

Under the Educational Childcare Regulation, insect repellent may be applied without medical authorization to a child receiving childcare, provided it is applied in accordance with this Protocol and that a parent has given written consent.

A parent is not required to consent to the application of this Protocol. However, if a parent does not sign the authorization form, the insect repellent may not be applied to a child unless the parent and a member of the Collège des médecins du Québec give written authorization.

BASIC RULES

The insect repellent used must contain a concentration of less than 10 % DEET (N,N-diethyl-m-toluamide); read the product label carefully because the concentration of DEET varies significantly from product to product.

Childcare providers may have their own insect repellent container; the brand name, the form (lotion, cream, gel, liquid, non-aerosol or aerosol spray) and the concentration of the active ingredient DEET must be indicated on the authorization form. To avoid confusion, only one form of insect repellent should be kept on hand.

Repeated or excessive applications of insect repellent are unnecessary for effectiveness; it is recommended the repellent be applied to the skin sparingly. The product should not be used for extended periods of time.

Under no circumstances should insect repellent be applied:

- ▶ to the eyes or mucous membranes;
- ▶ to open wounds or broken skin;
- ▶ to irritated or sunburned skin;
- ▶ under clothing;

- ▶ to the hands;
- ▶ in excessive amounts.

Insect repellent may not be used on children under 2 years of age without written authorization from a parent and a physician. This Protocol therefore does not apply to children under 2 years of age.

It is recommended insect repellent be applied only once a day to children between 6 months and 2 years of age, and a maximum of 3 times a day to children over 2 years of age.

Insecticides and pesticides are made for use on land or in houses, and should never be used on the body.

DEET-based products should first be tested by applying a small amount to a small area of the child’s skin, preferably on the inside of the forearm, then waiting 8 to 12 hours. It is suggested that testing be done in the morning to see how well the children tolerate the product through the day; it is important to let parents know that the test will be done on that day. The test should be done in early spring, well before the Protocol is applied. If a reaction occurs, wash the treated skin immediately and consult a physician; make sure to give the physician a list of the product’s ingredients.

This Protocol was initially approved by a working group composed of representatives from the health and social services network and childcare services. The Protocol was reviewed by the Comité de prévention des infections dans les services de garde à l'enfance du Québec. The information it contains reflects the state of knowledge on the subject in 2006.



Authorization form for the application of insect repellent

A parent is not required to consent to the application of this Protocol. However, if a parent does not sign the authorization form, insect repellent may not be applied to a child unless the parent and a member of the Collège des médecins du Québec give written authorization. A parent may limit the period of validity of the authorization by indicating the duration of the authorization in the space provided.

I hereby authorize _____

(name of the childcare centre, day care centre, person recognized as home childcare provider or person who assists the provider, as the case may be, or person designated under the section 81 of the Educational Childcare Regulation, where applicable) to use on my child, in accordance with this Protocol, insect repellent sold under the following brand name:

Brand name, form (lotion, cream, gel, liquid, non-aerosol or aerosol spray) and concentration of the active ingredient DEET

Child’s surname and given name

Authorization period

Parent’s signature

Date

Never combine insect repellent and sunscreen. Avoid all “2-in-1” products that act as both an insect repellent and a sunscreen. To adequately protect the children from the harmful effects of the sun, apply sunscreen generously to exposed skin and under clothing; apply insect repellent, in contrast, in small amounts and never under clothing. If suntan lotion is applied after insect repellent, both products become less effective. Sunscreens also lose approximately 20 % of their effectiveness when DEET is applied. When a sunscreen and an insect repellent are used, it is recommended a cream with a sun protection factor (SPF) of 30 be used and the insect repellent be applied 30 to 45 minutes after the sunscreen.

Insect repellent must be used in well-ventilated areas away from food.

Any application of insect repellent must be recorded in the register of medications prescribed by the Regulation and the parent must be informed of the number of daily applications.

PRECAUTIONARY MEASURES

Insect repellent should be used only during periods when mosquitoes are abundant or if the area around the childcare service provides a breeding ground for mosquitoes, and only after the precautionary measures below have been taken.

To avoid insect bites when outside, the children should :

- ▶ wear a long-sleeved sweater and long pants that ideally fit tightly at the wrists and ankles;

- ▶ wear loose-fitting, light-coloured clothes made of a tightly woven fabric;
- ▶ wear shoes and socks;
- ▶ avoid using perfumed products;
- ▶ avoid going outside at times of the day when mosquitoes are most abundant, such as early morning or late afternoon.

To prevent mosquitoes from multiplying in the area around the child-care service:

- ▶ eliminate any source of standing water, which is conducive to mosquito breeding;
- ▶ turn over any objects that are not stored indoors, such as boats, wading pools, gardening containers and children’s toys;
- ▶ cover outdoor garbage cans and any other container that may collect water;
- ▶ replace pool or wading pool water or make sure it is treated daily;
- ▶ use insect screens in the areas where younger children play;
- ▶ repair damaged insect screens as quickly as possible.

Protect children under 6 months of age from coming into contact with mosquitoes by using mosquito netting on strollers and by using screened-in verandas.

WHAT YOU SHOULD KNOW

DEET-based products remain the preferred and most effective insect repellents against a wide variety of insects; insect repellents with a DEET concentration of less than 10 % provide 2 to 3 hours of protection.

Although the safety of these products has been proven, they may pose certain risks, especially to children, if they are misused. DEET is partially absorbed through the skin and may make its way into the bloodstream. It may also accumulate in the body fat, brain and heart. A few cases of poisoning have been cited in the literature. However, there is little risk to human health if insect repellents are used with discretion and only occasionally.

Applying insect repellent to clothing (except synthetics or plastic material) may be a way of decreasing the risk of poisoning in children over 2 years of age, but it is important to watch that children do not put the saturated clothing in their mouths, or touch it and accidentally get repellent in their eyes. DEET-based products can cause severe eye irritation.

In choosing a product, the following benefits and inconveniences should be considered:

- ▶ products in the form of a lotion, gel or cream are generally easy to apply but heavy application should be avoided;
- ▶ insect repellents in non-aerosol or aerosol spray form require additional caution; they should not be applied in closed or poorly-ventilated areas to avoid breathing in the harmful fumes, and care must be taken to avoid getting repellent on children’s faces or hands.

WHAT YOU SHOULD DO

Insect repellent must always be applied by a person authorized to do so. Under no circumstances should children be allowed to apply insect repellent themselves, regardless of their age.

When you go outdoors with the children, you must:

- ▶ apply the precautionary measures;
- ▶ follow the steps below to apply the insect repellent:
 - use simple words to explain to the child the relationship between the situation, the insect repellent being applied and the expected results;
 - wash your hands before handling the product;
 - read the product label carefully before applying, and make sure that the DEET concentration is less than 10 % and that the product does not contain sunscreen;
 - it is preferable to wear gloves to apply the product;
 - use single-use gloves and change gloves if a child has broken skin, such as insect bites (which often lead to a secondary infection), to eliminate the risk of transmitting a skin infection to another child;
 - put a small amount of the product in your hand, apply it sparingly to exposed areas only or to clothing, only at the nape of the neck and ankles, as far as possible;
 - make sure the children do not touch the areas to which the insect repellent has been applied. If they do touch those areas, they should wash their hands with soapy water;
 - wash your hands after applying the insect repellent to all the children in the group, even if you wore gloves to apply it.

Wash the treated skin with soap and water when the children come inside or when protection is no longer needed. This is particularly important if insect repellent is applied several times in the same day or on several consecutive days.