APPENDIX - I

COMMUNICABLE DISEASES/CONDITIONS AND RETURN TO CHILD CARE GUIDELINES

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APPENDIX I

COMMUNICABLE DISEASES/CONDITIONS AND RETURN TO CHILD CARE

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INTRODUCTION

COMMUNICABLE DISEASES/CONDITIONS AND RETURN TO CHILD CARE

Childcare providers frequently must make decisions regarding when children with communicable diseases/conditions should be allowed to attend or return to the out-of-home child care setting (a large child care center or where child care is provided in a private residence for more than one child). We hope the information provided in this booklet will help with these decisions. It contains information about the most common or important communicable diseases/conditions and how they are spread. Information is listed about the different times during which infectious agents may be transmitted from one person to another, and when it is usually safe for someone who has one of these conditions to return to the center. The "return to child care times" are based on the usual period of time that a person is considered to be contagious — **not** on the period of time that may be necessary for full clinical recovery from the signs or symptoms of an illness which may vary a great deal from person to person.

While **this booklet will serve as a guide** for child care attendance of children with communicable conditions, the Mississippi State Department of Health (MSDH) welcomes the opportunity to help with your decisions. You may contact your district health department office (see district map on page 18) or the Division of Epidemiology at the MSDH in Jackson to speak with a consultant.

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***** THIS booklet is NOT intended to be used to DIAGNOSE an illness or infection. It SHOULD NOT REPLACE a diagnosis by trained MEDICAL personnel.*****

GENERAL INFORMATION

Small children who are cared for in out-of-home group settings are at a greater risk of acquiring and spreading a contagious disease. Small children are highly susceptible to contagious diseases since most of them have not been exposed to many of the most common germs and therefore do not have any immunity to them. Young children also have certain habits (e.g., putting their fingers and other objects in their mouths) that can easily spread germs. Even though contagious diseases/conditions will occur in a child care setting, the child care provider must do everything he or she can to prevent and control the spread of disease. **The use of common sense hygienic practices, especially frequent and thorough hand washing cannot be stressed enough!** Also, making sure that staff and children are up to date on their immunizations helps to lessen the risk of exposure to contagious diseases.

Reportable diseases: There are 4 classes of reportable diseases. Class I diseases are those of major public health importance and are to be reported upon first knowledge or suspicion and are usually reported by the physician, hospital or laboratory. However, the MSDH encourages child care providers who know of a child in their facility who has been diagnosed with a disease such as meningitis or measles to report it to the Health Department. This can sometimes help to expedite the investigation. Class II diseases may require public health intervention also, especially if there are several cases in one room (e.g., diarrheal diseases such as shigella and giardia).

When a Class I reportable disease is reported to the MSDH, there will be an investigation. The immediacy of the response by the MSDH and the extent of the investigation depend on the disease the person has. For example, if a child has been reported to have meningococcal meningitis, an investigation would take place as soon as the report is received. It is the goal of the MSDH to provide preventive medication to those for whom it would be indicated within 24 hours of receiving the report. A current list of the reportable diseases is provided in Appendix B of the Child Care Rules and Regulations.

Outbreaks/parental permission for laboratory tests: During times when there are outbreaks of *Giardia, Shigella* infection, etc., large numbers of stool specimens may be requested by the MSDH. The MSDH recommends that child care facilities obtain permission from parents or guardians at the time of enrollment for the child care facility to collect these stool specimens and receive the laboratory results if and when such an outbreak occurs. These laboratory tests would be done by the MSDH Laboratory free of charge. The laboratory test results would be sent to the child care facility and given to the parents/guardians by the child care facility for them to give to the child's physician. (See sample permission slip on page 17)

Handouts: It is good practice to keep parents informed as to what diseases might be occurring in the child care facility so that they can be alert to signs and symptoms of diseases and observe their children for them. We have provided a packet with fact sheets/handouts on certain diseases for you to give to parents.

CHILD CARE IMMUNIZATION REQUIREMENTS
(FOR ATTENDEES AND STAFF)

ATTENDEES

The MSDH regulations governing the licensure of child care facilities mandate that each child in a licensed facility have immunizations according to the recommended immunization schedule. These children are to be **age-appropriately immunized** and must have a Certificate of Immunization Compliance (Form 121) or a Certificate of Medical Exemption (Form 122) on file at the child care facility and readily accessible for review by the MSDH. The Form 121 must be signed by the District Health Officer, a physician, nurse, or designee. The medical exemption, Form 122, **MUST** be signed by the District Health Officer. Children enrolled in licensed child care facilities and public and private schools in Mississippi may be exempt for *medical reasons only* and not for religious reasons.

Children usually begin their routine immunizations between 6 weeks and 2 months of age. The immunizations that are currently **required** at the age-appropriate times for child care are: DTaP (diphtheria, tetanus, pertussis), polio, MMR (measles, mumps, rubella), and HIB (*H. Influenzae* type b). Hepatitis B vaccine is a recommended vaccine, and is usually started at birth to 2 months of age. Hepatitis B is **not required for child care** attendance but **is required for entry into 5 year old kindergarten.**

As of August 01, 2002, one (1) dose of Varicella (chicken pox) vaccine is required on or after the 1st birthday and is required for entry into five (5) year-old kindergarten. Varicella is not required if a history of the disease is documented.

Children enrolled in a licensed child care facility or Head Start Center are expected to be age appropriately immunized. All children must have one of the following forms before enrollment in a licensed Child Care/Head Start facility.

1. Certificate of Immunization Compliance (Form 121). This form must be signed by the District Health Officer, a physician, nurse, or designee.

2. Certificate of Medical Exemption (Form 122). This form must be approved and signed by the Mississippi Department of Health District Health Officer from the public health district or the State Epidemiologist.

STAFF

Anyone (whether full or part-time and even if they are the owner/director) who works in a licensed child care facility must have a Certificate of Immunization Compliance (Form 121) or a Certificate of Medical Exemption from Immunization Requirements for Adults (Form 132) on file and readily accessible for review by the MSDH. The requirement for adults is that they must show proof of immunity to **measles** (rubeola or "red" measles) and **rubella** ("German" or "3-day" measles).

Proof of immunity to measles: Persons born prior to 01-01-1957 are assumed to have natural immunity to measles. Persons born on or after 01-01-1957 must show proof of immunity in one of the following ways:

1. A **physician's statement** saying that the person has had measles disease.
2. **Serological (a blood test)** confirmation of measles immunity.
3. A record of **2 doses** of measles-containing vaccine (usually given as MMR) given on or after the first birthday and on or after 01-01-1968. There must be a minimum time interval of 30 days between the 2 doses.

Proof of immunity to rubella: All child care workers, **regardless of age**, must show proof of immunity to rubella in one of the following ways:

1. **Serological (blood test)** confirmation of rubella immunity.
2. A **rubella vaccination** received on or after 12 months of age and on or after 01-01-1969.

The MSDH does not provide serological testing for measles and rubella for the purpose of child care/school attendance or private employment. Those who wish to have a blood test for proof of immunity to measles and/or rubella should see their private physician.

The Child Care Licensure Division of the MSDH checks the immunization records in child care facilities during regular program reviews. District Immunization Representatives also visit child care centers on a random basis to inspect the immunization records of the children and the employees. The purpose of these visits is to verify the presence of the Certificates of Immunization Compliance. These visits also help to ensure adequate immunization of children enrolled in child care facilities.

EXCLUSION CRITERIA

Small children can become ill very quickly. The child care provider should observe each child's health throughout the time the child is in their care. If the child care provider observes signs and symptoms of illness that would require removal from the facility, he/she should contact the parents/guardians to have the child picked up and continue to observe the child for other signs and symptoms. **If the child is not responding to you, is having trouble breathing, or is having a seizure or convulsion, call 911.**

The following conditions require exclusion from child care:

Fever: Defined as 100°F or higher taken under the arm, 101°F taken orally, or 102°F taken rectally. For children 4 months or younger, the lower rectal temperature of 101°F is considered a fever threshold.

Diarrhea: Frequent (3 or more episodes in a 24-hour period) runny, watery, or bloody stools. **According to CDC recommendations, a child who is not toilet trained and has diarrhea should be excluded from child care settings regardless of the cause.**

Vomiting: Two or more times in a 24-hour period

Rash: Body rash with a fever

Sore throat: Sore throat with fever and swollen glands

Severe coughing: The child gets red or blue in the face or makes high-pitched whooping sound after coughing.

Eye discharge: Thick mucus or pus draining from the eye

Jaundice: Yellow eyes and skin

Irritability: **Continuous** irritability and crying

CHICKENPOX (VARICELLA)

Chickenpox is a highly infectious viral disease that begins with small red bumps that turn into blisters after several hours. The blisters generally last for 3-4 days and then begin to dry up and form scabs. These lesions (bumps/blisters) almost always appear first on the trunk rather than the extremities.

Mode of transmission: Airborne droplets of nose and throat secretions coughed into the air by someone who has chickenpox. Also by direct contact with articles freshly soiled with discharge from the blisters and/or discharge from the nose and mouth (e.g., tissues, handkerchiefs, etc.).

Notification: Notify parents/guardians and staff members that a case of chickenpox has occurred, especially those parents whose child is taking steroid medications, being treated with cancer or leukemia drugs or has a weakened immune system for some reason. Staff members who are pregnant and have never had chickenpox disease or the chickenpox vaccine should consult their physician immediately. A special preventive treatment may be indicated for those with a weakened immune system and non-immune pregnant women. This treatment must be given **within 96 hours** of the exposure to be effective.

Vaccine: As of August 01, 2002, one (1) dose of Varicella (chicken pox) vaccine is required on or after the 1st birthday and is required for entry into five (5) year-old kindergarten. Varicella is not required if a history of the disease is documented.

Return to child care: Once the diagnosis has been made, determine the day that the blisters first appeared. The child may return to child care on the 6th day after the blisters first appeared or earlier if all the lesions are **crusted and dry and no new ones are forming.** Keeping the child home until all the lesions are completely healed is unnecessary and results in excessive absences.

SHINGLES (VARICELLA ZOSTER)

Shingles (varicella zoster) is a reactivation of the chickenpox virus (varicella). After the initial infection with chickenpox, the virus continues to lie dormant (inactive) in a nerve root. We tend to think of the elderly and immunosuppressed individuals as the ones who have shingles; however, it can and does occur sometimes in children. The lesions or blisters of shingles resemble those of chickenpox and usually appear in just one area or on one side (unilateral) of the body and run along a nerve pathway. A mild shingles-like illness has been reported in healthy children who have had the chickenpox vaccine. This is a rare occurrence.

Mode of transmission: It is possible for someone who has never had chickenpox disease or the vaccine to get chickenpox by coming in contact with the fluid from the lesions of someone who has shingles. Shingles itself is not transmissible. A person who has shingles does not transmit chickenpox through the air as does someone who has chickenpox disease.

Return to child care: The child who has shingles may attend child care if the lesions can be covered by clothing. If the lesions cannot be covered, the child should be excluded until the lesions are crusted and dry. Staff members who have shingles pose little risk to others since the lesions would be covered by clothing or a dressing on exposed areas. **Thorough hand washing** is warranted whenever there is contact with the lesions.

> **NOTE:** Staff members, especially those who are pregnant, who have no history of chickenpox disease or chickenpox vaccine, should not take care of children with shingles during the time they have active or fluid-filled lesions.

CYTOMEGALOVIRUS (CMV)

CMV is a viral illness that most people become infected with during childhood. Small children usually have no symptoms when they become infected, but older children may develop an illness similar to mononucleosis with a fever, sore throat, malaise or feeling very tired and an enlarged liver.

Mode of transmission: CMV is spread from person to person by direct contact with body fluids such as urine, saliva, or blood. The virus can also be passed from the mother to the baby before birth.

Pregnancy: Rarely, a woman may contract the disease for the first time during pregnancy which may pose a risk to the fetus causing certain birth defects. CDC recommends that women who are child care providers and who expect to become pregnant should be tested for antibodies to CMV and if the test shows no evidence of previous CMV infection, they should reduce their contact with infected children by working, at least temporarily, with children 2 years of age and older where there is less circulation of the virus. Also, they should avoid kissing an infected child on the lips, and as with any child care situation, **wash hands** thoroughly after each diaper change and contact with a child's saliva. If contact with children does not involve exposure to saliva or urine, there should be no fear of potential infection with CMV.

Return to child care: There is no need to exclude children with CMV from child care as long as they do not have a fever since the virus may be excreted in urine and saliva for many months and may persist or there may be recurring episodes for several years following the initial infection. CMV is a virus that may persist as a latent infection and recur when a person becomes immunosuppressed with conditions such as cancer, AIDS, etc.

DIARRHEAL DISEASES (e.g., campylobacteriosis, cryptosporidiosis, giardiasis, rotavirus, salmonellosis, shigellosis) - See *E. coli* O157:H7 and Hepatitis A sections for specific return-to-child- care recommendations regarding these 2 diseases.

Diarrhea is defined as frequent (3 or more episodes within a 24 hour period), runny, watery stools and can be caused by different types of organisms such as viruses, bacteria and parasites.

Mode of transmission: Diarrheal diseases are generally transmitted or spread by ingesting food or water or by putting something in the mouth such as a toy that has been contaminated with the feces (stool/poop) of an infected person or animal. In some cases such as with *Salmonella* and *E. coli* O157:H7, the disease is transmitted by eating raw or undercooked meats (especially ground beef and poultry) and unpasteurized milk and fruit juices.

Notification: Notify parents/guardians of children in the involved room of the illness. Ask that they have any child with diarrhea, severe cramping, or vomiting evaluated by a physician and that they inform the day care of diarrheal illness in their child and family.

Outbreak situation: Most diarrheal diseases are reportable to the State Department of Health. When there are 2 or more cases of a diarrheal disease in one room, more extensive notification may need to be done as stool specimens may need to be collected. In this case, the director of the child care should consult with the Public Health District Epidemiology Nurse or the Division of Epidemiology at the State Department of Health. (See Public Health District Map on page 18 for addresses and telephone numbers)

Return to child care: In most cases, a child may return to child care after a diarrheal illness once he or she is **free of fever** and the **diarrhea has ceased**.

***E. COLI* O157:H7**

Escherichia (E.) coli bacteria are found in the intestines of most humans and many animals. These infections are usually harmless. However, certain strains of the bacteria such as the O157:H7 can cause severe illness. Some persons who are infected with *E. coli* O157:H7 may have a mild disease while others develop a severe, bloody diarrhea. In some cases, the infection may cause a breakdown of the red blood cells which can lead to HUS or hemolytic uremic syndrome.

Mode of transmission: *E. coli* O157:H7 is usually the result of eating undercooked meat, especially hamburger. There have also been cases reported from drinking **unpasteurized** apple

juice. Person-to-person transmission may occur by contact with the feces or stool of an infected person.

Notification: Notify the staff and parents/guardians that a case of *E. coli* O157:H7 has occurred and ask that they have their child evaluated by a physician if they have diarrhea, especially bloody diarrhea. *E. coli* O157:H7 is a Class I reportable disease and a follow-up investigation will be done by the Health Department.

Return to child care: The **infected child should not be in or allowed to return to a child care center until his/her diarrhea has ceased and 2 consecutive negative stool samples are obtained** (collected not less than 24 hours apart and not sooner than 48 hours after the last dose of antibiotics).

FIFTH DISEASE (ERYTHEMA INFECTIOSUM)

This is an infectious disease characterized by a "slapped -face" (redness) appearance of the cheeks followed by a rash on the trunk and extremities.

Mode of transmission: Person-to-person spread by direct contact with nose and throat secretions of an infected person. Transmission of infection can be lessened by routine hygienic practices which include hand washing and the proper disposal of facial tissues containing respiratory secretions.

Notification: Notify parents/guardians and staff members that fifth disease is occurring in the child care facility. Staff members who are pregnant should consult their obstetrician if children in their room have fifth disease.

Return to child care: Children with fifth disease may attend child care if they are **free of fever**, since by the time the rash begins they are no longer contagious. The rash may come and go for several weeks.

"FLU" (INFLUENZA)

Influenza is an acute (sudden onset) viral disease of the respiratory tract characterized by fever, headache, muscle aches, joint pain, malaise, nasal congestion, sore throat, and cough. Influenza in children may be indistinguishable from diseases caused by other respiratory viruses.

Mode of transmission: Direct contact with nose and throat secretions of someone who has influenza - airborne spread by these secretions coughed into the air.

Return to child care: The child may return to child care when **free of fever** and feeling well. The closing of individual schools and child care centers has not proven to be an effective control measure. By the time absenteeism is high enough to warrant closing, it is too late to prevent spread.

HAND-FOOT- AND- MOUTH DISEASE

This is a common childhood disease caused by a strain of coxsackievirus. In some people, the virus causes mild to no symptoms. In others, it may result in painful blisters in the mouth and on the palms of the hands and the soles of the feet.

Mode of transmission: The virus can be spread through saliva from the blisters in the mouth and from the fluid from the blisters on the hands and feet. It is also spread through the feces or stool of an infected person.

Notification: Notify parents/guardians and staff that there are cases of hand-foot-and-mouth disease in the child care facility so that they can be alert to the signs and symptoms.

Return to child care: The virus may be excreted in the stool for weeks after the symptoms have disappeared. **Children who have blisters in their mouths and drool or who have weeping or active lesions/blisters on their hands should be excluded from child care until the lesions are crusted and dry and the child is free of fever.**

HEAD LICE

This is an infestation of the scalp by small "bugs" called lice. They firmly attach egg sacs called "nits" to the hairs, and these nits are difficult to remove. Treatment may be accomplished with prescription or over-the-counter medicines applied to the scalp.

Mode of transmission: Direct contact with an infested person's hair (head-to-head) and, to a lesser extent, direct contact with their personal belongings, especially shared clothing and headgear. Head lice do not jump or fly from one person to another, but they can crawl very quickly when heads are touching.

Notification: When a case of head lice occurs in a room, notify the parents/guardians that a case of head lice has occurred. Check the other children in that room for head lice and if found, notify their parents/.guardians that the child needs treatment. Ask the parents/guardians to be alert to anyone in their family who may have signs and symptoms of head lice (e.g., excessive itching of the scalp, especially at the nape of the neck and around the ears) so that they may also receive treatment.

Infants and children less than 2 yrs. of age: It is a rare occurrence for children in this age group to have head lice. It is generally not recommended to treat this age group prophylactically or just because someone else in the family has been treated. If a child of this age is found to have head lice, the parent/guardian should consult the child's physician for treatment recommendations.

Return to child care: The child may return to child care after the first treatment has been given. **(See Attachment A - "Recommendations for the Control of Head Lice in the Child Care Setting")**

HEPATITIS A

This is an infectious viral disease characterized by jaundice (yellowing of the eyes and skin), loss of appetite, nausea, and general weakness. Child care centers can be a major source of hepatitis A spread in the community. This is because small children usually do not show any specific signs and symptoms of the disease. Symptomatic illness primarily occurs among adult contacts of infected, asymptomatic children.

Mode of transmission: Hepatitis A virus is found in the stool of persons infected with hepatitis A. The virus is usually spread from person to person by putting something in the mouth that has been contaminated with the stool of an infected person; for this reason, the virus is more easily spread under poor sanitary conditions, and when good personal hygiene, **especially good hand washing**, is not observed. Rarely, the virus is contracted by eating raw seafood (e.g., raw oysters) that has been collected from contaminated waters.

Notification: Notify the staff and parents/guardians that a case has occurred. Hepatitis A is a Class I reportable disease. A follow-up investigation will be done by the MSDH to determine who in the center may need to receive preventive treatment.

Return to child care: The child may return to child care one week after the onset of jaundice (yellowing of the eyes and skin) or one week after the onset of other signs and symptoms if no jaundice is present.

HEPATITIS B

Hepatitis B is a viral disease that affects the liver. It is a contagious condition characterized by loss of appetite, abdominal discomfort, jaundice (yellowing of the eyes and skin), joint aches, and fever in some cases. It is different from Hepatitis A. There should not be any risk of exposure to hepatitis B in a normal child care setting unless a child who is infected with hepatitis B is bleeding. Also, since the hepatitis B vaccine is now a part of the routine immunization schedule, more and more children should be immune.

Mode of transmission: The most common mode of transmission is through having sex with someone who has the virus; however, it can be transmitted when infected blood enters the body through cuts, scrapes or other breaks in the skin. Injecting drug users are at risk when they share needles with an infected person. It is also possible for infected pregnant women to transmit the virus to their babies during pregnancy or at delivery.

If an exposure to a person who is infected with hepatitis B has occurred, the person exposed should be referred to his/her physician since hepatitis B vaccine and hepatitis B immune globulin may be indicated. **Since hepatitis B and HIV/AIDS are both transmitted through blood exposure, the precautionary measures for HIV/AIDS would also apply to hepatitis B. (See HIV/AIDS section below)**

HEPATITIS C

Hepatitis C is also a viral disease that affects the liver. Again, hepatitis C should pose no risk of exposure in the normal child care setting unless the infected child is bleeding. There is no vaccine available for hepatitis C at this time. **Since it is also transmitted through blood exposure, the same precautionary measures for hepatitis B and HIV/AIDS would be apply to hepatitis C. (See HIV/AIDS section below)**

HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTION/ ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

Mode of transmission: The most common mode of transmission is through having sex with someone who has the virus; however, it can be transmitted when infected blood enters the body through cuts, scrapes or other breaks in the skin. Injecting drug users are at risk when they share needles with an infected person. It is also possible for infected pregnant women to transmit the virus to their babies during pregnancy or at delivery. Although HIV and hepatitis B are transmitted in the same way, HIV is much more difficult to transmit from one person to another than hepatitis B.

HIV infection in children causes a broad spectrum of disease manifestations and a varied clinical course. Children with HIV infection should be monitored closely by their physician. They are more susceptible to infectious diseases than other children. Parents of children known to have HIV infection should be notified when certain infectious diseases occur in the child care facility. There is no vaccine available for HIV at this time. According to CDC, HIV is not likely to be spread from one child to another in the child care setting and no case has ever been reported. Parents or guardians of HIV-positive children should inform the child care director of their child's HIV status. Because of concern over stigmatization, the person aware of a child's HIV infection should be limited to those who need such knowledge to care for the children in the child care setting. In a situation where there is concern of possible exposure of others to the blood or body fluids of an infected person, CDC recommends that a team including the child's parents or guardians, the child's physician, public health personnel, and the proposed child care provider evaluate the situation to determine the most appropriate child care setting. The team should weigh the risks and benefits to both the infected child and to others in the child care setting.

It should always be remembered that there those who are known to be infected with HIV, hepatitis B and C and other blood borne diseases, but on the other hand there are those we do not know about and some people are not even aware themselves that they may have an infectious blood borne disease. Therefore, we must always employ universal precautions (treating everyone's blood as though it is infectious) when dealing with blood and body fluids. There is no evidence that HIV, hepatitis B or hepatitis C is transmitted through tears, perspiration, urine, or saliva unless these body fluids contain visible blood.

Child care providers should be prepared to handle blood and blood-containing body fluids using the principles of universal precautions. Supplies of gloves, disposable towels, and disinfectants should be readily available.

The Mississippi State Department of Health is available for consultation in these situations.

IMPETIGO

This is a contagious skin disease characterized by spreading pustular lesions (sores with pus) and should receive medical treatment. This is quite important to avoid the risk of complications involving the heart and kidneys.

Mode of transmission: Skin-to-skin contact with the sores.

Return to child care: The child may return to child care 24 hours after treatment has been started if free of fever and the lesions are not draining.

MEASLES

Measles is a serious viral infection characterized by a rash (red, flat lesions) starting on the head and neck, which enlarge and coalesce (run together), and spread to the trunk, then to the extremities. Other symptoms include a high fever, conjunctivitis (red, inflamed eyes), cough, and nasal congestion. The Health Department must be notified on first suspicion. With our present immunization laws, measles is a rare occurrence today. It is imperative, however, that immunization records be kept current.

Mode of transmission: Direct contact with nose and throat secretions of an infected person. May be airborne by droplets of these secretions coughed into the air. Tiny droplets can be suspended in the air for two hours or more. Measles is very easily spread.

Notification: Notify staff and parents/guardians that a case has occurred. Measles is a Class I reportable disease and there will be a follow-up investigation by the Health Department. Parents of children with weakened immune systems (those being treated for cancer, leukemia or taking steroid medication, etc.) should consult their child's physician and keep the child out of the center until after the investigation by the Health Department and it is considered safe for them to return.

Return to child care: The child may return to child care when free of fever and the rash is fading (this usually takes 5-7 days).

MENINGITIS

Meningitis is an inflammation or infection of the meninges (the membranes that cover the brain and spinal cord). Meningitis can be caused by a variety of organisms or germs. Most people exposed to these germs do not develop meningitis or serious illness. Some people may carry a particular germ and have no symptoms at all. Anyone exhibiting signs and symptoms of meningitis (e.g., severe headache, fever, vomiting, stiffness and pain in the neck, shoulders and back, drowsiness) should seek medical attention promptly.

Meningitis is a reportable disease. The Department of Health evaluates each case individually to determine what public health intervention, if any, might be required. The two types of meningitis that require public health intervention most often are caused by the organisms *Haemophilus influenza* type b (HIB) and *Neisseria meningitidis* (meningococcal).

Mode of transmission: These germs are most commonly spread by direct contact with nose and throat secretions from an infected person.

Notification: Notify parents/guardians that a case has occurred and to have their children evaluated by a physician should they have any of the signs or symptoms listed above.

Return to child care: The child may return to the center whenever he or she has been released by his/her personal physician.

MUMPS

Mumps is an infectious disease that is characterized by swelling and pain of the salivary glands.

Mode of transmission: Person- to- person spread by direct contact with the saliva of an infected person.

Return to child care: The child may return to child care 9 days after the beginning of the salivary gland swelling.

"PINK EYE" (CONJUNCTIVITIS)

This is an infectious disease characterized by redness of the eye(s), excessive tearing, itching, and discharge. Some cases may require antibiotics; therefore, the child should see a physician.
Mode of transmission: Contact with discharges from the eye, nose, or throat of an infected person. Also, from contact with fingers, clothing and other articles that have been contaminated with the discharge.

Return to child care: Children may return to child care after they have seen a physician or when the redness/discharge is improving.

PINWORMS

Pinworms are tiny worms that live in the large intestine and can cause anal itching, sleeplessness and irritability. They may also be present without any symptoms. Pinworms occur worldwide and affect all socioeconomic classes. They are the most common worm infection in the United States. Prescription medication must be obtained to treat the infection.

Mode of transmission: Pinworms can be spread when an uninfected person touches the anal area of an infected person and then puts their hands/fingers in their mouth. They can also be spread when an infected person scratches the anal area and then contaminates food or other objects that are touched or eaten. Pinworms can be spread as long as the worms or the eggs are present.

Return to child care: The child may return to child care **24** hours after they have received the first treatment. Employ **thorough hand washing** especially before eating and after toilet use and change and wash any bed linens and towels in hot water that have been used for those children. Ask the parents/guardians to do the same at home. Also, discourage children from scratching the anal area.

RESPIRATORY SYNCYTIAL VIRUS (RSV)

RSV can cause an upper respiratory disease like a cold or a disease of the lower respiratory tract such as pneumonia. It is the most common cause of lower respiratory tract infections and pneumonia in infants and children under the age of 2. Almost 100% of children in child care programs get RSV during the first year of life. This usually occurs during outbreaks in the winter months. RSV can range from a very mild disease to life-threatening.

Mode of transmission: Direct contact with nose and throat secretions of an infected person. A young child can be infectious with RSV 1 to 3 weeks after signs and symptoms have subsided.

Return to child care: Most of the time a child is infectious before signs and symptoms appear. An infected child does not need to be excluded from child care unless he/she has a fever and/or is not well enough to participate in the activities. Make sure that **procedures pertaining to hand washing, proper disposal of tissues and disinfection of toys are followed.**

RINGWORM

Ringworm is a skin infection caused by a fungus that can affect the scalp, skin, fingers, toe nails, and feet. Ringworm anyplace except on the scalp or under the nails can be successfully treated with several over-the-counter medicines. Ringworm of the scalp is characterized by inflammation, redness, and hair loss and does not respond to over-the-counter medicines; therefore, the child should see his/her physician.

Mode of transmission: Direct skin-to-skin contact or indirect contact (e.g., toilet articles such as combs and hair brushes, used towels, clothing and hats contaminated with hair from infected persons or animals).

Notification: When the lesions (red, circular places) are found, notify the parent/guardian that the child needs treatment.

Return to child care: The child may return to child care after the treatment has been started. Treatment for ringworm of the scalp and nails usually lasts for several weeks. Strict infection control measures should be taken (e.g., blankets, towels or anything that is used on the infected child

should not be used on another child, make sure that staff caring for these children **practice good hand washing** and that disinfecting procedures are followed.

SCABIES

Scabies is a disease of the skin caused by a mite. The mite burrows beneath the skin and causes a rash that is usually found around finger webs, wrists, and elbows. The rash may appear on the head, neck, and body on infants. Any child with evidence of severe itching especially in these areas should be referred to his/her physician. Scabies requires treatment by prescription drugs.

Mode of transmission: Direct skin-to-skin contact with an infested person. Transfer of the mites from undergarments and bedclothes can occur, but only if contact takes place immediately after the infested person has been in contact with the undergarments and bedclothes.

Notification: Notify parents/guardians and staff that scabies has occurred in the facility so that they can be alert to signs and symptoms and seek treatment.

Return to child care: The child may return to child care 24 hours after the treatment has been completed. It must be noted that itching may continue for several days, but this does not indicate treatment failure or that the child should be sent home.

"STREP THROAT" (STREPTOCOCCAL PHARYNGITIS) & SCARLET FEVER

Strep throat is a communicable disease characterized by sore throat, fever, and tender, swollen lymph glands in the neck. The child should see a physician to obtain prescription medication; this is quite important to avoid the risk of complications involving the heart and kidneys. **Scarlet fever** is a streptococcal infection with a rash (scarlatinaform rash). It is most commonly associated with strep throat. In addition to the signs and symptoms of strep throat, the person with scarlet fever has an inflamed, sandpaper-like rash and sometimes a very red or "strawberry" tongue. The rash is due to a toxin produced by the infecting strain of bacteria. The treatment and exclusion criteria for scarlet fever would be the same as for strep throat.

Mode of transmission: Direct or indirect contact (e.g., contaminated hands, drinking glasses, straws) with throat secretions of an infected person.

Return to child care: The child may return to child care **24** hours after treatment has been started **if free of fever**.

TUBERCULOSIS (TB)

Mode of transmission: Airborne droplets of respiratory secretions coughed or sneezed into the air by a person with active TB disease.

Notification: TB is a class one reportable disease. If a child or a staff member in a child care facility is diagnosed with active TB, the MSDH will conduct an investigation. The MSDH will notify the facility and the parents/guardians of the type of follow-up that will be necessary.

Return to child care: Persons diagnosed with TB infection are evaluated by the Mississippi State Department of Health on an individual basis. Those who have a positive TB skin test *only* may attend child care since they have no disease process that is contagious. **Persons suspected of or diagnosed with active TB disease will need written permission from the Mississippi State Department of Health Tuberculosis Control Program to return to the center.**

Small children are highly susceptible to contracting TB disease, but do not transmit the disease as easily as an older child or adult. Children who do not have active TB disease, but who have been exposed to an active case in their household are considered high risk contacts and are placed on preventive medication. These children may attend child care since they are not infectious.

WHOOPING COUGH (PERTUSSIS)

Pertussis or whooping cough is a contagious disease characterized by upper respiratory tract symptoms with a cough, often with a characteristic inspiratory (breathing in) whoop.

Mode of transmission: Direct or indirect contact (contaminated articles) with nose and throat secretions of an infected person. Airborne transmission can also occur by droplets of these secretions coughed into the air.

Notification: Notify parents/guardians that a case has occurred. Pertussis is a class one reportable disease. The Health Department will conduct an investigation to determine those who may need preventive treatment.

Return to child care: The child may return to child care 5 days after their treatment has begun.

PERMISSION TO COLLECT STOOL SPECIMENS AND RECEIVE TEST RESULTS

If and when an outbreak of diarrheal diseases such as giardiasis, salmonellosis, shigellosis, etc. occurs in a child care facility, the Mississippi State Department (MSDH) investigates and may request that stool specimens be collected. In an outbreak situation, the stool specimen collection bottles are provided by the MSDH and the tests are done in the MSDH Lab free of charge. The collection bottle, with instructions, would either be given to the parent/guardian to collect the stool specimen or it may need to be collected at the child care facility. The child care facility would receive the test results and recommendations would be made by the MSDH. The test results would be given to the parents/guardians by the child care facility and the parents/guardians should give them to their child's physician.

I give my permission for (name of child care facility) to collect stool specimens from (name of child) when it is recommended by the MSDH and also for them to receive the test results. I understand that I will receive a copy of the test results and be informed of the recommendations made by the MSDH.

Date: _____ _____

Parent/Guardian

ATTACHMENT - A

RECOMMENDATIONS FOR THE CONTROL OF HEAD LICE IN THE CHILD CARE SETTING

Head lice, *Pediculus humanus capitis,* are a common problem in children who attend child care in Mississippi. Although they do not transmit any human disease, they may be a considerable nuisance, and require conscious effort on the part of the child care staff and parents to control. **It should be understood that head lice can only be controlled in the child care center, not eliminated; they will occur sporadically, and will recur even after control efforts. The goal of control efforts is to reduce the problem and its impact, and minimize spread.**

Head lice are not a product of poor personal hygiene or lack of cleanliness and their presence is not a reflection on the child care center or the family. More harm is probably caused by misconceptions about head lice than by the lice themselves.

1. IDENTIFYING INFESTED CHILDREN

By Screening: It is important to establish a screening program. Children should be screened for head lice upon entry into the child care setting and periodically during the year. Staff members should be instructed in the technique of detecting head lice.

By Individual Case: Any child suspected of having head lice (usually because he/she is scratching his/her head a lot) should be examined by a staff member who has been instructed in the technique. If infested, the child should be handled as described in Section 2, "HANDLING OF INFESTED CHILDREN."

If one child in a room is found to be infested, the whole room should be screened.

2. HANDLING OF INFESTED CHILDREN

Exclusion: An infested child's parent/guardians should be notified that the child has been found to have head lice and must receive the proper treatment before returning to child care. Treatment and removal of nits are described in Section 3, "TREATMENT." Care must be taken not to embarrass or stigmatize the child.

Return to Child Care: The child should return to the child care center as soon as the first treatment has been given. **Nits (eggs) may still be seen even in an adequately treated child. This is not evidence of continuing infestation if the child has been properly treated and no adult lice are present.**

3. TREATMENT

Individual: Several effective pediculicides (lice-killing products) are available such as Nix®* (permethrin) creme rinse (10 minute hair rinse) which is available over the counter and has ovicidal (egg or nit-killing) capability. It is the only over-the-counter pediculicide covered by Medicaid. The pyrethrin/pyrinate products (10 minute shampoos) include such products as Rid®*, A-1000®*, R&C®*, Clear®* and Triple-X®* and are available over the counter at pharmacies. Kwell®* (1%

lindane), a 4 minute shampoo, requires a prescription. Central nervous system toxicity with lindane has been documented with prolonged administration. Ovide®* lotion (Malathion 0.5%) has been re-approved by the Food and Drug Administration (FDA) as a prescription drug for the treatment of head lice infestation in the United States. Treatment with any approved pediculicidal (lice-killing) product should be adequate.

One Treatment vs. Two Treatments: Most products require 2 treatments. An initial treatment will kill adult and larval lice, but will not kill all the eggs. **A second treatment 7 to 10 days later, after the eggs left by the first treatment have all hatched, will kill the newly hatched lice before they mature and reproduce and will complete the treatment process.** Nix®* requires only one treatment since it is an ovicidal (also kills the eggs or nits); however, a second treatment is desirable since the product is not likely to kill 100% of the nits. Ovide®* lotion is also ovicidal and requires a second treatment 7 to 10 days after the first one **only** if crawling lice are seen.

Retreatment: Pediculicides should kill lice soon after application. However, in some situations (e.g., a person is too heavily infested, pediculicide is used incorrectly, reinfestation or possible resistance to the medication), the lice may still be present. Immediate retreatment with a **different class or type** of pediculicide is generally recommended if live lice are detected on the scalp 24 hours or longer after the initial treatment.

Treatment of Infants and Children Less Than 2 Years of Age: It is a rare occurrence for children in this age group to have head lice. It is generally not recommended to treat this age group preventively or just because someone else in the family has been treated. If a child of this age is found to have head lice, the parent/guardian should consult the child's physician for treatment. The safety of head lice medications has not been tested in children 2 years of age and under.

Removal of nits: The need to remove nits is somewhat controversial. However, removing the nits may prevent reinfestation by those nits hatching that may have been missed by the treatment. It may also decrease confusion about infestation when the person who has been treated is being re-examined for the presence of head lice, and it will avoid possible embarrassment to the infested child. Nits may be removed by the use of a nit comb or by manually ("nit-picking") removing them. Most of the nits that are easily seen and more easily removed with the nit comb are those that are grayish-white in color, have grown out one or more inches on the hair shaft and have already hatched. The new, viable nits are closer to the scalp (within about 1/4 inch) and are more of a brownish color. These nits are firmly attached to the hair shaft with a glue-like substance. There are commercial products available to help loosen the glue-like substance for easier removal.

Family: Household members of a child with head lice should be examined for lice (by a family member who knows how or someone else knowledgeable about lice) and any infested persons treated as described above. **The one exception is any person over 2 years of age who shares a bed with the infested child should simply be treated presumptively.** If the child is less than 2 years of age, consult the child's physician for treatment recommendations.

4. **ENVIRONMENTAL CONTROL**

Child Care Facility/Household: Clothing, cloth toys, and personal linens (such as towels and bedclothes used within the previous 48 hours by an infested person) can be disinfected by washing in hot water and drying in the dryer using hot cycles. Non-washables should be dry cleaned, or stored in airtight plastic bags for 2 weeks. Spraying with insecticides is **NOT** recommended. Fumigants and room sprays can be toxic if inhaled or absorbed through the skin. If there are cloth surfaces, such as furniture or carpet, with which the infested person's hair has had extensive contact, they should be **vacuumed** thoroughly. The head louse will not survive off the human scalp for more than 24 - 48 hours.

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Questions about control methods, specific treatments, or special problems can be addressed to the local health department, the district public health office, or to the Office of Community Health Services - Division of Epidemiology, State Department of Health in Jackson.

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(*Use of specific product names is for example purposes only, and is not intended as endorsement of specific brands over others.)

SAMPLE LETTER TO PARENTS/GUARDIANS

Dear Parent or Guardian:

Your child has been found to have head lice. Head lice do not transmit disease and they are not a result of lack of cleanliness. Children in child care settings get them commonly, sometimes more than once.

You should consult a pharmacist or your child's physician for a recommendation as to which of several effective products to use to treat your child. **As soon as you have treated your child with an approved pediculicidal (lice-killing) product, he or she may return to child care.**

There are 3 steps in the successful management of head lice:

1. **Treatment (killing the lice with an approved medical treatment)** - It is very important to follow the instructions given by your physician when using prescription medication. If you use over-the-counter medication, you should follow the package directions. The other members of your family should be checked for head lice and treated if they are found to have them. Persons over 2 years of age who sleep in the same bed with the infested child should be treated regardless. If a child less than 2 years of age is found to have head lice, consult the child's physician for treatment recommendations.

2. **Removal of the nits** - The Mississippi State Department of Health recommends that you attempt to remove the nits to avoid reinfestation by those nits hatching that may have been missed by the treatment. The nits can be removed by dividing the hair into sections and working each section separately. Look for small grayish-white or yellowish-brown specks that are attached to the hair shaft close to the scalp. Nits are attached to the hair shaft very firmly with a glue-like substance and are not easily brushed out. They must be picked out with the fingernails or combed with the nit comb that usually comes with the lice-killing product. This can be done outdoors under bright sunlight or indoors with a good reading lamp as nits are sometimes hard to see.

3. **Environmental control** - Clothing and personal linens (such as towels and bedclothes used by infested persons) should be machine washed using hot water and dried using the hot cycle. Non-washables can be dry cleaned or stored in an airtight plastic bag for 2 weeks. Cloth-covered furniture and carpet that have been in extensive contact with an infested person's head should be thoroughly vacuumed. Lice-killing sprays are generally not necessary.

Signature: _____Date: _____

Source: Miss. Code Ann. §43-20-8.