Immunization and Disease Control Laws in Michigan

Control of Vaccine-Preventable Diseases (VPD)

- The goals of disease control are to limit the spread of communicable disease throughout the community.
- This is usually achieved by:-
  - ◊ isolating the infectious person.
  - ◊ assuring a barrier between the infectious person and non-ill people.
- Immunity, usually after immunization, is the most effective barrier to disease, which is why it is so important.
- Some people however are not immune and are therefore at risk of infection.
- In schools and day care centers this has substantial implications.
- The legislature therefore recognized that when an outbreak of VPD occurs, the most effective way to protect those at risk is to place a spatial barrier, that is to exclude these at-risk students until the risk is substantially reduced.
- The local health officer can exclude "any individuals lacking documentation of immunity or otherwise considered susceptible to the disease until such time as the health officer deems there to be no likely further risk of disease spread."

- School immunization laws have been an important tool in the control of infectious disease in the US for almost 200 years [1].
- School and day care immunization laws protect a vulnerable segment of our population and also target an environment where transmission of infectious disease is facilitated by the close contact that children have in enclosed spaces [2,,3].
- The Michigan laws include assessment of day care and school immunization[4,5, 11] as well as exclusion from day care or school in the event of an outbreak of vaccine preventable disease.
- Michigan law requires that children attending day care and similar children's group activities as well as children attending school are protected against certain infectious disease through immunization or demonstration of immunity [4,11]. LHDs assist schools and day care centers by offering immunization clinics, interpretation of immunization records, immunization educational materials and other activities.
- Unlike the majority of states, Michigan law permits parents to exempt their child from the immunization requirements for non-medical, non-religious reasons (Mich. 333.9215). While the cost-savings for vaccinations is substantial[1], it has been calculated that there is a significant cost to a state which employs a personal/philosophical (as opposed to a medical or religious) exemption to immunization [6].

Mandatory roles of Local Health Departments

- Under Michigan law, local health departments (LHDs) are required to implement and monitor state laws covering immunization and disease control within their jurisdictions[8,9,10].
- LHDs in Michigan are required by law to offer immunizations and to control infectious/communicable disease.
- Among measures that LHDs employ to control communicable diseases are
  - ◊ LHDs provide accurate and up-to-date information about vaccines to their communities, often through local collaborations, web and social media pages and seminars.
  - ◊ LHDs work with their local health care and education providers to assist in getting immunization data into the state immunization registry, the MCIR.
  - ◊ LHD work with local immunization providers to assure that publicly-funded vaccines are stored correctly and are used only for children who are eligible for the vaccines.
  - ◊ LHDs are also responsible for disease surveillance and implementing measures to control infectious diseases, including those that are preventable by vaccines.

To calculate when the risk has diminished

- A person can become infected when exposed to another person who is infectious. Once infected, it can take days or weeks before the symptoms show. The time between when a person is infected and when they show symptoms is called the incubation period.
- Different diseases have difference incubation periods. Measles has an incubation period of between 7 and 21 days, pertussis can be up to 20 days and hepatitis A is 15-50 days[7].
- Depending upon the situation, the local health officer may determine that unvaccinated children should be excluded for a full incubation period since their last exposure to an infectious person.

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