus and Stahplococcus Aureus. It can rapidly spread from person to person by direct human contact or by inanimate objects or fomites. Therefore, it is best viewed as a public health problem and requires individual patient treatment and community containment and eradication.

UNDERLYING CAUSES

Impetigo requires a break in the skin surface in order for the bacteria to invade the skin and cause the typical crusted, inflamed wounds seen in these children. Skin breaks occur for many reasons including dry skin and scratching, eczema, scabies and skin irritation.

In Kash and other First Nations communities, many people have dry skin. This is more common in the winter and is sometimes called “winter dermatitis”. Dry skin is itchy and patients frequently damage their skin through scratching.

Many First Nations people suffer from eczema. One of the problems with eczema is cracking of the skin, especially at the creases behind the knees and elbows.

Scabies is an infection of the skin by a parasite that gets under the skin’s surface and causes intense itching and scratching. The mites and their eggs get under finger nails and the infection is made rapidly worse through scratching. In most cases, the whole household needs to be treated as scabies usually infects everyone in the home.

CHLORINE

In some people, skin irritation is made worse by external chemicals applied to the skin. This can include excessive chlorine in the water supply. This was the case in 2005 when the chlorine concentration was quintupled in Kash to destroy Enterococcus Coli in the water supply. This makes the skin irritated and itchy. Again this leads to scratching and skin breakdown.

Until a review of the chlorine concentrations recently used can be determined, we cannot tell whether excess chlorine has been a problem in Kash. But we do know that there is no bacterial contamination of the water supply in Kash at the present time and that the most recent water tests show that the chlorine content is within standard limits. It is safe to use and drink.

HOUSING

The other issue in Kash is overcrowding in homes. The standard Kash house has three bedrooms and one bathroom. With overcrowding access to the bathroom and adequate bathing becomes difficult. In 2005, one home had 23 occupants. Inadequate bathing makes impetigo epidemics worse.

TREATMENT AND PREVENTION

Treatment of an impetigo outbreak involves the use of oral antibiotics to treat the bacterial component, treatment of the underlying problem (dry skin, eczema, scabies, excessive chlorine in the water supply etc.), additional case finding (family members or school mates with lesions), cleaning of fomites (clothing, bedding, desks, children's toys etc.), public health follow-ups (home and school visits by nurses and CHRs), education of the community (children, parents, teachers and healthcare workers) and a long term surveillance program aimed at identifying and treating the underlying causes such as dry skin, scratching, eczema and scabies before the skin becomes secondarily infected with bacteria causing impetigo.

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