



**NINCDS COLLABORATIVE
PERINATAL PROJECT
A User's Guide to the Project and Data**

**Volume II: Project Study Forms
and Documentation of Transfer
to Computerized Data Items
in Master File**

**Part C: Pathological Exams
and Autopsies**

December 1983

**Prepared for
the National Institute of Neurological
and Communicative Disorders and Stroke
under Contract 231105150**

 **Battelle**
Pacific Northwest Laboratories

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**Volume II. Project Study Forms and Documentation
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in Master File**

Part C. Pathological Exams and Autopsies

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INTRODUCTION

DOCUMENT OBJECTIVES AND READER ASSUMPTIONS

Volume II, Project Study Forms and Documentation of Transfer to Computerized Data Items in Master File, provides researchers with detailed documentation for how data were collected, coded and stored on the data base. Volume II will help investigators decide: if data were collected in a suitable way for addressing particular research questions; if revision of forms affected the collection of specific data items; if data were coded on master, variable or work files, or are available only on microfilm. The reader is assumed to be the principal investigator for a project in which data from the data base will be used.

DOCUMENT STRUCTURE

Because of its size, this volume is divided into ten separate parts, each containing material on a group of forms related by subject. Each part groups together similar study forms. Generally, a part covers a single time period. The parts do not correspond exactly to the hierarchical classification structure described in Volume I. The parts of Volume II include:

- A. Prenatal Record and Medical History
- B. Labor and Delivery
- C. Pathological Exams and Autopsies
- D. Family and Socioeconomic History
- E. Neonatal Exams and Observations
- F. Pediatric and Neurological Exams, Four Months - One Year
- G. Pediatric Neurological Exams, Seven Years
- H. Psychological Exams, Eight Months
- I. Psychological Exams, Four Years and Seven Years
- J. Speech, Language and Hearing Exams, Three Years and Eight Years (Final)

This part of Volume II contains Part C: Pathological Exams and Autopsies and includes Forms PATH-1, PATH-2 and PATH-3.

To allow easy access to the data as they appear on the master file, all documentation for each form or form grouping representing a card series on the master file is identified by form number appearing at the bottom of each page. Forms are arranged in what may appear to be illogical numerical order in some cases, but the arrangement presented here ties forms and their revisions together and allows an investigator to trace an item through all revision cycles. Thus, in Part A of Volume II, OB-42 follows OB-9 and OB-10 appears next to OB-44 and OB-45. (For an explanation of how the master file was organized to result in this ordering, see the next section of the Introduction.)

All material related to a form is organized as a single unit within each part of Volume II. The material included for each form is given below in the order it appears:

- Descriptive Summary of Form. Includes purpose of form, history of use, revisions and location of records stored on Master File. A table is provided for each form (except those on microfilm only) showing the number of records available for each revision.
- Data Items Referencing Form. A list of all data items in computer files originating from form. List ordered by data item identification with reference to item number on form.
- Form. Copy of last revision of form.
- Form item numbers linked to data items. A list organized by form item numbers of all computerized data items originating from the form.
- Definition of codes. Coding instructions detailing the codes assigned to each computerized data item from the form.
- Master File Card Image. Illustrates transfer of data on form to Master File card.
- Instructions for Completing Form. The instructions used by study personnel to complete the form for each case.
- Earlier Forms or Manuals. Copies of earlier versions of forms or manuals that were used during the study.

MASTER FILE ORGANIZATION AND REVISION OF FORMS

Some understanding of how the master file was organized should aid investigators who want to trace the entry of data into computerized study files. The numbering system used both on forms and cards provides information on how data may be retrieved from the master file.

Forms

The first forms used in the study were the OB forms; as a consequence, this group of forms underwent the most revision. At first glance, it appears that forms disappear from the file and reappear in strange or bewildering places. In actuality, revisions were made according to a specific method.

Two types of revision and subsequent recodes appear in the master file, both of which appear in the OB series. In the first type of revision, radical changes in the concept of a form created a need for new coding in the computer file. Form OB-9, for example, was replaced by forms OB-40 (an optional form retained by the institution), OB-42, and OB-43 in April 1962. Data for earlier patients were recorded on OB-9 and entered on cards 1309, 2309, 3309 and 4309 of the master file; after April 1962, data was recorded on OB-42 and OB-43 and were entered on cards 0342, 1343 and 2343 of the master file.

In the second type of revision, the Collaborative Perinatal Task Force considered revisions important enough to warrant the distinction of a new form number, but considered the data for both forms to be similar enough to allow combining of data from both the old and new forms on the same card series. An example of this type of revision is form OB-35, replaced by OB-57 in April 1962. Records for both OB-35 and OB-57 are entered on cards 0357, 1357, 2357, 3357, 4357, and 5357 in the master file.

In assigning numbers to forms and their revisions, designers of the study followed a plan: prenatal records, history, and summaries of the prenatal period received numbers 1 through 15; when revised, these forms were assigned numbers in the forties. Labor and hospital records appeared on the 30 series of forms. When these forms were revised, they were assigned numbers in the fifties. Some OB data in the master file were abstracted by NINCDS staff members from forms filled out at the hospital. Cards derived from this procedure were designated as coming from forms ADM-49, 50 and 51 (which were actually ABSTRACT SHEETS). Autopsy protocol and laboratory exams of the placenta were recorded on forms PATH-1, PATH-2 and PATH-3.

Forms for recording family health history and genetic information during pregnancy also received a fair amount of revision. Early records appear on forms FHH-1,2,3 and 4. With revisions in April 1963, form SE-1 replaces part of FHH-1 and FHH-3; FHH-2, FHH-4 and parts of FHH-1 and FHH-3 were replaced by

forms GEN-5 through GEN-8 in May 1961. Form FHH-9, initiated in November 1965 for collection of socioeconomic data at time the child was seven years of age, was not replaced or revised.

The PED series of forms underwent little revision. Records for newborn babies appeared in PED-1 through PED-8; records for children up to age one and interval records were placed on PED-10 through PED-29. Seven year records were included in the series numbered PED-74 and up. Only one pediatrics form was radically revised: PED-7 was replaced by PED-8 in March 1963.

No replacements occur in the PS series, where results of psychological and speech, language and hearing tests were recorded. The PS forms are divided into distinct groups based on time of testing and subject of testing. Psychological testing occurred at 8 months, 4 years and 7 years; speech, language and hearing exams were administered at ages 3 and 8. Only the 8 month psychological examination underwent substantial revisions.

Master File Card Number and NINDB Case Number Rationale

Computer cards for each NCPP study form are numbered to reflect their origin and possible revisions. Card numbers are assigned to identify the type of data (subject), the presence of multiple cards in a series, NCPP study form and form revisions. The first five digits of each card on the master file are the card number. The study forms and card numbers are given in Figure 1.

The first fourteen columns of each master file computer card contain the master file card number and the NINDB case number. Table 1 identifies the function of each of these columns.

Column 1 identifies multiple cards in a series. It contains a zero for cards unique to a particular form (that is, no other cards are present), for example OB-3, or for cards where repetitive data are contained. Cards for OB-2 are an example of this second type; no new categories of information are included on successive cards, but previous births in excess of four must be recorded on an add-on card. For card series where data entered are unique to a card and more than one card is required to complete the series, a "1" is used to designate the first card, for example OB-5, OB-57, PATH-2 and PED-14 are exceptions to these rules.

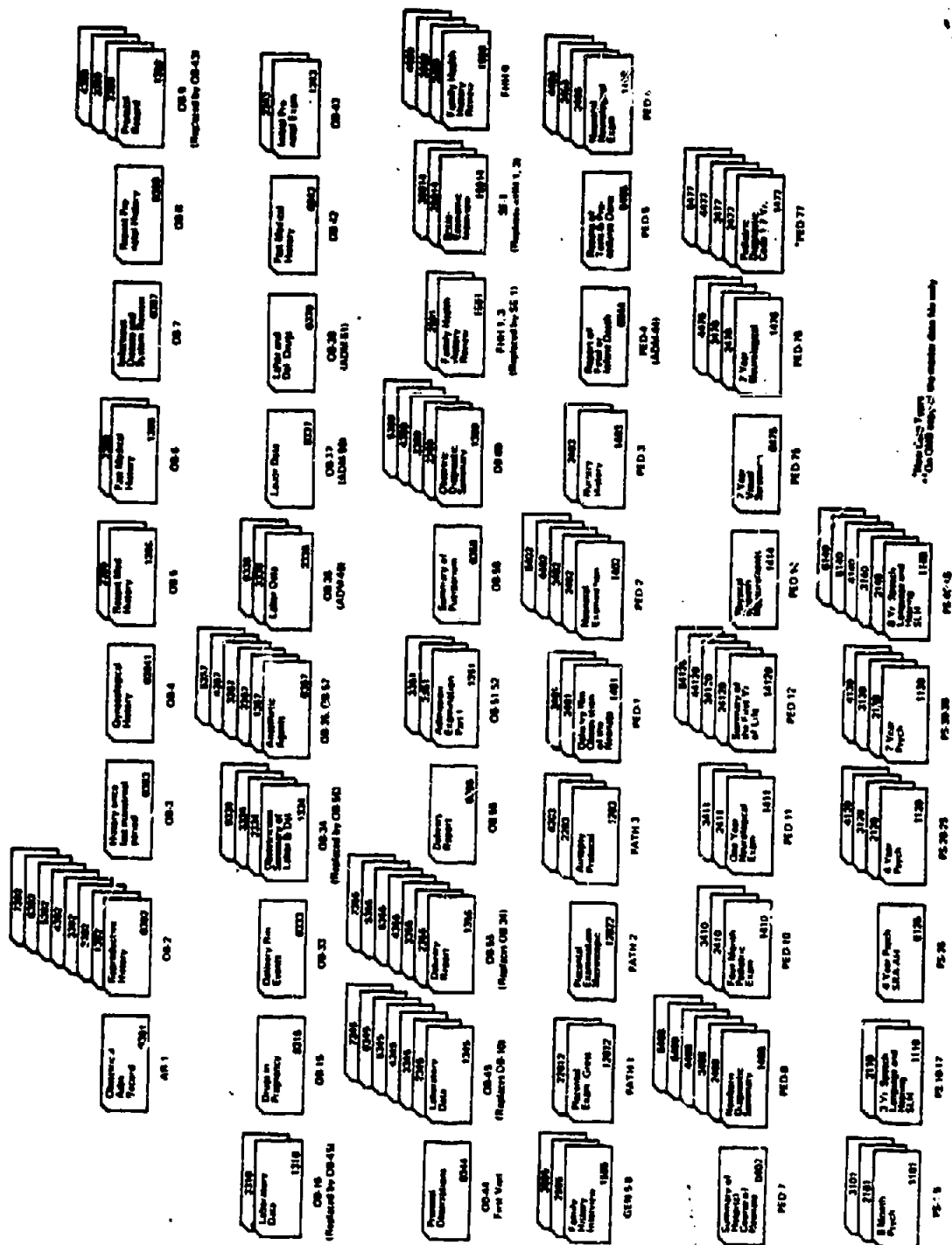


TABLE 1. Derivation of Master File Card Number and NINDB Case Number.

<u>Contents</u>	<u>Columns</u>
Master File Card Number	
card identifier	1
general subject matter	2
form number	3-4
revision code	5
NINDB Case Number	
collaborating institution	6-7
type of patient selection	8
gravida identification number	9-12
order of the pregnancy	13
identifies child or gravida	14

The second digit on the card reveals the general subject matter covered by data on the card. All cards containing information pertaining to obstetrics, for example, are designated by a "3" in column 2; family histories are designated by a "5"; pathology with a "2"; pediatrics, with a "4"; and psychological testing with a "1".

Columns three and four reveal the form number. In the case of forms where old and new forms having different numbers are included together, the number of the latest form appears on the master file. This rule does not apply to data abstracted from several forms by NINCDS staff (ADM forms).

Column 5 of the card contains a revision code indicating which form or combination of forms was used in arriving at data on a particular card. A typical card will have one to three revision codes, with a zero indicating the first version of a form and "1", "2", and "3" indicating later revisions. As a rule, revision codes used on cards differ from card to card; investigators should check the definition of codes provided in Volume II to determine the meaning of revision codes used.

Each woman and child studied in the project received a unique case number (NINDB case number) composed of nine digits, recorded in columns 6 through 14 of all master file cards. The case number identified the institution, the mother and the child. The first two digits represented the collaborating institution (see Table 2). The third digit indicated the type of patient

selection. A "1" was used for patients selected for the central core study; a "6" indicated that a patient had been transferred from one institution to another, and a "7" indicated that the patient was part of a special study undertaken by the collaborating institution. The fourth through seventh digits were used to identify the gravida, while the eighth digit identified the order of the pregnancy of a given gravida in the project. The ninth digit was used to identify the gravida or child of the pregnancy; "9" indicated the gravida, "0" indicated the child of a single birth, "1" indicated the first child of a multiple birth, "2" indicated the second child of a multiple birth, etc.

TABLE 2. Collaborating Institutions and Their Code Number
(Columns six and seven of all master file cards.)

05 - <u>Boston, Massachusetts</u> Harvard Medical School Boston Lying-in Hospital Children's Hospital Medical Center	50 - <u>Minneapolis, Minnesota</u> University of Minnesota Hospital Health Sciences Center
10 - <u>Buffalo, New York</u> University of Buffalo Children's Hospital	55 - <u>New York, New York</u> New York Medical College Metropolitan Hospital
15 - <u>New Orleans, Louisiana</u> Charity Hospital Tulane University School of Medicine Medical Center Louisiana State University	60 - <u>Portland, Oregon</u> University of Oregon Medical School
31 - <u>New York, New York</u> Columbia University College of Physicians & Surgeons Columbia-Presbyterian Medical Center	66 - <u>Philadelphia, Pennsylvania</u> University of Pennsylvania Pennsylvania Hospital The Children's Hospital of Philadelphia
37 - <u>Baltimore, Maryland</u> The Johns Hopkins University School of Medicine The Johns Hopkins Hospital	71 - <u>Providence, Rhode Island</u> Brown University Child Study Center
45 - <u>Richmond, Virginia</u> Virginia Commonwealth University Medical College of Virginia	82 - <u>Memphis, Tennessee</u> University of Tennessee College of Medicine Gallor Hospital

Data Item Identification and Naming

The NCPP data base contains over 6700 different data items and blank filler locations on computer files. We have assigned each of these a unique identification and a terse, stylized name. Because names were chosen to facilitate use of this guide, they do not duplicate names used by NINDB during the active phase of the project. Users should consult appropriate documentation before using data items from the master, variable or work files (Volumes II, III and IV).

The data item identifiers consist of 11 characters. At the far left are four unique numbers that were assigned sequentially. The next character is always a period and is followed by up to six characters. For data items on the master file, these characters describe the data collection form from which a data item was derived; for data items on the variable (VAR) or work (WXX) files, these characters indicate the appropriate file. If the right side is less than six characters, periods are inserted as shown in these examples:

850..OB-34	an item from OB-34; on the master file
3650.PATH-3	an item from PATH-3; on the master file
5223....VAR	an item on the variable file
6340...W-10	an item on work file 10, Rupture of Membranes

We assigned the numbers sequentially as they appear in Volume V. For the master file, we followed the order in which the cards would be found within an NINDB case. All card columns are accounted for by one of our data item identifications. For the variable and work files, the numbers were assigned in the order that data items appear within a case.

We categorized each data item according to the person to whom the data refer, by the time of measurement and/or the time to which the item applies and by general type or subject area (Table 3). Then we assigned names to the data items using the following guidelines:

- The name and the three associated categories had to stand alone - they must describe the data item out of context.
- The first word in the data item name had to be an important or key word when all names were listed alphabetically as in Volumes VI and VII. Thus "cry, abnormal" was used rather than "abnormal cry" because a

researcher is more likely to look for this item under "C" than under "A" in an alphabetic list.

- Secondary key words were preceded with a semicolon to facilitate preparation of the permuted index. For example, "abruptio; placenta" will be found under both the "A" and "P" portion of Volume VI.
- Qualifying words are delimited by commas and will not appear as keywords in Volume VI. Thus "abruptio; placenta, degree" will not be found in the "D" section.
- If medical terminology or usage has changed since the study was conducted, modern terms may be included and will be enclosed in brackets. Thus "mongolism; [Down's syndrome]" will appear under both the "M" and "D" portions of Volume VI.
- If measurement units are associated with a data item name, they are enclosed in parentheses and placed at the end of the name as in "Birthdate (yr)."
- The categories (person, time and subject) are appended to the right of the data item name.

Definitions for each category used in naming data items are given in Table 4 at the end of this introduction. Additional information is found in Chapter 4 of Volume I.

Data item names thus assigned are terse and highly stylized; as we have already indicated, they are not the names used by NINDB during the active phase of the project. Our aim was to develop standardized names that would stand alone. These names are intended to facilitate a user's search for data items potentially useful in a research project. Before an item is used, a researcher should consult its complete description. For a data item from the master files, e.g., 850..OB-34, the data item should be traced to the appropriate study form, e.g., OB-34, located in Volume II. A variable file data item, e.g., 5223....VAR, is traced to Volume III, where it is defined and its original source given. A data item from a work file is traced to Volume IV for its description.

Some data items contained in the indexes may include the notation "DO NOT USE." These items are either inaccurate or an alternative data item is available that gives better information. Users will find more appropriate data items by consulting one of the indexes to the data items (Volumes, V, VI and VII).

Tables of Data Items: Column Headings

For each form, two sets of computer generated pages list all data items in either the master, variable or work files derived from this form. These lists enable a user to track form items to computerized data items listed in other volumes of the User's Guide and vice versa. The computer listings have the following information.

<u>Column Heading</u>	<u>Description</u>
DATA ITEM ID	A unique identifier for this data item. See Data Item Identification and Naming above for details.
ITEM ON FORM	An identifier used on the NCPP study form to identify the question or group of questions which was used to generate this data item.
CARD NUM	Identifies the master file card on which this data item is located. See Master File Card Number and NINDB Case Number Rationale above for a description of card number.
FROM	Beginning card column for this data item.
TO	Ending card column for this data item.
DATA ITEM NAME	Terse stylized name for this data item. See Data Item Identification and Naming above for details.

ASSOCIATED DOCUMENTS

By examining the tables provided for each, investigators will be able to determine which computer files contain data of interest. For data contained in the variable file, see Volume III of this guide; for data contained in work files, see Volume IV.

TABLE 3. Abbreviations for Person, Time and Subject Categories

<u>Person</u>	<u>Time</u>	<u>Subject</u>
Mother	General	Administrative
Father	Preconception	Anesthesia
Placenta	Registration	Clin. Impression
Fetus	Prenatal	Clinical Lab
Child	Admission	Current Pregnancy
4 Surrogate	Intrapartum	Environ. Exposure
Family	Delivery	Events
Sibship	Post Partum	Hearing
	Neonatal	Hospitalizations
	Four month	Language
	Eight month	Linkage
	One year	Malformations
	Three year	Diag. & Cond.
	Four year	Med. History
	Seven year	Medications
	Eight year	Neurological Exam
		Observations
		Pathology
		Physical Exam
		Procedure
		Psych. Exam
		Reproductive Hist.
		Serology
		Socioecon. Info
		Speech
		Vision
		Work History
		X-ray
		Summary
		Gyn. History
		Special Studies
		Fam/Genetic Hist.
		SLH Exam

**TABLE 4. Definition of Person, Time
and Subject Categories**

PERSON	DEFINITION
Mother	Stud. registrant bearing the "study pregnancy"; biologic mother of the "study child"; gravida.
Father	Biologic father of the study child or study pregnancy; in the case of socioeconomic data, this category may indicate either the "father of baby" (not necessarily husband of the mother) or the "husband" (not necessarily related biologically to the study child).
Placenta	The organ of metabolic and gaseous interchange between the fetus and mother; also included in this category are gross and microscopic pathologic data from examination of the umbilical cord.
Fetus	Conceptus; the product of conception including the embryonic stage, i.e., from conception to the moment of birth.
Child	Product of the study pregnancy from the moment of birth onward; study child.
N Surrogate	Person or persons substituting for the mother of a study child, e.g., adoptive parents, foster parents or guardian.
Family	Person or persons biologically related to the mother or father of the study child.
Sibship	Child or children having one or both of the same biologic parents as the study child; siblings; half siblings; full siblings.

**TABLE 4. Definition of Person, Time
and Subject Categories (Cont.)**

TIME	DEFINITION
General	Data with no pertinent time period or data pertaining to more than one time period.
Preconception	Data pertaining to the period prior to conception of the study pregnancy.
Registration	Data collected at the time of study mother's registration in the study.
Prenatal	Data pertaining to the period from conception of the study pregnancy to delivery of the study child.
Admission	Data collected at the time of study mother's admission to the hospital for delivery of the study child.
Intrapartum	Data pertaining to the period from admission for delivery or onset of labor to delivery of the study child.
Delivery	Data pertaining to the time period during which delivery of the study child occurred.
Post Partum	Data (pertaining to the study mother) collected during the period immediately following birth of the study child.
Neonatal	Data pertaining to the study child during the period from birth to one month of age; the majority of these data were collected prior to or at the time a study child was discharged from the hospital.
Four Month	Data collected at the time of the four month examination of the study child.
Eight Month	Data collected at the time of the eight month examination of the study child.
One Year	Data collected at the time of the one year examination of the study child.
Three Year	Data collected at the time of the three year examination of the study child.
Four Year	Data collected at the time of the four year examination of the study child.
Seven Year	Data collected at the time of the seven year examination of the study child.
Eight Year	Data collected at the time of the eight year examination of the study child.

**TABLE 4. Definition of Person, Time
and Subject Categories (Cont.)**

SUBJECT	DEFINITION
Administrative	Data pertaining to the administrative aspects of the study.
Anesthesia	Data on medications and procedures used to obtain anesthesia.
Clin. Impression	Impression of abnormality or dysfunction gained by an examiner following evaluation of clinical signs and symptoms and including a subjective component.
Clinical Lab	Data obtained from laboratory examination of clinical specimens.
Current Pregnancy	Personal data and medically relevant information pertaining to the study pregnancy for which the mother is enrolled.
Environ. Exposure	Data on exposure to occupational or other environmental entities or hazards.
Events	Data related to a specific event, occurrence or incidence.
Hearing	Data obtained from examination and testing of hearing function.
Hospitalizations	Data on specific hospital admissions or the number of hospitalizations.
Language	Data obtained from examination and testing of language function.
Linkage	Data on the genetic relationships of family members to the study mother, father or child.
Malformations	Data on the conditions in which failure of normal development has resulted in abnormal physical traits existing at the time of birth.
Diag. & Cond.	Data on specific diagnoses or conditions obtained from past medical history or examination during the study.
Med. History	Data obtained from the study participant or medical records relevant to past or current medical diagnoses or conditions.
Medications	Data on drugs or medications used.
Neurological Exam	Data obtained from observation and physical examination of the central nervous system.
Observations	Data obtained from observations not categorized elsewhere.
Pathology	Data obtained from clinical and anatomical pathological examination.
Physical Exam	Data obtained from physical examination of the study participant.
Procedure	Data relating to specific procedures performed on the study participant prior to or during the period of enrollment in the study.
Psych. Exam	Data obtained from the psychological examinations and observations.

**TABLE 4. Definition of Person, Time
and Subject Categories. (Cont.)**

SUBJECT	DEFINITION
Reproductive Hist.	Data pertaining to the outcome of pregnancies prior to and or during the period of enrollment in the study.
Serology	Data obtained from the laboratory examination of serum by specific immunologic methods.
Socioecon. Info	Data related to the social and economic characteristics and environment of the study participant.
Speech	Data obtained from examination and observation of speech function.
Vision	Data obtained from examination of the eyes.
Work History	Data pertaining to occupation and employment prior to and during the period of enrollment in the study.
X-Ray	Data on diagnostic x rays and diagnostic or therapeutic radiological procedures.
Summary	Data presented as a summary of data collected and recorded elsewhere.
Gyn. History	Medical history specifically related to the female genital tract, reproductive physiology and endocrinology.
Special Studies	Data pertaining to participation in other special organized studies conducted during the period of enrollment in the study.
Fam/Genetic Hist.	Data on the medical histories of family members genetically related to the study child.
SLH Exam	Data obtained from the speech, language and hearing examinations not specifically or exclusively related to one of these areas.

PAGE II.C.xviii IS MISSING

CONTENTS

PATH-1	Placental Exam - Gross	II.C.1
PATH-2	Placental Exam - Microscopic	II.C.31
PATH-3	Autopsy Protocol	II.C.53

PATH-1 Placenta? Examination - Gross

Form PATH-1 was used to provide precise and detailed information about the gross appearance of the placenta and how it might relate to the outcome of the pregnancy for both mother and infant. The form was implemented in July 1959 and was not revised. Data from PATH-1 were keypunched onto cards 1201 and 2201 in the master file (Table PATH-1.1).

TABLE PATH-1.1 Cards and Data Records by Revision for Form PATH-1

CARD NAME	CARD NUMBER	REV. NO.	NUMBER RECORDS
PATH-1: Dimensions, Cord, Membrane and Fetal Surface	1201		
		2	47,290
		3	1,488
			48,778
PATH-1: Maternal Surface, Cut Surface	2201		
		2	47,177
		3	1,493
			48,670
total for form			97,448

5 *

II.C.2

PATH-1

Data Items Referencing Form PATH-1, Placental Exam - Gross

DATA ITEM ID	ITEM CM FORM	CARD NUM	FROM	TO	DATA ITEM NAME
48.....		1201	1	5	Card number (sequence, form type, form number, revision number)
49.....		1201	6	14	WIND case number
50.PATH-1	2	1201	15	16	Pathology: gross, examination by
51.PATH-1	3	1201	17	20	Pathology: gross, time
52.PATH-1	3	1201	21	22	Pathology: gross, date (mo)
53.PATH-1	3	1201	23	24	Pathology: gross, date (day)
54.PATH-1	3	1201	25	26	Pathology: gross, date (yr)
55.PATH-1	5	1201	27	27	Pathology: gross; designation of placenta, plurality
56.PATH-1	6	1201	28	28	Pathology: gross; placenta, labeled at delivery
57.PATH-1	7	1201	29	29	Pathology: gross; placenta, fused
58.PATH-1	8	1201	30	30	Pathology: gross; placenta, anastomosis present
59.PATH-1	9	1201	31	32	Pathology: gross; placenta, dimensions, largest diameter (cm)
60.PATH-1	9	1201	33	34	Pathology: gross; placenta, dimensions, smallest diameter (cm)
61.PATH-1	9	1201	35	36	Pathology: gross; placenta, dimensions, thickness (cm)
62.PATH-1	9	1201	37	37	Pathology: gross; placenta, shape
63.PATH-1		1201	38	38	Pathology: gross; placenta, description
64.PATH-1	12	1201	39	41	Pathology: gross; placenta, length (cm)
65.PATH-1	13	1201	42	43	Pathology: gross; placenta, shortest distance from cord, insertion to placental margin (cm)
66.PATH-1	13	1201	44	44	Pathology: gross; placenta, type of insertion
67.PATH-1	14	1201	45	45	Pathology: gross; placenta, number of vessels
68.PATH-1	15	1201	46	46	Pathology: gross; placenta, true knot
69.PATH-1	16	1201	47	47	Pathology: gross; placenta, color
70.PATH-1	17	1201	48	48	Pathology: gross; placenta, frozen sections taken
71.PATH-1		1201	49	49	Pathology: gross; membranes and fetal surface, description
72.PATH-1	19	1201	50	50	Pathology: gross; membranes and fetal surface, membranes complete
73.PATH-1	20	1201	51	51	Pathology: gross; membranes and fetal surface, decidua necrosis
74.PATH-1	21	1201	52	52	Pathology: gross; membranes and fetal surface, membranes edematous
75.PATH-1	22	1201	53	53	Pathology: gross; membranes and fetal surface, insertion of membranes
76.PATH-1	23	1201	54	55	Pathology: gross; membranes and fetal surface, shortest distance from edge of rupture to placental margin (cm)
77.PATH-1	24	1201	56	56	Pathology: gross; membranes and fetal surface, color of fetal surface
78.PATH-1	25	1201	57	57	Pathology: gross; membranes and fetal surface, opacity of membranes
79.PATH-1	26	1201	58	58	Pathology: gross; membranes and fetal surface, subchorionic fibrins
80.PATH-1	27	1201	59	59	Pathology: gross; membranes and fetal surface, description of subchorionic fibrin
81.PATH-1	28	1201	60	60	Pathology: gross; membranes and fetal surface, thrombosed fetal vessels
82.PATH-1	29	1201	61	61	Pathology: gross; membranes and fetal surface, amnion nodosum
83.PATH-1	30	1201	62	62	Pathology: gross; membranes and fetal surface, cysts

Data Items Referencing Form PATH-1, Placental Exam - Gross

DATA ITEM ID	ITEM JN FORM	CARD NUM	FROM	TO	DATA ITEM NAME
84.PATH-1	31	1201	63	66	Pathology: gross; membranes and fetal surface, weight (gms)
85.....		1201	67	72	Blank
86.PATH-1		1201	73	80	Pathology: gross; placenta identification number
87.....		2201	1	5	Card number (sequence, form type, form number, revision number)
88.....		2201	6	14	MINPR case number
89.PATH-1	33	2201	15	15	Pathology: gross; maternal surface, intact/lacerated
90.PATH-1	34	2201	16	16	Pathology: gross; maternal surface, completeness
91.PATH-1	35	2201	17	17	Pathology: gross; maternal surface, depressed area, total number
92.PATH-1	36	2201	18	19	Pathology: gross; maternal surface, depressed area, size, length (cm)
93.PATH-1	36	2201	20	21	Pathology: gross; maternal surface, depressed area, size, width (cm)
94.PATH-1	37	2201	22	22	Pathology: gross; maternal surface, depressed area, apparent cause
95.PATH-1	38	2201	23	23	Pathology: gross; maternal surface, hemorrhage, age
96.PATH-1	39	2201	24	25	Pathology: gross; maternal surface, hemorrhage, size, largest diameter (cm)
97.PATH-1	39	2201	26	27	Pathology: gross; maternal surface, hemorrhage, size, smallest diameter (cm)
98.PATH-1	39	2201	28	29	Pathology: gross; maternal surface, hemorrhage, size, thickness (cm)
99.PATH-1	40	2201	30	31	Pathology: gross; maternal surface, hemorrhage retroplacental shortest distance from periphetal edge hemorrhage to placental margin (cm)
100.PATH-1	40	2201	32	33	Pathology: gross; maternal surface, hemorrhage retroamniotic shortest distance from periphetal edge hemorrhage to placental margin (cm)
101.PATH-1	43	2201	34	35	Pathology: gross; cut surface infarcts, total number
102.PATH-1	43	2201	36	36	Pathology: gross; cut surface, infarcts, pink/red, marginal
103.PATH-1	43	2201	37	37	Pathology: gross; cut surface, infarcts, pink/red, not marginal
104.PATH-1	44	2201	38	38	Pathology: gross; cut surface, infarcts, yellow/white, marginal
105.PATH-1	44	2201	39	39	Pathology: gross; cut surface, infarcts, yellow/white, not marginal
106.PATH-1	44	2201	40	40	Pathology: gross; cut surface, infarcts, pink/red, unknown location
107.PATH-1	44	2201	41	41	Pathology: gross; cut surface, infarcts, yellow/white, unknown location
108.PATH-1	44	2201	42	42	Pathology: gross; cut surface, infarcts, unknown color, marginal
109.PATH-1	44	2201	43	43	Pathology: gross; cut surface, infarcts, unknown color, not marginal
110.PATH-1	44	2201	44	44	Pathology: gross; cut surface, infarcts, unknown color, unknown location
111.PATH-1	45	2201	45	45	Pathology: gross; cut surface, infarcts, size (cm)
112.PATH-1	46	2201	46	46	Pathology: gross; cut surface, infarcts, maternal floor
113.PATH-1	47	2201	47	47	Pathology: gross; cut surface, color
114.PATH-1	48	2201	48	48	Pathology: gross; cut surface, consistency

Data Items Referencing Form PATH-1, Placental Exam - Gross

DATA ITEM TO	ITEM ON FORM	CARD NUM	FROM	TO	DATA ITEM NAME
115.PATH-1	48	2201	49	49	Pathology: gross; cut surface, calcification
116.PATH-1		2201	50	51	Pathology: gross; cut surface, intervillous thrombosis, total number
117.PATH-1	50	2201	52	52	Pathology: gross; cut surface, intervillous thrombosis, total number laminated
118.PATH-1	51	2201	53	53	Pathology: gross; cut surface, intervillous thrombosis, number laminated in marginal sinus
119.PATH-1	52	2201	54	54	Pathology: gross; cut surface, intervillous thrombosis, total number not laminated
120.PATH-1	53	2201	55	55	Pathology: gross; cut surface, intervillous thrombosis, number not laminated in marginal sinus
121.PATH-1	54	2201	56	56	Pathology: gross; cut surface, tumor
122.PATH-1	55	2201	57	57	Pathology: gross; cut surface, hydatid change
123.PATH-1	56	2201	58	58	Pathology: gross; cut surface, true cysts
124.PATH-1	58	2201	59	59	Pathology: gross, exam was done with knowledge of case
125.PATH-1	59	2201	60	61	Pathology: gross, special studies
126.PATH-1	60	2201	62	62	Pathology: gross, other abnormalities
127.PATH-1	5	2201	63	63	Pathology: gross; designation of placenta, plurality
128.....		2201	64	72	Blank
129.PATH-1		2201	73	80	Pathology: gross, placenta identification number
5360.....VAR	24		518	518	Pathology: gross; membranes and fetal surface, color of fetal surface
5361.....VAR	20		519	519	Pathology: gross; membranes and fetal surface, decidua necrosis
5362.....VAR	20		520	520	Pathology: gross; membranes and fetal surface, decidua necrosis (yes, no, unknown)
5363.....VAR	22		521	521	Pathology: gross; membranes and fetal surface, insertion of membranes
5364.....VAR	31		527	527	Pathology: gross; membranes and fetal surface, weight; placenta (gms)
5365.....VAR	31		526	527	Pathology: gross; membranes and fetal surface, weight, categorized
5366.....VAR	13		528	528	Pathology: gross; cord, type of insertion, membranous, degree
5367.....VAR	13		529	529	Pathology: gross; cord, type of insertion, membranous / nonmembranous
5368.....VAR	14		530	530	Pathology: cord, arteries, number
5369.....VAR	45		531	531	Pathology: gross; cut surface, infarcts, site

CSL R-228D-1
7-72

PLACENTAL EXAMINATION - GROSS

INSTRUCTIONS: (1) For use when examining length of fetus to 14.5 cm, or more (gestational age 36 weeks). (2) Placenta must be fresh when examined. (3) An entry is required for every item except those for fetus only. (4) Describe all observations in the space or bottom of second chart. (5) Prepare at least 3 sections as specified in instruction card, membrane roll, and placenta.

1. PATIENT'S IDENTIFICATION

2. GROSS EXAMINATION BY _____ 3. TIME _____ DATE _____
AM _____ PM _____

4. MULTIPLE BIRTHS (Photograph all placentas of multiple births - 35 cm. each)

5. DESIGNATION OF PLACENTA DESCRIBED ON THIS FORM

☐ Twin A ☐ Twin B ☐ Other Multiple Birth (Describe)

6. LABELED AT DELV.

☐ No ☐ Yes

7. PLACENTAS FUSED

☐ No ☐ Yes (Fill out one form for each fetus)

8. IF FUSED PLACENTAS, IS ANASTOMOSIS PRESENT?

☐ No ☐ Yes ☐ Undetermined (Vessels must be injected and described in detail). Describe anastomoses below, indicating whether artery or vein, vein to vein, or artery to vein. Note also of vessels, etc.

9. DIMENSIONS

(Largest diam.) x (Smallest diam.) x (Thickness) cm

10. SHAPE

☐ Round or Oval ☐ Other (Describe)

11. CORD

12. LENGTH OF CORD

(Portion attached to placenta plus any loose pieces) _____ cm

13. SHORTEST DISTANCE FROM CORD INSERTION TO PLACENTAL MARGIN

_____ cm ☐ Insertion not membranous ☐ Insertion membranous

14. NUMBER OF VESSELS

(Fetus only) ☐ 2 ☐ 3

15. TRUE KNOT IN CORD

☐ No ☐ Yes (If "yes" note location as specified in comment)

16. COLOR OF CORD

☐ Normal ☐ Other (Describe)

17. FROZEN SECTION TAKEN

☐ No ☐ Yes

18. MEMBRANES AND FETAL SURFACE

19. MEMBRANES COMPLETE

☐ No ☐ Yes ☐ Unable to determine

20. DECIDUAL NECROSIS

☐ Not seen ☐ Present (Not described) ☐ Necrotic

21. MEMBRANES EDEMATOUS

☐ No ☐ Yes

22. INSERTION OF MEMBRANES (check two if partial)

☐ Marginal ☐ Circummarginate ☐ Circumvillate

23. SHORTEST DISTANCE FROM EDGE OF RUPTURE TO PLACENTAL MARGIN

_____ cm ☐ Unknown

24. COLOR OF FETAL SURFACE

☐ Bluish-gray ☐ Green ☐ Brownish-yellow ☐ Other (Specify)

25. OPACITY OF MEMBRANES

☐ Not opaque ☐ Opaque

26. SUBCHORIONIC PLEURA

☐ Not seen ☐ Present (Not described) ☐ Necrotic

27.

☐ Polych ☐ Diffuse

28. THROMBOSIS OF FETAL VESSELS

☐ Not seen ☐ Present (Describe Vain, artery, etc.)

29. AMNION NODOSUM

☐ Not seen ☐ Present (Describe)

30. CYSTS

☐ Not seen ☐ Present (Describe)

31. WEIGHT

(Fetus and membranes) _____ Gm

32. MATERNAL SURFACE

33. SURFACE

☐ Intact ☐ Lacerated

34.

☐ Complete ☐ Incomplete ☐ Undetermined

35. DEPRESSED AREA

☐ None ☐ Present

36. IF PRESENT

Size _____ x _____ cm

37. APPARENTLY CAUSED BY

☐ Hemorrhage ☐ Abrasion or laceration ☐ Other (Describe) ☐ Unknown

38. HEMORRHAGE

☐ None ☐ Remote ☐ Old ☐ Fresh

39. SIZE

(If fresh) ☐ 1 (Faint) ☐ 2 (Firm) (Largest diam.) x (Smallest diam.) x (Thickness) cm

40. SHORTEST DISTANCE FROM PERIPHERAL EDGE OF HEMORRHAGE TO PLACENTAL MARGIN

_____ cm ☐ Location retroplacental ☐ Location retroamniotic

41. CUT SURFACE

42. INFARCTS: (If none write 0 in all blanks)

43. Pink-Red Infarcts

No. Marginal _____ No. Not Marginal _____

44. Yellow-White Infarcts

No. Marginal _____ No. Not Marginal _____

45. SIZE OF INFARCTS

☐ Not Applicable (None found) ☐ All 1-2 cm ☐ At least one more than 3 cm (Infarcts more than 3 cm, in largest diam. must be described below)

46. MATERNAL FLOOR INFARCTS (as specified in comment)

☐ Not seen ☐ Present (Describe)

47. COLOR

☐ Normal ☐ Unusually light (pale)

48. CONSISTENCY

☐ Firm ☐ Spongy ☐ Calcification maternal surface only ☐ Calcification throughout

49. INTERVILLOUS THROMBOSIS: (If none, write 0 in all blanks)

50. Total number laminated

51. No. laminated in marginal sinus

52. Total no. not laminated

53. No. not laminated in marginal sinus

54. TUMOR

☐ Not seen ☐ Present (Describe)

55. HYDATIC CHANGE

☐ Not seen ☐ Present (Describe)

56. TRUE CYSTS (in substance) (If none, write 0)

Number present _____

Collaborative Research
Perinatal Research Branch, NINDS, NIH
Bethesda 14, Md.

(PATH-1) PAGE 1 OF 2

COLOR 1251-1
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57. PATIENT'S IDENTIFICATION

PLACENTAL EXAMINATION-GROSS
(Continued)

56. GROSS EXAMINATION WAS DONE WITH KNOWLEDGE THAT:

- ☐ 1 Clinical course or outcome for mother or baby was normal ☐ 2 Clinical course or outcome for mother or baby was abnormal ☐ 3 With no knowledge of the case

58. SPECIAL STUDIES:

- ☐ 1 Photography ☐ 2 Virology ☐ 3 Histohistochemistry (Special stains) ☐ 4 Other (describe)

59. PRESENCE OF OTHER ABNORMALITIES

- ☐ 5 No abnormalities other than those specified above ☐ 6 Abnormalities other than those specified above

60. DESCRIPTION OF ABNORMALITIES CHECKED AND OTHER PERTINENT FINDINGS. IDENTIFY EACH COMMENT BY THE CORRESPONDING NUMBER.

Form Item Numbers linked to Data Items on PATH-1, Placental Exam - Gross

ITEM ON FORM	DATA ITEM ID	CAKD NUM	FROM	TO	DATA ITEM NAME
2	129.PATH-1	2201	73	80	Pathology; gross, placenta identification number
3	116.PATH-1	2201	50	51	Pathology; gross; cut surface, intervillous thrombosis, total number
3	71.PATH-1	1201	49	49	Pathology; gross; membranes and fetal surface, description
3	86.PATH-1	1201	73	80	Pathology; gross; placenta identification number
3	63.PATH-1	1201	38	38	Pathology; gross; placenta, description
3	50.PATH-1	1201	15	16	Pathology; gross, examination by
3	53.PATH-1	1201	23	24	Pathology; gross, date (day)
3	52.PATH-1	1201	21	22	Pathology; gross, date (mo)
3	54.PATH-1	1201	25	26	Pathology; gross, date (yr)
3	51.PATH-1	1201	17	20	Pathology; gross, time
5	127.PATH-1	2201	63	63	Pathology; gross; designation of placenta, plurality
5	55.PATH-1	1201	27	27	Pathology; gross; designation of placenta, plurality
6	56.PATH-1	1201	28	28	Pathology; gross; placenta, labeled at delivery
7	57.PATH-1	1201	29	29	Pathology; gross; placenta, fused
8	58.PATH-1	1201	30	30	Pathology; gross; placenta, anastomosis present
9	59.PATH-1	1201	31	32	Pathology; gross; placenta, dimensions, largest diameter (cm)
9	60.PATH-1	1201	33	34	Pathology; gross; placenta, dimensions, smallest diameter (cm)
9	61.PATH-1	1201	35	36	Pathology; gross; placenta, dimensions, thickness (cm)
9	62.PATH-1	1201	37	37	Pathology; gross; placenta, shape
12	64.PATH-1	1201	39	41	Pathology; gross; placenta, length (cm)
13	5367....VAR		529	529	Pathology; gross; cord, type of insertion, membranous / nonmembranous
13	5366....VAR		528	528	Pathology; gross; cord, type of insertion, membranous, degree
13	65.PATH-1	1201	42	43	Pathology; gross; placenta, shortest distance from cord, insertion to placental margin (cm)
13	66.PATH-1	1201	44	44	Pathology; gross; placenta, type of insertion
14	5368....VAR		530	530	Pathology; gross; cord, arteries, number
14	67.PATH-1	1201	45	45	Pathology; gross; placenta, number of vessels
15	68.PATH-1	1201	46	46	Pathology; gross; placenta, true knot
16	69.PATH-1	1201	47	47	Pathology; gross; placenta, color
17	70.PATH-1	1201	48	48	Pathology; gross; placenta, frozen sections taken
19	72.PATH-1	1201	50	50	Pathology; gross; membranes and fetal surface, membranes complete
20	73.PATH-1	1201	51	51	Pathology; gross; membranes and fetal surface, decidua necrosis
20	5361....VAR		519	519	Pathology; gross; membranes and fetal surface, decidua necrosis
20	5362....VAR		520	520	Pathology; gross; membranes and fetal surface, decidua necrosis (yes, no, unknown)
21	74.PATH-1	1201	52	52	Pathology; gross; membranes and fetal surface, membranes edematous
22	75.PATH-1	1201	53	53	Pathology; gross; membranes and fetal surface, insertion of membranes
22	5363....VAR		521	521	Pathology; gross; membranes and fetal surface, insertion of membranes

Form Item Numbers linked to Data Items on PATH-1, Placental Exam - Gross

ITEM ON FORM	DATA ITEM ID	CARD NUM	FROM	TO	DATA ITEM NAME
23	76.PATH-1	1201	54	55	Pathology: gross; membranes and fetal surface, shortest distance from edge of rupture to placental margin (cm)
24	77.PATH-1	1201	56	53	Pathology: gross; membranes and fetal surface, color of fetal surface
24	5360.....VAR		518	518	Pathology: gross; membranes and fetal surface, color of fetal surface
25	78.PATH-1	1201	57	57	Pathology: gross; membranes and fetal surface, opacity of membranes
26	79.PATH-1	1201	58	58	Pathology: gross; membranes and fetal surface, subchorionic fibrins
27	80.PATH-1	1201	59	59	Pathology: gross; membranes and fetal surface, description of subchorionic fibrin
28	81.PATH-1	1201	60	60	Pathology: gross; membranes and fetal surface, thrombosed fetal vessels
29	82.PATH-1	1201	61	61	Pathology: gross; membranes and fetal surface, amnion nodosum
30	83.PATH-1	1201	62	62	Pathology: gross; membranes and fetal surface, cysts
31	84.PATH-1	1201	63	66	Pathology: gross; membranes and fetal surface, weight (gms)
31	5365.....VAR		526	527	Pathology: gross; membranes and fetal surface, weight, catagorized
31	5364.....VAR		522	525	Pathology: gross; membranes and fetal surface, weight; placenta (gms)
33	89.PATH-1	2201	15	15	Pathology: gross; maternal surface, intact/lacerated
34	90.PATH-1	2201	16	16	Pathology: gross; maternal surface, completeness
35	91.PATH-1	2201	17	17	Pathology: gross; maternal surface, depressed area, total number
36	92.PATH-1	2201	18	19	Pathology: gross; maternal surface, depressed area, size, length (cm)
36	93.PATH-1	2201	20	21	Pathology: gross; maternal surface, depressed area, size, width (cm)
37	94.PATH-1	2201	22	22	Pathology: gross; maternal surface, depressed area, apparent cause
38	95.PATH-1	2201	23	23	Pathology: gross; maternal surface, hemorrhage, age
39	96.PATH-1	2201	24	25	Pathology: gross; maternal surface, hemorrhage, size, largest diameter (cm)
39	97.PATH-1	2201	26	27	Pathology: gross; maternal surface, hemorrhage, size, smallest diameter (cm)
39	98.PATH-1	2201	28	29	Pathology: gross; maternal surface, hemorrhage, size, thickness (cm)
40	100.PATH-1	2201	32	33	Pathology: gross; maternal surface, hemorrhage retroamembranes
40	99.PATH-1	2201	30	31	Pathology: gross; maternal surface, hemorrhage retroplacental margin (cm)
43	101.PATH-1	2201	34	35	Pathology: gross; cut surface infarcts, total number
43	102.PATH-1	2201	36	36	Pathology: gross; cut surface, infarcts, pink/red, marginal
43	103.PATH-1	2201	37	37	Pathology: gross; cut surface, infarcts, pink/red, not marginal
44	106.PATH-1	2201	40	40	Pathology: gross; cut surface, infarcts, pink/red, unknown location

Form Item Numbers linked to Data Items on PATH-1, Placenta!! Exam - Gross

ITEM ON FORM	DATA ITEM ID	CARD NUM	FROM	TO	DATA ITEM NAME
44	108.PATH-1	2201	42	42	Pathology; gross; cut surface, infarcts, unknown color, marginal
44	109.PATH-1	2201	43	43	Pathology; gross; cut surface, infarcts, unknown color, not marginal
44	110.PATH-1	2201	44	44	Pathology; gross; cut surface, infarcts, unknown color, unknown location
44	104.PATH-1	2201	38	38	Pathology; gross; cut surface, infarcts, yellow/white, marginal
44	105.PATH-1	2201	39	39	Pathology; gross; cut surface, infarcts, yellow/white, not marginal
44	107.PATH-1	2201	41	41	Pathology; gross; cut surface, infarcts, yellow/white, unknown location
45	5369.VAR		531	531	Pathology; gross; cut surface, infarcts, size
45	111.PATH-1	2201	45	45	Pathology; gross; cut surface, infarcts, size (ca)
46	112.PATH-1	2201	46	46	Pathology; gross; cut surface, infarcts, waternal floor
47	113.PATH-1	2201	47	47	Pathology; gross; cut surface, color
48	115.PATH-1	2201	49	49	Pathology; gross; cut surface, calcification
48	114.PATH-1	2201	48	48	Pathology; gross; cut surface, consistency
50	117.PATH-1	2201	52	52	Pathology; gross; cut surface, intervillous thrombosis, total number laminated
51	118.PATH-1	2201	53	53	Pathology; gross; cut surface, intervillous thrombosis, number laminated in marginal sinus
52	119.PATH-1	2201	54	54	Pathology; gross; cut surface, intervillous thrombosis, total number not laminated
53	120.PATH-1	2201	55	55	Pathology; gross; cut surface, intervillous thrombosis, number not laminated in marginal sinus
54	121.PATH-1	2201	56	56	Pathology; gross; cut surface, tumor
55	122.PATH-1	2201	57	57	Pathology; gross; cut surface, hydatid change
56	123.PATH-1	2201	58	58	Pathology; gross; cut surface, true cysts
58	124.PATH-1	2201	59	59	Pathology; gross, exam was done with knowledge of case
59	125.PATH-1	2201	60	61	Pathology; gross, special studies
60	126.PATH-1	2201	62	62	Pathology; gross, other abnormalities

DEFINITION OF CODES
PLACENTAL EXAMINATION - GROSS
FORM PATH 1 CARD 12012
 CARD 12013

<u>FIELD</u>		<u>CARD COLUMN</u>
1.	<u>Card Number</u> Code: 1	1
2.	<u>Form Number</u> Code: 201	2-4
3.	<u>Revision Number</u> Code: 2 - Form dated: 7/59 (Revised coding 1965) 3 - Placental 1	5
4.	<u>NINDE Number</u> Item 1 Nine-digit number for Patient Identification Code: As given	6-14
5.	<u>Examination By</u> Item 2 Code: See attachment "Examiners", pages PATH 1 - 12 & 13	15-16
6.	<u>Time</u> Item 3 Code: 0001-2400 - As given in hours and minutes based on 24 hour clock 9999 - Unknown	17-20
7.	<u>Date</u> Item 3 Six-digit code for: <u>Month</u> (cols. 21-22) <u>Day</u> (cols. 23-24) <u>Year</u> (cols. 25-26) Code: As given 99 - Month, Day and/or Year Unknown	21-26
8.	<u>Designation of Placenta</u> Item 5 Code: 0 - Single birth 1 - First of multiple 2 - Second of multiple 3 - Third of multiple 4 - Fourth of multiple	27
9.	<u>Labeled at Delivery</u> Item 6 Code: 0 - No 1 - Yes 8 - Not applicable, single birth 9 - Unknown.	28

DEFINITION OF CODES (continued)

FORM PATH 1
Card 12012
Card 12013
CARD
COLUMN

FIELD

10. Placenta Fused
Item 7
Code: Same as in Field 9
11. Anastomosis Present
Item 8
Code: Same as in Field 9
12. Dimensions
Item 9
Six-digit code for:
 Largest Diameter (cols. 31-32)
 Smallest Diameter (cols. 33-34)
Code for each two columns:
 01-50 - As given in cms.
 97 - Multi-lobed
 98 - More than one set of dimensions
 99 - Unknown
 Thickness (cols. 35-36)
Code: 01-95 - As given in tenths of cms.
 96 - 9.6 cms. or more
 97 - Multi-lobed
 98 - More than one set of dimensions
 99 - Unknown
13. Shape
Item 10
Code: 1 - Non-partite
 2 - Bipartite
 3 - Tripartite
 4 - Succenturiate
 5 - Membranous placenta
 6 - Crescent shaped
 8 - Irregular shape
 9 - Unknown

29

30

31-36

37

CORD

14. Description
Code: 0 - No description
 1 - Edema
 2 - Maceration
 3 - Several pieces of cord seen
 4 - Narrow
 5 - Flat
 6 - Soft
 9 - Unknown

38

DEFINITION OF CODES (continued)

FORM PATH 1
Card 12012
Card 12013
CARD
COLUMN

<u>FIELD</u>		
15.	<u>Length</u> Item 12 Code: 001-200 - As given in cms. 999 - Unknown	39-41
16.	<u>Shortest Distance from Cord Insertion to Placental Margin</u> Item 13 Code: 00 - At margin 01-20 - As given in cms. 99 - Unknown	42-43
17.	<u>Type of Insertion</u> Item 13 Code: 0 - Marginal 1 - Not membranous 2 - Membranous 9 - Unknown	44
18.	<u>Number of Vessels</u> Item 14 Code: 2 - Two 3 - Three 8 - Other 9 - Unknown	45
19.	<u>True Knot</u> Item 15 Code: 0 - No 1 - Yes 9 - Unknown	46
20.	<u>Color</u> Item 16 Code: 0 - Normal 1 - Green 2 - Yellow 3 - Purple 8 - Other 9 - Unknown	47
21.	<u>Frozen Section Taken</u> Item 17 Code: Same as in Field 19	48

DEFINITION OF CODES (continued)

FORM PATH 1
Card 12012
Card 12013
CARD
COLUMN

FIELD

MEMBRANES AND FETAL SURFACE

22.	<u>Description</u> Code: 0 - No description 1 - Squamous metaplasia 2 - Amnion not available 3 - Velamentous vessels 8 - Other 9 - Unknown	49
23.	<u>Membranes Complete</u> Item 19 Code: Same as in Field 19	50
24.	<u>Decidual Necrosis</u> Item 20 Code: 0 - Not seen grossly 1 - Present, not massive 2 - Present, massive 8 - Other 9 - Unknown	51
25.	<u>Membranes Edematous</u> Item 21 Code: 0 - No 1 - Yes 2 - Possibly 9 - Unknown	52
26.	<u>Insertion of Membranes</u> Item 22 Code: 1 - Marginal 2 - Circummarginate 3 - Combination of codes 1 and 2 4 - Circumvallate 5 - Combination of codes 1 and 4 6 - Combination of codes 2 and 4 7 - Combination of codes 1, 2 and 4 9 - Unknown	53
27.	<u>Shortest Distance From Edge of Rupture to Placental Margin</u> Item 23 Code: 00 - At margin 01-30 - As given in cms. 97 - Membranes not ruptured 99 - Unknown	54-55

DEFINITION OF CODES (continued)

FORM PATH 1
Card 12012
Card 12013
CARD
COLUMN

<u>FIELD</u>		
28.	<u>Color of Fetal Surface</u> Item 24 Code: 1 - Blue-gray 2 - Green 3 - Combination of codes 1 and 2 4 - Brownish-yellow 5 - Combination of codes 1 and 4 6 - Combination of codes 2 and 4 7 - Combination of codes 1, 2 and 4 8 - Other 9 - Unknown	56
29.	<u>Opacity of Membranes</u> Item 25 Code: 0 - Not opaque 1 - Opaque 2 - Partially opaque 9 - Unknown	57
30.	<u>Sub-Chorionic Fibrin</u> Item 26 Code: 0 - Not seen 1 - Present, not massive 2 - Present, massive 9 - Unknown	58
31.	<u>Description of Sub-Chorionic Fibrin</u> Item 27 Code: 0 - No sub-chorionic fibrin 1 - Patchy 2 - Diffuse 3 - Combination of codes 1 and 2 9 - Unknown	59
32.	<u>Thrombosed Fetal Vessels</u> Item 28 Code: 0 - Not seen 1 - Present 9 - Unknown	60
33.	<u>Amnion Nodosum</u> Item 29 Code: Same as in Field 32	61

DEFINITION OF CODES (continued)

FIELD

FORM PATH 1
Card 12012
Card 12013
CARD
COLUMN

34. Cysts
Item 30
Code: 0 - Not seen
1-7 - As given
8 - 8 or more, numerous
9 - Unknown
35. Weight
Item 31
Code: 0001-2000 - As given in gms.
9999 - Unknown
36. Blank
37. Placenta Number
Code: Institution identification* as given
8 Blanks - None reported

62

63-66

67-72

73-80

* Any combination of alpha and numeric codes with blanks permitted in cols. 76-80.

DEFINITION OF CODES (continued)

FORM PATH 1
Card 22012
Card 22013
CARD
COLUMN

FIELD

1. Card Number
Code: 2 1
 2. Basic Data
Code: Same as in cols. 2-14 of card 1 2-14
- MATERNAL SURFACE
3. Surface
Item 33 15
Code: 1 - Intact
2 - Lacerated
9 - Unknown
 4. Completeness
Item 24 16
Code: 1 - Complete
2 - Incomplete
9 - Unknown
 5. Depressed Area 17-22
Items 35-37
Six-digit code for:
Total Number (col. 17)
Code: 0 - None
1 - One
2 - Two or more
3 - Present, number unknown (Rev. "3" only)
9 - Unknown
Size: Length (cols. 18-19)
Size: Width (cols. 20-21)
Code for each two columns:
00 - Not applicable
01-99 - As given
99 - Unknown
Apparent Cause (col. 22)
Code: 0 - Not applicable
1 - Hemorrhage
2 - Atrophy or Infarct
3 - Combination of codes 1 and 2
4 - Other (Rev. 3 only)
5 - Combination of codes 1 and 4
6 - Combination of codes 2 and 4
7 - Combination of codes 1, 2 and 4
9 - Unknown

NOTE: 0's in entire field = no depressed area

DEFINITION OF CODES (continued)

FORM PATH 1

Card 22012

Card 22013

CARD

COLUMN

FIELD

6.

Hemorrhage

Items 38-40

Eleven-digit code for:

Age (col. 23)

Code: 0 - None

1 - Recent, elastic

2 - Old, firm

3 - Combination of codes 1 and 2

8 - Hemorrhage present but age unspecified

9 - Unknown

Size: Largest Diameter (cols. 24-25)

Size: Smallest Diameter (cols. 26-27)

Size: Thickness (cols. 28-29)

Code for each two columns:

00 - Not applicable

01-98 - As given

99 - Unknown

Shortest Distance from Peripheral Edge of Hemorrhage

to Placental Margin: Retroplacental (cols. 30-31)

Retromembranous (cols. 32-33)

Code for each two columns:

00 - Not applicable

01-20 - As given in cms.

77 - Less than 0.5 cms.

98 - Hemorrhage present but distance unknown

99 - Unknown

NOTE: 0's in entire field = no hemorrhage present

CUT SURFACE

7.

Infarcts

Items 43-45

Twelve-digit code for:

Total Number (cols. 34-35)

Code: 00 - None

01-96 - As given

97 - 97 or more

98 - Too numerous to count

99 - Unknown

Pink-Red: Marginal (col. 36)

Pink-Red: Not Marginal (col. 37)

34-45

DEFINITION OF CODES (continued)

FORM PATH 1
Card 22012
Card 22013
CARD
COLUMN

FIELD

7. Infarcts (continued)
Yellowish-White: Marginal (col. 38)
Yellowish-White: Not Marginal (col. 39)
 Code for each column:
 0 - None
 1-7 - As given
 8 - 8 or more, too numerous to count
 9 - Unknown
Pink-Red: Unknown location (col. 40)
Yellow-White: Unknown location (col. 41)
Unknown Color: Marginal (col. 42)
Unknown Color: Not Marginal (col. 43)
Unknown Color: Unknown location (col. 44)
 Code for each column:
 0 - None
 1-7 - As given
 8 - 8 or more
 9 - Unknown
Size (col. 45)
 0 - Not applicable
 1 - All infarcts less than 3 cms.
 2 - At least one infarct measures
 3 or more cms.
 9 - Unknown
8. Maternal Floor Infarcts
 Item 46
 Code: 0 - Not seen
 1 - Present
 9 - Unknown
9. Color
 Item 47
 Code: 0 - Normal
 1 - Unusually light
 2 - Unusually dark
 3 - Combination of codes 1 and 2
 8 - Other
 9 - Unknown
10. Consistency
 Item 48
 Code: 1 - Firm
 2 - Spongy
 3 - Combination of codes 1 and 2
 4 - Soft
 9 - Unknown

DEFINITION OF CODES (continued)

FORM PATH 1
Card 22012
Card 22013

CARD
COLUMN

<u>FIELD</u>		
11.	<u>Calcification</u> Item 48 Code: 0 - None 1 - Maternal surface only 2 - Throughout 9 - Unknown	49
12.	<u>Intervillous Thrombosis</u> Items 50-53 Six-digit code for: <u>Total (cols. 50-51)</u> Code: 00 - None 01-96 - As given 97 - 97 or more 98 - Too numerous to count 99 - Unknown <u>Total Number Laminated</u> (col. 52) <u>Number Laminated in Marginal Sinus</u> (col. 53) <u>Total Number Not Laminated</u> (col. 54) <u>Number Not Laminated in Marginal Sinus</u> (col. 55) Code for each column: 0 - None 1-7 - As given 8 - 8 or more, too numerous to count 9 - Unknown	50-55
13.	<u>Tumor</u> Item 54 Code: Same as in Field 8	56
14.	<u>Hydatid Change</u> Item 55 Code: Same as in Field 8	57
15.	<u>True Cysts</u> Item 56 Code: Same as in Field 12, col. 52	58
16.	<u>Gross Examination Done With Knowledge That</u> Item 58 Code: 1 - Clinical outcome normal 2 - Clinical outcome abnormal 3 - No knowledge of case 9 - Unknown	59

DEFINITION OF CODES (continued)

FORM PATH 1
Card 22012
Card 22013
CARD
COLUMN

FIELD

- | | | |
|-----|---|-------|
| 17. | <u>Special Studies</u>
Item 59
Two-digit code for:
<u>Photography, Virology or Histochemistry (col. 60)</u>
Code: 0 - None
1 - Photography only
2 - Virology only
3 - Combination of codes 1 and 2
4 - Histochemistry
5 - Combination of codes 1 and 4
6 - Combination of codes 2 and 4
7 - Combination of codes 1, 2 and 4
9 - Unknown
<u>Other (col. 61)</u>
Code: 0 - None
1 - Bacterial culture
2 - Other than bacterial culture
3 - Combination of codes 1 and 2
9 - Unknown | 60-61 |
| 18. | <u>Other Abnormalities</u>
Item 60
Code: 0 - No
1 - Yes
9 - Unknown | 62 |
| 19. | <u>Designation of Placenta</u>
Item 5
Code: 0 - Single Birth
1 - First of Multiple
2 - Second of Multiple
3 - Third of Multiple
4 - Fourth of Multiple | 63 |
| 20. | Blank | 64-72 |
| 21. | <u>Placenta Number</u>
Code: Institution identification* as given
8 Blanks - None reported | 73-80 |

* Any combination of alpha and numeric codes with blanks permitted in cols. 76-80.

PLACENTAL EXAMINATION - GROES

EXAMINERS

05 - Boston

01 Benirschke
02 Driscoll
03 J.K.
04 Potter
05 Craig
06 Szulman
07 Bradford
08 Leoidas
09 Cury or Kury
10 Favara
11 Aires
12 Alvario
13 McCoombs
14 Mechanic
15 Gibson
16 Santos
17 Amicic
18 Paci
19 Raslavicus
20 Deligiosi
21 Saber
22 Whyte
23 Laga
24 Malouf
25 Hedley
99 Unknown

10 - Buffalo

01 O'Sullivan
02 Aquino
03 Froehlich
04 Legnami
05 Lehoczký
06 Managle
07 Aterman
08 Harrod
09 Abaci
10 Darwish
99 Unknown

15 - Charity

01 Johnson
02 Burch
03 Gilmer
04 Foley
05 Rosal
06 Elliott
07 Medawar
08 Beck
09 Melton
10 Meek
99 Unknown

31 - Columbia

01 Blanc
02 Kaufman
03 Goetz
04 Navarro
05 Richard
99 Unknown

37 - Johns Hopkins

01 Gruenwald
02 Brown
03 Lane
04 Kramer
05 Hannibal
06 Nicastrì
07 Linthicum
08 Beitnott
09 Bloodwell
10 McCall
11 Le:
12 Clowry
13 Pusch
14 Esterly
15 Hutchins
16 Ebert
17 Haghighi
18 Patterson
19 Haller
20 Benson
21 Porro
22 Berman

PLACENTAL EXAMINATION - GROSS

EXAMINERS (cont.)

37 - Johns Hopkins (cont.)

23 Frederick
24 Barnby
25 Simonsen
26 Rieumont
27 Bransford
28 WL
29 MacLeod
30 Cornell
31 Caplan
32 Jacobs
33 Wasserman
34 O'Quinn
35 Hingson
36 Lewis
37 Henjroji
38 Zerins
39 Taylor
40 Brazendale
41 Rogers
42 Goldman
43 Russo
44 Wasnich
45 Wheeler
46 Mancini
47 Pelham
48 Laubscher
49 Singer
50 Curtin
51 Gray
52 Wilson
53 Vitsky
54 Leiby
55 Siegal
56 WDZ
57 Ziererink
58 Tolo
59 Brammer
60 Abraham
61 Houghtaling
62 Johnson
63 Hall
64 Addman
65 Davis
66 Shelley
67 Elliott
68 Baens
69 Woodward
99 Unknown

45 - Virginia

01 Belter
02 Richart
03 Martin
04 Calle
05 Bates
06 Davis
07 Nakoneczna
08 Ishizaki
09 Friedrich
99 Unknown

50 - Minnesota

01 Burke
02 Swallen
03 Woolfrey
04 Goodlin
99 Unknown

55 - New York Medical

01 diBlasi
02 Cempo
03 Kim
04 Sedlis
05 Sonnenblick
06 Mahairas
07 Stone
08 Gugliucci
09 Murphy
10 Asimakopulos
11 Saphier
12 Derry
13 Kapusta
14 Smith
15 Fabricant
16 Brenner
17 Caturani
18 Seigal
19 Vansom
20 Olivo
21 Yatvin
22 Schwartz
23 Wasserwald
24 Aneckstein
25 Ortiz
26 Dacosta

PLACENTAL EXAMINATION - GROSS

EXAMINERS (cont.)

55 - New York Medical (cont.)

27 Kandemir
28 Breyan
29 Clemendor
30 Pineda
31 Calnoy
32 Lim
33 McCartin
34 Vasquez
35 Palmer
36 Lefkowitz
99 Unknown

60 - Oregon

01 Fujikura
02 Emig
03 Berroth
04 Philp
05 Gourley
06 Wellings
07 Ppropst
08 Evans
99 Unknown
09 Waterman
10 Napier

66 - Pennsylvania

01 Ziel
02 Scarano
03 Sharpe
04 Lerner
05 Baker
06 Chatten
07 Knauer
08 Gonzalez
09 Muniz
10 Schiller
11 Hausman
12 Weidmann
13 Schultze
14 Frederick
15 Pendleton
16 Lane
17 Beatty
18 Seidel
19 Vakil
20 Amurao

66 - Pennsylvania (cont.)

21 Prompiti
22 Francis
23 Baroff
24 Lipkin
25 Sumerson
26 Stanitski
27 Longo
28 Crane
29 Decker
30 Olen
31 SZ
32 E.D.E.
99 Unknown

71 - Providence

01 Song
02 Anderson
03 Grace
04 Freeman
05 Mald
06 Robinson
07 Fethiere
99 Unknown

82 - Tennessee

01 Johnson
02 Greer
03 Pitzer
04 Bro' i
05 Crocher
06 Bowers
07 Fuste
08 C.A.C.
09 T.A.B.
10 A.B.
11 Manzano
12 Blumenfeld
13 Smith
14 Ainsworth
15 Wise
16 Threlkeld
17 RHA
18 Bushow (see 24)
19 Sainz

[illegible]

ITEM #	ON FORM	CARD #	NINDB #	ITEM #	ON FORM	CARD #	NINDB #
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	2
3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8
9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4
5	6	7	8	9	0	1	

PLACENTAL EXAMINATION-GROSS (For Form PATH-1, Dated 7-59)

PURPOSE. The purpose of this examination is to provide precise and detailed information about the gross appearance of the placenta and how it may relate to the outcome of the pregnancy for both mother and infant. Report the information on PATH-1, Placental Examination - Gross.

ORDER OF EXAMINATION. For the sake of convenience and thoroughness, the order of the examination is to conform in so far as possible with the order of items as they appear on the form.

EXAMINER'S LACK OF BIAS. In so far as possible, the examiner should have no knowledge of the course or outcome of the pregnancy until this form has been completed.

WHEN TO USE THIS FORM. This form is to be used in every case in which the crown-rump length is 16.5 centimeters or more (gestational age 20 weeks or more), and, in those cases in which the placenta is intact when the fetus is less than 16.5 centimeters crown-rump.

DESCRIPTION OF ABNORMALITIES. All abnormalities are to be described in the space provided at the bottom of the form. This includes those abnormalities which are not specifically mentioned in the form. If the space at the bottom of the form is not sufficient, additional pages may be added. Wherever possible, include the item number with the description of the abnormality.

METHODS OF PREPARING SECTIONS. At least three sections are to be prepared: cord, membrane roll, and placenta. In cases of twins, a section of the dividing membranes should also be prepared. In addition, sections of all significant gross abnormalities are to be prepared.

SECTION OF DIVIDING MEMBRANE OF TWINS. In fused placentas the first step after inspection and measuring of the length of the cord, etc., should be to remove a square of membranes from the area which divides the two amniotic sacs. In other words, the dividing membranes are identified and a section is cut through them. This section of membranes is then rolled by means of forceps and the roll is placed in fixative. After 24 hours, it is trimmed so that a jelly-roll-like structure is obtained for histologic examination.

SECTION OF UMBILICAL CORD. At the end of the gross examination of the umbilical cord, the cord is cut at a point two centimeters from the fetal surface and a section of the middle portion of the cord is placed in fixative. This segment should be approximately three to four centimeters in length and after proper fixation, a section should be trimmed from its center.

PREPARATION OF MEMBRANE ROLL. After inspection of the membranes, a segment is cut out measuring approximately ten centimeters in length and five centimeters in width, starting at the point of rupture and proceeding towards the margin of the placenta and including a very small piece of marginal placenta. Care must be taken that the amnion is not stripped off in this procedure. This section of membranes is then rolled by means of forceps and the roll is placed in fixative. After 24 hours, it is trimmed so that a jelly-roll-like structure is obtained for histologic examination.

SECTION OF PLACENTA. After complete sectioning and inspection of the cut surfaces of the placenta, select a representative block of placental tissue. Such a block is preferably three to four centimeters wide, spanning the entire thickness of the placenta and including the fetal surface with some large fetal blood vessels. It must be handled carefully lest it disrupt in the center. It should be chosen from the central portions of the placenta, some three or four centimeters away from the insertion of the cord, and it should be placed in fixative immediately. Abnormal areas, such as tumors, intervillous thromboses, and occasional infarcts, should be sampled as indicated. It is not deemed advisable to section all infarcts. However, it is suggested that cysts and intervillous thromboses and any other unusual structures be sampled for histologic observation. The choice of fixative is left to the individual institution.

Item 1, Patient Identification. As a minimum, enter the patient's name by addressograph or other method.

Item 2, Gross Examination By. Enter name and status of examiner.

Item 3, Time and Date. Enter the time and date of the examination.

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PLACENTAL EXAMINATION-GROSS (Con't)

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- Item 4, Multiple Births.** In cases of multiple births, 35 millimeter Kodachrome photographs of the placenta must be submitted with the protocol. Each fetus is to be designated A, B, etc., with regard to order of birth and a separate form is to be used for each fetus even if the placentas are fused. In cases of fused placentas, all entries after Item 13 refer to that portion of the placenta containing the fetal circulatory district of the fetus whose designation appears on the form. If the form is being used for a single birth, leave Items 5-8 blank.
- Item 5, Designation of Placenta Described on this Form.** If the multiple birth has two members enter the designation of the placenta of the twin described on this form. If the designations have not as yet been assigned on the basis of birth order, they are to be arbitrarily assigned at this time. If this multiple birth has more than two members, check box "other multiple births" and enter in space at the bottom of the form the number of fetuses and their designation.
- Item 6, Labeled at Delivery.** Self-explanatory.
- Item 7, Placentas Fused.** Enter "yes" or "no" in this space. Fill out a separate form for each fetus in either case.
- Item 8, If Fused Placentas, Is Anastomosis Present.** In cases of fused placentas, the safest way to identify anastomoses is by injection of a colored medium into the placenta. Isolate areas of probable anastomoses and dissect one small surface vessel which leads into this district. Then isolate this vessel, insert a cannula with a ball tip, tying a small tie behind this ball tip and inject either air or preferably a colored dye. White or green dyes (e.g., a light green saline solution) provide better contrast than blue or red dyes and are more practical than the use of plastic injection materials. Large anastomoses may be identified readily by moving the possibly liquid blood in this large vessel from one placental district to the other. Check appropriate box and describe anastomoses in the space provided at the bottom of the form. Indicate whether anastomoses are artery to artery, vein to vein, or artery to vein. Note size of anastomoses, etc.
- Item 9, Dimensions.** The thickness is measured at the center of the placental tissue by piercing it with a knitting needle on which centimeter marks have been inscribed.
- Item 10, Shape.** Check appropriate box. If shape is other than round or oval, describe in Item 61.
- Item 11, Cord.** This section refers to the examination of the umbilical cord. If abnormalities are present other than those specified, describe them in Item 61.
- Item 12, Length of Cord.** Measure and enter the length of the cord left on the placenta plus any loose pieces. The pediatrician will measure the length of the cord left on the baby so that a total length may eventually be obtained.
- Item 13, Shortest Distance from Cord Insertion to Placental Margin.** Record this distance in centimeters. Check proper box with regard to type of insertion. If a membranous insertion is present, describe the course and integrity of the large fetal vessels from the insertion of the cord along the membranes onto the placenta.
- Item 14, Number of Vessels.** Self-explanatory.
- Item 15, True Knot in Cord.** Check appropriate box. In the presence of true knots, this segment of the umbilical cord should be fixed in toto and sections should be placed at the ends of the knot and through its center to observe possible thrombosis in some of the blood vessels.
- Item 16, Color of Cord.** Check appropriate box. If color is abnormal, describe in Item 61. Include some impression as to possible etiology of abnormal coloration.
- Item 17, Frozen Section Taken.** Check appropriate box.
- Item 18, Membranes and Fetal Surface.** If abnormalities are present other than those specified, describe them in Item 61. This is to be especially emphasized in the case of spontaneous hemorrhage of the fetal surface.
- Item 19, Membranes Complete.** Self-explanatory.
- Item 20, Decidua Necrosis.** This refers to changes in the decidua capsularis.

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- Item 21, **Membranes Eloquent.** Self-explanatory.
- Item 22, **Insertion of Membranes.** If the insertion is partial, then check two boxes to describe it properly and note in the space at the bottom of the form the proportion of each type of insertion, (e.g., in case of partial circumvallate insertion, check circumvallate and marginal and then note at the bottom of the form the proportion of the periphery of the placenta occupied by each type of insertion).
- Item 23, **Shortest Distance from Edge of Rupture to Placental Margin.** If the rupture is at the margin or through the body of the placenta, enter "0" and describe in Item 61.
- Item 24, **Color of the Fetal Surface.** Self-explanatory.
- Item 25, **Opacity of Membranes.** Self-explanatory.
- Item 26, **Subchorionic Fibrin.** This entry refers to the quantity of fibrin present.
- Item 27, This entry refers to the distribution of fibrin present.
- Item 28, **Thrombosed Fetal Vessels.** This does not include clots which formed after birth. If thrombosed vessels are present, note in Item 61, the type of vessel, its size and the presence or absence of degenerative changes in its walls. Also describe the thrombus and give an estimate of its age.
- Item 29, **Amnion Nodulosa.** If present, include in Item 61 a general description as to size, number and color of the granules.
- Item 30, **Cysts.** If present, describe in Item 61. Note the number, size, location, and type of contents. Especially note the presence or absence of hemorrhage into the cyst.
- Item 31, **Weight of Entire Placenta Less Cord, Membranes, and Large Clots.** Record in grams. In cases of fused twin placentas the placenta is to be cut along the approximate cleavage plane of fetal circulatory districts. The weight entered is to be that of the fetus whose designation appears on this form.
- Item 32, **Maternal Surface.** If abnormalities are present other than those specified, describe them in Item 61.
- Item 33 and 34, **Surface.** Self-explanatory.
- Item 35, **Depressed area.** If "none" is checked, leave items 36 and 37 blank.
- Item 36, **N Present.** State largest diameter and smallest diameter.
- Item 37, **Apparently Caused By.** If cause is known and is not hemorrhage, atrophy, or infarct, check "other" or "unknown" cause and give cause in a note in Item 61.
- Item 38, **Hemorrhage.** If "none" is checked for Item 38, then Items 39 and 40 are to be left blank. If more than one hemorrhage of significant size is present, then the largest one is to be described in Items 38 - 40 and similar information is to be provided for others of significance in Item 61.
- Item 39, **Size.** Self-explanatory.
- Item 40, **Shortest Distance from Peripheral Edge of Hemorrhage to Placental Margin.** Measure the shortest distance from the edge of the hemorrhage to the placental margin and check either or both boxes as applicable.
- Item 41, **Cut Surface.** If abnormalities are present other than those specified, describe them in Item 61.
- Item 42, **Infarcts.** Give number of infarcts according to color, in Items 43 and 44 if present. If none are present, write "0" in both blanks in Items 43 and 44. Also check box labeled "not applicable" in Item 45.
- Item 43, **Pink-Red Infarcts.** Self-explanatory.
- Item 44, **Yellow-White Infarcts.** Self-explanatory.
- Item 45, **Size of Infarcts.** All infarcts more than 3 centimeters in largest diameter must be described in Item 61. The distribution of these infarcts should be noted and may be entered in a sketch of the placenta.
- Item 46, **Maternal Floor Infarcts.** This refers to areas where the maternal surface is yellowish, very firm, and thickened. On section of these areas, the major portion of the villous tissue is normal, but the floor is apparently infarcted. If such an infarct is present, describe it in the space provided at the bottom of the form with regard to its size and location. The

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fiavours which normally divide the "maternal" cotyledons are often absent in this condition. If the fissures are absent, this should be noted in the description.

Item 47, Color. This refers to the color of the cut surface.

Item 48, Consistency. Self-explanatory.

Item 49, Intervillous Thrombosis. If none are observed, write "0" in Items 50 - 53.

Item 50, Total Number Laminated. Self-explanatory.

Item 51, Number Laminated in Marginal Sinus. Self-explanatory.

Item 52, Total Number not Laminated. Self-explanatory.

Item 53, Number not Laminated in Marginal Sinus. Self-explanatory.

Item 54, Tumor. If present, describe in Item 61 with regard to type, size, location, shape, color, consistency, etc.

Item 55, Hydatid Change. If present, describe in Item 61 with regard to appearance and extent.

Item 56, True Cysts (in Substance). Enter number present. If none, write "0". Describe each cyst in Item 61 with regard to size, location and type of contents. Especially note presence or absence of hemorrhage into the cyst.

Item 57, Patient Identification. As a minimum, enter the patient's name by addressograph or other method.

Item 58, Gross Examination was Done with the Knowledge That: Self-explanatory.

Item 59, Special Studies. Describe any studies other than those choices specified on the form. "Photography" does not refer to routine photography of multiple birth placentas.

Item 60, Presence of Other Abnormalities. Check appropriate box with regard to the presence or absence of abnormalities other than those specifically mentioned in the form.

Item 61, Description of Abnormalities. In this space, all those abnormalities previously noted and all those abnormalities not specifically noted in the form are to be described. Whenever possible include the item number with the description of the abnormality.

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PATH-2 Placental Examination - Microscopic

Form PATH-2 provided precise, detailed information about the microscopic appearance of the placenta and how the placenta might relate to the outcome of the pregnancy for both mother and infant. The form was implemented into the study in November 1959; it was not revised. Data from PATH-2 were coded onto card 1202 of the master file (Table PATH-2.1).

TABLE PATH-2.1 Cards and Data Records by Revision for Form PATH-2

CARD NAME	CARD NUMBER	REV. NO.	NUMBER RECORDS
PATH-2: Cord, Membranes, Decidua, Terminal Villi	1202	2	49,799
			49,799
	total for form		49,799

Data Items Referencing Form PATH-2, Placental Exam - Micros.

DATA ITEM #	ITEM CM FORM	CARD NUM	FROM	TO	DATA ITEM NAME
130.....		1202	1	5	Card number (sequence, form type, form number, revision number)
131.....		1202	6	14	MINDB case number
132.PATH-2	2	1202	15	16	Pathology; microscopic, examination by
133.PATH-2	3	1202	17	18	Pathology; microscopic, date (mo)
134.PATH-2	3	1202	19	20	Pathology; microscopic, date (day)
135.PATH-2	3	1202	21	22	Pathology; microscopic, date (yr)
136.PATH-2	4	1202	23	23	Pathology; microscopic, designation of placenta, plurality
137.PATH-2	5	1202	24	24	Pathology; microscopic, amnion available for examination
138.PATH-2	8	1202	25	25	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein
139.PATH-2	9	1202	26	26	Pathology; microscopic; cord, neutrophilic infiltration, umbilical artery
140.PATH-2	10	1202	27	27	Pathology; microscopic; cord, neutrophilic infiltration, cord substance
141.PATH-2	11	1202	28	28	Pathology; microscopic; cord, thrombosis of vessels
142.PATH-2	12	1202	29	29	Pathology; microscopic; cord, number of umbilical arteries
143.PATH-2	15	1202	30	30	Pathology; microscopic; membranes, epithelium of amnion, necrosis
144.PATH-2	16	1202	31	31	Pathology; microscopic; membranes, epithelium of amnion, squamous metaplasia
145.PATH-2	17	1202	32	32	Pathology; microscopic; membranes, epithelium of amnion, amnion nodosum
146.PATH-2	18	1202	33	33	Pathology; microscopic; membranes, epithelium of amnion, bacterial colonies
147.PATH-2	20	1202	34	34	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion
148.PATH-2	21	1202	35	35	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion
149.PATH-2	22	1202	36	36	Pathology; microscopic; membranes, neutrophilic infiltration, placental surface, amnion
150.PATH-2	23	1202	37	37	Pathology; microscopic; membranes, neutrophilic infiltration, placental surface, chorion
151.PATH-2	24	1202	38	38	Pathology; microscopic; membranes, neutrophilic infiltration, fetal surface vessels
152.PATH-2	25	1202	39	39	Pathology; microscopic; membranes, fetal surface vascular changes, other
153.PATH-2	27	1202	40	41	Pathology; microscopic; membranes, macrophages in amnion or chorion
154.PATH-2	28	1202	42	43	Pathology; microscopic; membranes, macrophages in decidua
155.PATH-2	29	1202	44	44	Pathology; microscopic; membranes, class. of dividing membranes of twin placentas
156.PATH-2	32	1202	45	45	Pathology; microscopic; decidua vessels, thrombosis
157.PATH-2	33	1202	46	46	Pathology; microscopic; decidua vessels, fibrinoid
158.PATH-2	34	1202	47	47	Pathology; microscopic; decidua vessels, etherone

Data Items Referencing Form PATH-2, Placental Exam - Micros.

DATA ITEM ID	FORM 34 FORM	CARD NUM	FROM	TO	DATA ITEM NAME
159.PATH-2	36	1702	48	48	pathology; microscopic; decidual necrosis, margin
160.PATH-2	37	1702	49	49	pathology; microscopic; decidual necrosis, capsularis
161.PATH-2	38	1702	50	50	pathology; microscopic; decidual necrosis, basal
162.PATH-2	40	1702	51	51	pathology; microscopic; decidual, neutrophilic infiltration at margin
163.PATH-2	41	1702	52	52	pathology; microscopic; decidual, neutrophilic infiltration in capsularis
164.PATH-2	42	1702	53	53	pathology; microscopic; decidual, neutrophilic infiltration in basal
165.PATH-2	44	1702	54	54	pathology; microscopic; decidual, lymphocytic infiltration at margin
166.PATH-2	45	1702	55	55	pathology; microscopic; decidual, lymphocytic infiltration in capsularis
167.PATH-2	46	1702	56	56	pathology; microscopic; decidual, lymphocytic infiltration in basal
168.PATH-2	48	1702	57	57	pathology; microscopic; decidual, cytotrophoblast of columns, fibrin deposition
169.PATH-2	49	1702	58	58	pathology; microscopic; decidual, cytotrophoblast of columns, cystic change
170.PATH-2	50	1702	59	59	pathology; microscopic; decidual, syncytium, nuclear clumping
171.PATH-2	52	1702	60	60	pathology; microscopic; terminal villi, Langhans' layer
172.PATH-2	53	1702	61	61	pathology; microscopic; terminal villi, Hofbauer cells
173.PATH-2	54	1702	62	62	pathology; microscopic; terminal villi, stromal fibrosis
174.PATH-2	55	1702	63	63	pathology; microscopic; terminal villi, pathological edema
175.PATH-2	56	1702	64	64	pathology; microscopic; terminal villi, micro infarcts
176.PATH-2	57	1702	65	65	pathology; microscopic; terminal villi, nucleated RBC in fetal circulation
177.PATH-2	58	1702	66	66	pathology; microscopic; terminal villi, melanin
178.PATH-2	61-62	1702	67	67	pathology; microscopic; intervillous space, thrombi and adjacent villous infarction
179.PATH-2	63	1702	69	69	pathology; microscopic; intervillous space, marginal sinus thrombi
180.PATH-2	64	1702	70	70	pathology; microscopic; intervillous space, sickling; maternal blood
181.PATH-2	65	1702	71	71	pathology; microscopic; intervillous space, apparent maturity of placenta
182.PATH-2	66	1702	72	72	pathology; microscopic; exam tone with knowledge of case
183.PATH-2	67	1702	73	73	pathology; microscopic; other abnormalities present
184.....		1702	74	80	Blank
5368.....VAR	12		530	530	Pathology; cord, arteries, number
5370.....VAR	27		532	532	Pathology; microscopic; membranes, macrophages in amnion or chorion
5371.....VAR	27		534	534	Pathology; microscopic; membranes, macrophages in amnion or chorion (yes, no, unknown)
5372.....VAR	28		535	535	Pathology; microscopic; membranes, macrophages in decidua
5373.....VAR			537	537	Pathology; microscopic; membranes, macrophages in decidua (yes, no, unknown)

Data Items Referencing Form PATH-2, Placental Exam - Micros.

DATA ITEM TO	IFM CH FORM	CARD NUM	FROM	TO	DATA ITEM NAME
5374.....VAR	20		538	538	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion
5375.....VAR	20		539	539	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion (yes, no, unknown)
5376.....VAR	22		540	540	Pathology; microscopic; membranes, neutrophilic infiltration, placental surface, amnion
5377.....VAR	22		541	541	Pathology; microscopic; membranes, neutrophilic infiltration, placental surface, amnion (yes, no, unknown)
5378.....VAR	21		542	542	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion
5379.....VAR	21		543	543	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion (yes, no, unknown)
5380.....VAR	8		544	544	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein
5381.....VAR	8		545	545	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein (yes, no, unknown)

11-53

PLACENTAL EXAMINATION-MICROSCOPIC

INSTRUCTIONS: (1) For use when crown-rump length of fetus is 16.5 cm. or more (gestational age 28 weeks). (2) An entry is required for every item except those for twins only. (3) Describe all abnormalities in the space at bottom of sheet. (4) Examine at least 3 sections; cord, membrane roll, and placenta. (5) Use ball point pen.

2. MICROSCOPIC EXAMINATION BY:

3. DATE
Mo. Day Year

4. DESIGNATION OF PLACENTA DESCRIBED ON THIS FORM

☐ Single Birth ☐ Twin A ☐ Twin B ☐ Other (Specify below)

5. WAS AMNION AVAILABLE FOR EXAMINATION

☐ No ☐ Yes

6. CORD

7. NEUTROPHILIC INFILTRATION

 8. Umbilical Vein
☐ Not seen ☐ Slight ☐ Marked

 9. Umbilical Artery
☐ Not seen ☐ Slight ☐ Marked

 10. Cord Substence
☐ Not seen ☐ Slight ☐ Marked

11. THROMBOSIS OF VESSELS

☐ Not seen ☐ Present (Describe)

12. NUMBER OF UMBILICAL ARTERIES

☐ One ☐ Two

13. MEMBRANES

14. EPITHELIUM OF AMNION

 15. Necrosis
☐ Not seen ☐ Present

 16. Squamous metaplasia
☐ Not seen ☐ Present

 17. Amnion Nodules
☐ Not seen ☐ Present

 18. Bacterial Colonies
☐ Not seen ☐ Present

19. NEUTROPHILIC INFILTRATION OF:

 20. Amnion of Membrane Roll
☐ Not seen ☐ Slight ☐ Marked

 21. Chorion of Membrane Roll
☐ Not seen ☐ Slight ☐ Marked

 22. Amnion of Placental Surface
☐ Not seen ☐ Slight ☐ Marked

 23. Chorion of Placental Surface
☐ Not seen ☐ Slight ☐ Marked

 24. Fetal Surface Vessels
☐ Not seen ☐ Slight ☐ Marked

35. OTHER FETAL SURFACE VASCULAR CHANGES

☐ None ☐ Thrombosis ☐ Necrosis ☐ Other (Describe)

26. MACROPHAGES

27. In Amnion or Chorion

☐ Not seen ☐ Present (containing no pigment) ☐ Present (containing melanin) ☐ Present (containing hemosiderin) ☐ Present (containing unknown pigment)

28. In Decidua

☐ Not seen ☐ Present (containing no pigment) ☐ Present (containing melanin) ☐ Present (containing hemosiderin) ☐ Present (containing unknown pigment)

29. TWIN PLACENTAS ONLY - CLASSIFY DIVIDING MEMBRANES

☐ Monochorionic-Monoamniotic (No dividing membranes present) ☐ Dichorionic-Dichorionic ☐ Dichorionic-Monoamniotic ☐ Unknown

30. DECIDUA

31. VESSELS (of intact, non-neuritic area of decidua)

 32. Thrombosis
☐ Not seen ☐ Present ☐ Unable to evaluate

 33. Fibroid
☐ Not seen ☐ Present ☐ Unable to evaluate

 34. Atheroma
☐ Not seen ☐ Present ☐ Unable to evaluate

35. NECROSIS

 36. At Margin
☐ Not marked ☐ Marked ☐ Unable to evaluate

 37. In Capsularis
☐ Not marked ☐ Marked ☐ Unable to evaluate

 38. In Basalis
☐ Not marked ☐ Marked ☐ Unable to evaluate

39. NEUTROPHILIC INFILTRATION

 40. At Margin
☐ Not seen ☐ Slight ☐ Marked

 41. In Capsularis
☐ Not seen ☐ Slight ☐ Marked

 42. In Basalis
☐ Not seen ☐ Slight ☐ Marked

43. LYMPHOCYTIC INFILTRATION

 44. At Margin
☐ Not seen ☐ Slight ☐ Marked

 45. In Capsularis
☐ Not seen ☐ Slight ☐ Marked

 46. In Basalis
☐ Not seen ☐ Slight ☐ Marked

47. CYTOTROPHOBLAST OF COLUMNS

 48. Fibrin Deposition
☐ Average ☐ Excessive

 49. Cystic Change
☐ Not seen ☐ Present

50. SYNCYTIUM-NUCLEAR CLUMPING

☐ Normal (clumps on 30% of villi) ☐ Less than normal for term placenta ☐ Excessive for term placenta

51. TERMINAL VILLI

52. LANGHANS' LAYER

☐ Absent ☐ Present

53. HOPFAUER CELLS

☐ Few ☐ Many

54. STROMAL FIBROSIS

☐ Not seen ☐ Present (Describe)

55. PATHOLOGICAL EDEMA

☐ Not seen ☐ Present (Describe)

56. MICRO INFARCTS (as specified in manual)

☐ Not seen ☐ Present

57. NUCLEATED RBC IN FETAL CIRCULATION

☐ Not seen ☐ Present

58. MELANIN

☐ Not seen ☐ Slight ☐ Marked

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 Perinatal Research Branch, NINDS, NIH
 Bethesda 14, Md.

(PATH-2) Page 1 of 2

PLACENTAL EXAMINATION-MICROSCOPIC
(Continued)

68. INTERVILLOUS SPACE			
61. INTERVILLOUS THROMBI		62. IF THROMBI PRESENT	
☐ Not seen 0	☐ Present, RBC intact 1	☐ Present, RBC hemolyzed 2	☐ No adjacent villous infarction seen 0
63. MARGINAL SINUS THROMBI		64. SICKLING (maternal blood)	
☐ Not seen 0	☐ Present, RBC intact 1	☐ Present, RBC hemolyzed 2	☐ Not noted 0
65. APPARENT MATURITY OF PLACENTA			
☐ Under 26 weeks 1	☐ 26-27 weeks 2	☐ 28-34 weeks 3	☐ 37 weeks or over 4
66. MICROSCOPIC EXAMINATION WAS DONE WITH KNOWLEDGE THAT:			
☐ Clinical course or outcome for mother or baby was normal 1	☐ Clinical course or outcome for mother or baby was abnormal 2	☐ With no knowledge of the case 3	
67. PRESENCE OF OTHER ABNORMALITIES			
☐ No abnormalities other than those specified above 0		☐ Abnormalities other than those specified above 1	
68. DESCRIPTION OF ABNORMALITIES CHECKED AND OTHER PERTINENT FINDINGS. IDENTIFY EACH COMMENT BY THE CORRESPONDING ITEM NUMBER.			

69. FINAL DIAGNOSIS

70. DO NOT
USE

Form Item Numbers linked to Data Items on PATH-2, Placental Exam - Micros.

ITEM ON FORM	DATA ITEM ID	CARD NUM	FROM	TO	DATA ITEM NAME
2	5373.....VAR		537	537	Pathology; microscopic; membranes, macrophages in decidua (yes, no, unknown)
3	132.PATH-2 1202		15	16	Pathology; microscopic, examination by
3	134.PATH-2 1202		19	20	Pathology; microscopic, date (day)
3	133.PATH-2 1202		17	18	Pathology; microscopic, date (no)
3	135.PATH-2 1202		21	22	Pathology; microscopic, date (yr)
4	136.PATH-2 1202		23	23	Pathology; microscopic, designation of placenta, plurality
5	137.PATH-2 1202		24	24	Pathology; microscopic, amnion available for examination
8	138.PATH-2 1202		25	25	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein
8	5380.....VAR		544	544	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein
8	5381.....VAR		545	545	Pathology; microscopic; cord, neutrophilic infiltration, umbilical vein (yes, no, unknown)
9	139.PATH-2 1202		26	26	Pathology; microscopic; cord, neutrophilic infiltration, umbilical artery
10	40.PATH-2 1202		27	27	Pathology; microscopic; cord, neutrophilic infiltration, cord substance
11	PATH-2 1202		28	28	Pathology; microscopic; cord, thrombosis of vessels
12	5368.....VAR		530	530	Pathology; cord, arteries, number
12	142.PATH-2 1202		29	29	Pathology; microscopic; cord, number of umbilical arteries
15	143.PATH-2 1202		30	30	Pathology; microscopic; membranes, epithelium of amnion, necrosis
16	144.PATH-2 1202		31	31	Pathology; microscopic; membranes, epithelium of amnion, squamous metaplasia
17	145.PATH-2 1202		32	32	Pathology; microscopic; membranes, epithelium of amnion, amnion nodosum
18	146.PATH-2 1202		33	33	Pathology; microscopic; membranes, epithelium of amnion, bacterial colonies
20	147.PATH-2 1202		34	34	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion
20	5374.....VAR		538	538	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion
20	5375.....VAR		539	539	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, amnion (yes, no, unknown)
21	5378.....VAR		542	542	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion
21	148.PATH-2 1202		35	35	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion
21	5379.....VAR		543	543	Pathology; microscopic; membranes, neutrophilic infiltration, membrane roll, chorion (yes, no, unknown)
22	5376.....VAR		540	540	Pathology; microscopic; membranes, neutrophilic infiltration, placental surface, amnion

Form Item Numbers linked to Data Items on PATH-2, Placental Exam - Micros.

ITEM ON FORM	DATA ITEM ID	CARD NUM	FROM	IN	DATA ITEM NAME
22	149.PATH-2	1202	36	36	Pathology: microscopic; membranes, neutrophilic infiltration, placental surface, amnion
22	5177....VAR		541	541	Pathology: microscopic; membranes, neutrophilic infiltration, placental surface, amnion (yes, no, unknown)
23	150.PATH-2	1202	37	37	Pathology: microscopic; membranes, neutrophilic infiltration, placental surface, chorion
24	151.PATH-2	1202	38	38	Pathology: microscopic; membranes, neutrophilic infiltration, fetal surface vessels
25	152.PATH-2	1202	39	39	Pathology: microscopic; membranes, fetal surface vascular changes, other
27	153.PATH-2	1202	40	41	Pathology: microscopic; membranes, macrophages in amnion or chorion
27	5370....VAR		532	533	Pathology: microscopic; membranes, macrophages in amnion or chorion
27	5371....VAR		534	534	Pathology: microscopic; membranes, macrophages in amnion or chorion (yes, no, unknown)
28	5372....VAR		535	536	Pathology: microscopic; membranes, macrophages in decidua
28	154.PATH-2	1202	42	43	Pathology: microscopic; membranes, macrophages in decidua
28	155.PATH-2	1202	44	44	Pathology: microscopic; membranes, class. of dividing membranes of twin placentas
32	156.PATH-2	1202	45	45	Pathology: microscopic; decidual vessels, thrombosis
33	157.PATH-2	1202	46	46	Pathology: microscopic; decidual vessels, fibrinoid
34	158.PATH-2	1202	47	47	Pathology: microscopic; decidual vessels, atherome
36	159.PATH-2	1202	48	48	Pathology: microscopic; decidual necrosis, margin
37	160.PATH-2	1202	49	49	Pathology: microscopic; decidual necrosis, capsularis
38	161.PATH-2	1202	50	50	Pathology: microscopic; decidual necrosis, basal
40	162.PATH-2	1202	51	51	Pathology: microscopic; decidua, neutrophilic infiltration at margin
41	163.PATH-2	1202	52	52	Pathology: microscopic; decidua, neutrophilic infiltration in capsularis
42	164.PATH-2	1202	53	53	Pathology: microscopic; decidua, neutrophilic infiltration in basal
44	165.PATH-2	1202	54	54	Pathology: microscopic; decidua, lymphocytic infiltration at margin
45	166.PATH-2	1202	55	55	Pathology: microscopic; decidua, lymphocytic infiltration in capsularis
46	167.PATH-2	1202	56	56	Pathology: microscopic; decidua, lymphocytic infiltration in basal
48	168.PATH-2	1202	57	57	Pathology: microscopic; decidua, cytotrophoblast of columns, fibrin deposition
49	169.PATH-2	1202	58	58	Pathology: microscopic; decidua, cytotrophoblast of columns, cystic change
50	170.PATH-2	1202	59	59	Pathology: microscopic; decidua, syncytium, nuclear clumping
52	171.PATH-2	1202	60	60	Pathology: microscopic; terminal villi, Langhans' layer
53	172.PATH-2	1202	61	61	Pathology: microscopic; terminal villi, Hofbauer cells
54	173.PATH-2	1202	62	62	Pathology: microscopic; terminal villi, stromal fibrosis

Form Item Numbers linked to Data Items on PATH-2, Placental Exam - Micros.

ITEM ON FORM	DATA ITEM ID	CARD NUM	FROM	TO	DATA ITEM NAME
55	174.PATH-2	1202	63	63	Pathology: microscopic; terminal villi, pathological edema
56	175.PATH-2	1202	64	64	Pathology: microscopic; terminal villi, micro infarcts
57	176.PATH-2	1202	65	65	Pathology: microscopic; terminal villi, nucleated RBC in fetal circulation
58	177.PATH-2	1202	66	66	Pathology: microscopic; terminal villi, melanin
61-62	178.PATH-2	1202	67	68	Pathology: microscopic; intervillous space, thrombi and adjacent villous infarction
63	179.PATH-2	1202	69	69	Pathology: microscopic; intervillous space, marginal sinus thrombi
64	180.PATH-2	1202	70	70	Pathology: microscopic; intervillous space, sickling maternal blood
65	181.PATH-2	1202	71	71	Pathology: microscopic; intervillous space, apparent maturity of placenta
66	182.PATH-2	1202	72	72	Pathology: microscopic; exam done with knowledge of case
67	183.PATH-2	1202	73	73	Pathology: microscopic; other abnormalities present

DEFINITION OF CODES
PLACENTAL EXAMINATION - MICROSCOPIC
FORM PATH-2 CARD 12022

<u>FIELD</u>	<u>CARD COLUMN</u>
1. <u>Card Number</u> Code: 1	1
2. <u>Form Number</u> Code: 202	2-4
3. <u>Revision Number</u> !! Code: 2 - Form dated: 8/59 (Revised coding 1965)	5
4. <u>NINDE Number</u> Item 1 Nine-digit number for Patient Identification Code: As given	6-14
5. <u>Microscopic Examination By</u> Item 2 Code: See "Examiners" - 12012 card, pages 12-13	15-16
6. <u>Date</u> Item 3 Six-digit code for: <u>Month</u> (cols. 17-18) <u>Day</u> (cols. 19-20) <u>Year</u> (cols. 21-22) Code: As given 99 - Month, Day and/or Year Unknown	17-22
7. <u>Designation of Placenta</u> Item 4 Code: 0 - Single birth 1 - First of Multiple 2 - Second of Multiple 3 - Third of Multiple 4 - Fourth of Multiple 9 - Unknown	23
8. <u>Amnion Available for Examination</u> Item 5 Code: 0 - No 1 - Yes - not further qualified 2 - Yes - roll only 3 - Yes - fetal or placental surface only 9 - Unknown	24

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12022

CARD
COLUMN

FIELD

CORD

9. Neutrophilic Infiltration 25-27
Items 8, 9 and 10
Three-digit code for:
 Umbilical Vein (col. 25)
 Umbilical Artery (col. 26)
 Cord Substance (col. 27)
Code for each column:
 0 - Not seen
 1 - Slight
 2 - Marked
 3 - Combination of codes 1 and 2, moderate
 9 - Unknown
10. Thrombosis of Vessels 28
Item 11
Code: 0 - Not seen
 1 - Present
 9 - Unknown
11. Number of Umbilical Arteries 29
Item 12
Code: 1 - One
 2 - Two
 9 - Unknown

MEMBRANES

12. Epithelium of Amnion 30-33
Items 15, 16, 17 and 18
Four-digit code for:
 Necrosis (col. 30)
Code: 0 - Not seen
 1 - Present - not qualified further
 2 - Present - slight
 3 - Present - marked
 9 - Unknown
 Squamous Metaplasia (col. 31)
 Amnion Nodorum (col. 32)
 Bacterial Colonies (col. 33)
Code for each column:
 Same as in Field 10

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12022

CARD
COLUMN

FIELD

13. Neutrophilic Infiltration of:
Items 20, 21, 22, 23 and 24
Five-digit code for:
- | | |
|-------------------------------------|-----------|
| <u>Amnion of Membrane Roll</u> | (col. 34) |
| <u>Chorion of Membrane Roll</u> | (col. 35) |
| <u>Amnion of Placental Surface</u> | (col. 36) |
| <u>Chorion of Placental Surface</u> | (col. 37) |
| <u>Fetal Surface Vessels</u> | (col. 38) |
- Code for each column:
Same as in Field 9

34-38

14. Other Fetal Surface Vascular Changes
Item 25

39

- Code:
- 0 - None
 - 1 - Thrombosis
 - 2 - Necrosis
 - 3 - Combination of codes 1 and 2
 - 4 - Other than specified above
 - 5 - Combination of codes 1 and 4
 - 6 - Combination of codes 2 and 4
 - 7 - Combination of codes 1, 2 and 4
 - 9 - Unknown

15. Macrophage
Items 27 and 28

40-43

- Four-digit code for:
- | | |
|-----------------------------|---------------|
| <u>In Amnion or Chorion</u> | (cols. 40-41) |
| <u>In Decidua</u> | (cols. 42-43) |

Code for each two columns:

- 00 - Not seen
- 01 - Containing no pigment
- 02 - Containing meconium
- 03 - Combination of codes 01 and 02
- 04 - Containing hemosiderin
- 05 - Combination of codes 01 and 04
- 06 - Combination of codes 02 and 04
- 07 - Combination of codes 01, 02 and 04
- 08 - Containing unknown pigment
- 09 - Combination of codes 01 and 08
- 10 - Combination of codes 02 and 08
- 11 - Combination of codes 01, 02 and 08
- 12 - Combination of codes 04 and 08
- 13 - Combination of codes 01, 04 and 08
- 14 - Combination of codes 02, 04 and 08
- 15 - Combination of codes 01, 02, 04 and 08
- 99 - Unknown

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12022

FIELD

CARD
COLUMN

16. Classification of Dividing Membranes of Twin
Placentas

44

Item 29

Code: 0 - Single birth
1 - Monoamniotic - monochorionic
2 - Diamniotic - dichorionic
3 - Diamniotic - monochorionic
8 - Other than twins
9 - Unknown

DECIDUA

17. Vessels

45-47

Items 32, 33 and 34

Three-digit code for:

<u>Thrombosis</u>	(col. 45)
<u>Fibrinoid</u>	(col. 46)
<u>Atheroma</u>	(col. 47)

Code for each column:

0 - Not seen
1 - Present
2 - Unable to determine
9 - Unknown

18. Necrosis

48-50

Items 36, 37 and 38

Three-digit code for:

<u>At Margin</u>	(col. 48)
<u>In Capsularis</u>	(col. 49)
<u>In Basalis</u>	(col. 50)

Code for each column:

0 - Not marked
1 - Marked
2 - Unable to determine
9 - Unknown

19. Neutrophilic Infiltration

51-53

Items 40, 41 and 42

Three-digit code for:

<u>At Margin</u>	(col. 51)
<u>In Capsularis</u>	(col. 52)
<u>In Basalis</u>	(col. 53)

Code for each column:

Same as in Field 9

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12022

FIELD

CARD
COLUMN

20. Lymphocytic Infiltration
Items 44, 45 and 46
Three-digit code for:
 At Margin (col. 54)
 In Capsularis (col. 55)
 In Basalis (col. 56)
Code for each column:
 Same as in Field 9
54-56
21. Cytotrophoblast of Columns
Items 48 and 49
Two-digit code for:
 Fibrin Deposition (col. 57)
Code: 0 - Not seen
 1 - Average
 2 - Excessive
 3 - Combination of codes 1 and 2
 4 - Less than average
 8 - Unable to determine
 9 - Unknown
 Cystic Change (col. 58)
Code: 0 - Not seen
 1 - Present
 8 - Unable to determine
 9 - Unknown
57-58
22. Syncytium - Nuclear Clumping
Item 50
Code: 1 - Normal
 2 - Less than normal for term placenta
 3 - Excessive for term placenta
 4 - Excessive in parts
 8 - Unable to determine
 9 - Unknown
59
- TERMINAL VILLI
23. Langhans' Layer
Item 52
Code: Same as in Field 10
60
24. Hofbauer Cells
Item 53
Code: 1 - Few
 2 - Many
 9 - Unknown
61

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12022FIELDCARD
COLUMN

- | | | |
|---------------------|--|-------|
| 25. | <u>Stromal Fibrosis</u>
Item 54
Code: 0 - Not seen
1 - Present - not qualified further
2 - Present - rare
3 - Present - many
8 - Unable to determine
9 - Unknown | 62 |
| 26. | <u>Pathological Edema</u>
Item 55
Code: Same as in Field 25 | 63 |
| 27. | <u>Micro Infarcts</u>
Item 56
Code: Same as in Field 25 | 64 |
| 28. | <u>Unclotted RBC in Fetal Circulation</u>
Item 57
Code: Same as in Field 25 | 65 |
| 29. | <u>Melanin</u>
Item 58
Code: Same as in Field 9 | 66 |
| INTERVILLIOUS SPACE | | |
| 30. | <u>Intervillous Thrombi and Adjacent Villous Infarction</u>
Items 61 and 62
Code: 00 - Not seen
10 - RBC intact and no adjacent villous seen
11 - RBC intact and adjacent villous seen
12 - Combination of codes 10 and 11
20 - RBC hemolyzed and no adjacent villous seen
21 - RBC hemolyzed and adjacent villous seen
22 - Combination of codes 20 and 21
30 - Combination of codes 10 and 20
31 - Combination of codes 11 and 21
32 - Combination of codes 12 and 22
99 - Unknown | 67-68 |
| 31. | <u>Marginal Sinus Thrombi</u>
Item 63
Code: 0 - Not seen
1 - RBC intact
2 - RBC hemolyzed
3 - Combination of codes 1 and 2
9 - Unknown | 69 |

DEFINITION OF CODES (continued)

FORM PATH-2
Card 12C22

FIELD

CARD
COLUMN

- | | | |
|-----|---|----|
| 32. | <u>Sickling: Maternal Blood</u>
Item 64
Code: Same as in Field 21, col. 58 | 70 |
| 33. | <u>Apparent Maturity of Placenta</u>
Item 65
Code: 1 - Under 20 weeks
2 - 20-27 weeks
3 - 28-36 weeks
4 - 37 weeks or over
8 - Unable to determine
9 - Unknown | 71 |
| 34. | <u>Microscopic Examination Was Done With Knowledge That</u>
Item 66
Code: 0 - No knowledge
1 - Normal outcome for mother or baby
2 - Abnormal outcome for mother or baby
9 - Unknown | 72 |
| 35. | <u>Presence of Other Abnormalities</u>
Item 67
Code: Same as in Field 10 | 73 |

[illegible]

PLACENTAL EXAMINATION-MICROSCOPIC
(For Form PATH-2, Dated 11-59)

PURPOSE. The purpose of this examination is to provide precise, detailed information about the microscopic appearance of the placenta and how it may relate to the outcome of the pregnancy for both mother and infant. Report the information on PATH-2, Placental Examination - Microscopic.

ORDER OF EXAMINATION. For the sake of convenience and thoroughness, the order of the examination is to conform in so far as possible with the order of items as they appear on the form.

EXAMINER'S LACK OF BIAS. Insofar as possible, the examiner should have no knowledge of course or outcome of the pregnancy until this form has been completed.

WHEN TO USE THIS FORM. This form is to be used in every case in which the crown-rump length is 16.5 centimeters or more (gestational age 20 weeks or more), and in those cases in which the placenta is intact when the fetus is less than 16.5 centimeters crown-rump.

EXAMINATION OF SECTIONS. During the course of this examination, at least three sections — cord, membrane roll, and placenta — should be examined. The methods for the preparation of these sections are outlined in Pathology Manual, PHS-3222-1, Placental Examination — Gross.

DESCRIPTION OF ABNORMALITIES. All abnormalities are to be described in Item 68. This includes those abnormalities which are not specifically mentioned in the form. Wherever possible, the item number corresponding to the abnormality should be included with the description of the abnormality. If the space at the bottom of the sheet is not sufficient, additional pages may be added.

MULTIPLE BIRTHS. In cases of multiple births, a separate form is to be prepared for the placenta of each fetus.

INSTRUCTIONS

Item 1, Patient Identification. As a minimum, enter the patient's name by addressograph or other method.

Item 2, Microscopic Examination By. Enter name and status of examiner.

Item 3, Date. Enter date of examination.

Item 4, Designation of Placenta Described on this Form. Check the appropriate box. In cases of multiple births with more than two members, check box "other multiple births" and enter in Item 68 the number of fetuses and the designation of the fetus whose placenta is described in this form.

Item 5, Was Amnion Available for Examination. Self-explanatory.

Item 6, Cord. If abnormalities are present other than those specified, describe them in Item 68. In particular, if any special sections have been taken during the course of the gross examination, describe these fully.

Item 7, Neutrophilic Infiltration. Self-explanatory.

Item 8, Umbilical Vein. Self-explanatory.

Item 9, Umbilical Artery. Self-explanatory.

Item 10, Cord Substance. Self-explanatory.

Item 11, Thrombosis of Vessels. If present, describe in Item 68 the age of the thrombus, the size of the vessel and the presence or absence of degenerative changes in the wall of the vessel.

Item 12, Number of Umbilical Arteries. Self-explanatory.

Item 13, Membranes. Self-explanatory.

Item 14, Epithelium of Amnion. Self-explanatory.

Item 15, Necrosis. If present, describe in Item 68 with regard to degree and extent.

Item 16, Squamous Metaplasia. Self-explanatory.

Item 17, Amnion Nodulum. Self-explanatory.

Item 18, Bacterial Colonies. If present, describe these morphologically, insofar as is possible, in Item 68.

Item 19, Neutrophilic Infiltration of. Self-explanatory.

Item 20, Amnion of Membrane Roll. Self-explanatory.

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- Item 21, *Chorion of Membrane Roll*. Self-explanatory.
- Item 22, *Amnion of Placental Surface*. Self-explanatory.
- Item 23, *Chorion of Placental Surface*. Self-explanatory.
- Item 24, *Fetal Surface Vessels*. Self-explanatory.
- Item 25, *Other Fetal Surface Vascular Changes*. Check the proper box. If changes are present, describe them in Item 68.
- Item 26, *Macrophages*. Self-explanatory.
- Item 27, *In Amnion or Chorion*. Self-explanatory.
- Item 28, *In Decidua*. Self-explanatory.
- Item 29, *Twin Placentas Only - Classify Dividing Membranes*. Fill out this item only in the case of twins. If this is a multiple birth, of more than two members, leave this blank and describe all the dividing membranes in Item 68. Indicate the relationship of the fetus described on this form to the other members of the birth insofar as the dividing membranes are concerned.
- Item 30, *Decidua*. If abnormalities are present other than those specified describe them in Item 68.
- Item 31, *Vessels*. These must be observed in intact, non-necrotic areas of decidua.
- Item 32, *Thromboses*. If present, describe in Item 68 with regard to age, extent, and whether or not the lumen of the vessel is narrowed.
- Item 33, *Fibrinoid*. If present, describe in Item 68 with regard to extent and presence or absence of luminal narrowing.
- Item 34, *Atheroma*. If present, describe in Item 68 with regard to extent and presence or absence of luminal narrowing.
- Item 35, *Necrosis*. Self-explanatory.
- Item 36, *At Margin*. This refers to necrosis at the margin of the placenta.
- Item 37, *In Capsularis*. This refers to necrosis in the decidua basalis.
- Item 38, *In Basalis*. This refers to necrosis in the decidua basalis.
- Item 39, *Neutrophilic Infiltration*. Self-explanatory.
- Item 40, *At Margin*. Self-explanatory.
- Item 41, *In Capsularis*. Self-explanatory.
- Item 42, *In Basalis*. Self-explanatory.
- Item 43, *Lymphocytic Infiltration*. Self-explanatory.
- Item 44, *At Margin*. Self-explanatory.
- Item 45, *In Capsularis*. Self-explanatory.
- Item 46, *In Basalis*. Self-explanatory.
- Item 47, *Cytotrophoblast of Columns*. Self-explanatory.
- Item 48, *Fibrin Deposition*. This refers to the fibrin or fibrinoid deposits which occur in cytotrophoblast cells as term is approached.
- Item 49, *Cystic Change*. These may form within the trophoblastic columns. If the change is present, check the proper box.
- Item 50, *Syncytium-Nuclear Clumping*. At term, approximately 30% of all terminal fetal villi have a syncytial bud attached to their surface. Using this as a normal, check the proper box with regard to syncytial nuclear clumping in the placenta under examination.
- Item 51, *Terminal Villi*. If abnormalities other than those specified are present, describe them in Item 68.
- Item 52, *Lenghans Layer*. Self-explanatory.
- Item 53, *Hofbauer Cells*. Self-explanatory.
- Item 54, *Stromal Fibrosis*. If present, describe in Item 68 with regard to degree and distribution.
- Item 55, *Pathological Edema*. If present, describe in Item 68 with regard to extent and distribution and roughly estimate what proportion of villi appear to be involved.
- Item 56, *Microinfarcts*. Microinfarcts are small areas of incipient degeneration of placental tissue which form a distinct histologic lesion although they cannot be seen grossly. Most

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often terminal villi are closely packed in a microinfarct and often they appear to be agglutinated by inflammatory cells or degenerated epithelium. The blood vessels are apparently obliterated.

Item 57, Nucleated RBC in Fetal Circulation. Self-explanatory.

Item 58, Melanin. This pigment may be present within, and next to, calcium deposits, in fibrin masses, in the thickened granular basement membrane of villi, and rarely in Hofbauer cells. It is yellowish-brown in color.

Item 59, Patient Identification. As a minimum, enter the patient's name by addressograph or other method.

Item 60, Intervillous Spaces. If abnormalities other than those specified are present, describe them in Item 68.

Item 61, Intervillous Thrombi. If nucleated red blood cells are seen in the substance of such a thrombus, this should be noted in Item 68.

Item 62, If Thrombi Present. Self-explanatory.

Item 63, Marginal Sinus Thrombi. Self-explanatory.

Item 64, Sickling (Maternal Blood). Self-explanatory.

Item 65, Apparent Maturity of Placenta. Self-explanatory. If question arises as to the criteria to be used in this estimation, the examiner is referred to pages 14 and 15 of the revised form of The Examination of the Placenta by Dr. Kurt Benirschke.

Item 66, Microscopic Examination Was Done with Low Edge Thet. Self-explanatory.

Item 67, Presence of Other Abnormalities. Check the appropriate box with respect to presence of abnormalities other than those specifically mentioned in the form.

Item 68, Description of Abnormalities. In this space, all those abnormalities previously noted and all those abnormalities not specifically mentioned in this form are to be described. Whenever possible, include the item number with the description of the abnormality.

Item 69, Final Diagnosis. Self-explanatory.

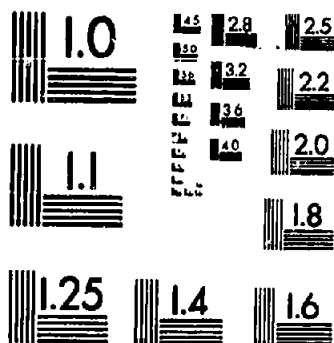
Item 70, Do Not Use. This box is to be used by central office of Collaborative Research for coding.

PATH-3 Autopsy Protocol

Form PATH-3 was used to provide information obtained from autopsies of deceased infants or children. Implemented into the study in August 1961, the form was never revised. Data from PATH-3 were punched onto three cards of the master file (Table PATH-3.1).

TABLE PATH-3.1 Cards and Data Records by Revision for Form PATH-3

Card Name	Card Number	Rev. No.	Number Records
PATH-3: Diagnoses	1203	1	28,329
PATH-3: Weights of Organs	2203	1	3,083
PATH 3: Summary of Conditions	4203	1	2,172
	total for form		33,584



MICROCOPY RESOLUTION TEST CHART
 NATIONAL BUREAU OF STANDARDS
 STANDARD REFERENCE MATERIAL 1010a
 (ANSI and ISO TEST CHART No 2)

CONTINUED ON NEXT FICHE