

ALASKAN MEDICAL AIDE

TRAINING PROGRAM

COMPENDIUM

Submitted by the "Community Health Program Committee", Jan. 1964

OBJECTIVES

1. To inform prospective medical aides of their responsibility to the village, physician and PHN, including:

- A. Records
- B. Medical ethics
- C. Radio reports
- D. Drug orders

2. To instruct the medical aide in certain basic sanitation procedures and concepts, including an explanation in appropriate terms of the germ theory. The aide is to be encouraged to pass on this knowledge to other members of his community.

3. To instruct the aide in healthful nutritional schemes for the:

- A. Prenatal patient
- B. Infant and Child
- C. Basic Alaskan diet

This information is to be presented in such a way that the aide can use it in instructing others in the village.

4. To instruct the aide in basic principles of proper dental hygiene and essentials of diet as far as dental problems are concerned.

5. To instruct the aide in recognition of signs and symptoms of disease and in the proper reporting thereof. To instruct the aide in certain basic emergency procedures which he may have to perform without first notifying a physician. To be able to do so, it must be assumed that the aide can recognize certain signs and symptoms, thus he must also be instructed in what to look for in life-threatening situations.

6. To instruct the aide in certain basic nursing procedures with which he must be familiar to carry out the orders of the physician contacted.

7. It must be realized that the above 6 categories cannot and should not be divorced from each other during teaching presentations. Continuity in presentation and overlapping of important principles from one section to another is to be desired. The medical aide is not intended to supplant pre-existing services, e.g., sanitation aides and mid-wives, but to augment such services and fill the gaps particularly in villages with no trained aides of any kind. The ultimate goal is a trained medical aide and alternate in every village.

GENERAL CONSIDERATIONS

1. It is suggested that there be informality throughout the course allowing time

2. the first day to get well acquainted with the aides and allowing time throughout the course for the aides to express their views and comments in general discussion. Evening bull-sessions over a pot of coffee are to be encouraged. To enhance the aide's prestige, it is felt that a final formal awards ceremony
3. should be held. Suggest that as much material as possible be prepared in advance and put in each notebook. Each hospital should prepare a list of names and titles for the notebook with which the aide should be familiar.

TEACHING GUIDE-LINES

I. INTRODUCTION

| <u>TOPIC</u> | <u>METHOD</u> |
|------------------------|---|
| 1. Getting acquainted. | 1. Coffee, name tags. |
| 2. The Course. | 2. Informal discussion on reasons and |
| 3. Notebook. | 3. general objectives. Dispense notebooks, pens and pencils. |
| 4. Test. | 4. Discuss contents briefly. Urge aides to jot down any questions to ask later or words not understood. Mention future additions and revisions of the notebook. |

II. RESPONSIBILITIES

Discuss test as a useful tool for evaluating the course (not the aide).
Give test.

| <u>TOPIC</u> | <u>METHOD</u> |
|----------------------------|--|
| 1. Records | 1. Discuss reasons. |
| 2. Maintenance of records. | 2. Demonstrate use of the card file and dispense the files. |
| 3. Medical ethics. | 3. Discussion emphasizing confidentiality. |
| 4. Reports. | 4. Briefly discuss reporting technique, i.e., radio technique, etc.. |

- | | |
|---|---|
| <p>5. Drug Orders. (Pharmacology of drugs should not be covered at this time. Certain standing orders will be presented later.)</p> | <p>5. Discuss and elaborate:</p> <p>a. Review use of forms under Drug Control in Native Villages Program. Inter-relationship between "Inventory Guide for Drug and Medical Supplies" (A-PH-4) and "Village Approved Drug Requisition" (A-PH-2), "Village Approved Medical Supply Requisition" (A-PH-1). Also "Report of Administration" (A-PH-3), etc..</p> <p>b. Re-emphasize discriminate use of drugs, i.e., administer only on doctor's orders, PHN instructions, etc., except when no one can be contacted, then use "standing orders".</p> <p>c. Storage and security requirements, (refrigeration for penicillin, caution for freezables, lock, away from children.)</p> <p>d. Need to check drug stocks regularly for replenishment, expiration-dated drugs, (awareness that orders may not always arrive at moment's notice, etc..)</p> <p>e. Discuss the current drug list revision briefly and that further instructions will be sent later.</p> |
| <p>6. Assisting medical personnel</p> | <p>6. Review use of the card file for statistical purposes, i.e., morbidity, mortality, etc.. Discuss assisting MD and/or PHN prior to and during field clinics.</p> |
| <p>7. Obtaining permits.</p> | <p>7. Demonstrate forms, e.g., operative permits, foster home placements, etc..</p> |

III. SANITATION
A. THE GERM THEORY

(Cover page of posters)

To understand sickness, and the causes of it, we must have a knowledge of germs. Just as a hunter learns all that he can about any game that he is after, we must learn all that we can about the things which make us sick, if we are to fight them. In the next few days, you are going to hear a lot about germs, so this short period is going to be spent in trying to find out just what they are. Germs are found everywhere, in the air, in water, in food, and even in our bodies. Some of these are good for us and help us and some are bad for us and make us sick.

To begin our study, we must first realize that what we are studying is something that is very small. Germs cannot be seen with the naked eye. To see them, we have to have a tool known as a microscope. A microscope will make a small object look many times larger than it really is, and in this way we can see it.

2. BACTERIA

(Turn to page 1,)

The first kind of germs that we will study is a family called bacteria. Bacteria come in different sizes and shapes, and cause many different diseases. Some bacteria are good because they help to make some of our foods, such as bread, cheese, and other food products. In the picture that I have here ;, I have tried to give you an idea of the size of bacteria. If we could take some of them and lay them in a straight line, it would take 25,000 of them to be one inch long.

For our course today, we are going to study bacteria according to their shape. First you will notice that we have a group known as COCCUS, If you could see these bacteria under a microscope, they would look like little round balls. The way these little balls are lined up, tells us their family name. If they are found in pairs, we call them DIPLOCOCCI. This kind of bacteria causes Gonorrhoea.

(Turn to page #2)

This picture shows the little balls or COCCUS lined up in a row, or in a chain. This family is called STREPTOCOCCUS. This kind of bacteria causes Scarlet Fever and Strep Throat.

Next we find these little balls or COCCUS in a cluster like a bunch of grapes. This family group is known as STAPHYLOCOCCUS. These cause Pneumonia and Food Poisoning. Now we go to an entirely different shape of bacteria,, and this shape of bacteria is known as BACILLI. This Typhoid Fever and Tuberculosis, These is the

(Turn to page #3)

look like little rods, family that causes
The last group of bacteria that we will note are a family get their name from their spiral or twisting shape. This Syphilis.
called SPIROCHETES. These is the family that causes
To summarize what we have covered this far, bacteria can be named according to their shape. They are very small, and can be seen only by using a microscope.

(Turn to page #4)

In this picture, we have tried to show that bacteria have to have certain things in order to live. These things are shown in this chain. Just like you and I, they need food. And in most cases, they will eat anything that we as people will eat.

Secondly, they grow best at certain temperatures, Again, just as you and I like it when it is nice and warm, they like temperatures between 45 degrees and 140 degrees.

Third, Bacteria prefer a moist or wet place to live in. If these three things are available, food, moisture and a warm temperature, bacteria grow real fast. They may grow in our bodies, in our food, in our water and many other places. For us to keep them from growing and spreading diseases, we try to get rid of one or more of the things that they have to have to live on, such as their food. Or perhaps we change the temperature and kill them; in this way, we break the chain of life requirements. There are many ways of course, to kill bacteria or other disease germs. If they are inside the body, we may have to use some kind of medicine, If they are outside the body, we can kill them with Clorox, with boiling water and so forth.

(Turn to page #5)

This picture shows one way of breaking the chain. Wash germs off the hands and pour the

waste water down the drain. In this way they will come in contact with some cold temperatures which will kill-them.

(Turn to page #6)

Another way to break the chain is by using boiling water to kill them. This is why we should pay real close attention to caring for the babies bottle for instance. To clean the bottles up and scald them so that germs will not have a chance to grow on the bottle and make the baby sick.

(Turn to page #7)

This is just to remind you that bacteria are not the only germs that can make a person sick. There is another big family of germs known as VIRUSES that are even smaller than bacteria. We will not go into detail about VIRUSES except to mention that they need the same things as bacteria in order to live and we can get rid of them in the same way that we do bacteria.

3. Review & Questions:

B. SANITATION PROBLEMS

1. Definition:

Sanitation is the study of, and work towards the providing of a clean home, a clean school and a clean community, for each person. In providing a clean place in which to live, we are helping to keep people from getting sick. For the next few minutes, I am going to study with you the little bit about sanitation that is written in your green handbooks.

(Turn to page #1)

2. Water Supply:

The biggest problem that we have in most communities in Alaska is the need for a good safe water supply. Our first picture here shows the best type of water supply if it is possible to have. Here we have a well that is located away from privies, disposal pits, dog tethering areas and so forth. If the pump is put in as it should be, and the plumbing and well house built as they should be, this is a safe water supply.

(Turn to page #2)

A second way to get water for drinking is by catching rain water from the roofs of buildings. This, of course, in most parts of Alaska would be a summer time method. In the picture, we see a house provided with gutters to catch the rain water and cause it to run into covered storage containers. A little later, we will **see** how these are constructed from 55 gallon drums.

(Turn to page #3)

Another place to get drinking water from is a lake. The lake should be away from the community and the cleanest water is in the middle of the lake. To get this water, it is necessary to build a dock to the middle of the lake.

(Turn to page #4)

Another way of getting drinking water is by hauling ice. Again we have to be very careful where we gather ice, to try and get as clean a water as is possible: Dogs should certainly be kept away from this area where ice is gathered. Care should be taken as to how the ice is to be stored.

This picture and those on the next page show how to take a 55 gallon oil or gas drum, and make a water storage container from it.

Explain the steps:

1. Cutting top off can.
2. Fitting lid on can.
3. Burning out gas or oil.

(Turn to page #6)

4. Tapping drum.
5. Painting inside and out.
6. Locating on a stand.

(Turn to page #7)

After getting water from the best possible place, getting it home, storing it in the safest manner possible, we still need to do one more thing to make sure that the water is free from germs and safe to drink. This is either to add Clorox to the water to kill germs or boil the water to kill them. Water may be perfectly clear and clean looking, and yet be filled with disease germs, you remember that it was mentioned that you can not see bacteria or the viruses, and they can live in water. This picture shows how much Clorox to add to the water to kill any germs that might be in-it. Would you, also turn to page ten in your green handbook and change the figures there to what I have here?

(Turn to page #8)

The best way to kill the germs that might be in the drinking water is by boiling the water for one to five minutes. Be sure to boil all water for infants and for people sick with stomach upsets, Water should be boiled and stored in the same container with a cover on it.

(Turn to page #9)

Changing the subject now from water supplies to one of the main uses of water we go to dishwashing. To protect your families health, the dishes that they use must be clear_ and free from germs. This picture shows one way of doing this. First, washing the dishes in hot soapy water, then rinsing in boiling water. This boiling water kills any germs that might be on them. Then the dishes should be stored in a cupboard, or somewhere that they will not get dirty before they are used again.

(Turn to page #10)

3. Body Wastes:

Next, we change the subject again, this time we consider how to dispose of body wastes. The first poster we have there shows how to dispose of body wastes in the home. At the top we have a home-made chemical toilet. Your Sanitation Aide can show you how to build this. If you want something that is better looking, Sears, Roebuck sells one that looks like the bottom one here.

(Turn to page #11)

Outside of the home, body wastes may be disposed of in the pit privy. The privy can also be used to empty the ^{chemical} toilets into. The last picture shows one way of getting rid of the trash and refuse that accumulates in the community. Here it is picked up and hauled a good distance away from the village, in this way, keeping the village clean.

Review what has been said:

Water collection.

Review what has been said:

Water collection.
Water storage.
Water disinfection.
Dishwashing.
Waste & refuse disposal.
Questions:

C. INSECTS

1. Introduction:

(Poster is in front of class and shows the cover sheet only.)

There are not many kinds of insects in Alaska; however, there are lots of the ones that we do have. As you know, during the summer weather, it seems that there are millions of insects swarming around. We are studying insects today because they can make people sick with many diseases in many ways. They may carry bacteria on their bodies to us, or they may vaccinate us with germs when they bite us. Just as the nurse or doctor may give you a shot with a needle to make you sick, an insect may give you a shot with his mouth full of bacteria, that makes you sick. This is why we study the insects so that we can find ways of getting rid of them' before they get to us,

2. Lice:

(Turn to first page of posters.)

The first picture we have here is of the body or head louse. Just as the pictures that you saw earlier of bacteria were much larger than the actual bacteria, so are the pictures that I have of insects. We really would have problems with lice as big as this one. Lice carry several types of fevers, as well as having an irritating bite. You may notice that anyone with lice may have little sores all around the hair line from bites, and from scratching these bites. Also, you will notice if you look closely that there are tiny white specks that seem to be glued to the hair. These are eggs or nits, and are very difficult to get rid of. The second picture shows crab louse. These are usually found on the pubic hair and second picture shows a crab louse. These never in the hair on the head. I will not tell you how to control these lice on a person, but will leave that to the medical personnel.

3. Flies:

(Stay on this page.)

These pests seem to be found around the world. They cause more sickness other insect. Here are some of the reasons for this:
than any

a.) Flies hatch in filth. This includes places like ^{open} dumps, open privies, around dead animals, and any place where there is garbage or waste.

b.) The body of a fly is covered with hair, As the fly walks over trash, these body hairs become soiled, then when the Ely comes to see you, it brings this filth along with it. If the fly has been walking around in the privy in human feces, it brings this right along with it and in walking over your food, leaves a trail of feces everywhere it walks.

c.) A fly cannot eat solid food, in order for a fly to eat, it must first get its food in liquid form. To do this, it spits or vomits on its food to make it liquid so that it can drink it up. You can see now why every means should be taken to keep flies under control. This can be done in several ways:

(a). Get rid of the places where they breed. This means keeping the village clean, trash and refuse stored properly, body wastes disposed of correctly and so forth,

(b). Screens. During the fly season, screens or: the doors and windows of the peoples homes will keep flies and other insects outside and away from food and people.

(c). Sprays. With care, one may spray inside the home for flies and other insects. DDT is a good chemical for killing flies and other insects. This chemical and other

chemicals used to kill insects must be used with care, especially around small children. Any chemical that can kill a bug can also kill a person!

4. Bedbugs:

(Turn to page 2 on the poster)

The next insect that we will study today is the bedbug. We cannot say for sure that the bedbug carries a disease, but we can say for sure that it can bite. Children in particular often got reactions to bites from bedbugs. Bedbugs spend their days in hiding in mattresses, pillow cases, joints in the bed, cracks in the floors and walls, then at night when people are sleeping, they come out and eat. Their food is blood, so you and I are their meals. Bedbugs may be gotten rid of in the following way:

2.) Spray. Use a 5% DDT spray in the hiding places that we mentioned a moment ago. In a week or ten days, spray again; this will kill any new ones that have hatched out. Be careful with spray.

5. Mosquitoes:

(Stay on page 2 of the poster)

The last insect that we will study is the mosquito, The Alaskan mosquito is troublesome because of its biting. In other parts of the world, the mosquito carries various diseases, but the kind we have here just bite. In many areas, they can be controlled by getting rid of the places where they breed, some places in Alaska, such as Bethel, this is impossible. In this case, we learn to live with them but attempt to keep them out of our homes and from biting us when we go outside, Screens will keep them outside of the home and there are various sprays that can be bought to keep them from biting us.

I will be glad at this time to answer questions about what we have studied.

(Give out handouts)

1. Flies carry DISEASE
2. Garbage and rubbish

IV. NUTRITION

A. Objectives:

1. To acquaint the medical aides with the relationship between food and health.
2. To familiarize the aides with the Alaska Basic 5 food groups as the basis of an adequate diet.
3. To acquaint the aide with the infant and child's need for food to support growth and health.
4. To familiarize the aide with food recommendations for infants and children.
5. To familiarize the aide with food recommendations in pregnancy.

B. General Nutrition:

| <u>TOPIC</u> | <u>METHOD</u> |
|---|--|
| 1. Food is necessary to live. | 1. Discuss - what would happen if one didn't eat. |
| 2. Food not only keeps you alive but provides material for the body to grow (child), keeps the different parts of the body working (heart, liver, etc.)and helps the body to be strong and health and fight off sickness. (prevent anemia, healing cuts and bones.) | 2. Film Strip - "Walt Disney " Food and your Body". (available from BIA schools) |

3. Foods available in your village.
 - a. Do people get the kind of food they need to stay healthy?
4. Foods are not all the same in what they do for the body, some foods have more of one kind of material (to help build muscles, bodies, blood, etc.) than others.
 - a. It is good to know what kinds of food the body needs to keep healthy so that one can try to have these foods regularly.
5. Solicit questions, comments from the group.
6. Additional educational materials Nfdm leaflet

3. Ask each aide to record typical food intake for one day for "my family if in their village".
4. Show selected food bar posters representing Basic 5 food groups
 - a. Show Basic 5 food charts and leaflets; Review 1 day food intake (3 above) in terms of Basic 5.
5. Discuss
6. Discuss.

C. FOOD FOR BABIES AND CHILDREN

TOPIC

1. Babies and children need food;
 - a. to live
 - b. to grow
 - c. to be strong and healthy
2. Babies and children are dependent on adults to see that they get the kind of food they need.
3. Babies first food is milk but as they grow other foods needed to supply material to build bones, gums, nerves, etc..
4. Food babies need as they grow older include: cereal, meat, fish, fruit, vegetables
5. Solicit questions, comments from group,
 - a. Determine, if possible, how they will apply for information.
6. "How to fix a Bottle for Your Baby"

METHOD

1. Review discussion on relationship of food to body needs, pointing out:
 - a. Discuss sickness babies get if food is wrong, insufficient amount, type of food, prepared incorrect.
2. Discuss - importance of adult knowing about babies food needs so they can provide.
3. Show milk bar poster, pointing out material -(Feb., Vit. C. esp.) that must come from other foods.
4. Distribute "Feeding your baby" leaflets; discuss, noting sanitary food handling and relating consistency of food to child's ability to chew
 - a. Display foods (kind and quality) for a six month (average) old baby and the average year old.
5. Discuss.
6. Review.

D. PRENATAL NUTRITION TOPIC

TOPIC

1. Review Lesson I highlights: a. Food is for health. b. Food is for growth, c. Different foods help different parts of the body.
2. When a woman is pregnant, one way she can help herself and her baby is through what she eats,
3. A person, even a baby, is built from the foods he eats or that his mothers eats before he is born.

METHOD

1. Review with group;
 - a. Alaska Basic 5 food Groups Plan (leaflet and chart)
2. Read with group page 1 of above leaflet, especially paragraph 5 which suggests eating more foods daily from Groups 1, 2, & 3. (See front and back pages of leaflet for names of food groups and functions.)
3. Example-Just as one builds a boat from wood or walrus skins and fastens it together with rawhide, wood, or nails, so a pregnant woman builds a baby from the food she eats.

(or use a sled, house, etc., as example.)

4. Plan a days meals for a pregnant woman in your village for this time of year.

4. Let the group use the food lists in the Basic 5 leaflet for this. First select the foods then, combine them into meals.

For Example:

- Group 1 - Canned tomatoes, frozen berries (wild), wild greens in seal poke
- Group 2 - Fresh reindeer meat, fresh seal liver.
- Group 3 - Canned and dry skim milk.
- Group 4 - Oatmeal mush, "restored" rice (Vit, b added), sourdough or yeast bread.
- Group 5 - Fresh seal oil, Muktuk

Now for the meals:

Morning: Oatmeal mush made with dry skim milk (see PHS-ANH dry milk recipe leaflet), tea or coffee with canned milk.

Noon: Reindeer stew made with canned tomatoes and restored rice, sourdough or yeast bread made with dry skim milk, frozen wild berries alone or as akutuk, (berry--seal oil mixture), tea or coffee with canned milk.

Night: Same as noon(or boiled seal liver wild greens with seal oil, sourdough or yeast bread made with dry skim milk, frozen ; berries alone or as akutuk, tea or coffee with canned milk

5. In some cases, the doctor or nurse will say "so salt", "no sugar", or "not so much fat or starches" to the pregnant woman. This may be to help her not get too fat or to help cut down on swelling of her feet or ankles.

5. Get group to plan how to change above meals to follow each of the 21 variations of diet (low caloric, low salt)

Low Salt: no salt in cooking or on food before eating. Look on boxes or cans for list of ingredients (salt esp.) Low Caloric: determine days intake of food and advise accordingly.

6. It is necessary to know what a pregnant woman eats so you can help her make any necessary changes for the health of herself and her baby.

6. Using 2 aides, or an instructor and 1 aid demonstrate a diet history being taken on a pregnant woman for the past 24 hours. Using this (quantity and quality of food) demonstrate advice to be given which is simple and practical.

V. DENTAL

TOPIC

METHOD

1. Introduction:
Will cover development, structure and function of the teeth; primary and permanent dentition. (Covering also nomenclature)

1. Discussion and visual aids by chart and slide.

2. Diet as related to dentition: Will cover basic elements needed in foodstuff for healthy teeth and gums, and from what foods these elements can be obtained. Include emphasis on prenatal diet and the addition of fluoride to diet.

3. Oral Hygiene:
Will include definition, reasons for good hygiene; how it can be obtained and maintained; role of dentist in oral hygiene program - staining.

4. Dental Caries (Decay)
Will show relationship to oral hygiene, diet, and fluoride intake. Mechanism of this disease and results of neglect of decay.

5. Periodontal disease
Will cover relationship to diet and oral hygiene. Results of neglect with mechanism of disease.

6. Dental Emergencies
Will cover toothaches, bleeding gums, gum boils, fractured jaws and supernumerary teeth.

7. Field Health Program
Explain the present philosophy of the dental program (children emphasized) and how the village plays a major role in having dentists visit them. Also fluoride program.

2. Discussion and charts from the Nutrition lectures.

3. Discussion, demonstrations and visual aids, (slides)

4. Discussion, visual aids, by models and slides.

5. Discussion and visual aid.

6. Discussion, visual aids by models and casts.

7. Discussion.

VI. NORMAL GROWTH AND DEVELOPMENT

| <u>TOPIC</u> | <u>METHOD</u> |
|-----------------|--|
| 1. Well baby | 1. Refer to booklet in notebook and discuss a) Your New Baby b) Your Baby's First year |
| 2. Pre-Schooler | 2. Refer to and discuss booklet in notebook - "Your 1 to 6 year old". |
| 3. 6 - 12 Years | 3. Any charts or outlines available. |
| 4. Adolescence | 4. Any charts or outlines available. Discuss great variation (which can be normal) in menstrual cycles, onset, etc.. |

VII. RECOGNITION OF SIGNS AND SYMPTOMS AND REPORTING

| <u>TOPIC</u> | <u>METHOD</u> |
|---------------------------------------|--|
| 1. Pain | 1. Discussion: a. Location b. Duration c. Severity d. Relieved by anything e. Character |
| 2. Temperature - Pulse - Respiration. | 2. Discuss: |

3. Nausea and Vomiting.
 - a. Oral temperature in persons over 6.
 - b. Rectal temperature in persons under six.
 - c. Significance of temperature of over 100 orally and 101 rectally.
 - d. Normal range of pulse and respiration
4. Bowel Upsets.
 - a. Duration and frequency.
 - b. Character of vomitus, i.e., blood, food, bile, etc..
5. Urination.
 - a. Constipation - Duration and character and frequency
 - b. Diarrhea- Duration and character and frequency
6. Nose and Throat
 - a. Frequency
 - b. Pa in
 - c. Bleeding
7. Ear ache.
 - a. Bleeding
 - b. Appearance - Demonstrate how to look in throat
 - c. Discharge from nose
 - d. Tender adenopathy - Demonstrate palpation
 - e. Difficulty in breathing or swallowing
8. Weight loss.
 - a. Frequency of earaches
 - b. Is ear draining? Color, Smell
9. Cough.
 - a. Weight one month ago, weight now.
 - b. Possible loss of appetite.
10. Skin.
 - a. Sputum and color?
 - b. Dry?
 - c. Duration
11. Reporting injuries.
 - a. Color
 - b. Moist or dry
 - c. Rash - color and extent.
12. Recognition of above.
 - a. Lacerations
 - b. Bruises
 - c. Fractures
 - d. Burns
12. Demonstration of TPR techniques and practice of same. Demonstration of other signs and symptoms from available patients if possible
Method

VIII. EMERGENCIES

A. INTRODUCTION

TOPIC

METHOD

1. Introduction.

1. Hand out the blue guide books and explain that pertinent sections only will be emphasized. (Fill out medical self-help registration blanks,)

B. CONTROL OF BLEEDING CAUSED BY INJURY

TOPIC

METHOD

1. Introduction.

1. Reference guide page 21.
Discussion - bleeding caused by cut vessels and difference between arterial and venous bleeding

2. Methods.

2. Film strip #5

a. Pressure dressing

a. Frame 1, 2, 3

Discussion of pressure directly over wound and elevation of injured extremity, Type of material to be used, i.e., sterile, clean, not to use cotton or adhesive directly on wound. Placing of bulky dressing after bleeding has stopped,

b. Pressure points.

b. Frame 4, 5

Discuss pressure on arteries. Point out this is not as good as direct pressure on wound because arteries are difficult to find.

c. Tourniquet.

C. Frame 5, 7

Emphasize that this should not be used unless nothing else works.

3. Special types of injuries.

3. Continue film strip 05

a. Belly wounds.

a. Frame 8

Discuss from standpoint of knife or animal attack. If intestines (gut) out, rinse with clean water, replace and cover entire area with large bandage, held firmly,

b. Chest (socking) wound.

b. Frame 9

Apply air tight dressing immediately using materials at hand.

c. Neck cuts.

C. Frame 10, 11

Emphasize excessive amount of bleeding. Position of patient should be either sitting with head bent forward or lying on the stomach, thus preventing choking. Pressure is used to stop bleeding.

d. Jaw wounds.

d. Frame 12, 13

Stop bleeding, apply bandage with bow at top, lie patient down.

e. Scalp lacerations.

e. Frame 14

Wrap long strips of cloth around bulky dressing. Lie patient down with head elevated.

4. Types of dressings.

4. Frame 15, 16, 17 - Discuss different types of dressings which can be used.

Demonstration:

- a. Pressure bandages
- b. Belly dressing
- c. Chest dressing
- d. Controlling neck bleeding
- e. Jaw bandage

5. Points to remember.

5. Emphasize:

- a. Arterial versus venous bleeding
- b. Elevate a bleeding limb above heart level
- c. Treat for shock (covered in detail later)
- d. Do not remove a pressure bandage if soaked through with blood. Apply a firmer bandage over it.

C. ARTIFICIAL RESPIRATION

TOPIC

METHOD

1. Introduction

1. Page 18 of Reference guide.

Discuss causes for cessation of breathing, i.e., gas poisoning, electric shock, choking, drowning, smoke suffocation and head injuries.

2. Mouth to mouth and Mouth to Nose.

2. Film strip A, Frames 1 to 6

- a. Place person on back
- b. Clear mouth and throat of foreign material
- c. Tilt head back so chin points upward (explain why),
- d. Pitch patient's nose together and open mouth wide. Take a deep breath, place your mouth over patients and blow. Frequency is 12 to 16 times a minute for an adult. Use much shallower breath and frequency of 20 times a minute for child.
- e. Mouth to nose is used when there is an obstruction in the patient's mouth.
- f. Practical demonstration of mouth to mouth resuscitation.

3. Back Pressure Ana Lift Method

3. Frame 6 through 11

- a. need, to remove foreign objects.
- b. To be used when there is no chest injury.
- c. Practical demonstration of method.

4. Points to remember

4. Emphasize:

- a. Start artificial respiration as soon as possible after patient stops breathing.
- b. Clear mouth and throat with fingers.
- c. Timing, is important with both Methods.

- d. Do not force air into children's lungs too hard or too fast. just blow enough breath - in mouth to mouth - to make chest rise.
- e. Continue artificial respiration until patient starts natural breathing or for at least two hours when there are no signs of life.
- f. After patient has started breathing, mat for shock.

D. SHOCK

| | <u>Topic</u> | <u>Method</u> |
|-----------------------------|--------------|--|
| 1. Introduction. | | 1. Page V in Reference Guide. Discuss mechanism of shock in lay terms and relationship to severe injuries and excessive bleeding. Emphasize that treatment for shock is seldom harmful and may be life saving. |
| 2. Signs. | | 2. Film strip 04, Frame 1 Emphasize signs previously discussed. |
| 3. Positions and cars. | | 3. Frames 2, 3 Discuss position of patient. Discuss turning of head if unconscious to prevent choking from vomitus. |
| 4. Administration of fluid. | | 4. Frames 4, 5, 6 Administration of electrolyte solution by mouth if conscious. |
| 5. Points to remember. | | 5. Emphasize: <ul style="list-style-type: none"> a. Keep patient lying down in proper position. b. Keep warm. c. Electrolyte solution if conscious. d. Nothing if unconscious. e. Positions should be shown in practical demonstration before class. |

E. FRACTURES AND SPLINTING

| | <u>TOPIC</u> | <u>METHOD</u> |
|---------------|--------------|--|
| 1. Types: | | 1. Film strip V, Frame 1, 2; Reference guide, page 25. |
| a. Simple | | Discuss nomenclature of fractures. If in doubt, treat injury as though it were a fracture. Show how closed fracture can become compounded if not treated properly and explain danger of compound versus closed. Discuss treatment of wound of compound fracture. |
| b. Compound | | |
| 2. Splinting. | | 2. Frames 3 through 11. Discuss what is accomplished by splinting, |
| a. Materials. | | a. Discuss materials that may be used for splinting. |
| b. Methods. | | b. Discuss methods of splinting. |

- 3. Back Fracture.
 - 4. Points to remember.
 - 5. Practical application.
- 3. Discuss treatment and the consequences of over treatment.
 - 4. Emphasize:
 - a. When in doubt treat as fracture.
 - b. Apply splint as soon as possible.
 - c. Prevent shock, **keep patient warm.**
 - 5. Demonstration and participation of class in applying splints.

F. BURNS

| <u>Topics</u> | <u>Method</u> |
|------------------------|--|
| 1. Types | 1. Page 36 in Reference Guide. Discuss: <ul style="list-style-type: none"> a. Heat (thermal) b. Electrical c. Chemical |
| 2. Seriousness | 2. Discuss: <ul style="list-style-type: none"> a. First degree - redness b. Second degree - blister c. Third degree - charred d. Extent of body involved |
| 3. Immediate treatment | 3. Discuss: <ul style="list-style-type: none"> a. Treat for shock if necessary b. Cover serious burns with dry sterile dressing and leave alone. c. Encourage increased intake of fluids and "electrolyte" solution. |
| 3. Points to remember | 4. DO NOTS: <ul style="list-style-type: none"> a. Pull clothes over burned area b. Remove pieces of cloth that stick to burn c. Try to clean the burn d. break blisters e. Use grease on serious burns f. Use iodine or antiseptics g. Touch burn except with sterile or clean dressings h. Change dressings for five days |

G. TRANSPORTATION OF SERIOUSLY INJURED PATIENTS

| <u>TOPIC</u> | <u>METHOD</u> |
|-----------------|--|
| 1. Introduction | 1. Page 32 in Reference Guide Discuss: <ul style="list-style-type: none"> a. Move only after life saving procedures have been carried out. b. Gentle moving is important. |

2. Improvised stretchers
 3. Loading patient onto stretcher
 4. Methods of carrying
 5. Points to remember
 6. Practical application
2. Film strip #8, Frames 1 through 4
 3. Frames 5 through 7
 4. Frame 8 through 11
 - a. Fireman's drag - use when no chest or arm injuries, patient may be conscious or unconscious
 - b. Saddleback - used for short distance on patient not seriously injured.
 - c. Seat carries - short distances
 5. Emphasize:
 - a. Give emergency care before moving patient
 - b. Be gentle
 - c. Carry stretcher to injured person not visa versa
 - d. Be sure patient will not slip or fall from stretcher
 6. Demonstrations of above and participation by class

IX. MOTHER AND BABY

| <u>TOPIC</u> | <u>METHOD</u> |
|--|--|
| 1. Introduction | 1. a. Page 70 in Reference Guide b. Page 72 in Green book, Film strip #12 C. Also refer to the booklets in the notebook "When Your Baby is Born at Home" "When Your Baby is on the Way" |
| 2. Steps of pregnancy | 2. Frames 1, 2, 3, Discuss the development of the fetus within the uterus. Discuss things to look out for and report, i.e., edema, bleeding, persistent vomiting and headaches |
| 3. Labor | 3. Frames 5, 5, 7, C Discuss passage of baby down birth canal |
| 4. Delivery | 4. Frames 0 and 10 Discuss guiding of baby. Caution about pulling, i.e., let mother push baby out |
| 5. Care of child immediately after birth | 5. Frames 11, 12, and 13 Discuss: <ol style="list-style-type: none"> a. Holding baby (caution against slapping) b. Clearing of mucous c. Place infant on abdomen of mother face down. Caution against pulling on cord. Allow afterbirth to be pushed out, if baby is not breathing, use very gentle mouth to mouth breathing. |
| | 6. Frames 14 and 15 |

- 6. Care of cord
- 7. Recording of birth
- 8. General postpartum and postnatal care
- 9. Premature infant
- 10. Formula

- Discuss tying cord.
- 7. discuss recording the date and time of delivery and sex of child on card file, being careful to note any problems of mother or baby at time of delivery.
- 8. Frame 17
Discuss Postpartum care
 - a. Massage uterus
 - b. Food and fluid ad lib
 - c. Encourage to urinate
 - d. Encourage rest
 - e. Keep clean
 Discuss postnatal care
 - a. Keep warm
 - b. Do not wash immediately
 - c. Silver nitrate solution in eyes as soon as possible
 - d. breast feed if possible
 - e. Keep people away
 - f. Handle baby as little as possible
- 9. Define and discuss keeping warm, handling very little, transportation to nearest hospital if condition is good in one to two days.
- 10. Discuss:
 - a. Full-term
 - b. Premature

X. COMMON PROBLEMS

| <u>TOPIC</u> | <u>METHOD</u> |
|------------------------|---|
| 1. Abscesses and Boils | 1. Page 43 in Reference Guide Discuss: <ul style="list-style-type: none"> a. Cause and definition b. Treatment: Hot packs, sterile dressing if draining, ASA for pain, keep clothing away c. Caution: Do not squeeze, do not prick with pin, do not lance or open |
| 2. Animal bites | 2. Page 44 in Reference Guide <ul style="list-style-type: none"> a. Treatment: Wash with soap and water thoroughly b. Confine animal: Do not kill but keep by itself; keep for 14 days to see if it becomes ill; discuss local policy on shipment of heads c. Report all serious bites or bites about the face as soon as possible |
| | 3. Page 45 in Reference Guide Discuss: |

3. Blisters
 - a. Cause
 - b. Treatment: In non-irritated area keep clean and leave alone, in irritated area cover with adequate bandage.

Demonstrate proper method of puncturing blister

4. Common cold

4. Page 48 in Reference Guide

Discuss:

 - a. Treatment:
 - Adults 1 to 2 ASA q.4.h., fluids, rest
 - Child, ½ to 1 ASA, q.4.h., fluids, rest
 - b. Prevention:

Cover mouth and nose with paper tissue or handkerchief when sneezing or coughing; dispose of handkerchief or tissue after use; wash hands thoroughly before handling; any food or belongings of others

5. Croup

5. Page 49 in Reference Guide

Discuss

 - a. symptoms: Cough and difficulty breathing usually in a child at night
 - b. Treatment: Steam inhalation(green book, page 64)

6. Pain

6. Page 65 in Reference Guide

Review some of earlier discussions

Therapy until advice available

 - a. Cold compresses to area
 - b. ASA as directed (2 tablets q.4 h.)
 - c. keep patient still and as calm as possible
 - d. pain in stomach: do not give laxatives as pain may get worse.

7. Fever

7. Page 56 in Reference Guide

Review earlier discussions of temperature taking.

Treatment until advice available

 - a. ASA in proper amount
 - b. Sponge baths

8. Lice

8. Page 42 in Green Book

Demonstration of delousing procedures

9. Poisoning

9. Emphasize in discussion

 - a. Keep all medicines out of reach of children
 - b. Poisonous plants of the area
 - c. Proper storage of household chemicals of all kinds
 - d. Acid and lyes
 - e. Kerosene and oil
 - f. Emetics and when

XI. NURSING PROCEDURES

The following procedures should be covered both with discussions and practical demonstrations: in some cases concurrently and in some cases following discussions on particular entitles.

1. Hand washing: should be encouraged to do this before and after seeing any patient, but most particularly when dressing wounds; around impetigo; with newborn infants; around diarrhea patients; burns. Finger nail cleanliness should be included.
2. Injections: As this is one of the more controversial and important duties of the aide, very special emphasis is to be placed on the:
 - a. Actual procedures involving reading syringes and inserting the needle
 - b. Appropriate injection sites and rotation of sites
3. Temperature taking: Both oral and rectal procedures including cleansing of thermometers should be covered plus practice in reading the mercury level.
4. Giving of sponge baths to bring down excess temperatures.
5. Administration of Silver Nitrate drops to the newborn.
6. Practice and explanation of procedures involved in placing respective drops in eyes, ears and nose.
7. Practice and explanation of procedure involved in administering eye ointment.
8. Recommended procedure for soaking off skin lesions in impetigo.
9. Determining respiratory rate.
10. Determining pulse rate.
11. Demonstration and practice in making and applying butterfly bandages. Should have some instruction as to when to use this type of bandage.
12. Directions for collecting sputa for bacteriological examination - and practice in doing so.
13. Demonstration on making a croup tent in the home.
14. Demonstrate removal of lice, nits and crabs.
15. Formula preparation.
16. Immunization procedures.
17. Home care of the newborn.

XII. SPECIFIC ALASKAN PROBLEMS

| <u>TOPIC</u> | <u>METHOD</u> |
|-----------------|---|
| 1. Tuberculosis | 1. Discussion: <ol style="list-style-type: none">a. Transmissionb. Prevention of spreadc. X-ray and/or PPDd. Obtaining sputumse. Chemotherapy at homef. Follow-up |
| 2. Otitis media | 2. Discussion: <ol style="list-style-type: none">a. Define acute and chronicb. Sequelaec. Standing orders |
| 3. Caries | 3. Discussion |
| 4. Frostbite | 4. Discussion: <ol style="list-style-type: none">a. Rapid re-warming in water at 110 to 113⁰b. Loose bulky sterile dressingc. Do not rub Do not use hot water (over 113⁰) Do not use dry heat |

Do not break blisters
Do not rub with ice or snow
d. Transport to hospital as soon as possible

5. Usual Childhood Diseases

5. Discussion:

Distribute any available charts and teaching aids.

6. Impetigo

6. Discuss:

- a. Cause
- b. Transmission
- c. Standing orders

7. PKC

7. Description of signs and symptoms with emphasis on "the spot"

- a. Standing orders

XIII. VITAL STATISTICS

Suggest that a local magistrate be asked to discuss local policies and regulations in regards to birth and death registrations and reporting of same as well as reporting of shootings, stabbings, etc..

XIV. TESTING

XV. AWARDS CEREMONY