

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

IMCI ADAPTATION GUIDE

*A guide to identifying necessary adaptations of clinical policies
and guidelines, and to adapting the charts and modules
for the WHO/UNICEF course*

PART 4

H. Modifying the Generic Chart Booklet:
Using Microsoft Publisher®

November 2001



**DEPARTMENT OF CHILD
AND ADOLESCENT HEALTH
AND DEVELOPMENT**

WORLD HEALTH ORGANIZATION

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Modifying the Generic Chart Booklet Using Microsoft Publisher®

The generic IMCI chart booklet can be modified and printed using a personal computer and the Microsoft Publisher software¹.

Personal computer system requirements

- Microprocessor: Intel Pentium recommended or 80386DX minimum
- Memory: 16 MB recommended, 6MB minimum
- Hard disk space required: 10 MB minimum
- 3.5 inch, 1.44 MB capacity disk drive
- CD-ROM (optional)
- Operating System: Windows 3.1, Windows for Workgroups 3.11, Windows 95 or Windows NT version 4.0 or later
- Software: Microsoft Publisher version 2.0 for Windows 3.1 or 3.11
- Printer: any Windows-supported printer capable of printing True-Type fonts and with a minimum of 300 dots per inch, preferably a laser printer.²

MS Publisher 2.0 runs on Windows 3.1 and 3.11 can also run under Windows 95 and Windows NT.

IMCI chart booklet disk for MS Publisher version 2.0

The IMCI chart booklet for MS Publisher 2.0 is saved in two files. The first file is named *eng_ind.pub* and contains the chart pages printed in A4 Landscape mode (page size 29.7cm x 21cm). The second file *eng_prt.pub* contains chart pages of patient recording forms which are printed in A4 Portrait mode (page size 21cm x 29.7cm). Both files fit in one high density 1.44 MB floppy disk.

Backing up MS Publisher and IMCI chart booklet disk

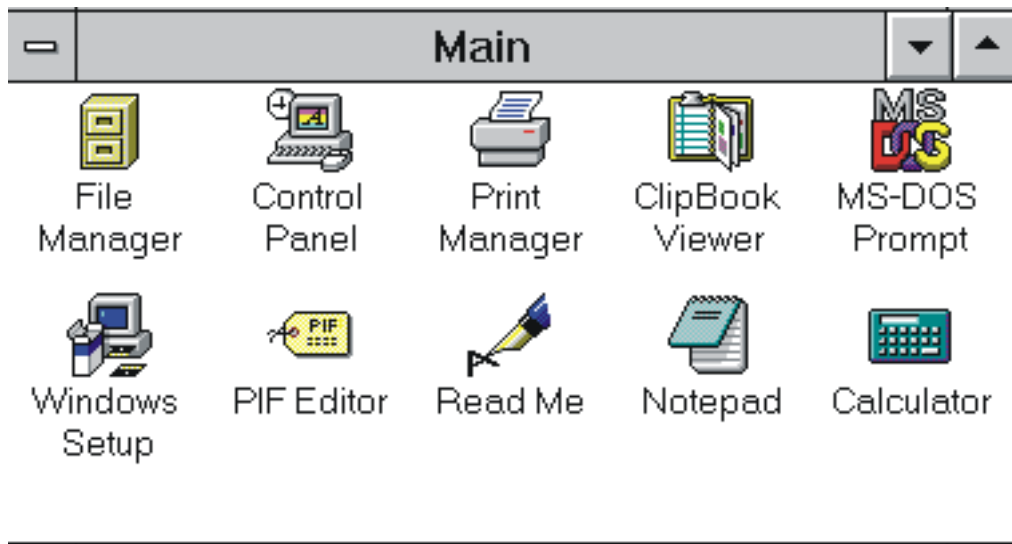
Before you start, first backup or make a duplicate of the MS Publisher install disks and IMCI chart booklet disk. MS Publisher installation software comes in a CD-ROM or a set of 5 floppy diskettes. If you have the CD-ROM version, there is no need to backup the MS Publisher installation disks. The original generic IMCI chart booklet disk, however, must be backed up.

¹ The software Microsoft Publisher costs approximately US\$ 80. It can also be provided by the World Health Organization, Division of Child Health and Development, upon request.

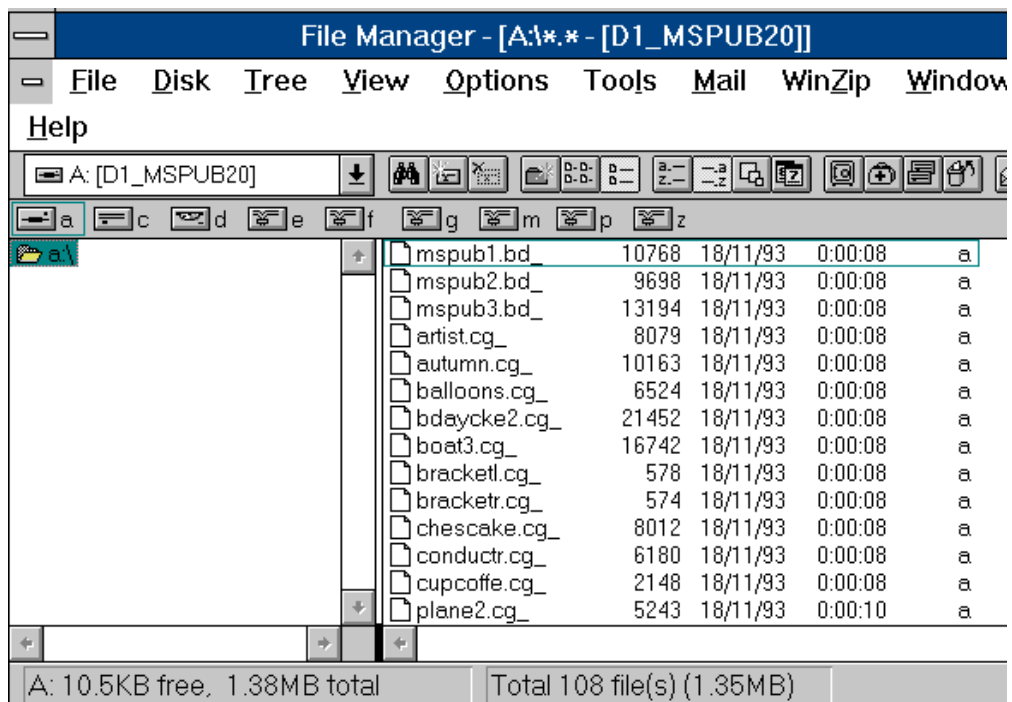
² The charts have been tested on the following printer models: Hewlett-Packard LaserJet printer models II, III, IV and 5 and QMS PS-860 PostScript. Best results are obtained with a printer resolution of 600 x 600 dots per inch or higher.

To backup the disks:

- Prepare 6 blank floppy diskettes or one if you have MS Publisher in CD-ROM.
- Insert the disk to backup in drive A: (start with MS-Publisher Disk 1)
- Run the *File Manager* program. This is usually found under the *Main* program group.



- In *File Manager*, click on *Disk* then *Copy Disk*.



- The disk to backup is called the *Source*. The new blank disk to become the backup is called the *Target*. If the Target disk is not blank, all files on the Target will be erased. You will be prompted to insert the Source disk first, then the Target disk, alternately. You may be asked to do this repeatedly depending on the memory of the computer.

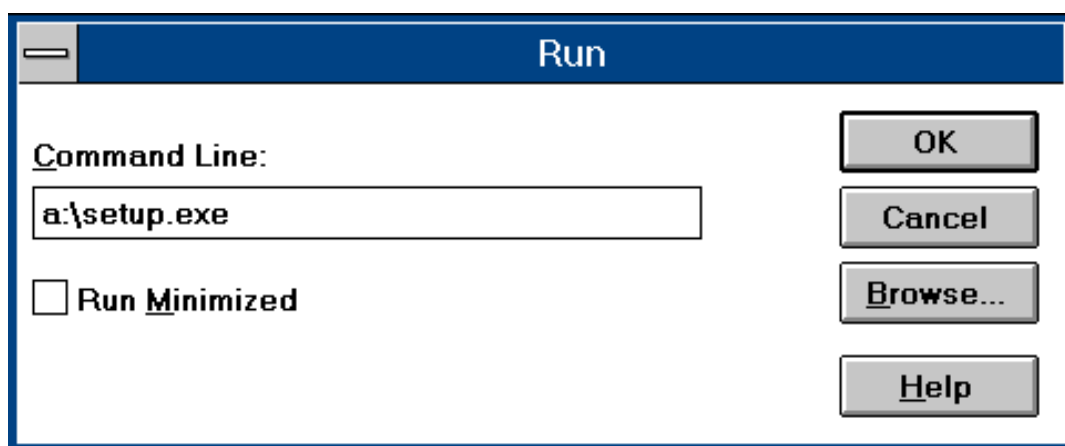


- Label the new backup disk exactly as the original, before starting on the next disk to back up.
- Repeat the process until all diskettes have been backed up.
- Keep the original set of diskettes for safe keeping. Use only the backup set for installing the software and copying the IMCI chart booklet files.

How to install Microsoft Publisher version 2.0

Floppy disk installation:

- Insert MS-Publisher Disk 1 - SETUP (the backup disk)
- From the Windows Program Manager, click on menu *File* then *Run*
- At the box *Command Line* type **A:\setup.exe** then click on OK.



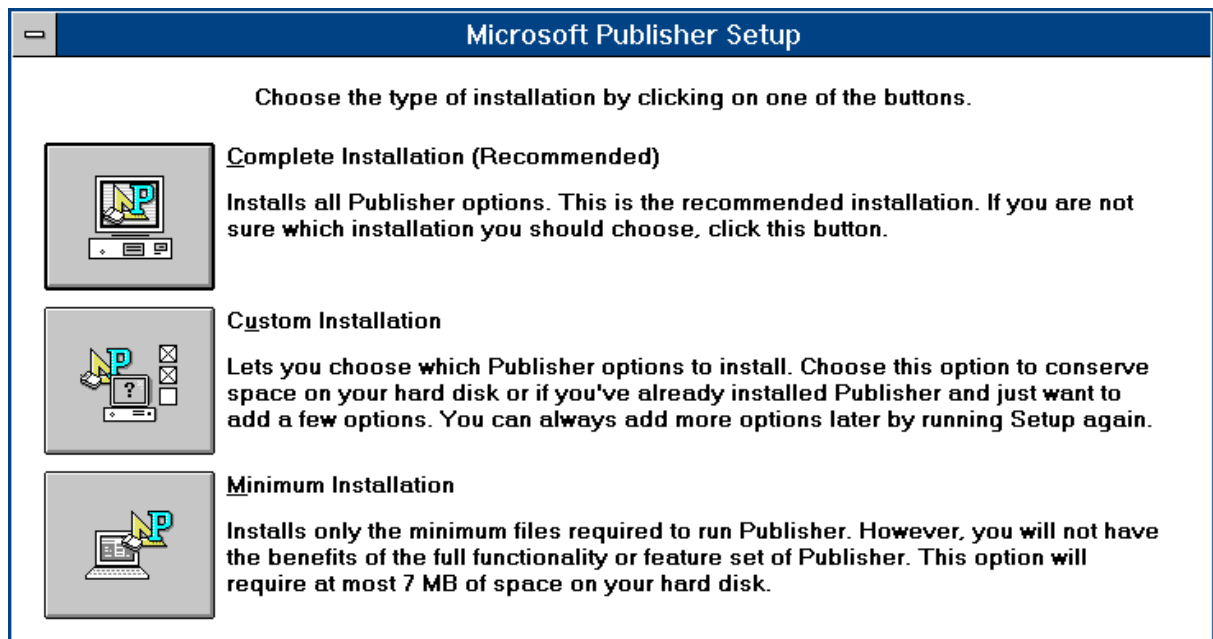
CD-ROM installation:

If a CD-ROM exists, the drive identifier is usually the letter D: or E:. This can be verified by running File Manager. The drive letter identifier appears with a CDROM icon. (See example of the File Manager picture where drive D: is illustrated as a CD-ROM icon.)

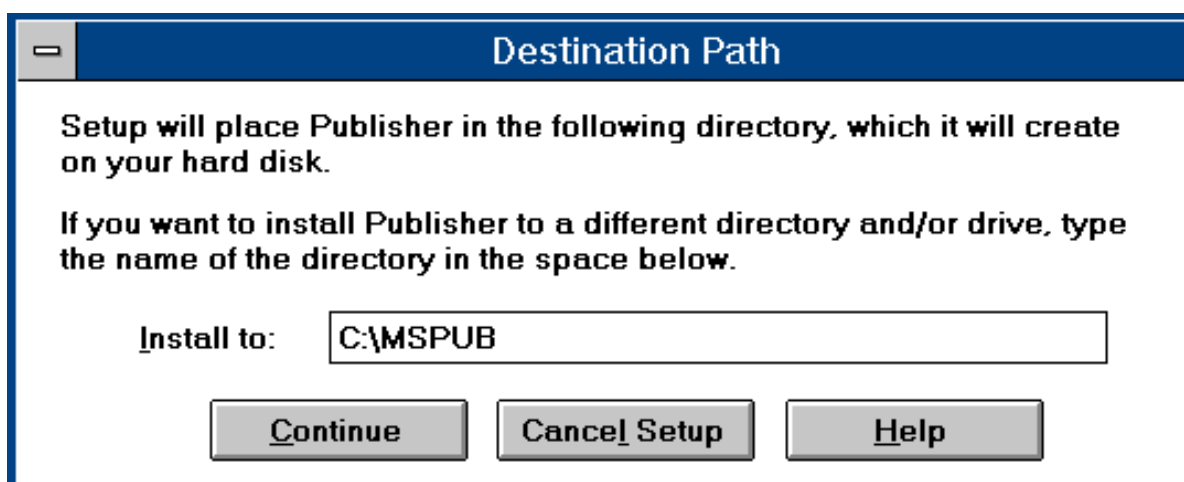
Follow the same procedure as the floppy disk installation replacing the drive letter identifier A: with either D: or E:.

Choosing type of installation

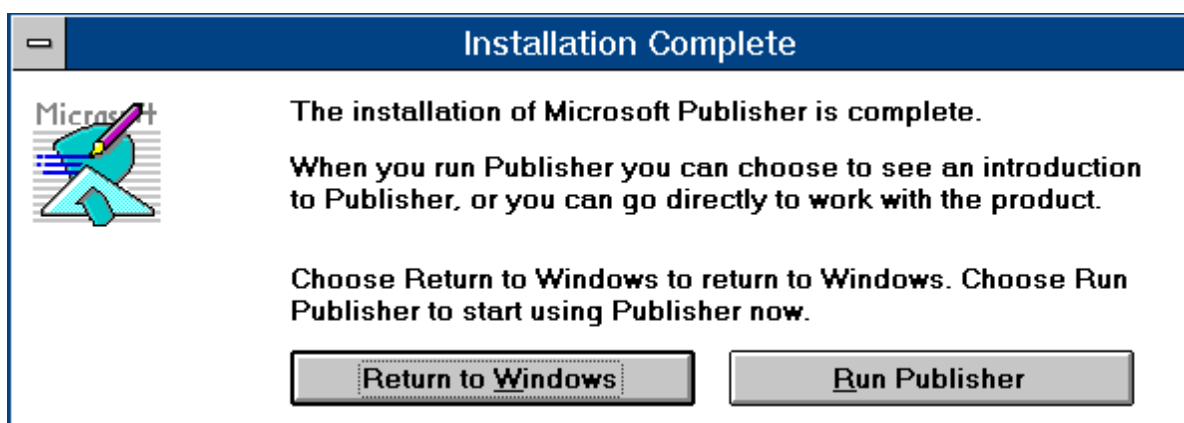
MS Publisher can be installed in 3 ways: Complete, Custom and Minimum. Full installation installs all MS-Publisher files and requires 13 MB of disk space. Minimum installation installs a working version of MS Publisher however some features such as Spell Check, Sample Layout programs, Wizards and other options are not installed. Minimum install requires about 7MB of disk space. Custom installation allows the user to choose features to install. It is recommended to do the Complete installation.



After choosing the type of installation, specify the directory where MS Publisher will be installed. It is recommended to use the default directory C:\MSPUB.



Insert the floppy disks as requested. Fill in the software registration form and post it. This entitles you to product upgrade information. When the installation procedure is finished, a screen will indicate if the installation succeeded.



If the installation did not finish or failed, check for the following:

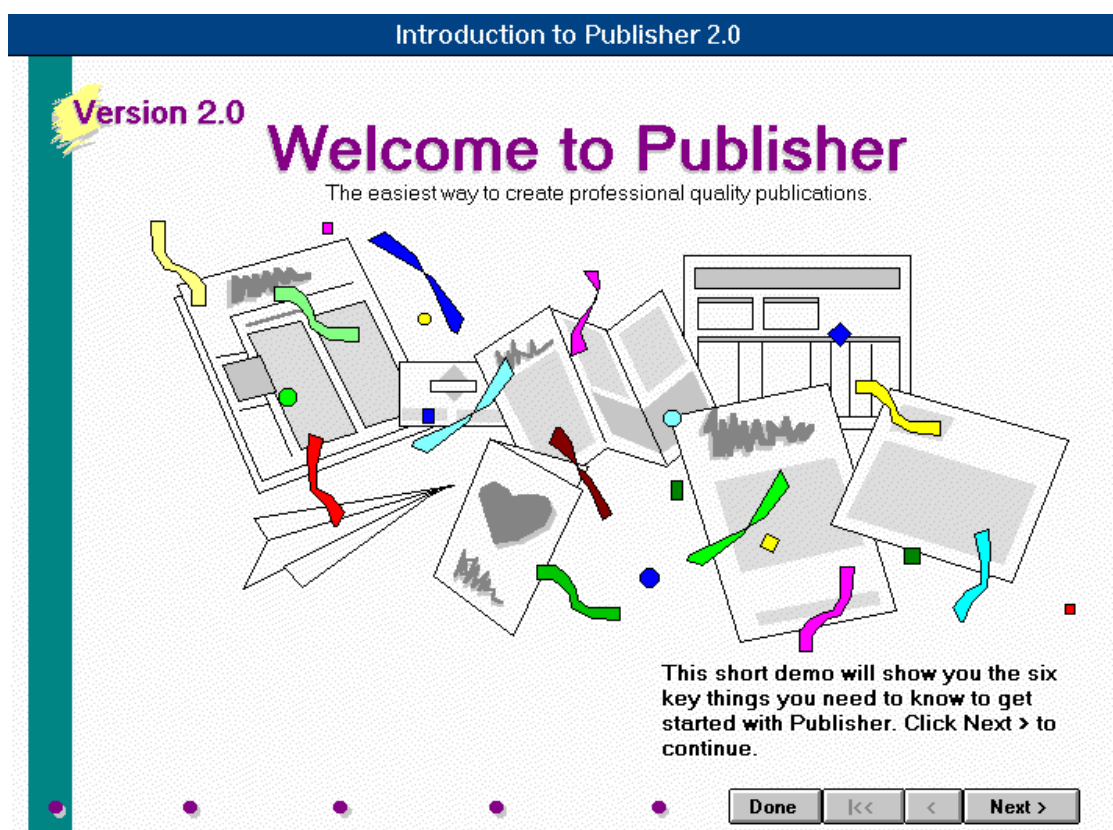
- Is there enough free hard disk space available? 13 MB is required for a complete installation. Use the File Manager to verify that enough space is available.
- Does the computer have enough memory? Close other open applications then run SETUP again (e.g. word processing programs like Word or WordPerfect).
- Was there any problem with the installation disks? Did a “cannot read disk” error occurred? Ask a computer expert to check that the installation disks are not damaged.

Starting MS Publisher program

From the Windows Program Manager, select the program group *Microsoft Publisher*. Double click on the icon *Microsoft Publisher*.

Tutorial: Introduction to Microsoft Publisher

The first time MS Publisher is run, a short tutorial called *Introduction to Microsoft Publisher* automatically starts, explaining the basic concepts of the software. It is recommended to follow this tutorial. Click on the *Next* button to continue the tutorial.



The tutorial will introduce the fundamental concepts of a desktop layout program (also known as DTP). DTP creates documents by placing “objects” in a page. There are 9 different object types in MS Publisher and each object has its own tool:

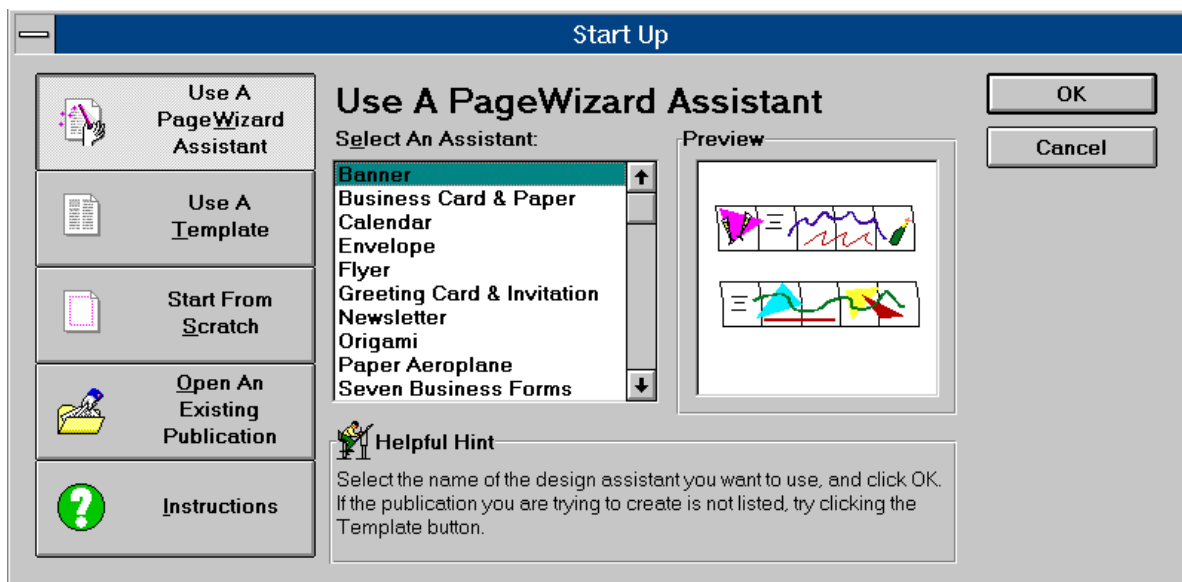
1. Text frame tool - used for entering text
2. Table frame tool - used for entering text in table format
3. Word Art frame tool - used for entering fancy text (ex. curved, slanted, etc.)
4. Picture frame tool - used for placing pictures
5. Page Wizard tool - automated design assistants
6. Drawing tools (3) - creates drawings of various shapes

To modify the IMCI chart booklet, only the Text and Table frame tools will be used since most of the chart elements are already laid out.

The *Introduction to MS Publisher* tutorial can be run at any time by clicking on the *Help* menu. Other topics and demonstration programs helpful to beginners are also available on the Help menu.

Modifying the generic IMCI chart booklets

Start the MS Publisher program if you have not already done so. The Start Up options will automatically start. These are small programs that assist users in the preparation of documents. For modifying the generic IMCI chart booklet, these options will not be necessary. Click on *Cancel* to close the Start Up options.



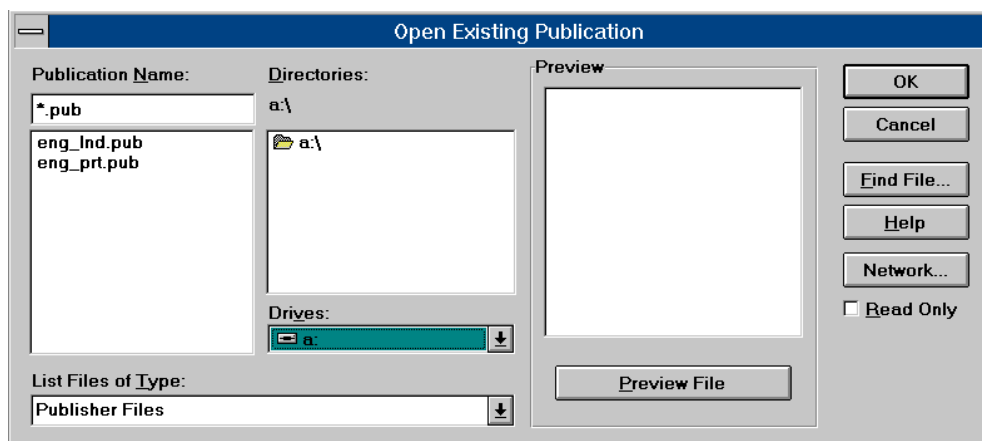
Opening the IMCI chart booklet publication

Insert the IMCI chart booklet disk in drive A:

Click on *File - Open Existing Publication*.

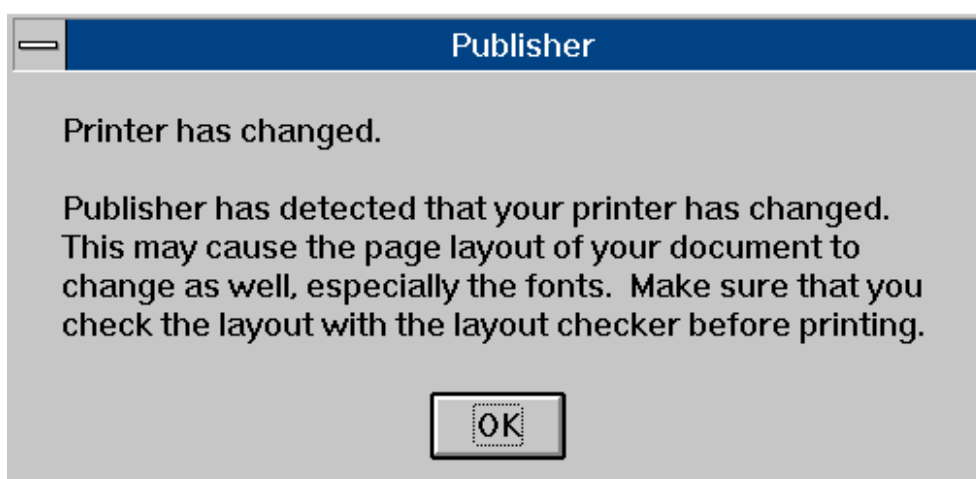
Click on *Drives* and change it to drive letter A.

Under *Publication Name* click on the file name *eng_ind.pub* then click *OK*.



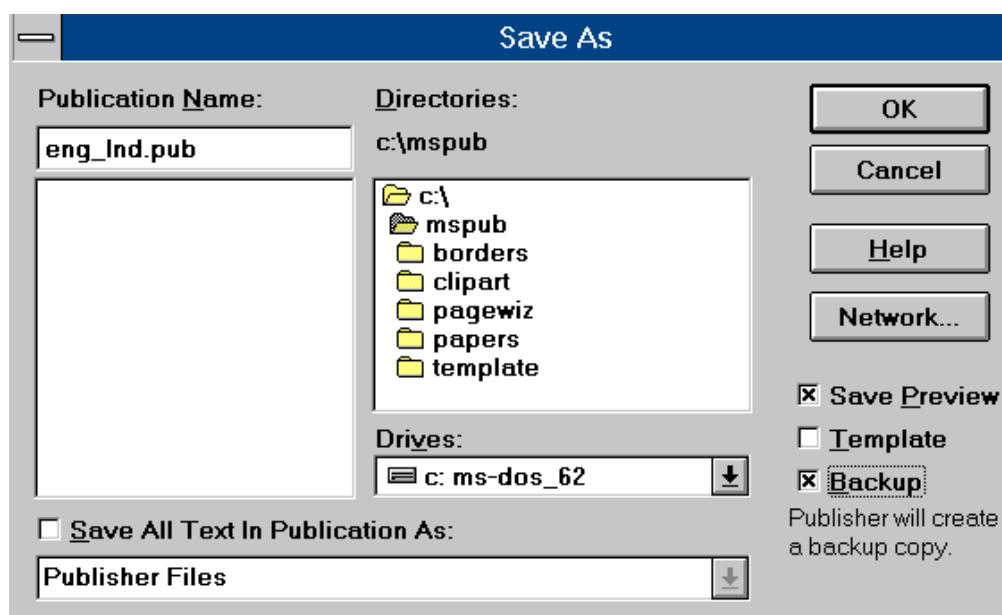
Wait while the publication loads from the floppy disk. This can take some time. You will notice that the green or red light on the drive will flash while the computer reads the files.

If you are not using an HP LaserJet III printer, a warning that the printer has changed will appear. This is a minor warning. Read the warning then click on *OK* to proceed.



Saving the IMCI chart booklet files to the hard disk

You will notice that working off a floppy disk is a very slow process. Therefore before starting to modify the charts, first save the IMCI chart booklet files to the hard disk. To save IMCI chart booklet files to the hard disk, click on the *File* menu, then click on *Save as*.

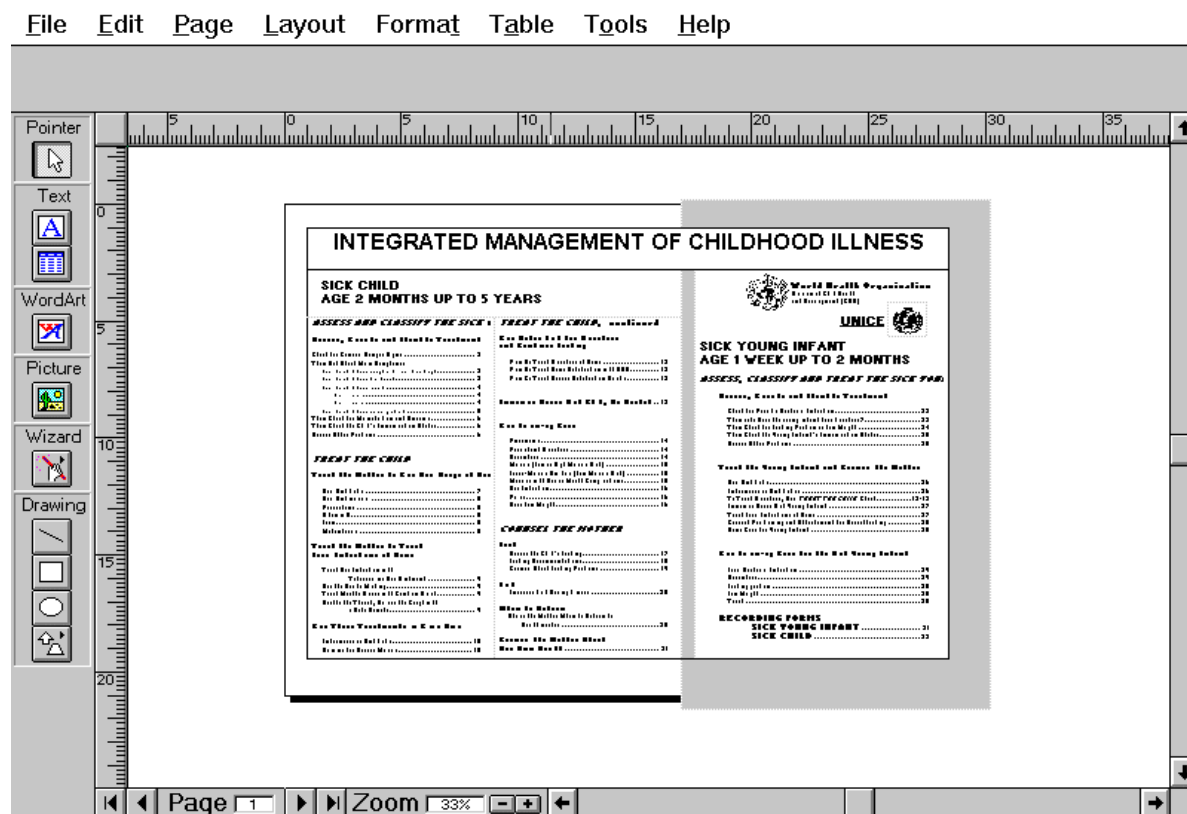


Make sure there is an “X” in the check box *Backup*. If there is none, click on it. This ensures that a backup file will be created each time the publication is saved.

Click on *Drives* and change it to drive letter C.

Under *Directories* change the directory to *C:/mspub*, then click on OK.

Controlling what you see using Zoom

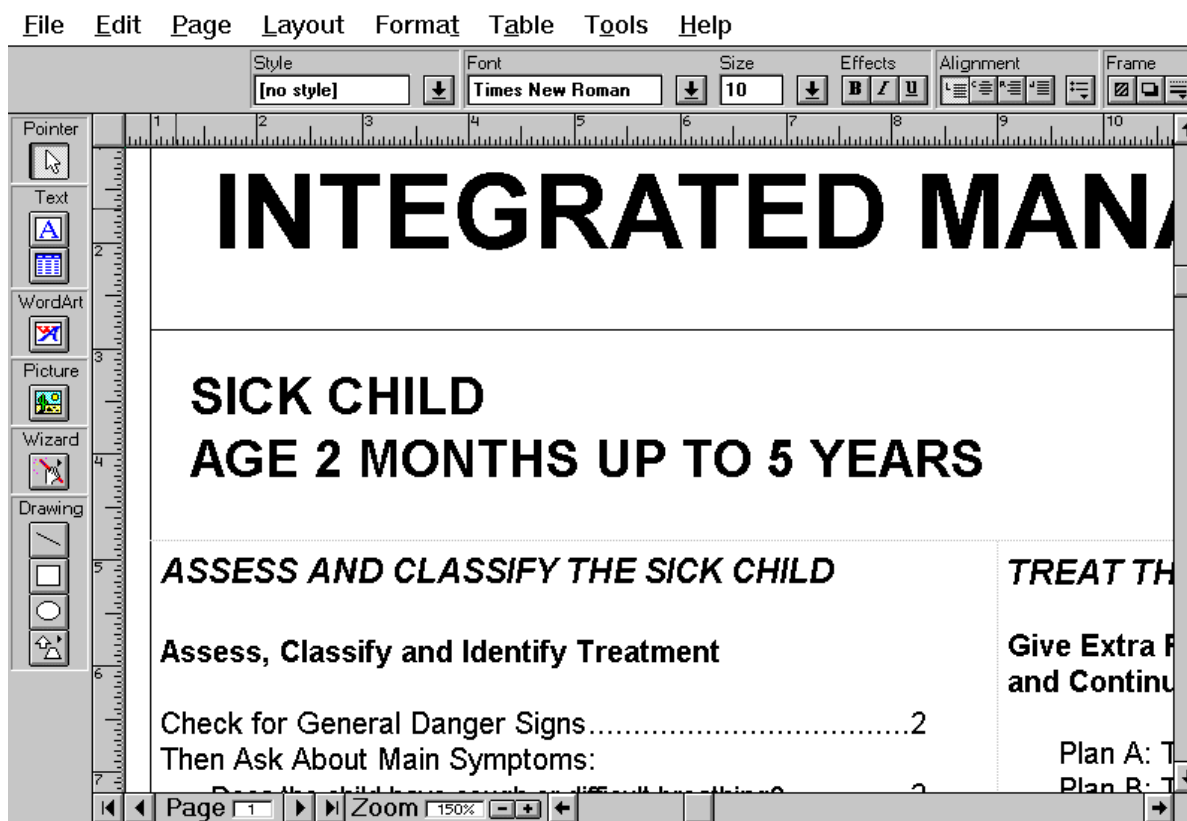


DTP software such as MS Publisher shows as much as possible of the printed page on the screen. Because the screen size is normally smaller than the printed page, the screen image is usually too small for normal reading. Showing the full page, however, allows you to view how the page is laid out. To increase the viewing size of the words, use the *Zoom* control.





Click on the *Zoom* box at the bottom left of the screen. Choose the desired magnification level. Selecting *Full Page* fits the whole page in one screen. Selecting *Fit to Selection* shows only the currently selected area (i.e. blocked or shaded) in one screen.

You may also click on the “+” or “-” buttons to increase or reduce magnification.

The screen below shows a magnified view.




Moving around with the scroll bars


When the screen is magnified, the page can be moved around with the use of the horizontal and vertical scroll bars. To move the page up and down, click on the  and  buttons found on the right edge of the screen. To move the page left and right, click on the  and  buttons found on the bottom edge of the screen.


Jumping to pages

The page control bar is found at the bottom left of the screen.

To go to the Next page, click on the  button.

To go to the Previous page, click on the  button.

To go to the Last page, click on the  button.

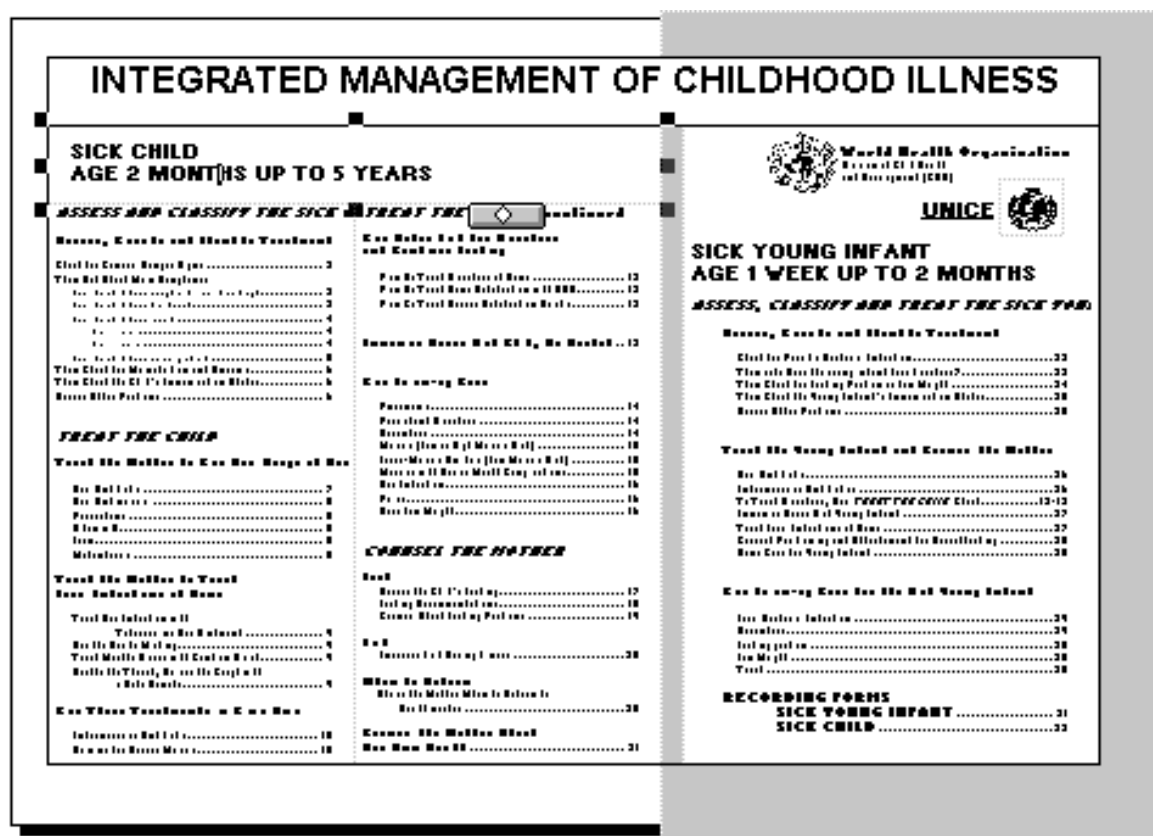
To go to the First page, click on the  button.

To go to a specific page, click on the number and then enter the page number.

Selecting text frames to allow editing

Before text on the IMCI chart booklet can be edited, the frame holding the text must first be “selected”. As illustrated in the Introduction to MS Publisher, the document or publication is composed of objects. Most of the objects in the IMCI chart booklet are text and table objects.

To select a text object, simply click once on the text to be edited.



Selected text frames are displayed with a surrounding border accented with small black squares. In the picture above, the text frame containing the text “SICK CHILD - AGE 2 MONTHS UP TO 5 YEARS” is selected.

Once a text frame is selected, the whole frame can be move, resized or its contents edited.

Editing text

To edit text first select the text frame by clicking once in the text area to be edited. Once selected, click on the actual position where text is to be inserted or deleted. A flashing vertical cursor indicates the current editing position. Use the *Zoom* to control viewing size.

How to *Undo* your mistakes

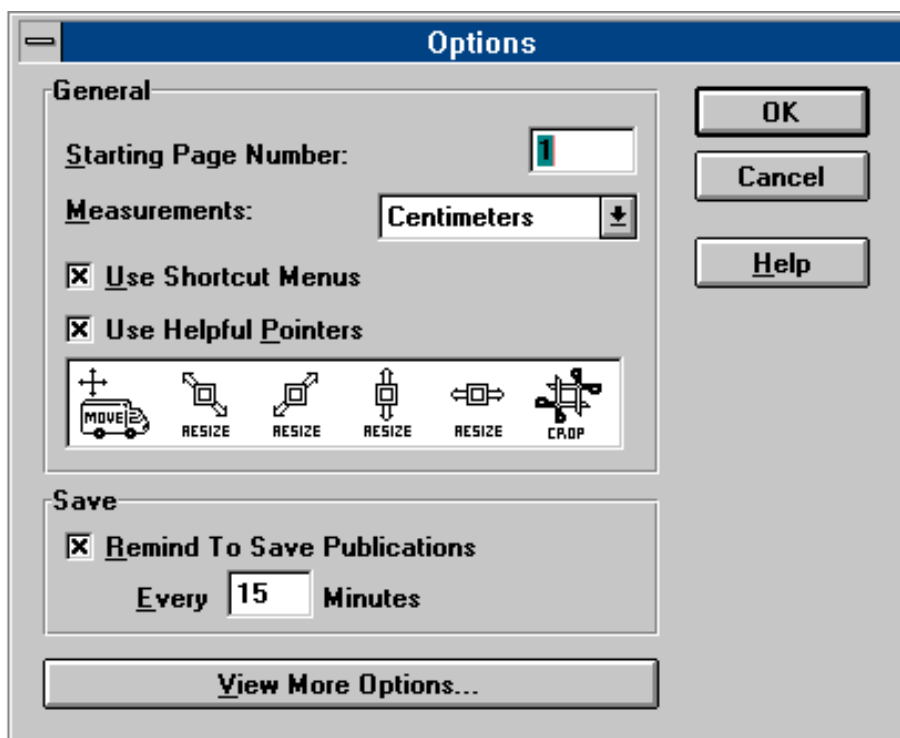
If you make a mistake do not panic. Do not click the mouse or press the keyboard wildly. You can undo a mistake by clicking on *Edit-Undo*. This command must be given immediately after the mistake is done. If you continue working after the mistake, it cannot be undone.

How to save your work

To save your work so far, click on the *File* menu then *Save* or press *Ctrl+S*.

How to set automatic reminder to save your work

It is recommended to save your work at periodic intervals, for example, every 15 minutes or so. This ensures that in the event of a power failure or a computer problem, only a maximum of the last 15 minutes of your work is lost. To set automatic reminders, click on the *Tool-Options* menu.



Click to put an “X” in the check box *Remind To Save Publications*. The time interval of the reminder can be set by the user. The default 15 minute interval is sufficient. Note that this option does not actually automatically save the file. It is simply a reminder that work done in the last 15 minutes has not been saved. To save the file, click on the *File* menu then *Save* or by pressing *Ctrl+S*.

Modifying the Generic IMCI Chart Booklet

Practicing how to change specific pages: List of changes to be made

#	Page	Heading / Location	Change from	Change to
1	1	left of WHO logo		Add "HMG/NEPAL"
2	4	LOW MALARIA RISK table, row 1 column 3, last line	"Refer URGENTLY to hospital"	"Refer URGENTLY to hospital with the slide"
3	6	THEN CHECK THE CHILD'S IMMUNIZATION STATUS - <u>VACCINE</u>		Remove "OPV-0"
4	7	FOR DYSENTERY table, row 2 column 3	TABLET 250 mg	TABLET 500 mg
5	7	FOR CHOLERA table, row 2, column 2	TABLET	CAPSULE
6	7	FOR CHOLERA table, row 4, column 2	"1/2"	Delete "1/2" and shade cell
7	7	FOR DYSENTERY table		Add column 4: SYRUP 300 mg per 5 ml 2-5 ml 2.5 ml 5.0 ml
8	8	Give Paracetamol... table, column 2		Delete whole column 2
9	8	Give Paracetamol... table		Add column 3: SYRUP (125 mg per 5 ml) 5 ml 7.5 ml
10	10	Give Quinine...	"Give Quinine for Severe Malaria"	"Give Quinine for Severe Malaria in High Malaria Risk Areas"
11	10	Give Quinine... last bullet	"If low risk of malaria, do not give quinine to a child less than 4 months of age."	Delete "If low risk of malaria, do not give quinine to a child less than 4 months of age."
12	18	2 Years and Older	"Give family foods..."	On the dotted lines, add "puffed rice with oil, roti, papaya, mango, popcorn, beans"
13	23	DYSENTERY, 3rd table, column 3	"Treat for 5 days with an oral antibiotic recommended for Shigella in your area. Follow-up in 2 days."	Delete "Treat for 5 days with an oral antibiotic recommended for Shigella in your area. Follow-up in 2 days" and replace with "Refer URGENTLY to hospital"
14	26	Give First Dose...	"Give first dose of both benzylpenicillin <u>and</u> gentamicin intramuscular."	Delete "both benzylpenicillin <u>and</u> "
15	26	Give First Dose...table		Delete whole third column "BENZYL PENICILLIN"
16	29	DYSENTERY box		Delete whole DYSENTERY box
17	33	DOES THE CHILD HAVE FEVER	"Decide Malaria Risk: High Low"	Add "No" to read "Decide Malaria Risk: High Low No"
18	33	CHECK THE CHILD'S IMMUNIZATION STATUS	"CHECK THE CHILD'S IMMUNIZATION STATUS"	Add text to read "CHECK THE CHILD'S IMMUNIZATION, VITAMIN A AND DEWORMING STATUS"
19	33	CHECK THE CHILD'S IMMUNIZATION STATUS		Delete "OPV 0"

Modifying the Generic IMCI Chart Booklet

Practicing how to change specific pages: Step-by-step instructions

Change #1

1	left of WHO logo		Add "HMG/NEPAL"
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- Click on the Text Frame tool. The pointer should change to a "+" when pointed inside the document.
- Position the pointer to the left of the WHO logo.
- Press mouse button and do not release. Draw a box then release mouse button.
- Type "HMS/NEPAL".
- Block the newly typed text "HMS/NEPAL" by pointing before the letter "H", then press mouse without releasing and drag up to after the letter "L".
- Change the font to Arial 14 by pointing to the Font icon. Select Arial from the Font list and type 14 in the Size box.
- If the text "HMS/NEPAL" does not fit in the text box, resize the text box by pointing in one of the "ears" of the text box. There are 6 ears in every text box. The pointer will change to a "RESIZE" icon. Pull the ears outward until the text "HMS/NEPAL" fit properly in the text box.
- If the "HMS/NEPAL" text box is blocking some text or logo or border, move the text box into an unoccupied area.
- To move a text box, point in any of the lines connecting the ears. The pointer will change into a TRUCK icon with the word MOVE. Press mouse button and drag the text box into an unoccupied area.

Change #2

4	LOW MALARIA RISK table, row 1 column 3, last line	"Refer URGENTLY to hospital"	"Refer URGENTLY to hospital with the slide"
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- Go to page 4. Click on the right arrow sign of the Page Button found at the lower left part of the screen .
- Click on the LOW MALARIA RISK table, row 1, column 3.
- If the characters are not visible, increase the zoom by clicking on the "+" sign in the Zoom button found at the lower left part of the screen.



- Position the cursor after the text "Refer URGENTLY to hospital" and type "with the slide".

Change #3

6	THEN CHECK THE CHILD'S IMMUNIZATION STATUS – <u>VACCINE</u>		Remove “OPV-O”
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- Go to page 6.
- Click on the THEN CHECK THE CHILD'S IMMUNIZATION STATUS - VACCINE box.
- Position the cursor just before the text “OPV-O” then delete this text by pressing the <Delete> key. If the text becomes disarranged you can “undo” the last action by clicking on <Edit-Undo>.

Change #4

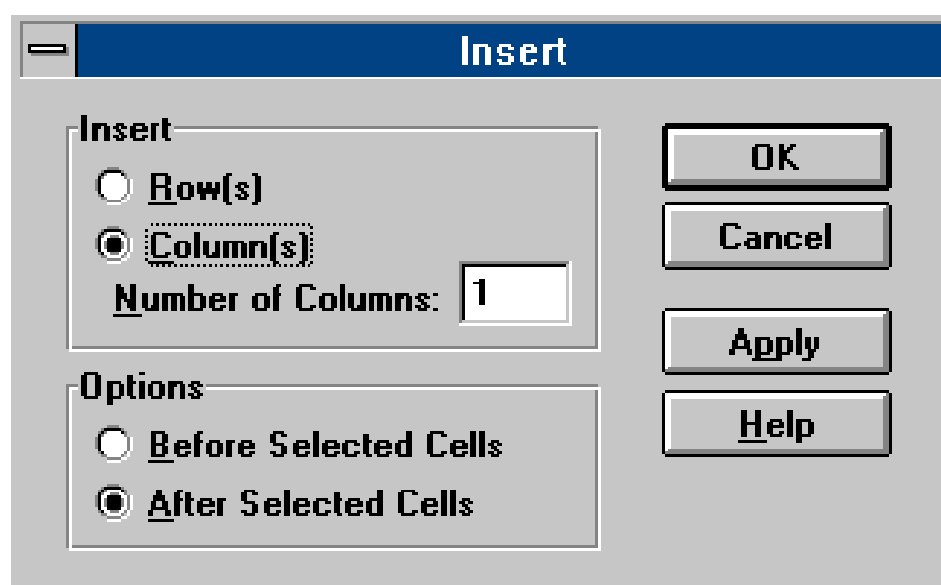
7	FOR DYSENTERY table, row 2 column 3	TABLET 250 mg	TABLET 500 mg
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- Go to page 7.
- Click on the FOR DYSENTERY table, row 2, column 3 cell.
- Change the text “250” to “500”.

Change #7

7	FOR DYSENTERY table		Add column 4: SYRUP 300 mg per 5 ml 2-5 ml 2.5 ml 5.0 ml
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- Go to page 7.
- Click on the FOR DYSENTERY table.
- Point anywhere the 3rd column then click once.
- To add a 4th column click on <Table> <Insert Row or Columns>



- On the selection box, click on <Columns> and <After Selected Cells>, then <OK>.
- A 4th column will be added. It may spill over the printable page. This can be adjusted later.
- Type the contents of the cells as indicated above.

To make 4th column fit on the printable page, adjust the column widths of the other columns. When selected, a table is bounded by a gray colored boundary on both axes. The divisions on the gray axes determine the column widths and row heights which can be dragged to adjust them.

SECOND LINE ANTIBIOTIC FOR CHLAMYDIA		
	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ➤ Give two times daily for 5 days	NALIDIXIC ACID ➤ Give four times daily for 5 days
AGE or WEIGHT		TABLET 250 mg
2 months up to 4 months (4 - <6 kg)	See doses above	1/4
4 months up to 12 months (6 - <10 kg)		1/2
12 months up to 5 years (10 - 19 kg)		1

- Point anywhere on the horizontal gray border. The arrow icon changes into a hand.
- Move the hand so that it points into the first column division. The hand changes into a double sided arrow with the words “ADJUST”.
- Press mouse then drag to left or right to adjust column width.
- Do the same for the other columns so that all 4 columns fit into the printable page.

Change #8

8	Give Paracetamol... table, column 2		Delete whole column 2
---	--	--	-----------------------

- Go to page 8.
- Point to Give Paracetamol... table, column 2.
- To delete the 2nd column click on <Table> <Delete Rows or Columns> <Current Column>.

...oOo...

The 2001 working draft of the IMCI Adaptation Guide consists of the following sections:

- Section A.** The Adaptation Process
- Section B.** Procedures for Adapting the Charts and Modules
- Section C.** Technical Basis for Adapting the Clinical Guidelines, Feeding Recommendations and Local Terms
- Section D.** Protocol for Adapting the Feeding Recommendations
- Section E.** Protocol for Identifying and Validating Local Terms
- Section F.** Protocol for Designing and Pretesting an Adapted Mother's Card
- Section H.** Modifying the Generic Chart Booklet: Using Microsoft Publisher®

Please provide comments and further input to WHO/CAH, Geneva, Switzerland.

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ASSESS AND CLASSIFY THE SICK CHILD

Asses, Classify and Identify Treatment

Check for General Danger Signs	2
Then Ask About Main Symptoms:	
Does the child have cough?	2
Does the child have diarrhoea?	3
Does the child have fever?	4
Classify malaria	4
Classify measles	4
Does the child have an ear problem?	5
Then Check the Child for Malnutrition and Anaemia	6
Then Check the Child's Immunization Status	6
Assess Other Problems	6

TREAT THE CHILD

Teach the Mother to Give Oral Drugs at Home

Oral Antibiotic	7
Oral Antimalarial	8
Paracetamol	8
Vitamin A	8
Iron	8
Mebendazole	8

Teach the Mother to Treat Local Infections at Home

Treat Eye Infection with Tetracycline Eye Ointment	9
Dry the Ear by Wicking	9
Treat Mouth Ulcers with Gentian Violet	9
Soothe the Throat, Relieve the Cough with a Safe Remedy	9

Give these Treatments in Clinic Only

Intramuscular Antibiotic	10
Quinine for Severe Malaria	10
Prevent Low Blood Sugar	11

TREAT THE CHILD, continued

Give Extra Fluid for Diarrhoea and Continue Feeding

Plan A: Treat Diarrhoea at Home	12
Plan B: Treat Some Dehydration with ORS	12
Plan C: Treat Severe Dehydration Quickly	13

Immunize Every Sick Child, As Needed

Give Follow-up Care

Pneumonia	14
Persistent Diarrhoea	14
Dysentery	14
Malaria (Low or High Malaria Risk)	15
Fever-Malaria Unlikely (Low Malaria Risk)	15
Measles with Eye or Mouth Complications	15
Ear Infection	16
Feeding Problem	16
Pallor	16
Very Low Weight	16

COUNSEL THE MOTHER

Food

Assess the Child's Feeding	17
Feeding Recommendations	18
Counsel About Feeding Problems	19

Fluid

Increase Fluid During Illness	20
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When to Return

Advise the Mother When to Return to Health Worker	20
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Counsel the Mother About

Her Own Health	21
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HMG/NEPAL



World Health Organization
Division of Child Health
and Development (CHD)



SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS

ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT

Assess, Classify and Identify Treatment

Check for Possible Bacterial Infection	22
Then ask: Does the young infant have diarrhoea?	23
Then Check for Feeding Problem or Low Weight	24
Then Check the Young Infant's Immunization Status	25
Assess Other Problem	25

Treat the Young Infant and Counsel the Mother

Oral Antibiotic	26
Intramuscular Antibiotics	26
To Treat Diarrhoea, See <i>TREAT THE CHILD</i> Chart	12-13
Immunize Every Sick Young Infant	27
Treat Local Infections at Home	27
Correct Positioning and Attachment for Breastfeeding	28
Home Care for Young Infant	28

Give Follow-up Care for the Sick Young Infant

Local Bacterial Infection	29
Dysentery	29
Feeding Problem	30
Low Weight	30
Thrush	30

RECORDING FORMS

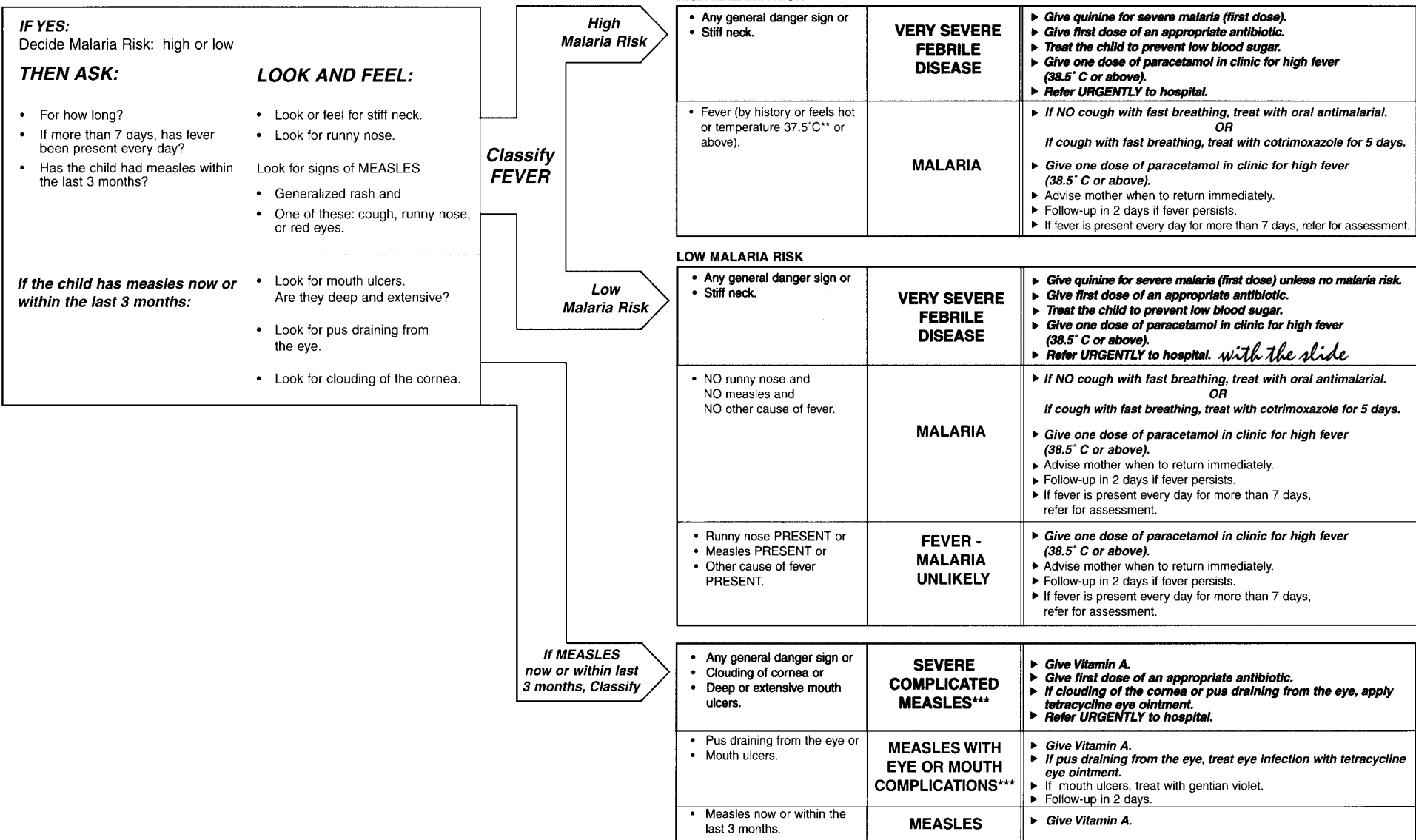
SICK YOUNG INFANT	31
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SICK CHILD	33
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WEIGHT FOR AGE CHART	on back cover
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Does the child have fever?

(by history or feels hot or temperature 37.5°C** or above)



** These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5° C higher.

*** Other important complications of measles - pneumonia, stridor, diarrhoea, ear infection, and malnutrition - are classified in other tables.

THEN CHECK FOR MALNUTRITION AND ANAEMIA

LOOK AND FEEL: <ul style="list-style-type: none"> Look for visible severe wasting. Look for palmar pallor. Is it: <ul style="list-style-type: none"> Severe palmar pallor? Some palmar pallor? Look for oedema of both feet. Determine weight for age. 	Classify NUTRITIONAL STATUS	<ul style="list-style-type: none"> Visible severe wasting or Severe palmar pallor or Oedema of both feet. 	SEVERE MALNUTRITION OR SEVERE ANAEMIA	<ul style="list-style-type: none"> Give Vitamin A. Refer URGENTLY to hospital.
		<ul style="list-style-type: none"> Some palmar pallor or Very low weight for age. 	ANAEMIA OR VERY LOW WEIGHT	<ul style="list-style-type: none"> Assess the child's feeding and counsel the mother on feeding according to the FOOD box on the <i>COUNSEL THE MOTHER</i> chart. <ul style="list-style-type: none"> If feeding problem, follow-up in 5 days. If pallor: <ul style="list-style-type: none"> Give iron. Give oral antimalarial if high malaria risk. Give mebendazole if child is 2 years or older and has not had a dose in the previous 6 months. Advise mother when to return immediately. If pallor, follow-up in 14 days. If very low weight for age, follow-up in 30 days.
		<ul style="list-style-type: none"> Not very low weight for age and no other signs of malnutrition. 	NO ANAEMIA AND NOT VERY LOW WEIGHT	<ul style="list-style-type: none"> If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the FOOD box on the <i>COUNSEL THE MOTHER</i> chart. <ul style="list-style-type: none"> If feeding problem, follow-up in 5 days. Advise mother when to return immediately.

THEN CHECK THE CHILD'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE:	AGE	VACCINE
	Birth	BCG OPV-0
	6 weeks	DPT-1 OPV-1
	10 weeks	DPT-2 OPV-2
	14 weeks	DPT-3 OPV-3
	9 months	Measles

ASSESS OTHER PROBLEMS

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments.

Exception: Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed.



TREAT THE CHILD

CARRY OUT THE TREATMENT STEPS IDENTIFIED ON
THE ASSESS AND CLASSIFY CHART



TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home.
Also follow the instructions listed with each drug's dosage table.

- Determine the appropriate drugs and dosage for the child's age or weight.
- Tell the mother the reason for giving the drug to the child.
- Demonstrate how to measure a dose.
- Watch the mother practise measuring a dose by herself.
- Ask the mother to give the first dose to her child.
- Explain carefully how to give the drug, then label and package the drug.
- If more than one drug will be given, collect, count and package each drug separately.
- Explain that all the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better.
- Check the mother's understanding before she leaves the clinic.

ANTIBIOTICS

► Give an Appropriate Oral Antibiotic

► FOR PNEUMONIA, ACUTE EAR INFECTION OR VERY SEVERE DISEASE:

FIRST-LINE ANTIBIOTIC: _____

SECOND-LINE ANTIBIOTIC: _____

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ► Give two times daily for 5 days			AMOXYCILLIN ► Give three times daily for 5 days.	
	ADULT TABLET 80 mg trimethoprim + 400 mg sulphamethoxazole	PEDIATRIC TABLET 20 mg trimethoprim + 100 mg sulphamethoxazole	SYRUP 40 mg trimethoprim + 200 mg sulphamethoxazole per 5 ml	TABLET 250 mg	SYRUP 125 mg per 5 ml
2 months up to 12 months (4 - < 10 kg)	1/2	2	5.0 ml	1/2	5 ml
12 months up to 5 years (10 - 19 kg)	1	3	7.5 ml	1	10 ml

► FOR DYSENTERY:

Give antibiotic recommended for Shigella in your area for 5 days.

FIRST-LINE ANTIBIOTIC FOR SHIGELLA: _____

SECOND-LINE ANTIBIOTIC FOR SHIGELLA: _____

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ► Give two times daily for 5 days	NALIDIXIC ACID ► Give four times daily for 5 days	
	See doses above	TABLET 500 mg	SYRUP 300 mg per 5 ml
2 months up to 4 months (4 - < 6 kg)		1/4	2.5 ml
4 months up to 12 months (6 - < 10 kg)		1/4	2.5 ml
12 months up to 5 years (10 - 19 kg)		1/2	5.0 ml

► FOR CHOLERA:

Give antibiotic recommended for Cholera in your area for 3 days.

FIRST-LINE ANTIBIOTIC FOR CHOLERA: _____

SECOND-LINE ANTIBIOTIC FOR CHOLERA: _____

AGE or WEIGHT	TETRACYCLINE ► Give four times daily for 3 days	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ► Give two times daily for 3 days	ERYTHROMYCIN ► Give four times daily for 3 days	FURAZOLIDONE ► Give four times daily for 3 days
	TABLET 250 mg	See doses above	TABLET 250 mg	TABLET 100 mg
2 months up to 4 months (4 - < 6 kg)			1/4	
4 months up to 12 months (6 - < 10 kg)	1/2		1/2	
12 months up to 5 years (10 - 19 kg)	1		1	1/4

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Show the instructions below for every oral drug to be given at home.
Follow the instructions listed with each drug's dosage table.

► Give an Oral Antimalarial

FIRST-LINE ANTIMALARIAL:

SECOND-LINE ANTIMALARIAL:

► IF CHLOROQUINE:

- Explain to the mother that she should watch her child carefully for 30 minutes after giving a dose of chloroquine. If the child vomits within 30 minutes, she should repeat the dose and return to the clinic for additional tablets.
- Explain that itching is a possible side effect of the drug, but is not dangerous.

► IF SULFADOXINE + PYRIMETHAMINE: Give single dose in clinic.

CHLOROQUINE ► Give for 3 days										SULFADOXINE + PYRIMETHAMINE ► Give single dose in clinic	
AGE or WEIGHT	TABLET (150 mg base)			TABLET (100 mg base)			SYRUP (50 mg base per 5 ml)			TABLET (500 mg sulfadoxine + 25 mg pyrimethamine)	
	DAY 1	DAY 2	DAY 3	DAY 1	DAY 2	DAY 3	DAY 1	DAY 2	DAY 3		
2 months up to 12 months (4 - < 10 kg)	1/2	1/2	1/2	1	1	1/2	7.5 ml	7.5 ml	5.0 ml	1/2	
12 months up to 3 years (10 - < 14 kg)	1	1	1/2	1 1/2	1 1/2	1/2	15.0 ml	15.0 ml	5.0 ml	1	
3 years up to 5 years (14 - 19 kg)	1 1/2	1 1/2	1/2	2	2	1				1	

► Give Paracetamol for High Fever ($\geq 38.5^{\circ}\text{C}$) or Ear Pain

- Give paracetamol every 6 hours until high fever or ear pain is gone.

PARACETAMOL			
AGE or WEIGHT	TABLET (100 mg)	TABLET (500 mg)	SYRUP (125/5 ml)
2 months up to 3 years (4 - < 14 kg)		1/4	5 ml
3 years up to 5 years (14 - 19 kg)	1 1/2	1/2	7.5 ml

► Give Vitamin A

- Give two doses.

- Give first dose in clinic.
- Give mother one dose to give at home the next day.

AGE	VITAMIN A CAPSULES			VITAMIN A SYRUP
	200 000 IU	100 000 IU	50 000 IU	Concentration: _____
Up to 6 months		1/2 capsule	1 capsule	
6 months up to 12 months	1/2 capsule	1 capsule	2 capsules	
12 months up to 5 years	1 capsule	2 capsules	4 capsules	

► Give Iron

- Give one dose daily for 14 days.

AGE or WEIGHT	IRON/FOLATE TABLET Ferrous sulfate 200 mg + 250 mcg Folate (60 mg elemental iron)	IRON SYRUP Ferrous fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - < 6 kg)		1.00 ml (< 1/4 tsp.)
4 months up to 12 months (6 - < 10 kg)		1.25 ml (1/4 tsp.)
12 months up to 3 years (10 - < 14 kg)	1/2 tablet	2.00 ml (< 1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

► Give Mebendazole

- Give 500 mg mebendazole as a single dose in clinic if:
- hookworm/whipworm are a problem in children in your area, and
 - the child is 2 years of age or older, and
 - the child has not had a dose in the previous 6 months.

GIVE THESE TREATMENTS IN CLINIC ONLY

- ▶ Explain to the mother why the drug is given.
- ▶ Determine the dose appropriate for the child's weight (or age).
- ▶ Use a sterile needle and sterile syringe. Measure the dose accurately.
- ▶ Give the drug as an intramuscular injection.
- ▶ If child cannot be referred, follow the instructions provided.

▶ Give An Intramuscular Antibiotic

FOR CHILDREN BEING REFERRED URGENTLY WHO CANNOT TAKE AN ORAL ANTIBIOTIC:

- ▶ Give first dose of intramuscular chloramphenicol and refer child urgently to hospital.

IF REFERRAL IS NOT POSSIBLE:

- ▶ Repeat the chloramphenicol injection every 12 hours for 5 days.
- ▶ Then change to an appropriate oral antibiotic to complete 10 days of treatment.

AGE or WEIGHT	CHLORAMPHENICOL
	Dose: 40 mg per kg Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml
2 months up to 4 months (4 - < 6 kg)	1.0 ml = 180 mg
4 months up to 9 months (6 - < 8 kg)	1.5 ml = 270 mg
9 months up to 12 months (8 - < 10 kg)	2.0 ml = 360 mg
12 months up to 3 years (10 - < 14 kg)	2.5 ml = 450 mg
3 years up to 5 years (14 - 19 kg)	3.5 ml = 630 mg

▶ Give Quinine for Severe Malaria *in High Malaria Risk Areas*

FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE:

- ▶ Check which quinine formulation is available in your clinic.
- ▶ Give first dose of intramuscular quinine and refer child urgently to hospital.

IF REFERRAL IS NOT POSSIBLE:

- ▶ Give first dose of intramuscular quinine.
- ▶ The child should remain lying down for one hour.
- ▶ Repeat the quinine injection at 4 and 8 hours later, and then every 12 hours until the child is able to take an oral antimalarial. Do not continue quinine injections for more than 1 week.
- ▶ If low risk of malaria, do not give quinine to a child less than 4 months of age.

AGE or WEIGHT	INTRAMUSCULAR QUININE	
	150 mg/ml* (in 2 ml ampoules)	300 mg/ml* (in 2 ml ampoules)
2 months up to 4 months (4 - < 6 kg)	0.4 ml	0.2 ml
4 months up to 12 months (6 - < 10 kg)	0.6 ml	0.3 ml
12 months up to 2 years (10 - < 12 kg)	0.8 ml	0.4 ml
2 years up to 3 years (12 - < 14 kg)	1.0 ml	0.5 ml
3 years up to 5 years (14 - 19 kg)	1.2 ml	0.6 ml

* quinine salt

► Feeding Recommendations During Sickness and Health

Up to 4 Months of Age



- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours.
- Do not give other foods or fluids.

4 Months up to 6 Months



- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours.
- Only if the child:
 - shows interest in semisolid foods, or
 - appears hungry after breastfeeding, or
 - is not gaining weight adequately,

add complementary foods (listed under 6 months up to 12 months).

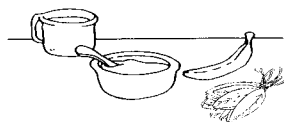
Give these foods 1 or 2 times per day after breastfeeding.

6 Months up to 12 Months



- Breastfeed as often as the child wants.
- Give adequate servings of:

- 3 times per day if breastfed;
- 5 times per day if not breastfed.

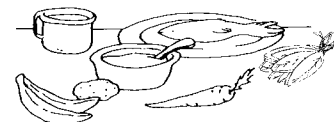


12 Months up to 2 Years

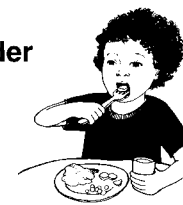


- Breastfeed as often as the child wants.
- Give adequate servings of:

or family foods 5 times per day.



2 Years and Older

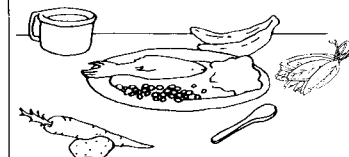


- Give family foods at 3 meals each day. Also, twice daily, give nutritious food between meals, such as:

PUFFED RICE WITH OIL

ROTI, PAPAYA,

MANGO, POPCORN,
BEANS



* A good daily diet should be adequate in quantity and include an energy-rich food (for example, thick cereal with added oil); meat, fish, eggs, or pulses; and fruits and vegetables.

Feeding Recommendations For a Child Who Has PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If taking other milk:
 - replace with increased breastfeeding OR
 - replace with fermented milk products, such as yoghurt OR
 - replace half the milk with nutrient-rich semisolid food.
- For other foods, follow feeding recommendations for the child's age.

THEN ASK:

Does the young infant have diarrhoea?

IF YES, ASK:

LOOK AND FEEL:

- For how long?
- Is there blood in the stool?
- Look at the young infant's general condition. Is the infant:
Lethargic or unconscious?
Restless and irritable?
- Look for sunken eyes.
- Pinch the skin of the abdomen.
Does it go back:
Very slowly (longer than 2 seconds)?
Slowly?

Classify DIARRHOEA

for
DEHYDRATION

Two of the following signs: • Lethargic or unconscious • Sunken eyes • Skin pinch goes back very slowly.	SEVERE DEHYDRATION	<p>► If infant does not have POSSIBLE SERIOUS BACTERIAL INFECTION: - Give fluid for severe dehydration (Plan C). OR</p> <p>► If infant also has POSSIBLE SERIOUS BACTERIAL INFECTION: - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise mother to continue breastfeeding.</p>
Two of the following signs: • Restless, irritable • Sunken eyes • Skin pinch goes back slowly.	SOME DEHYDRATION	<p>► Give fluid and food for some dehydration (Plan B). ► If infant also has POSSIBLE SERIOUS BACTERIAL INFECTION: - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise mother to continue breastfeeding.</p>
• Not enough signs to classify as some or severe dehydration.	NO DEHYDRATION	► Give fluids to treat diarrhoea at home (Plan A).

and if diarrhoea
14 days or more

• Diarrhoea lasting 14 days or more.	SEVERE PERSISTENT DIARRHOEA	<p>► If the young infant is dehydrated, treat dehydration before referral unless the infant has also POSSIBLE SERIOUS BACTERIAL INFECTION. ► Refer to hospital.</p>
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and if blood
in stool

• Blood in the stool.	DYSENTERY	<p>► Treat for 5 days with an oral antibiotic recommended for Shigella in your area. ► Follow up in 2 days.</p>
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* These thresholds are based on axillary temperature. The thresholds for rectal temperature readings are approximately 0.5° C higher.

** If referral is not possible, see *Integrated Management of Childhood Illness, Treat the Child, Annex: Where Referral Is Not Possible.*

Refer **URGENTLY**
to hospital

BACTERIAL INFECTION
DIARRHOEA

ASSESS AND CLASSIFY

TREAT AND COUNSEL

26

FOLLOW-UP

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

► Give an Appropriate Oral Antibiotic

For local bacterial infection:

First-line antibiotic: _____

Second-line antibiotic: _____

AGE or WEIGHT	COTRIMOXAZOLE trimethoprim + sulphamethoxazole ► Give 2 times daily for 5 days			AMOXYCILLIN ► Give 3 times daily for 5 days	
	Adult Tablet single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	Pediatric Tablet (20 mg trimethoprim + 100 mg sulphamethoxazole)	Syrup (40 mg trimethoprim + 200 mg sulphamethoxazole)	Tablet 250 mg	Syrup 125 mg in 5 ml
Birth up to 1 month (< 3 kg)		1/2*	1.25 ml*		1.25 ml
1 month up to 2 months (3-4 kg)	1/4	1	2.5 ml	1/4	2.5 ml

* Avoid cotrimoxazole in infants less than 1 month of age who are premature or jaundiced.

For dysentery:

Give antibiotic recommended for Shigella in your area for 5 days.

First-line antibiotic for Shigella: _____

Second-line antibiotic for Shigella: _____

► Give First Dose of Intramuscular Antibiotics

► Give first dose of ~~both benzylpenicillin and gentamicin~~ intramuscular.

WEIGHT	GENTAMICIN Dose: 2.5 mg per kg		BENZYLPENICILLIN Dose: 50 000 units per kg	
	Undiluted 2 ml vial containing 20 mg = 2 ml at 10 mg/ml	OR Add 6 ml sterile water to 2 ml vial containing 80 mg* = 8 ml at 10 mg/ml	To a vial of 600 mg (1 000 000 units): Add 2.1 ml sterile water = 2.5 ml at 400 000 units/ml	OR Add 3.6 ml sterile water = 4.0 ml at 250 000 units/ml
1 kg		0.25 ml*	0.1 ml	0.2 ml
2 kg		0.50 ml*	0.2 ml	0.4 ml
3 kg		0.75 ml*	0.4 ml	0.6 ml
4 kg		1.00 ml*	0.5 ml	0.8 ml
5 kg		1.25 ml*	0.6 ml	1.0 ml

* Avoid using undiluted 40mg/ml gentamicin.

► Referral is the best option for a young infant classified with POSSIBLE SERIOUS BACTERIAL INFECTION. If referral is not possible, give benzylpenicillin and gentamicin for at least 5 days. Give benzylpenicillin every 6 hours plus gentamicin every 8 hours. For infants in the first week of life, give gentamicin every 12 hours.

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

▶ **LOCAL BACTERIAL INFECTION**

After 2 days:

Look at the umbilicus. Is it red or draining pus? Does redness extend to the skin?

Look at the skin pustules. Are there many or severe pustules?

Treatment:

- ▶ If ***pus or redness remains or is worse***, refer to hospital.
- ▶ If ***pus and redness are improved***, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.

▶ **DYSENTERY**

After 2 days:

Assess the young infant for diarrhoea. > See "Does the Young Infant Have Diarrhoea?" above.

Ask:

- Are there fewer stools?
- Is there less blood in the stool?
- Is there less abdominal pain?
- Is the young infant eating better?
- Has fever developed?

Treatment:

- ▶ If the young infant is ***dehydrated***, treat dehydration.
- ▶ If ***number of stools, amount of blood in stools, abdominal pain, and eating are the same or worse, or fever develops***, refer to hospital. If fever, give first dose of intramuscular antibiotics before referral.
- ▶ If ***fewer stools, less blood in the stools, less abdominal pain, and eating better***, continue giving the same antibiotic until finished.

MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

Name: _____ Age: _____ Weight: _____ kg Temperature: _____ °C

ASK: What are the child's problems? _____ Initial Visit? _____ Follow-up Visit? _____

ASSESS (Circle all signs present)

CLASSIFY

CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS LETHARGIC OR UNCONSCIOUS		General danger sign present? Yes ___ No ___ Remember to use danger sign when selecting classifications
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___ • For how long? _____ Days • Count the breaths in one minute. _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor.		
DOES THE CHILD HAVE DIARRHOEA? Yes ___ No ___ • For how long? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable? • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?		
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5°C or above) Yes ___ No ___ Decide Malaria Risk: High Low <i>No</i> • For how long? _____ Days • If more than 7 days, has fever been present every day? • Has child had measles within the last 3 months? ----- If the child has measles now or within the last 3 months:		
• Look or feel for stiff neck. • Look for runny nose Look for signs of MEASLES: • Generalized rash and • One of these: cough, runny nose, or red eyes. ----- • Look for mouth ulcers. If Yes, are they deep and extensive? • Look for pus draining from the eye. • Look for clouding of the cornea.		
DOES THE CHILD HAVE AN EAR PROBLEM? Yes ___ No ___ • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear.		
THEN CHECK FOR MALNUTRITION AND ANAEMIA • Look for visible severe wasting. • Look for palmar pallor. Severe palmar pallor? Some palmar pallor? • Look for oedema of both feet. • Determine weight for age. Very Low _____ Not Very Low _____		
CHECK THE CHILD'S IMMUNIZATION STATUS Circle immunizations needed today BCG _____ DPT 1 _____ DPT 2 _____ DPT 3 _____ OPV 0 _____ OPV 1 _____ OPV 2 _____ OPV 3 _____ Measles _____ <i>IMMUNIZATION, VITAMIN A AND DEWORMING STATUS</i>		Return for next immunization on: _____ (Date)
ASSESS CHILD'S FEEDING if child has ANAEMIA OR VERY LOW WEIGHT or is less than 2 years old. • Do you breastfeed your child? Yes ___ No ___ If Yes, how many times in 24 hours? _____ times. Do you breastfeed during the night? Yes ___ No ___ • Does the child take any other food or fluids? Yes ___ No ___ If Yes, what food or fluids? _____ _____ How many times per day? _____ times. What do you use to feed the child? _____ If very low weight for age: How large are servings? _____ Does the child receive his own serving? _____ Who feeds the child and how? _____ • During this illness, has the child's feeding changed? Yes ___ No ___ If Yes, how? _____		

ASSESS OTHER PROBLEMS: