Information related to day care center policies for dealing with mildly ill children is provided in this document. Data cited in the report indicate wide inconsistencies at the present time in policies and procedures for screening ill children in Air Force child care centers and in the policies followed for admitting and readmitting children who have had a mild illness. To ascertain how states restrict the admission of ill children, a compilation of state day care licensing requirements was reviewed. Additionally, models for the care of sick children and programs for the care of mildly ill children are briefly described, and research on illness and child care is briefly discussed. Concluding sections of the document focus on preventive measures for military child care centers and alternatives for the care of mildly ill children in military centers. (Author/RH)
UNITED STATES AIR FORCE
CHILD CARE PROGRAM

ALTERNATIVES FOR THE CARE OF MILDLY ILL CHILDREN

Prepared for the United States Air Force Child Care Program by Ms. Linda J. Brant as Part of the Department of Health and Human Services-Funded Tri Services Military Child Care Project

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Chapter 1

INTRODUCTION

In March 1980, 43 percent of the children under age 6 had mothers in the labor force. This translates into 7.5 million children under age 6 with working mothers. It is projected that by 1990, 74 percent of all two-parent families will have working mothers. Due to this transformation of the work force, day care has become a vital factor in the country's economy and well-being.

Fifty-two percent of all wives married to Air Force members are employed. In officer families, 44 percent of spouses work outside the home while 65 percent of enlisted spouses are so employed. As a group, the children of military families are much younger than those of the larger society. In 1973, the median age of children in military families was 5.3 years old compared with 10.5 years for civilian families. Almost all of the children of active duty personnel were under 5 years.

A list of child care needs related to military employment was developed by a group of 32 enlisted women with children. In a discussion of how well child care centers met their needs as military service members, one of the problems stated was the inability of the centers to care for sick children.

Generally, day care centers do not provide care for ill children due to a variety of factors which may include state licensing regulations, inability to provide specialized care, and/or lack of health care training of center staff. Therefore, a family who uses group care and does not have another source of child care such as relatives, neighbors, or a nonworking spouse is placed in a stressful and frustrating situation when a child is ill. When parents have difficulty resolving child care situations, stress and anxiety result.

There is a loss of productivity of an employee who is in an anxious state. Working parents who have no one they can rely upon to care for sick child often call their employer and falsely claim to be sick themselves so that they can stay at home and take care of their sick child. In addition to the loss of productivity and efficiency at the work place, the burden of deception and guilt is created between an employee and the employer. Absence from work may result in the employee's losing income, promotion, and/or other job opportunities.

Care for sick children is just as great a need among two-parent families when at least one parent is forced to miss work to stay with the child as it is for single parent breadwinners. While one in five mothers (3.8 million) in the labor force is from a one-parent family, mothers from two-parent families are also affected.
Some evidence has been collected to support the existence of this problem. In its 1980 corporate report, Honeywell estimated that 61 percent of employee absenteeism was due to the need for child care, especially care of sick children. A survey done by Jan Calderon Yocum, Executive Director, National Day Care and Child Development Council, indicated that women employees use a majority of their own sick days caring for ill children at home. According to Yvonne Hanson, labor force absenteeism is 5.3 days per year for males and 5.9 days per year for females. The difference between male and female rates is probably due to the female parent's assuming more responsibility for care of sick children. Alice Jordan, Director of Berkeley Children's Services, has stated that absentee rates of children due to illness range from 12 to 25 percent a day in group child care settings.

In a study conducted by Child Care Services, in the Minneapolis, MN area, respondents were asked how many sick days they had taken in the past year to care for a sick child. Eighty-three percent had taken less than 6 paid days off for this purpose. One-third used less than 20 percent of their sick leave for sick child care while one-fourth claimed almost all of their sick leave was spent taking care of sick children. One-third of the respondents used some vacation time for sick child care (this may have implications for personnel specialists who develop vacation time as relaxation time). More than half of the parents stated that their children typically missed from 1 to 6 days of day care per year because children were too ill to attend.

The Berkeley Sick Child Care Program resulted from a community needs assessment prepared by the Pacific Training and Technical Assistance Corporation. Their 1971 study is reported in "Care For Our Children" (an unpublished document). Eighty-three percent of the working parents surveyed had no adequate solution for the care of sick children. They either stayed at home with the child or left their sick child at home alone or with a sibling. The parents stated that their children were sick an average of 5 days per school year. The authors estimated that 10,000 work days were lost in Berkeley alone, constituting an economic problem for employers, a hardship for families, and a source of serious jeopardy to the employment of women.

State licensing regulations and policies of day care centers seem to assume that there will be a mom or dad at home to care for a child who becomes sick at the center. Not so; most moms are at work along with the dads. For every sick child who is sent home from a center, an employee must take time off from work to care for that child. This is especially true in military families who lack an extended family support network which could provide for emergency child care.
Job pressures may lead parents to attempt to leave a child at a child care center even though the parent knows the child is ill. In addition, some mildly ill children are not receiving adequate medical attention because the medical facility available to them may provide health care only by appointment during the routine working day. Parents then tend to use the hospital emergency room at night for what is, in reality, a mild illness. This creates a system whereby the medical personnel are irritated with those parents bringing routine illnesses to the emergency room for treatment and angry with the child care center for requesting a note stating that the child has been treated. The chasm between parent, physician, and child care center then grows larger.

According to Peters, the health component of a child care program should begin with a definition of health and with measures to prevent illness. A support system between the parent, child, center, and medical professional needs to be created. When parents are made more aware of the center's rules regarding screening policies, they will make fewer attempts to "sneak" a sick child past the front desk. However, being aware of and following rules will not reduce stress and frustration to families when a child is ill. There continues to be a significant, unmet need for sick child care.
Chapter 2

SURVEY INFORMATION

The 1981 Air Force Child Care Center Survey dealt, in part, with what guidelines are actually used for restricting ill children from attendance in Air Force child care centers. These data were analyzed to increase understanding of the issues related to the care of mildly ill children in Air Force child care centers. The survey was mailed to 124 Air Force installations, of which 123 responded. Interpretation of the survey answers was difficult because the bases varied in their definition of "ill children." In analyzing the results, the responses were grouped for purposes of summation. Information was obtained from the respondents on the following questions:

1. "How many children per day are denied service because they appear to be ill at the time of entrance?"

<table>
<thead>
<tr>
<th>NO. CHILDREN DENIED SERVICE PER DAY</th>
<th>NO. BASES REPORTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 per day</td>
<td>54</td>
</tr>
<tr>
<td>1-2 per day</td>
<td>49</td>
</tr>
<tr>
<td>3-4 per day</td>
<td>7</td>
</tr>
<tr>
<td>5 or more per day</td>
<td>6</td>
</tr>
<tr>
<td>No response</td>
<td>7</td>
</tr>
</tbody>
</table>

2. "On an average day, how many children are sent home during their stay because they appear to be ill?"

<table>
<thead>
<tr>
<th>NO. CHILDREN SENT HOME PER DAY</th>
<th>NO. BASES REPORTING</th>
</tr>
</thead>
<tbody>
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<td>1 per day</td>
<td>35</td>
</tr>
<tr>
<td>1-2 per day</td>
<td>66</td>
</tr>
<tr>
<td>3-4 per day</td>
<td>16</td>
</tr>
<tr>
<td>5 or more per day</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
</tr>
</tbody>
</table>

3. "What general guidelines (i.e., temperature of 101°F, diarrhea, etc) do you follow in restricting children with illnesses from the center?"

a. Temperatures:

<table>
<thead>
<tr>
<th>TEMPERATURE AT WHICH CHILDREN ARE RESTRICTED</th>
<th>NO. BASES RESTRICTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.6°F</td>
<td>47</td>
</tr>
<tr>
<td>100°F</td>
<td>37</td>
</tr>
<tr>
<td>101°F</td>
<td>27</td>
</tr>
<tr>
<td>102°F</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
</tr>
</tbody>
</table>
It should be noted that centers did not mention the method used for obtaining the above temperatures (i.e., oral, rectal, or axillary). NOTE: Temperatures regarded as within a normal range may vary more than 2°F, depending upon the method used.

b. **Upper Respiratory Infections (URI)** (includes colds, discharging nose, coughing, ear problems, sore throat): Fifty-seven bases (46 percent) restrict children with URI.

c. **Gastrointestinal (GI) Conditions** (includes flu, diarrhea, vomiting, stomach pains): One hundred and two bases (83 percent) restrict children with GI conditions.

d. **Eye Conditions** (includes pink eye, watery eyes, discharging eyes): Thirty bases (24 percent) restrict children with eye conditions.

e. **Skin Conditions** (includes sores, rash, ringworm, impetigo, scabies, mites, lice): Eighty-four bases (68 percent) restrict children with skin conditions.

f. **Needing Medications**: Eleven bases (9 percent) restrict children who need medication.

g. **Communicable Diseases** (includes measles, mumps, chicken pox, pinworms): Thirty bases (24 percent) restrict children with communicable diseases.

h. **Visible Signs of Illness**: Thirty bases (24 percent) restrict children with visible signs of illness.

i. **Miscellaneous** (includes convulsions, lethargy, irritability, headache, drowsiness, casts, stitches, orthopedic equipment, hepatitis, abnormal behavior change, uncontrollable behavior, retarded): Twenty-five bases (20 percent) also restrict children for one or more of the reasons in the miscellaneous category.

Some bases sent brochures along with their survey which indicated their criteria for restricting children with illnesses. When these brochures were included with the survey, they were also used in compiling the data for this report.

Although the survey did not deal specifically with readmission policies for ill children, some centers addressed this issue via the survey questions or the brochures which were provided. There appears to be little consensus regarding readmission policies or the length of absence required for a mildly ill child. Some centers require a physician's release before a child can be readmitted. Others require that a child exposed to a contagious disease not be readmitted for the duration of the incubation period.
period, which may vary from 1 to 28 days. Some child care centers will not give medications, thus usually eliminating readmission for children receiving antibiotics for ear infections, strep throat, etc. In instances of diarrhea, vomiting, or fever, readmission often was dependent on absence of symptoms for 24 to 48 hours.

In conclusion, there appears to be wide inconsistencies at the present time as to what constitutes an ill child in Air Force child care centers and the policies followed in admission and readmission of children who have had a mild illness.
Chapter 3

STATE LICENSING REGULATIONS

The "Comparative Licensing Study" (1978), a compilation of state day care licensing requirements, was reviewed to ascertain how states restrict the admission of ill children. The categories pertinent to this study are as follows:

a. Daily Illness Screening. Thirty-four states require a daily illness screening. Nine of these states specify that the inspection be done by a person knowledgeable about the symptoms of childhood illnesses.

b. Temporary Isolation and/or Removal of Ill Children. Thirty states require temporary isolation and removal of ill children from the child care facility. Thirteen states require isolation but not necessarily removal of ill children. The licensing regulations of Alaska and Washington state that ill children need not be discharged home as a routine policy, but may be cared for during minor illness at the discretion of the parent and operator. Pettygrove reports the Minnesota Department of Public Welfare explicitly permits care of sick children in family and group family day care and does not prohibit care of sick children in centers.

The Pennsylvania regulation states:

When a facility allows admission of ill children, a plan for care of such children shall be arranged with the parents to assure that the needs of the child for rest, attention, and administration of prescribed medication as applicable, are met.

The regulations for Massachusetts and Iowa state:

The licensee shall maintain a quiet area for mildly ill children.

Administration of Medication.

Only 12 states have regulations governing the administration of medications to children.

Readmission Policies.

Eight states have guidelines for readmission of ill children; of these, four require a doctor's certificate of good health for children with communicable diseases. The other four states require that a reason for the child's absence be stated by the parent.
Chapter 5

MODELS FOR CARE OF SICK CHILDREN

Models for care of sick children were studied to help identify feasible alternatives for care of mildly ill children in military child care centers.

Bruce Kosanovic divides alternative care plans for sick children into two basic categories: (1) those which care for ill children in a group setting and (2) those which care for the ill child on an individual basis. There are several alternative care plans within each category:

a. Group Care Models:

(1) "Sick bay"--a separate room within an existing day care program which could care for three or more ill children. The "sick bay" would be staffed by health professionals and would probably meet the needs of a large enrollment program of 80 to 200 children.

(2) Isolation area--a smaller version of the "sick bay." This plan would have beds for one or two children and be staffed by a health professional or paraprofessional. It could meet the needs of a small to medium program with an enrollment of 20 to 40 children.

(3) Infirmary--a centrally located infirmary, staffed by health professionals, and shared by several day care programs. It could care for 15 to 25 ill children daily. This type of service would probably be needed only on a base or in a community with several child care programs.

(4) Family day care home--a smaller version of the infirmary. The home could care for ill children from one or more day care centers. For example, a family day care home on a base could be licensed to care for a small number of ill children. Children too ill to attend the regular child care center would go to the family day home for the duration of their illness.

(5) "On-call" family day care home--a center/program staff member would be licensed to provide care for ill children within that staff person's home either on or off base.

Group care models are best suited for care of mildly ill children, preschool, or older.
b. Individual Care Models:

(1) "On-call" center/staff--a staff member would be "on call" to provide care for an ill child at the child's home. When this staff member was not being used for sick child care, he/she would work in the regular child care program. The staff person would receive training in the care of sick children.

(2) Community health workers--these trained workers would be employed by a central agency and would care for ill children in the child's own home. Parents would call a central phone number to request care for the following day. Community health workers might also become a component of an ongoing volunteer program such as the Red Cross, Foster Grandparent, or base chapel activities.

Individual care models are better suited for care of ill children ages birth to 3 years or any child with an acute illness or communicable disease.
Chapter 6

PROGRAMS FOR CARE OF MILDLY ILL CHILDREN

Currently operating and former programs for care of mildly ill children were studied in the search for alternatives for care of mildly ill children in military centers. Many individuals and programs were contacted. A few programs are now offering child care for mildly ill children. Although each program has unique characteristics, they can be grouped into Kosanovic’s Group Care and Individual Care Models. Addresses and phone numbers of these programs are included in the appendix.

EXISTING PROGRAMS

GROUP CARE PLAN

The Albany CA Wheezles and Sneezles is a small group care option created by the Berkeley Sick Child Care Program as a "satellite" to a large child care center.23 Located in an apartment building, the center provides care for children with colds, ear infections, asthma, and others who are on medication and need quiet and rest before returning to their regular school or day care program. A staff member described the program as "being geared for the child who is at the tail end of his/her illness or is beginning antibiotic treatment and waiting out the 24/48 hour period before returning to the regular center." A nurse screens the children prior to admission to confirm the appropriateness of their spending the day at Wheezles and Sneezles. Children with temperatures over 101°F and/or those with contagious illnesses are not accepted. The center has quiet activities available to keep the children entertained and rested during the day. Wheezles and Sneezles is licensed as a family day care home and can care for six children daily.

San Anselmo Children’s Center, Fairfax CA, has established a special room in the child care center to be used for the care of children with mild illnesses.13 This "get well room," with a capacity for five to six children, is available between the hours of 0800 and 1800. Two trained staff members are on call to work in the "get well room." Parents wanting to place their child in the "get well room" phone one of the staff members the night before the service is desired. The child’s illness is discussed and plans are made for the following day. (If a child should become ill during the day, a staff person may refer him/her to the "get well room").

The center recommends that the parent consider staying at home with a child who is very ill, needs constant bed rest, or has a temperature of more than 102°F. Temperatures are taken every 4 hours and if a child has a temperature rise above 103°F, shows signs of greater lethargy, or appears to have become more ill than...
When he/she arrived, parents are notified. Meals which are served are light, with juices and liquids given high priority. Medication is given with parental consent. Daily notes on each child are maintained in a permanent ledger in the sick care room. Parents are asked to read these notes and initial entry when the child is picked up. Parents can phone the center for information on their child during the day. The success of the program requires close contact and communication between the parent and the center staff.

San Anselmo Children's Center serves 100 families. Prior to establishment of the "get well room," the center operated with a family day home concept for care of sick children. One of the staff members currently caring for the children in the "get well room" was a licensed family day home provider and was "on call" to care for sick children from the center in her/his home.

**INDIVIDUAL CARE PLANS**

In-home care provided by community health workers is one approach that seems to be working in several areas of the country. This model gives working parents a resource for home child care when their child is ill. Community agencies provide nonmedical home care to children with minor illnesses that preclude a child from having contact with other children but do not demand parental presence. The agencies do not intend for their service to replace the parent when the child needs the parent to be with them.

Three agencies provided extensive information on this type of service: (1) The Tucson Association for Child Care, Inc.; (2) Child Care Services, (CCSI), (Minneapolis MN); and (3) the Berkeley Sick Child Care Program. As nonprofit corporations, the agencies offer a valuable service to parents, day care centers, and employers in their respective communities.

A typical system works as follows: A parent phones the agency to request a child health care worker for the next day. The director talks with the parent about the child's illness and determines what services will be needed. A child health care worker is then assigned to the family. One agency monitors telephone calls until 2230, then switches to a machine on which parents can leave taped messages. The staff starts matching requests and workers at 0630, so parents' workdays are disrupted as little as possible.

These programs are using Comprehensive Employment and Training Act (CETA) workers whenever possible. Other sources of funds are community block grants, community services agencies, the United Way, state departments of education, private industry and foundations, and parent fees. Charges for the services vary from $5.00 per day to $6.00 per hour, depending on the fee scale and the type of funding of each agency. CCSI estimates the total daily cost of providing each CCSI worker is $88.00.
The agencies provide an extensive training program for their workers. CCSI workers receive 20 hours of training which includes Red Cross CPR and first aid instruction, a 4-hour session on childhood illnesses, and instruction on administrative procedures in suspected cases of child abuse. In addition, 20 hours per year of ongoing in-service training is required and provided by CCSI. CCSI employees are blanket bonded, but not fidelity bonded. Employees are not covered by liability insurance.

Health care workers employed in the Tucson program receive 6 weeks of training provided by registered nurses and other skilled professionals. Among the areas covered are common childhood ailments and appropriate care and comfort measures, medications, safety, appropriate child activities, confidentiality and privacy, and first aid. Each health worker is carefully screened for health, honesty, dependability, and loving attitude toward children.

The Berkeley Sick Child Care Program is an employment resource for three sets of job seekers—older women who have raised their own families, Aid to Families With Dependent Children (AFDC) mothers who have been involved in training related to child care and/or health care, and young workers with associate or bachelor degrees in child development who are entering the job market for the first time. These are the types of individuals typically hired to provide the sick child service in the Berkeley program.

With 13 trained workers, the Berkeley Sick Child Care Program currently serves over 500 families a year, providing about 10,000 hours of sick child care per year. The average length of care for each child is 3 days. The Tucson Association for Child Care provided care for over 1,000 children during short-term illness in the course of a 12-month period from February 1979 to February 1980. CCSI, with five trained workers, was able to fill only one out of four requests last winter.

FORMER PROGRAMS

Historically, both models of sick child care described by Kosanović have existed in this country. Some programs have been developed and implemented, but no longer provide service. The demise of these programs can be attributed to a variety of factors, not excluding lack of funding.

The Wichita KS Child Day Care Association operated an "Individual Care Model" using community child health care workers. Four paraprofessionals were trained by the day care association under the supervision of a health coordinator. To obtain the service, parents phoned the association on a 24-hour hot line available through Red Cross. Cost to the parent was on a sliding fee scale with a maximum of $7.00 per day. According to Ms. Frankie Gibson, director, "... this cost was totally unrealistic for the.
services provided. The cost of the service to the providers was much higher. The program was for working parents and was not limited to children who were regularly enrolled in child care centers. The program operated successfully until its CETA funding was lost.

Seven years ago the Mile High Child Care Association in Denver CO operated a group care model using a family day care setting for sick children. Family day care homes were established with the providers being paid a flat monthly fee whether they had one or twenty sick children per month. The providers were given basic first aid training in addition to training in educational activities for sick children. The program operated for several months with a high rate of success, but was terminated when a request for funding from the Department of Social Services was denied.

The World War II child care center at the Kaiser Shipyards in Portland OR appears to be the first to have a “sick bay” for mildly ill children. The two child care centers at the shipyards came into existence in 1943 when studies made it clear that one of the most prevalent causes of absenteeism, lateness, and early checkouts by women was the problems of child care. The centers were industry-based and industry-supported with a capacity for over 1,000 children per center, making them the largest child care centers in the world. An infirmary was included in each center. Cubicles isolated the sick children from each other, but glass dividers were used so they could see each other and talk. The infirmaries were staffed with nurses to provide the medical attention and teachers to provide in-bed activities for the children. Average daily attendance in the infirmaries was 23 in one and 26 in the other. This included day and swing shifts. The Kaiser child care centers operated from 1943 to 1945.
Chapter 7

RESEARCH ON ILLNESS AND CHILD CARE

There have been a few studies on the feasibility of non-parental care of mildly ill children. Chang (1981) reported on a pilot study which compared home care of mildly ill children by parents with care by trained home workers. Children cared for by trained home workers had illnesses of shorter duration (median 3.0 days) when compared with episodes of illness in children cared for by their parents (median 5.2 days). On the basis of this study it appears that care by a trained worker during mild illness is a safe and acceptable alternative to in-home parent care.

The Frank Porter Graham Child Development Center, at the University of North Carolina in Chapel Hill, conducted a research project in which sick children were not excluded from the program. (NOTE: At the time of the study children with chickenpox and measles were excluded.) The children were studied over a 40-month period to determine the frequency and etiology of respiratory disease among a day care population. Maximum enrollment was 39 children, ranging in age from 6 weeks to 5 years. The center had a child/staff ratio of 5 to 1. The staff was carefully selected, well-trained, and stable. The children received total health care from the center staff. Ample indoor space was available for the children; there was extensive use of the outside play facilities.

There was not an excessive amount of respiratory illness in the children in day care when compared with the reported illness of children receiving care at home. The study suggests that group day care is medically safe for infants and that exclusion of sick children is unnecessary in a day care program with adequate space and staffing.

Despite the special circumstances existing in this center, the data has relevance to day care standards. The evidence suggests that the value of temporary exclusion of sick children from day care for epidemiologic control of respiratory disease is overrated. Viruses are often excreted prior to the onset of clinical symptoms which provide the criteria for exclusion from a group setting.

The Frank Porter Graham Child Development Center has continued to accept and study sick children, with the exception of those with chickenpox. Studies produced during the past decade concur with the earlier study regarding accepting children with illness into the center. Kline reported on a study conducted at the Frank Porter Graham Center during an outbreak of influenza virus in 1974. Cultures were obtained from both sick and well children every other week. Additional specimens were collected when children were ill. Blood samples were routinely collected at 6-month intervals and checked for antibody content. Fifty percent of the children who were infected by the influenza B virus had symptoms of illness at the time of culturing. Children who are apparently well but infected may play a significant role in spreading disease.
The common infections of childhood in descending order of frequency with which they require a visit to a physician are: (1) upper respiratory infections (URI), (2) gastrointestinal (GI), and (3) skin conditions. Of the upper respiratory infections, middle ear disease is the most common cause of visits to a physician. Most middle ear problems can be controlled with medication. (Centers need to be receptive to giving medications.) The peak season for respiratory illness is November to February. Dr Ann Peters reports that the Frank Porter Graham Center was able to reduce most of the gastrointestinal illness by using good sanitation practices.

According to Willa Pettygrove, there seems to be general agreement that "mild" upper respiratory illness can be safely handled with appropriate precautions in a group setting, but there is disagreement concerning fevers, vomiting, and diarrhea. In addition, information on highly communicable illness such as impetigo, chicken pox, and skin parasites (scabies, lice, etc) is scanty.
Chapter 8

PREVENTATIVE MEASURES FOR MILITARY
CHILD CARE CENTERS

There are some precautions which can be taken to help decrease the potential danger of caring for mildly ill children in group settings. Dr. Ann D. Peters lists the necessary elements for a sound preventive health program in a child care center: (1) personal hygiene of caregivers, (2) environmental control, i.e., proper sewage disposal, proper sanitation in handling diapers and contaminated articles, proper cleansing of eating utensils, etc., and (3) health education and training for staff, parents, and children.27 If good hygiene, sanitation, and health care measures are practiced, children in day care will not needlessly be exposed to increased infection. The risk of contagion in military child care centers can be reduced if adequate preventative measures are followed. These include:

a. Stable Environment. Children in group day care should exist in a stable environment. The staff should be as constant as possible and the children in the program with whom any individual child interacts should not change frequently. Children who are part of a cohesive, consistent group build up an immunity to viruses which are common to the group. They may then carry these viruses in the nose and throat secretions without harm to themselves. However, these viruses may cause respiratory illness in others who are not immune to them.

The continual introduction of new children (and staff) with new agents and without immunity to the agents already present into a group of children increases the amount of disease. The military population is very mobile. A child may travel from Florida to Alaska, moving from one child care population to another, bringing along viruses to which the new group has not yet built immunity. The problem this situation creates is further increased when hourly children are mixed with full-time enrollees in a child care center. Keeping hourly children separate from full-time enrollees can contribute to the reduction in the amount of infectious diseases within a military program.

The significant turnover of staff in day care centers has been documented. This turnover is usually traceable to stresses associated with working long hours with many children for low pay. Increasing the pay, improving the working conditions, and providing staff training can do much to increase retention of staff. Building positive attitudes among the staff as to the importance of their job is essential. Allowing staff to participate in some decision making policies at the center also increases their motivation to the job. Stability of staff is important not only because it reduces the introduction of new viruses into the center
but because staff who are familiar with the children being cared for can identify ill children more quickly and can more adequately comfort and care for children who are experiencing discomfort.

b. Center Size. As center size increases, children will be exposed to more infectious agents from outside their own environment. When the groups within the center become too large, the difficulty of maintaining health routines will increase illness. The larger the center and the primary care groups, the more viruses there are to share. A recommended maximum size for day care centers is 75 children. Air Force child care centers operate with an average of 150 children per center and some serve over 300 children in one facility. In these large centers exposure to disease is increased. This is especially true when children are cared for in large groups or smaller groups of children are intermingled during the day.

c. Sanitation.

   (1) Handwashing is a first-line preventive measure in the control of disease. A number of studies have shown that unwashed hands are the primary carriers of infectious agents from the environment to people and from person to person. The washing time and frequency of washing rather than the type of soap are critical factors in determining how much reduction of infectious agents is accomplished by handwashing.30 Handwashing facilities must be near where hand contamination is likely to occur (diapering area, toilet, etc). Child care centers are often located in buildings built for other purposes, without handwashing concerns in mind. Alternative measures which could be used include disposable dry wipe products or surgical foam for handwashing areas. Providing hand lotion at the handwashing area may encourage more frequent washing by staff.

   (2) Proper disposal of heavily contaminated materials such as nasal and toilet tissues, diapers, soiled clothing and bedding, and vomitus is important to prevent large doses of bacteria and viruses from being delivered to susceptible persons. Clean-up areas need to be separate from food service locations to minimize the risk that food, hands, and utensils will be contaminated by invisible high doses of infectious agents.

d. Space and Ventilation.

   (1) Small rooms filled with large numbers of children result in overcrowding and increase chances of contagion. Some centers may maintain small groups, but then combine all of the groups at certain periods of the day, such as before lunch. This means that 90 children may be sitting in a room designed for 30. A sneeze can transmit nasal and throat secretions 3 feet. Also, it is important that no more than one child sleep in the same crib or cot in order to prevent heavy exposure to one another. Cots or mats should be spaced so that each child has 200 cubic feet of air space during
rest periods. This provides enough space to prevent the air passage of infectious agents in large droplets from one child to another. With this much space, the large droplets settle on the floor without reaching the next cot.

(2) The least expensive child care space is the outdoors and maximum use should be made of the outdoor play area. This is especially true in cold weather when crowded and overheated indoor spaces provide excellent environments for the spread of disease.

e. Humidity Control. Adequate humidification, temperature control, and ventilation of the environment increases a person's mucous membrane resistance and recuperative abilities. Humidity and room temperature are related. As cool, low humidity winter outdoor air is artificially heated, the amount of moisture the air can hold is increased. This heated air will extract moisture from any water source available including skin and mucous membranes. The skin and mucous membranes are then dried by exposure to the heated low humidity air. The reverse problem occurs in summer when hot, humid air interferes with the normal cooling evaporation of water from the skin. When skin moisture cannot easily evaporate, a child's body tends to overheat.

f. Proper Feeding Techniques. Bottle propping and bottle feeding in the crib feeding can encourage middle ear disease in infants and toddlers. Breast-fed infants are usually held in an inclined position in which the child's ear and eustachian tube opening are slightly elevated above the mouth and throat. With incorrect bottle feeding, and almost inevitably with bottle propping, the child is placed on his back which favors the entry of liquid food and/or the secretions from the naso pharynx through the eustachian tube into the middle ear. The naso pharynx secretions normally contain some bacteria and viruses which increase the potential for middle ear problems. Therefore, bottle propping and self-bottle feeding should not be permitted. A caregiver should bottle feed a child while holding him/her in the "normal" breast-feeding position.

g. Health Education Training.

(1) Centers providing care for sick children should develop working definitions of illness. Descriptions of programs often refer to illness as "mild," "moderate," or "severe" but do not define these terms. Programs providing care for sick children must develop written guidelines on care of sick children with the help of qualified medical personnel.

(2) According to Peters, a well-trained staff is the major element in preventing spread of disease in a center. "If you train your staff to recognize symptoms you are putting the children in a safer environment." Staff must have adequate training and professional backup to safely care for sick children.
depth of staff training will depend, in part, upon the kind of
sick child care a center is providing (individual in-home, group
care in center, group care in family day care home, or isolation
room in center). Qualified medical professionals should participate
in the staff training. Recommended areas to be covered are (1)
common childhood illness, (2) appropriate care and comfort measures,
(3) administration of medications, (4) cardiopulmonary resuscitation
(CPR), (5) first aid, and (6) quiet activities for children. The
staff receiving this training will be determined by the type of
program being offered. However, all staff should receive training in
how to observe and screen children for symptoms of illness.

(3) A vital part of health education training is to
develop a close working relationship with the parents so they
understand center policies. Parents who are informed as to why
children with certain conditions can or cannot be accepted at the
center will be less likely to attempt to sneak a sick child past
the front desk. A brochure which describes the medical policies
of the center is a "healthy" public relations tool to use with
parents.

(4) The health education cards (Appendix) have been
developed to assist staff and parents in recognizing and controlling
communicable diseases that often occur in child care centers. These
cards provide basic information and a photograph of a communicable
disease. The cards can be mounted on a bulletin board for easy
reference by staff and parents.

(5) One example of a multimedia presentation which can be
effectively used for staff training is "Medical Problems," Module IV
in "Child Health and Safety Series," available from the Texas
Department of Human Resources, John H. Reagan Building, Austin TX
78701. The slide presentation included with the material provides
easy-to-understand facts about childhood medical problems.29

A sick child program should first of all be prevention-oriented.
If preventive measures are followed, the chances for infection
are markedly reduced. Second, a sick child program central focus
should be substituting tender loving care for the child, not provi-
ding quarantine. The purpose of a sick child program is to provide
appropriate care for a child who is mildly ill, not to isolate
him/her from other children. Children are infectious before they
are symptomatic; therefore, one can't effectively isolate children
from the group in order to protect the group from disease. The
evidence doesn't support isolation as an effective preventive
measure.
A group care setting can be a suitable alternative for care of sick children. However, there are some appropriate exceptions to grouping children. For instance, children with hepatitis and chicken pox should stay at home during the acute stages of their illness. Likewise children with high fevers, discomfort, in need of total bed rest, acutely ill, etc, should not be admitted to a group care setting. In-home individual care rather than group care is needed for these children.
Chapter 9

ALTERNATIVES FOR CARE OF MILDLY ILL CHILDREN IN MILITARY CENTERS

There are several viable alternatives for care of mildly ill children that could be used by a military installation. These are:

a. Family Day Care Homes. Several homes could be licensed by the base to provide care for children who can not be admitted into the child care center due to mild illness. According to the 1981 Air Force Child Care Center Survey, the estimated number of children per base needing such care each day would be under five. The day care home providers should receive training in caring for sick children and in providing quiet activities for them. Ideally, a base pediatrician or a pediatric nurse practitioner would be involved in planning the program and would be available to answer emergency questions which might arise. Guidelines for admittance to the family day care home could be established by a committee made up of child care center staff, medical personnel, and parents. The emphasis of the program should be on providing care for the mildly ill child, with parents understanding that a child who was seriously ill or who needs the care of a parent should stay home with the parent.

b. Individual In-Home Care. Health care workers could be "on call" to go to a child's home to provide care during an illness. The source for these workers could be the intermittent on-call (IOC) staff at the child care center. These staff persons would be trained in caring for sick children. Besides being "on call" to work in the child care center, they would also be on call to provide sick child care. This concept could also be used with volunteers from established agencies providing the sick child care. The Red Cross Volunteer Program could include a component for sick child care. Parents could be charged an additional fee for this in-home service.

c. Isolation Room in Center. Care for mildly ill children could be provided in centers that have an isolation room large enough to house several children. Isolation rooms large enough to hold only one crib would not be suitable for children to be in for long periods of time. A caregiver trained in care of sick children could staff the room. Quiet activities should be provided for the mildly ill children. Yocum indicates that this alternative for sick child care is the least expensive to operate.32

d. Dependent Care Leave. Another alternative is to expand the current Air Force leave policy to include leave to care for sick children, spouses, and elderly parents (the member's immediate family). Establishing a dependent care leave policy would legitimize the actions of members who are already staying at home to
care for sick children but are using other reasons to explain work absences. According to Ms Yocum, many industries are considering instituting dependent care leave as an alternative to providing sick child care.\textsuperscript{32}

In summary, the number one concern of military child care centers should be the well-being and care of each child. This can best be accomplished by:

a. A well-advertised admission and readmission policy which also serves as a screening device.

b. Open communication between staff, parents, and medical personnel.

c. Training staff in common medical problems of children, how to look for symptoms, preventing spread of infection, and caring for mildly ill children.

d. Providing alternatives for care of mildly ill children.
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Texas Department of Human Resources, Austin, TX 78767
BANANAS, 6501 Telegraph Ave, Oakland, CA 94609--
booklet "Sick Child Care Book for Parents and Child Care Providers"
Wichita Child Day Care Association, 155 S. Hydraulic, Wichita
KS 67211,--booklet "Signs and Symptoms of Common Childhood Illness."
OTHER SOURCES CONTACTED

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