Draft

STATE TRANSFORMATION COMMISSION
GOVERNMENT OF UTTAR PRADESH

MUKHYAMANTRI MATRITVA SURAKSHA SANKALP YOJNA

ROADMAP FOR ZERO PREVENTABLE MATERNAL DEATHS

STATE TRANSFORMATION COMMISSION,
GOVERNMENT OF UTTAR PRADESH
&
CENTRE FOR CATALYZING CHANGE

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Goal: The overarching goal of the roadmap is to achieve rapid and sustained reduction in Maternal Mortality Ratio (MMR), preferably bringing it to less than 20. This goal will logically also have a reduction in neonatal deaths. It will be achieved through integrated, high impact interventions across the continuum of care beginning with pregnancy, childbirth and post -natal period anchored in quality, accountability, convergence and last mile delivery.

Target: To reduce MMR below 20

Maternal mortality serves as a critical indicator of health care delivery and utilization in any geography. The Mukhyamantri Matritva Suraksha Sankalp Yojana roadmap reflects a shared commitment to move decisively from diagnosis to action to achieve rapid and sustained reduction in maternal and new born mortality through a mission mode approach.

Definition:

Maternal Mortality Ratio (MMR): Number of maternal deaths per 100,000 live births

$$\text{MMR} = \frac{\text{Maternal Deaths}}{\text{Live Births}} \times 100{,}000$$

Focus: Risk of death per pregnancy or childbirth

Most commonly used indicator globally (e.g., by World Health Organization)

It answers: *"What is the risk of a woman dying once she becomes pregnant?"*

Maternal Mortality Rate (MMRate): Number of maternal deaths per 100,000 women of reproductive age (15–49 years)

$$\text{MMRate} = \frac{\text{Maternal Deaths}}{\text{Women Aged 15-49}} \times 100{,}000$$

Focus: Risk of maternal death in the entire female population

Reflects both:

- Risk per pregnancy and
- Fertility rate (how many women are getting pregnant)

It answers: *"What is the overall risk of maternal death among all women of reproductive age?"*

The Sustainable Development Goals (SDGs) 3.1 aims to reduce the global maternal mortality ratio to 70 maternal deaths per 100,000 live births by 2030. There is one SDG 3.1 directly pertaining to maternal mortality ratio and six SDGs (1,2,4,5,6,10) are indirectly linked. The current status of MMR in India is 97 and in Uttar Pradesh it is 141. There has been substantial progress in reduction in MMR at national and state level over the period.

Progress in MMR Reduction in India and Uttar Pradesh

Current Situation

Uttar Pradesh, home to nearly one-fifth of India's population, occupies a pivotal position in the country's progress on maternal and neo-natal health. With a projected population of 242.9 million (24.3 crores) in 2026 as per Report of The Technical Group on Population Projection, 2011-36 (MoHFW, 2020). The Crude Birth Rate of the state was 23.6 (SRS, 2023), and accordingly the estimated number of pregnancies is 6.3 million and 5.7 million births. The maternal mortality ratio (MMR) of the state has come down to 141 (SRS, 2023). The estimated maternal death is around 8000, which accounts for the 33% of the total maternal deaths in India.

Progress in MMR Reduction in India and Uttar Pradesh

India:

S.N.	Source of Data	Year	Maternal Mortality Ratio (MMR)
1	NSS 14th. Round	1957	1287
2	NSS 19th. Round	1963 -1964	1174
3	SRS	1972-1976	892
4	SRS	1977-1981	844
5	SRS	1982-1986	568
6	NFHS	1992-1993	437
7	Retrospective MMR survey	1997-1998	398
8	SRS	1997	407
9	SRS	1998	406
10	NFHS-2	1998-1999	540
11	SRS Prospective household report	1999-2001	327
12	SRS special survey of death using RHIME	2001-2003	301
13	SRS	2004-2006	254

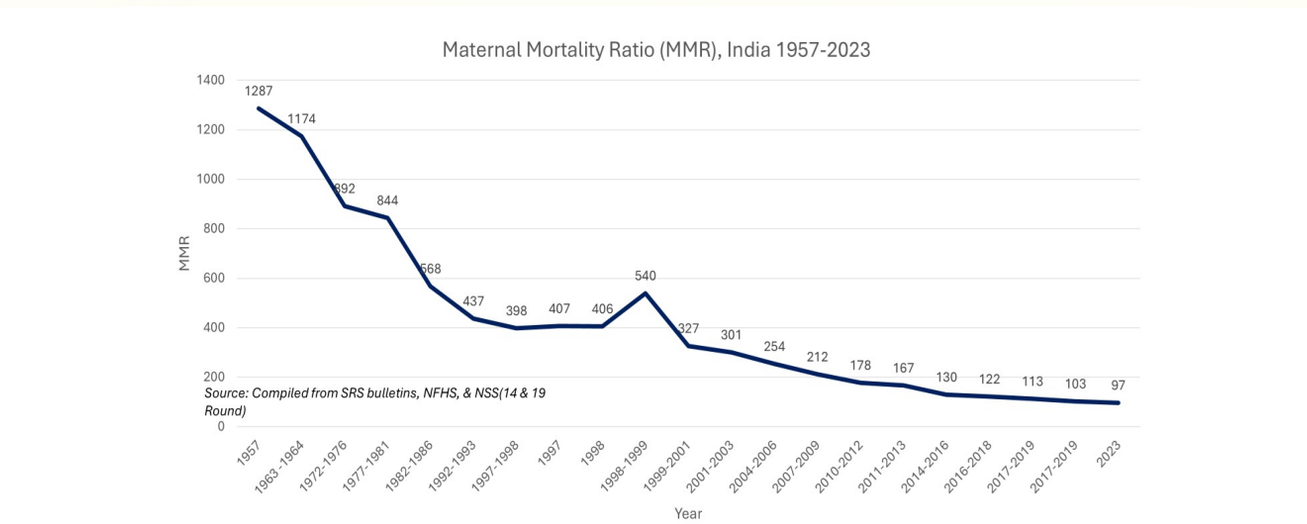
S.N.	Source of Data	Year	Maternal Mortality Ratio (MMR)
14	SRS	2007-2009	212
15	SRS	2010-2012	178
16	SRS	2011-2013	167
17	SRS	2014-2016	130
18	SRS	2016-2018	122
19	SRS	2017-2019	113
20	The Office of the Registrar General of India released the bulletin on MMR on March 14, 2022	2018-2020	103
21	SRS	2019-21	97
22	SRS	2020-22	93
23	SRS	2021-23	88

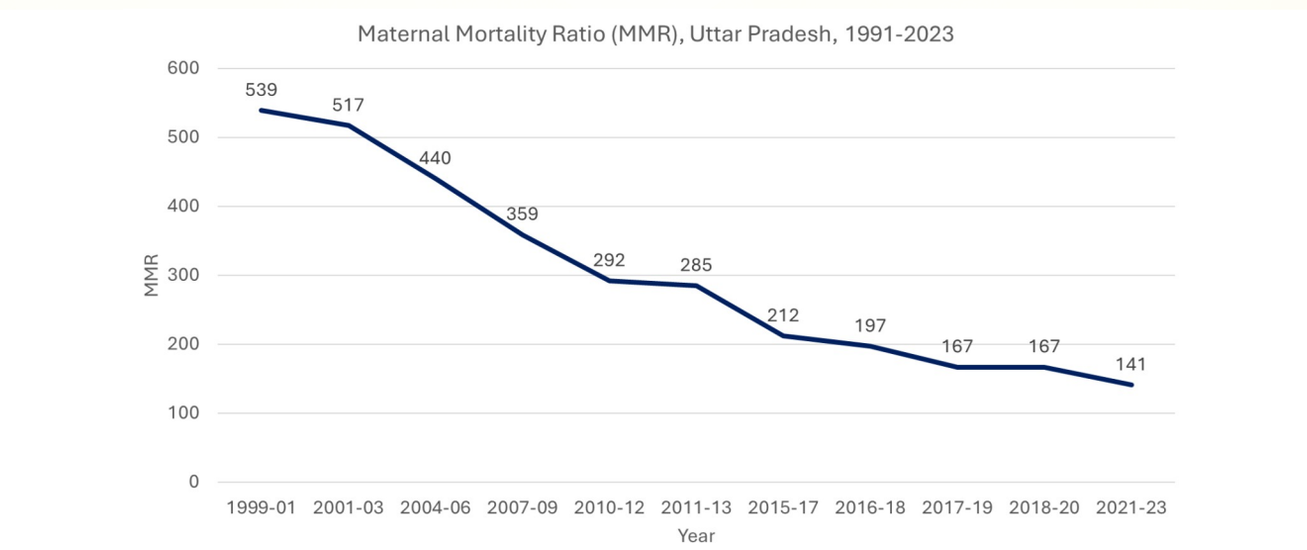
Uttar Pradesh:

S.N.	Source of Data	Years	MMR
1	SRS	1999-2001	539
2	SRS	2001-2003	517
3	SRS	2004-2006	440
4	SRS	2007-2009	359
5	SRS	2010-2012	292
6	SRS	2011-2013	285
7	SRS	2015-17	212
8	SRS	2016-18	197

S.N.	Source of Data	Years	MMR
9	SRS	2017-19	167
10	SRS	2018-20	167
11	SRS	2021-23	141

Figure 1: The MMR trend (1957-2023), India and Uttar Pradesh SRS





Yet beneath these aggregate gains lies a more complex and uneven mortality landscape, one in which preventable maternal and neonatal deaths continue to cluster around the time of birth, pointing to persistent gaps in quality of care, referral readiness, and early post- natal management. Neonatal mortality, in particular, has not declined at the pace required to meet SDG targets, underscoring the need for sharper focus on the highest risk period: labour, delivery, and the first 24 hours of life.

Infrastructure:

Public Sector: The scale of Uttar Pradesh's public health system is vast. There are 81 medical colleges (Public 51 Private 30), 221 district and special hospitals, 975 CHCs, 3750 PHCs and 27,800 sub-centres / AAMs. This infrastructure is accompanied by a large number of frontline work force, which includes 162000 ASHAs, 35000 ANMs, 18000 nurses, 17700 medical officers, and 5100 specialists. Besides the above there are Community Health Officers and ASHA Sanginis who undertake outreach and continuity of care.

Private Sector: There are 9235 private health facilities registered with the Medical Department, of which 3198 are PMJAY empanelled.

Deliveries: Of the total deliveries taking place in public facilities, 60 percent are taking place in CHCs, and 28 percent are taking place in district hospitals. Remaining 12 percent are in lower-level health facilities. The state health department/NHM data suggest that haemorrhage alone accounts for nearly half of maternal deaths in Uttar Pradesh. This number is 25 percent for the country. Majority of these deaths are occurring around delivery or in the immediate post-partum period. While First Referral Units (FRU) activation has improved between 2017 and 2025, functional readiness remains uneven, particularly with respect to round the clock specialist availability, blood storage and transfusion services, and integrated referral transport systems.

In recent years the State has expanded facility based newborn care, this has led to sharp rise in admissions to Newborn Stabilization Units (NBSUs) from 1.4 percent to 36 percent within four years. The case -mix data from NBSUs and Special Newborn Care Units (SNCU) reveal a high burden of low birth weight, prematurity, and intrapartum-related complications. While this trend signals improved identification and referral of vulnerable newborns, it also highlights upstream gaps in labour room practices, early newborn assessment, and immediate postnatal monitoring that continue to drive preventable admissions and deaths. Talen together, the evidence suggests that Uttar Pradesh's maternal and neonatal health challenge is no longer one of access but of quality, timeliness, and system integration. High coverage of institutional delivery has created an opportunity to strengthen intrapartum care, ensure functional referral pathways, and institutionalize continuous clinical mentoring in high volume facilities. The target now for state should be to ensure 100 percent institutional deliveries and provisioning of best quality care for child births in both public and private health facilities in the state.

The Government Programs and Schemes for Mother and Child Health

Program (Year) & implemented by	Objectives	Key features	Coverage
Central Government Health Department			
Janani Suraksha Yojana (JSY) (2005)	Safe motherhood intervention to increase institutional delivery through demand-side financing and conditional cash transfer	• Demand promotion scheme providing conditional cash transfer for ensuring timely ANC, institutional delivery and PNC. • Current package mother: Rs 1400 (Rural) & Rs 1000 (Urban) • Package for ASHA: Rs 600/- (Rural) & Rs 200 (Urban)	In 2024-25, 24,38,659 women received the benefits under the Scheme and the total expenditure under the Scheme was Rs. 297.23 crores.
Janani Shishu Suraksha Karyakram (JSSK) (2011)	Eliminate out of pocket expenditure for both pregnant women and sick newborn	• Free and cashless maternity service and infant care in government facilities (normal and C-section). • Includes free diet, drugs, disposable, diagnostics, blood transfusion • Free referral transport and drop back facilities	The number of beneficiaries in year 2025-26 was 68,62,647 and the expenditure under the scheme was Rs. 8.93 crores
Pradhan Mantri Surkashit Matritva Abhiyan (PMSMA) , 2016	Provide quality ANC services in 2nd and 3rd trimester of pregnancy on 9th day of every month by MO/OBGY	• Focus on identification and line listing of ANCs for delivery plan	The program is upgraded to Extended Pradhan Mantri Surkashit Matritva Abhiyan (E-PMSMA) in 2022 with additional component

Program (Year) & implemented by	Objectives	Key features	Coverage
Central Government Health Department			
Extended Pradhan Mantri Surkashit Matritva Abhiyan (E-PMSMA), 2022	Improving the HRP tracking and strengthen follow up activities through cash-based incentive for ASHA and beneficiaries.	• An additional day of a month for PMSMA clinic for missed out HRP & for those who needed frequent follow-up organized on 1st, 9th, 16th & 24th of every month by Specialist/MBBS doctor • Provision of trained specialist doctors (OBGYNs, Physicians, Radiologists). at lower facilities on deputation- • Provision of teleconsultation for ANC from specialist	The number of beneficiaries under the Scheme in year 2024-25 was 32,74,174 and the expenditure incurred was Rs. 5.91 crores. In the year 2025-26, the beneficiaries were 36,05,589 and the expenditure incurred was Rs. 5.97 crores. The HRP cases tracked and linked to higher facilities in year 2025-26 were 5,38,060.
LaQshya (2017)	To improve the Quality of Care (QoC) in labor room (LR) and maternity OTs in public health facilities	• Performance monitoring of LR/OT as per the parameters of National Quality Assurance Standards (NQAS) • Care for pregnant women with high quality, respect and dignity • Focus on adequate and trained HR	The expenditure under the programme in year 2025-26 was Rs. 32.00 Lakhs
SUMAN-Surakshsit Matritava Aashwasan (2019)	An Initiative for Zero Preventable Maternal and Newborn Deaths Comprehensive initiative that promotes safe pregnancy, childbirth and immediate post-partum care with respect & dignity	• Subsumes all existing initiative and provide service assurance – no denial of service • 100% maternal death reporting and reviews • Grievance redressal mechanism (104) • Award to SUMAN champion • Client feedback mechanism (Mera Aspatal)	

Program (Year) & implemented by	Objectives	Key features	Coverage
Central Government Health Department			
Anaemia Mukt Bharat (2018)	Reduce the Anaemia among – children (6-59 months), children (5-9 years), Adolescent (10-19 years), Pregnant and lactating women, and women of reproductive age group (15-49 years)	• Prophylactic IFA supplementation • Periodic deworming • Behaviour changes communication campaign • Testing and treatment using digital application • Provision of IFA fortified food in government funded health program • Intensifying awareness, screening and treatment	
National Ambulance Services (NAS) (2012) Central Government (102) & State (108)	Patient transportation for emergency through ambulance	• Dial 102/108 ambulance services • Trained Emergency Medical Technician • Basic and advanced life support	The total number of beneficiaries catered in year 2025-26 was 1,63,10,845 and the expenditure on this service in year 2025-26 was Rs. 463.83 crores.
Pradhan Mantri Jan Arogya Yojana(PMJAY) (2018) Centrally Sponsored (60:40)	Coverage of Rs 5 lakh per family per year for secondary and tertiary care.	• Covers health benefit packages and procedures • Public & private empanelled hospitals are reimbursed • Coverage of pre-exiting disease conditions	Till 2022, deliveries (both normal and C-section) were covered under the Scheme for private health facilities, discontinued since 2022. The matter has been taken up with the Health Ministry, Government of India, to include deliveries under PMJAY
Maternal Death Surveillance System (MDSR), 2017 Central Government	• To strengthen the mechanisms and processes for Maternal Death Surveillance & Response. • To institute a system of conducting Confidential Review into maternal deaths.	• Conduct community and facility-based death review	In year 2025-26, the reported cases of maternal deaths on this system were 2,151 and the verbal and facility-based autopsies carried out were 2,036.

Program (Year) & implemented by	Objectives	Key features	Coverage
Women and Child Development Department			
Pradhan Mantri Matru Vandana Yojana (PMMVY) Central Government	Financial assistance to pregnant and lactating mothers for the first two living children, to compensate for wage loss during pregnancy, ensure nutritious food, and improve maternal and child health behaviours	• A maternity benefit scheme that provides assistance of Rs. 5000 for the first child and Rs. 6000 for the second child (if it is a girl) directly in the bank account of the mother. • Supported by AWW and ICDS supervisors to create awareness and facilitate	·
Poshan Abhiyan (2018) Central Government	Reduce the level of stunting, under nutrition, anaemia and low birth weight among the children, also focused on adolescent girls, pregnant and lactating women.	• Use of technology for tracking nutritional status • Community engagement through VHSND platform	
Diagnostics E-voucher (e-RUPI voucher scheme) Scheme for ANC, (2024) State Government	Free ultrasound services to pregnant women at private empanelled diagnostic centres, early detection of complications.	• Each e-RUPI voucher is valued at ₹300, specifically for ultrasound examinations in the private sector.	The total cases that availed this benefit in year 2025-26 were 4,33,452 and the expenditure under the scheme was Rs. 2.68 crores.

The important Portals

The important portals which are related to the reporting of programmes related to maternal and neonatal health, nutrition and maternal deaths & neonatal deaths are as follows

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
1	Health Management Information System (HMIS)	Collects health facility based monthly, quarterly and annual data on 1. Service statistics and outcome level indicators on Maternal Child Health, Nutrition, Family planning, etc. 2. Infrastructure and Human Resources	National Health Mission (NHM), Ministry of Health and Family Welfare, (MoHFW), Government of India	central www.hmis.mosfw.gov.in
2	Reproductive and Child Health (RCH) Portal	Individual beneficiary, women & children, is tracked throughout the reproductive lifecycle: Pregnancy, childbirth, post-natal period, and children for immunization. The key features of the portal	National Health Mission (NHM), Ministry of Health and Family Welfare, (MoHFW), Government of India	central https://rch.mohfw.gov.in/RCH/

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
		1. Helps frontline health workers (FLWs) in planning for services ANC, PNC, essential check ups 2. Identification and tracking of high-risk pregnancy 3. Monitoring of outcome of the delivery: livebirth/still birth, maternal deaths etc. 4. A tool for ASHA/ANM in generation of work plan for ANC, routine, checkup, delivery.		
3	e-Kavach	Comprehensive digital health application (mobile and web-based), for various programs and a job-aid for FLWs. Key features are: 1. Longitudinal tracking of beneficiary-including pregnant women tracking for ANC, delivery, PNC, etc. 2. Multiple health modules: The platform has modules for tracking mother and child (MNCH), Communicable and non-communicable disease (NCD)	National Health Mission, Uttar Pradesh	State https://ekavach.upnrhm.gov.in/imtecho-ui/

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
		3. Line-listing of beneficiary: for MNCH, immunization, and other programs 4. Decision support system: Provision of data-analytics for identifying gaps, developing implementation strategies and monitoring performance of program		
4	e-PMSMA (Extended - Pradhan Mantri Surakshit Matritva Abhiyan) portal	Developed and hosted by the Centre for Health Informatics (CHI) of the National Health Portal (NHP). The key features: High-Risk Pregnancy (HRP) Identification (The Sticker System) Green Sticker: for women with no risk factor detected Red Sticker: for women with high-risk pregnancy	Ministry of Health and Family Welfare (MoHFW), Government of India	Central https://pmsma.mohfw.gov.in/pmsma-app/LoginController
5	e-SAATHI	WhatsApp-based digital support system for pregnant and post-partum women implemented in Varanasi, Uttar Pradesh. Key features: 1. A digital companion	Population Council Institute & Sitaram Bhartia Institute of Science and Research (NGO)	State

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
		2. women receive guidance on pregnancy care, nutrition, danger signs, and newborn care 3. share feedback that helps improve service quality		
6	U-WIN	U-WIN platform captures each & every vaccination event of all pregnant women & children under Universal Immunization Programme (UIP)- against the Ayushman Bharat Health Account (ABHA) ID.	Ministry of Health and Family Welfare, (MoHFW), Government of India	Central https://uwin.mohfw.gov.in/
7	Maa Navajat Tracking Application (MaNTrA)	Comprehensive digital platform developed to improve maternity care and labour room management across public health facilities in Uttar Pradesh Ke features are: 1. Monitor clinical parameter, interventions, outcomes, follow up, patients feedback. 2. Linkage to programs, benefits and other applications, such as JSY, e-Kavach, Safe delivery, birth and	National Health Mission (NHM) of Uttar Pradesh and UNICEF	State https://mantra.upnrhm.gov.in/admin/login

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
		death registration (CRS), ADBM compliant, etc. 3. Tracking ambulance services. 4. Performance monitoring of MNCH program- GIS enabled dashboard. 5. Robinson classification for rationalisation of C-section.	National Health Mission (NHM) of Uttar Pradesh and UNICEF	
8	Maternal, Perinatal, Child Death Surveillance and Response (MPCDSR)	MPCDSR software with support from WHO is an IT-based system aims to create a one-stop integrated information platform to capture, generate, and use timely, reliable and actionable data for both maternal and child deaths (including perinatal deaths).	National Health Mission, Ministry of Health and Family Welfare, Government of India	Central https://mpcdsrindia.mohfw.gov.in/#/login
9	E-Aushadi	e-Aushadhi is a web-based application which deals with the management of stocks of various drugs, sutures and surgical items required by different district drug warehouses of UP state	Uttar Pradesh Medical Supplies Corporation Ltd.	State https://updvdms.dcservices.in/IMCS/login

Sl #	Name of the portal	Subject / Content	Department	Implemented by: State government / Central government
10	Manav Sampada HRMS	Web app tool for personnel management activities like planning, recruitment, posting, promotion, transfer, maintenance of service history etc.	Developed, maintained and hosted by NIC UP State	State https://ehrms.upsdc.gov.in/%5C
11	Civil Registration System (CRS)- Birth and Death Registration system	Recording of vital events i.e. Birth, Death & Still Birth under the statutory provisions on continuous and permanent basis. CRS falls under the Concurrent list of the Constitution of India	Office of the Register General & Census Commissioner, Ministry of Home Affairs, Government of India	Central https://dc.crsorgi.gov.in/crs/
12	POSHAN Tracker (ICDS-CAS)	A mobile based app for monitoring maternal and child nutritional status including stunting, wasting and under-weight. Key features: 1. Track Supplementary Nutrition program 2. Growth monitoring 3. Home visits	Ministry of Women and Child Development, Government of India	Central https://www.poshantracker.in/
13	Pradhan Mantri Matru Vandana Yojana (PMMVY) 2.0 (PMMVYSOFT MIS)	Paperless online registration and payment process in DBT-enabled accounts. Aims to provide cash benefit to the pregnant women and lactating mothers for first child and second child, if girl child, through DBT mode	Ministry of Women and Child Development, Government of India	Central https://www.poshantracker.in/

Status on Important Parameters at International, National and State Level

As per the report published in Lancet Obstet Gynaecol Women's Health 2026, published online on March 26, 2026 says that “Maternal mortality has decreased globally in the past three decades; however, mortality remains high in some locations and progress has plateaued or reversed in others. SDG 3.1 target for MMR of fewer than 70 deaths per 100 000 live births by 2030. 104 of 204 countries and territories have yet to meet the SDG goal of 70 deaths per 100 000 live births. Efforts should prioritize identifying data gaps and focusing data collection in areas where data are sparse or less timely. Efforts should also continue to focus on providing high quality, accessible, and adaptable care to prevent and manage well known obstetric complications. Global MMR decreased in overall period of 1990 to 2023, with widespread acceleration in the era of the Millenium Development Goals from 2000 to 2015; however, global progress in the early SDG era of 2015 to 2023 slowed globally and slowed and even plateaued in many countries and territories.

Predominant sub causes of maternal mortality varies by location, but maternal haemorrhage and maternal hypertensive disorders are the top two sub-causes of maternal mortality at the global level in the recent years. Total maternal deaths numbered 240000 globally in 2023, accounting for 5.5% of all deaths among female aged 10-54 years. Countries with highest number of maternal deaths in 2023 are Democratic Republic of Congo, Ethiopia, India, Nigeria and Pakistan. The largest number of maternal deaths in 2023 were in age group of 20-24 years and the least were in age group of 50-54 years. From 1990 to 2000, maternal deaths declined globally by 6.2% decreasing from 321 to 191. The details of which is as follows:

Period	Global MMR	Rate of decline in MMR	Absolute number of deaths	Absolute number of deaths	Annualised decrease in death counts
1990-2000	321	6.2 %	423000	397000	2.0%
2000-2015		29.4%		280000	3.6%
2015-2023	191	14.3%		240000	3.0%

The number of countries with different level of performance on MMR is as follows:

Number of countries	MMR in 2023
100	Less than 70
72	Less than 30
46	Less than 10
104	More than 70
15	70-100
16	100-140
73	More than 140
Liberia (highest MMR in 2023)	1210

The number of maternal deaths, MMR, percentage change and annualized rate of change in MMR globally and in India since 1990 is as follows:

No. of Maternal Deaths	Global	India
1990	423000	119000
2000	397000	105000
2015	280000	36900
2023	240000	24700
% tage change in number of maternal deaths		
1990-2000	- 6.2%	-11.5%
2000-2015	- 29.4%	-65%
2015-2023	- 14.3%	-33%
1990-2023	- 43.3%	-79.3%
Maternal Mortality Ratio (MMR)		
1990	321	508

No. of Maternal Deaths	Global	India
2000	306	417
2015	198.5	152
2023	190.5	116
Annualised rate of change in MMR (%)		
1990-2000	-0.5	-2.0
2000-2015	-2.9	-6.7
2015-2023	-0.5	-3.4
1990-2023	-1.6	-4.5

The Major Causes of Maternal Deaths since 1990 at Global, India, and State level is as follows:

Causes of Death	Global 1990	Global 2023	India 1990	India 2023	Uttar Pradesh 2023
Maternal Haemorrhage	36.1	21.7	45.8	32.7	37.0
Maternal sepsis and other maternal infections	9.9	11.1	9.0	5.1	5.0
Maternal hypertensive disorder	16.6	20.1	10.0	12.1	14.0
Maternal obstructed labour and uterine rupture	6.7	5.1	8.4	5.1	6.0
Maternal abortion and mis-carriage	10.6	8.2	7.2	5.9	6.0
Ectopic pregnancy	2.1	5.3	0.0	0.0	-
Indirect maternal death	8.7	9.6	10.5	14.2	12.0
Late maternal death	1.7	3.3	1.3	3.2	2.0
Maternal deaths aggravated by AIDS / HIV	0.3	0.7	0.0	0.1	-
Other direct maternal disorder	7.2	14.9	7.8	21.5	18.0

The report has concluded following Strategies for reducing the MMR:

1. Improving health care access and quality during pregnancy and child birth.
2. Earlier arrivals in good health facilities for complicated deliveries.
3. As maternal haemorrhage and hypertensive disorder account for nearly 40% of maternal deaths, improving access and quality delivery of known interventions could have a large effect.
4. Targeting upstream factors that contributes to maternal mortality. Improving the health of the women even prior to pregnancy.
5. Expanding access to high quality postpartum and primary care in the year after pregnancy. Post partum care beyond 6 weeks is important for late maternal deaths."

BOX I

Global, National and State Situation of Maternal Mortality: Learning from Global Burden of Disease Study 2023

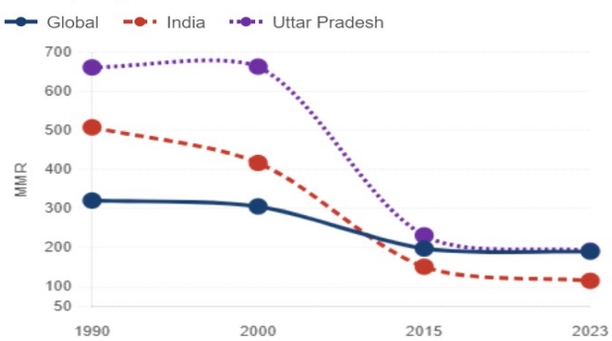
2,40,000
Global maternal deaths, 2023

24,700
Maternal deaths in India, 2023

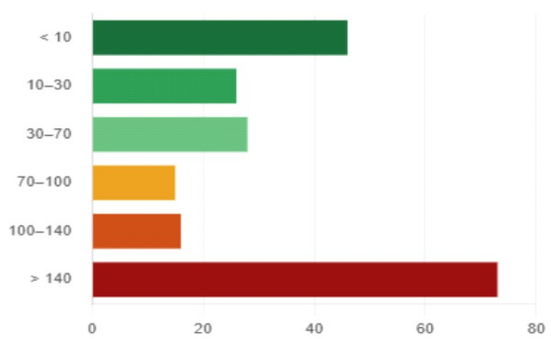
104 / 204
Countries yet to meet SDG 3.1 target (<70 per 1,00,000 LB)

TRENDS IN MATERNAL MORTALITY RATIO (PER 1,00,000 LIVE BIRTHS), 1990–2023

MMR trajectory: Global, India and Uttar Pradesh



Distribution of 204 countries by MMR level, 2023



PROGRESS IN REDUCING MATERNAL DEATHS: GLOBAL, INDIA AND UTTAR PRADESH

UP 1990–2000: DEATHS ROSE DUE TO POPULATION GROWTH DESPITE FLAT MMR

Period	No. of maternal deaths			MMR			% change in deaths			Annualised rate of change in MMR (%)		
	Global	India	UP	Global	India	UP	Global	India	UP	Global	India	UP
1990	4,23,000	1,19,000	28,306	321	508	661	—	—	—	—	—	—
2000	3,97,000	1,05,000	33,365	306	417	663	−6.2%	−11.5%	+17.9%	−0.5	−2.0	0.0
2015	2,80,000	36,900	11,908	198.5	152	232	−29.4%	−65.0%	−64.3%	−2.9	−6.7	−6.8
2023	2,40,000	24,700	9,820	190.5	116	193	−14.3%	−33.0%	−17.5%	−0.5	−3.4	−2.3
1990–2023	Global: −43.3% | India: −79.3%		UP: −65.3%	321→191	508→116	661→193	—	—	—	−1.6	−4.5	−3.7

CAUSES OF MATERNAL DEATH (% SHARE): GLOBAL, INDIA AND UTTAR PRADESH

Cause of death	Global 1990	Global 2023	India 1990	India 2023	UP 2023
Maternal haemorrhage	36.1	21.7	45.8	32.7	37.0
Maternal hypertensive disorder	16.6	20.1	10.0	12.1	14.0
Maternal sepsis & other infections	9.9	11.1	9.0	5.1	5.0
Other direct maternal disorder	7.2	14.9	7.8	21.5	18.0
Abortion and miscarriage	10.6	8.2	7.2	5.9	6.0
Indirect maternal death	8.7	9.6	10.5	14.2	12.0
Obstructed labour & uterine rupture	6.7	5.1	8.4	5.1	6.0
Ectopic pregnancy	2.1	5.3	—	—	—
Late maternal death	1.7	3.3	1.3	3.2	2.0
Deaths aggravated by HIV/AIDS	0.3	0.7	—	0.1	—

KEY STRATEGIES: LANCET GBD 2023 RECOMMENDATIONS

1. Improve access and quality of care during pregnancy and childbirth.
2. Facilitate earlier arrival at quality facilities for complicated deliveries.
3. Scale proven interventions for haemorrhage and hypertensive disorders — together ~40% of all maternal deaths.
4. Target upstream determinants: improve women's health status prior to pregnancy.
5. Expand high-quality postpartum and primary care through the year after pregnancy — care beyond 6 weeks is essential to reducing late maternal deaths.

Faith J, Martopullo I, Arndt M et al. Global, regional, and national levels and trends in maternal mortality, progress towards the Sustainable Development Goals, and mortality from COVID-19 infection in pregnant women, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023. The Lancet Obstetrics, Gynaecology, & Women's Health, 2026; 0.

Important Findings of Deliberations at the Workshop

The UP STC conducted on a workshop 15th. January, 2026 at Lucknow after due deliberations, the key interventions identified were as follows:

A. Ensuring early Pregnancy Registration and quality antenatal care.
B. Ensuring 100% institutional delivery.
C. Strengthening High-Risk Pregnancy management through early identification, continuous tracking and birth planning at suitable facilities.
D. Prevention and Management of Post-Partum Haemorrhage.
E. Involving private facilities with high quality infrastructure and skilled professionals.
F. Strengthening the First Referral Units (FRUs).
G. Strengthening the ambulance service for taking the women to health facilities for antenatal care and delivery.
H. Improve maternal nutrition including enhanced THR and multi-nutrient supplementation.
I. Using the 1.50 lacs available as Vulnerability Reduction Fund with the Village Organizations for deliveries.
J. Strengthening accountability for Maternal and new born health outcomes.
K. Expanding access to high quality postpartum and primary care in the year after pregnancy. Post partum care beyond 6 weeks is important for late maternal deaths."

In the workshop held on 15th. January, 2026 at Lucknow, while deliberating the subject and in experts' presentations various issues and challenges were mentioned, which are responsible for higher MMR in state. The State Transformation Commission has tried to compile the response which came from the experts and participants to those challenges. The suitable response to those challenges needs to be built in as an integral part of the roadmap. The important challenges and response against them are summarised in the following table.

Findings from the workshop: Challenges and Interventions for Reducing Maternal Mortality

S. No.	Challenge	Intervention
1	All pregnancies not getting registered.	Mobile App for self-registration. Broadening the registration base by enabling it to be done by ASHA, ANM, ICDS workers and helpers, Gram Pradhan and Panchayat Sahayak, VHSNC members etc.
2	Delayed registration of pregnancies.	IEC activities and activating VHSND.
3	Poor coverage of antenatal care (42.4%: NFHS 5; 2019–21).	On registration, the information of registered pregnancy will reach ANM, ASHA, ICDS workers, M.O. and CMO. Regular message for ANC to the beneficiary and raising the level for default cases.
4	Poor quality of antenatal care.	Ensure high quality ANC, at least 9 visits for normal delivery and for HRP cases minimum 9 and maximum as per need and requirement. Work out a model to pay Rs. 500 per ANC to private health facility or include it in the delivery package. ANC reports to be uploaded digitally on the App.
5	No maintenance of records of ANCs, which can help in identifying High Risk Pregnancy (HRP) cases.	All ANC records to be digitally uploaded on App, besides physical record maintenance. The automatic identification of HRP based on findings of vitals in ANC.
6	Lack of 100% institutional delivery.	Ensure 100% institutional delivery. Ensure that health facilities both public and private which have all requisite infrastructure, facilities and professionals undertake deliveries. Birth planning at suitable stage and health facility. Identify public facilities which are doing well; also identify public facilities which are well equipped but not doing enough. All public and private medical colleges to undertake deliveries, especially of HRP cases. Identify 4–5 private hospitals in each district and one in each block (if available) for ANC and delivery, and allow them under PMJAY or State Scheme. Create a network between pregnant women, ambulance, and doctor in public and private facility which will do ANC, maintain ANC records physically/digitally on App, and do delivery.
7	High out-of-pocket expenses for deliveries.	Strict monitoring to eliminate this. Empanel 5–6 good private health facilities in each district, one in a block if possible, with excellent infrastructure and professionals, and allow them under PMJAY or State-led programme.

S. No.	Challenge	Intervention
8	No defined referral process or Standard Operating Procedure (SoP).	If not existing, make one SoP immediately, where referral is tracked on App and the doctor is contacted on phone or WhatsApp about the case being referred.
9	Identification of HRP cases is not dynamic.	Each ANC report is uploaded on App and HRP is identified automatically.
10	All FRUs/hospitals in Government are not functioning round the clock and on holidays.	Infrastructure be strengthened and doctors should stay or remain available on holidays; otherwise that facility should not undertake deliveries.
11	With identification of pregnancies, proper nutritional supplements are not provided.	Moringa / soya chunks / eggs / IFA of appropriate salt.
12	Post-Partum Haemorrhage (PPH) accounts for 50% of all maternal deaths in U.P.	PPH accounts for 25% of maternal deaths worldwide, but in Uttar Pradesh it accounts for 50% of deaths.
13	Gaps in training for handling PPH.	Intensive training to government and private health facilities, doctors and staff.
14	Non-availability of Non-Pneumatic Anti-Shock Garments (NASG).	All health facilities where delivery is taking place should have these garments in adequate numbers.
15	Lack of essential uterotonics.	Ensure availability of uterotonics in the last mile.
16	Maternal deaths are not recorded properly. Immediate review of cause of death is not undertaken. Often reported as heart attack etc.	Complete reporting of maternal death and regular audit and monitoring at facility / district and state levels should be ensured.
17	Accountability for preventable maternal death is missing.	The attempt should be to sensitize, train, and equip the stakeholder. The approach should be "no shame, no blame" but the facility in-charge should take accountability.
18	Non-availability of ambulance services for antenatal check-ups.	102 ambulance service provides for transportation for ANC check-up. They should be publicized and used intensively.
19	Non-availability of ambulance services for taking pregnant women to FRU/Hospital.	102 ambulance services will be fully used and tracked. This will be monitored by the call centres and war rooms also.
20	Non-availability of ambulance services even for cases referred from the CHCs.	The facility in-charge has to ensure that if he is referring a case then he must summon the 102 ambulance for the patient.
21	No linkage of pregnant women with ANM or doctor who will do ANC and maintain the record.	The pregnant woman, doctor and facility for delivery will be done in birth planning immediately after registration.

S. No.	Challenge	Intervention
22	No linkage of pregnant women with facility where she will deliver. No birth planning.	Birth planning should be done immediately after registration with the consent of the beneficiary by the doctor. In case of HRP cases, birth plan will be finalised and frozen at least 1–2 months in advance of delivery.
23	The value of MMR is arrived through survey; in present situation it should be based on exact details of deaths and births taking place in State in a year.	All maternal deaths should be registered in the app and it will be the responsibility of facility in-charge. This will be tracked by the state war room. Deaths happening outside facility should be reported by the panchayat and municipal authorities.
24	All births and deaths are not getting recorded and certificates are not being issued by the prescribed authorities in time.	All maternal deaths should be registered in the app and it will be the responsibility of facility in-charge. This will be tracked by the state war room. Deaths happening outside facility should be reported by the panchayat and municipal authorities. Certificates should be issued by the competent authorities within time.
25	Training for sensitisation and work at all levels is lacking.	The sensitization workshops will be held at district and state levels both for public and private facilities. Organisations like FOGSI, IMA, and IAP will be involved.
26	Lack of hygiene in OT/hospitals causing sepsis.	Sensitization and regular checking by district level health officers. Hospitals not maintaining the required hygiene will not be allowed to carry on delivery.
27	Activate VHSNC.	The Gram Pradhan and Panchayati Raj officials will be activated.
28	Payment of Ayushman/PMJAY is monitored for maternity related cases.	High risk maternal care is allowed in all empanelled PMJAY hospitals, and they should be encouraged to use it. Sensitization of SACHIS in this matter is required.
29	Identify one champion doctor in each district (Public or Private).	STC will advertise and select one champion doctor in each district for the cause of maternal health.
30	Identify one NGO in each district which works in this sector.	STC will advertise and select one NGO in each district working in maternal health.
31	Map government and private facility in each district which has expertise in handling PPH cases.	STC in collaboration with health department will identify minimum 5–6 hospitals in each district which has expertise in maternity care/PPH.

S. No.	Challenge	Intervention
32	On registration of pregnant women, ensure her name in Ayushman card and enrolment in ICDS.	The state war room will track this and ensure it.
33	Entry of data on maternal mortality is not done timely and correctly.	Intensive training will be given to person responsible for data entry.

Launch of the Strategy

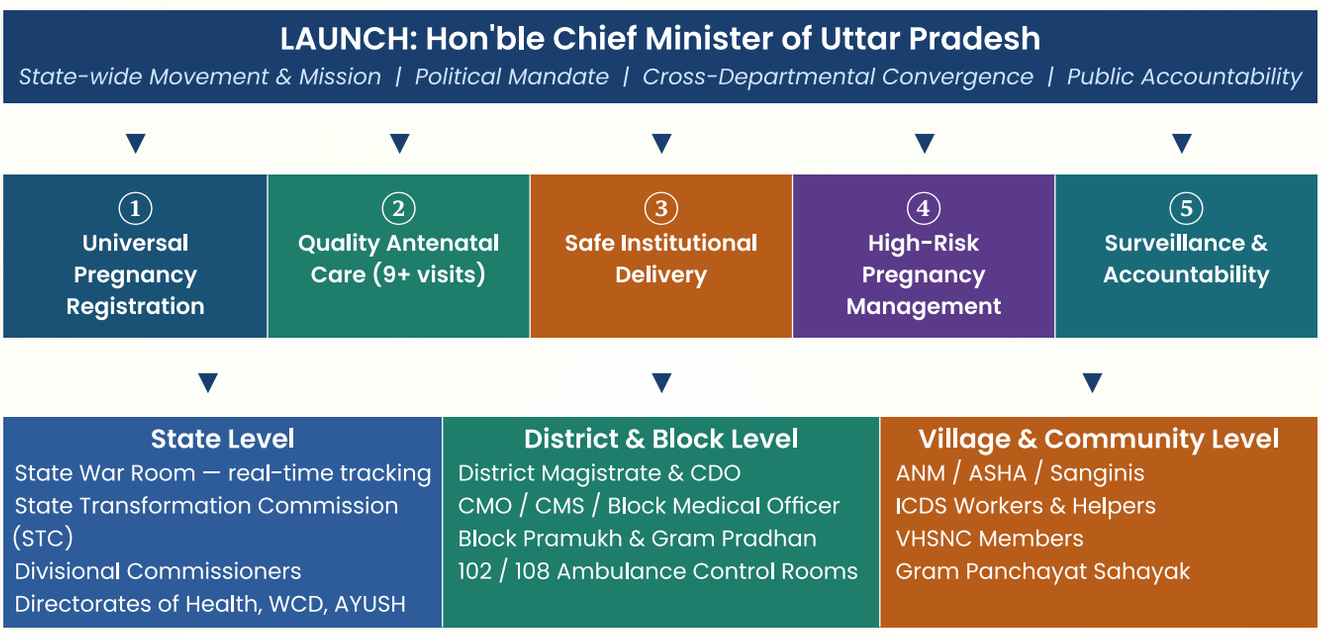
Launch of the Strategy to Reduce Maternal Mortality in Uttar Pradesh

Reduction in Maternal Mortality Ratio for state should be taken up as a movement and mission. This calls for its launch from the level of Hon'ble Chief Minister and active participation of all the probable, direct or indirect stakeholders. It is imperative that the following stakeholders be linked and associated with the programme for effective time bound attainment of the objectives. The important stakeholders are as follows:

State Level	Village & Community Level	District Level
Officials of Medical Health and Health Education Department (Directors / Principals/ NHM CMO/CMS/MO/ANM/ASHA/Community Health Workers/ Sanginis	Zila Panchayat Adhyaksha and Zila Panchayat Ward Members	Mayors and Ward Counsellors
Officials of Ayurved, Unnani and Siddha Medicine Department	Block Pramukh and Block Panchayat Ward Members	Divisional Commissioners
Officials of Women and Child Development Department (ICDS Workers / Helpers)	Gram Pradhan and Gram Panchayat Ward Members	District Magistrates
Officials of Rural Development (MD, UPSRLM / BDO / Panchayat Secretaries)	Gram Panchayat Sahayak	Chief Development Officers
Officials of Panchayti Raj Department (Panchayat Secretaries)	102 / 108 Ambulance Control Room Supervisors / Operators/ Drivers / Assistants	All Birth and Death Registrars
Official of Urban Development	One Champion Doctor in each District	Office Bearers of Federation of Obstetrics and Gynaecological Societies of India (FOGSI)

State Level	Village & Community Level	District Level
Owners / Directors of Private Health Facilities	Identified Civil Society Organizations working or interested in working in this field	National and State representatives of International Organizations working in this field
Directors / Principals of Medical Institutions and colleges both Public and Private	UPSRLM -SHG, VO, CLF	

Figure: Launch Architecture from Political Mandate to Community Action



Guiding Principles of the Launch

No shame, no blame	The accountability framework sensitises and trains rather than penalises. Facility in-charges carry responsibility without blame culture.
Technology as the backbone	A single App connects pregnancy registration, ANC records, HRP identification, ambulance tracking, and maternal death reporting — monitored by the State War Room.
Convergence, not silos	Departments of Health, WCD, Rural Development, Panchayati Raj, and Urban Development act in concert, with STC as the coordinating body.
Private sector as equal partner	Empanelled private hospitals under PMJAY / State Scheme participate fully in ANC, delivery, and high-risk pregnancy management.
Community as the first line	ASHA, ANM, Sanginis, SHGs, and Gram Pradhans are the first movers — reaching every registered pregnancy from day one.

Establishment of State War Room:

The important challenges are lack of follow up of HR cases, transition to digitalization and coordination gaps. The State War Room will take care of above challenges by ensuring targeted intervention for HR cases, real time monitoring, data integration across departments and inter sectoral co-ordination.

The State War Room is proposed to be set up in the Office of National Health Mission (NHM) with a digital twin of it at State Transformation Commission.

Function of State War Room:

1. Birth Planning Mechanism: Comprehensive planning for pregnant women and high-risk mothers to ensure appropriate delivery facilities and avoid unnecessary referrals.

2. High risk Follow up: Tracking and managing high-risk pregnancies through systematic flagging and timely interventions.

3. Private Hospital Categorization: Classifying private institutions into Level I, II and III based on capabilities and emergency care services.

4. Data Harmonization: Creating new variables, stratification, collection and follow up of maternal health data across systems.

5. Coordination with Call Centres: Collaboration with State / District call centres for follow up of Antenatal mothers and address emergency response and grievances.

6. Data Monitoring & Validation: Ensuring correctness and accuracy of data in all related portals and apps.

7. Capacity Building: Training and enhancing skills of healthcare providers for effective maternal healthcare delivery.

Birth Planning Help desk in each facilities doing ANC and delivery: This to be done on App. Sharing the birth planning done at help desks with the State War Room to ensure that it is appropriate. Birth Planning data is shared with 102 / 108, to avoid multiple referrals. Inter facility tansfer from private hospital to government should be enabled. State level hybrid mode sensitization meeting should be conducted for private obstetricians. Training for IMA and Uttar Pradesh FOGSI, on "Convergence for Care" as PPP initiative should be taken up intensively. State Call Centre with 50 Counsellors at State level should be placed. The calls to be made are ; 2 calls are made to high risk (HR) mothers after 37 weeks (2 & 4 weeks before EDD). Outcomes of calls are classed as: Mother is fine (Green); Mother needs continuous follow up (yellow); Mother needs immediate attention (Red). Calls are made from state helpline 14 days prior to EDD.

District MCH Call Centres: Calls should be made to all antenatal HR Mothers on following frequency: 10 days before EDD; 21 days before EDD; 35 days before EDD; Once in 2nd Trimester; Newly identified HR mothers; High risk Post natal (PN) mothers; and Mothers not reached by state call centre.

App / Portal developed by the STC should have facilities for: Scheduling visits of HR Mothers; Antenatal Visits entry in portals; up to date treatment details; appropriate birth planning at patient's choice and real time data monitoring and validation.

An important pillar of the strategy is Strengthening CEmONC Services which will help in improving quality care; issue red alert to OBG Team for multi- disciplinary Obstetrics ICU care; provide for exclusive physician for ICU Care of maternal cases. It will ensure establishment of post partum clinics; training / hands on workshop in protocols; revamped maternal death audits / near miss audits. The above objectives will be achieved through periodic CEmONC coordination meetings at the district.

Antenatal High- Risk (AN HR) mother follow up call schedule for state call centre counsellors / State War Room / District MCH Call Centre should be made mandatory. Antenatal High- risk mother follow up refers to the regular monitoring and care of pregnant women who have a high risk of complications or adverse outcomes during pregnancy, child birth, or the post- partum period. The goal of this follow-up is to:

1. Identify potential complications early.
2. Prevent or minimize risk.
3. Ensure timely interventions.
4. Improve maternal and foetal outcomes.

A typical follow-up schedule for high- risk mothers may include:

1. Frequent ante natal visits.
2. Ultrasound examinations.
3. Foetal Monitoring (NST, BPP, or Doppler studies).
4. Blood Tests (for gestational diabetes, hypertension, or other conditions).
5. Urine Tests (for proteinuria or infection).
6. Consultation with specialists (maternal-foetal medicine, cardiology, etc).
7. Hospitalization or bed rest (if necessary).

The frequency and type of follow -up will depend on the individual's specific risk factors and medical history. Healthcare provider will work closely with high-risk mothers to develop a personalised care plan and ensure best possible outcomes. The hospital facility of appropriate level will be selected for delivery. To start with all AN HR mothers will be taken up. Out of them 1 month near EDD is to be called once in a week, 2 months near EDD to be called once in 15 days and 3 and above months EDD mothers are to be called once in a month.

The Antenatal High-Risk mothers are categorised on priority basis as high priority (Orange), Medium priority (Yellow) and Low priority (Light Blue) mothers.

S.N.	High Priority Conditions (Orange) (Red)	Moderate Priority Conditions (Yellow)	Low Priority Conditions (Light Blue)
1	Ectopic pregnancy	Previous LSCS / Assisted	Rh Isoimmunization
2	PIH / Preeclampsia	Short Primi (Height less than 145 cm)	CPD
3	Severe Anaemia (<7)	Intra Uterine Growth Restriction (IUGR)	
4	Heart Disease complicating pregnancy	Hydramnios (Poly / Oligo) >28 weeks	
5	APH-Placenta Previa, Abrupito Placenta	Multipara (>/ Gravida 4)/ HOB	
6	Abnormal presentation > 37 weeks (Transverse Lie, breach etc)	Hyperthyroidism	
7	Hypothyroidism	Differently Abled Mother	
8	Bad Obstetric History (BOH)	Pregnancy after Prolonged Infertility	

S.N.	High Priority Conditions (Orange) (Red)	Moderate Priority Conditions (Yellow)	Low Priority Conditions (Light Blue)
9	Haemoglobinopathy	IVF	
10	Active Tuberculosis (TB) in pregnancy	Teenage Pregnancy (<19 years)	
11	Auto Immune Disease (SLE)	Mild Anaemia (HB >9 gm)	
12	HIV / AIDS	Post Dated Pregnancy (beyond 42 weeks)	
13	Pyrexia in Pregnancy Malaria, Dengue, Scrub typhus, typhoid, H1N1	Pregnancy due to Contraceptive Failure	
14	Jaundice / Hepatitis B	Moderate anaemia (Hb 7 to 9 gm)	
15	Renal Diseases Complicating Pregnancy	Vesicular Mole	
16	Congenital malformation		
17	Elderly Primi (>35 years)		
18	Weight more than 75 kg and less than 40 kg		
19	Epilepsy		
20	Intra Uterine Death (IUD)		
21	GDM / DM		
22	Multiple Pregnancy		

The questions to be asked and answers to be filled up by calls and meetings with the high- risk mothers as per their high-risk conditions is given in **Annexure-II**.

The following Standard Operating Procedure be followed based on the response to the above questions:

Red Flagged Mothers:

All Red Flagged Mothers should be followed up by the concerned ANM/ASHA as soon as they receive SMS message t on their mobile number and in call centre / portal. After giving necessary services, the message should be closed by ANM/ASHA within 24 hours.

The same message will be sent to the concerned PHC MO and BMO at the same time for follow up and action taken as soon as possible.

If the message is not closed within 24 hours the state call center counsellors will again call the AN HR mother and counsel the mother to go immediately to the nearest health facility for care and support. They will also call the concerned ANM/ASHA and remind her about the follow up of mother.

If the concerned ANM/ASHA is not closing the message within 24 hours, the same will be forwarded to concerned medical officer on the following day and he/she must act on it along with the PHC team (BMO, PHC MO, ANM/ASHA) to check and make arrangement for getting essential services by the mothers and make ASHA/ANM to follow up and close the message.

If still action is delayed and the message is not closed it is sent to the concerned DHO for action in next 24 hours.

If even after 72 hours no action has been taken and the message is not closed, this message will be escalated to the Helpdesk NHM and Call Centre / portal in STC.

All Yellow Flagged Mothers should be followed up by the concerned ASHA/ANM as soon as they receive SMS message on their mobile number and in call centre / portal. After giving necessary services, the message should be closed by the ASHA/ANM within 48 hours.

The same message will be sent to the concerned PHC MO and BMO at the same time for follow up and action taken as soon as possible.

Green Flagged Mothers:

All Green Flagged Mothers should follow up by the concerned ASHA/ANM as soon as they receive SMS message on their mobile number and in call centre / portal. After giving necessary services, the message should be closed by the ASHA/ANM within 7 days.

The same message will be sent to the concerned PHC MO and BMO on the same time for follow up and take action as soon as possible.

Red Flagged Mother Follow Up:

The states with better performance on MMR were studied by the team and best practices have been incorporated in the strategy. In states with better performance, it was noticed that approximately 55 % deliveries are conducted at Government Institutions, 89 % of deliveries in government facilities are taking place in 130 CEmONC facilities (36 Medical Colleges and 94 District Hospitals).

High risk deliveries should be undertaken only where there is blood bank. The High- Risk Camps should be organised at least once in a week. It is helpful to create Obstetrics high dependency units, Operation Theatres and Obstetric Triage. Hiring of Specialists; Obstetricians, Anaesthetists and Paediatricians is important. The conduct of Maternal Death Audits (Community / District / State) as early as possible after death a is educative. The best practices also include establishment of Midwifery Led Care Unit to Promote normal labour. Under the Schemes like JSY & JSSK; AN & PN Diet for mothers attending AN Clinics to reduce OOPE can be provided. There should be a clear convergence of schemes like Anaemia Mukt Bharat / IFA & Calcium Supplementation, Immunization of Mothers.

Integration with Indian System of medicines like Siddha, Ayurveda, Unani, Yoga, and Naturopath and Homeopath is important.

Strengthening C-Section Delivery:

There is a misconception that C-section delivery is higher in private health facilities. This probably is the reason for taking out delivery and C-section delivery from the private health

facilities under PM-JAY (Ayushman Yojana), but practically no such trend can be established. In one of the states performing well on MMR, which was visited by the team the visited, it was seen that 55% of deliveries are conducted in government institutions, of which 90% are in CEmONC like medical colleges and district hospitals. The C-section delivery in government institutions is 38% and in private institutions it is 62%. So average C-section deliveries are almost 50%. The above numbers clearly shows that the geographies which are doing well on MMR indicators and are also economically better off, the C-section cases are quite high. There all government C-Section are audited as per the Robson's Criteria, opinion of two consultants prior to C-Section is obtained. It is attempted that the primary C-Section is conducted by the senior most Obstetrician. The state has ensured constant C-Section audit which has helped in reducing primary C-Section to 41%. The Midwifery led care unit has been established to promote normal labour in addition to C-Section audit.

Maternal Death Audit: Surveillance, Review and Response

1. Purpose and Guiding Principles

Maternal Death Surveillance and Response (MDSR) is a continuous cycle of identification, notification, and review of maternal deaths, followed by targeted actions to improve quality of care and prevent future deaths. In Uttar Pradesh, the MDSR system is designed to transform every maternal death and every near-miss from a tragedy into a learning event that drives systemic change.

The entire process is governed by a single overriding principle: **no blame, no shame.** The purpose is to identify gaps in the system not to attribute fault to individuals. This principle must be explicitly stated in the Government Order issued on MDSR and must be reinforced at every review meeting at every level. No disciplinary action shall be initiated against any service provider solely on the basis of MDSR findings.

There should be a State Task Force Committee for reduction of MMR under ACS, Health, followed by a District Task Force Committee for reduction of MMR under the District Magistrate. At the district level, officers such as the District Health Officer, Dean of Medical College Hospital, Joint Director Health / Chief Medical Officer, Chief District Obstetrician, CEmONC Nodal Officer, District In-charge Family Welfare, District Maternal and Child Health Officer, and FOGSI representatives may be part of the committee, along with such other members as may be notified by the State.

Key Principle (aligned with MoHFW MDSR Guidelines 2017):
The approach should be sensitise, train, and equip not penalise. The facility in-charge bears responsibility for ensuring corrective action. The process is learning-driven, not punitive.

2. Overview: The MDSR Cycle

The MDSR process operates simultaneously at four levels community, facility, district, and state and covers all maternal deaths irrespective of place of death (home, facility, or transit) or the resident status of the deceased (including migrant women). The cycle comprises six steps, each with defined timelines, responsible actors, and prescribed formats (Forms 1–6 of the MoHFW MDSR Guidelines).

Step	Action	Timeline
1	Notification of maternal death	Within 24 hours
2	Community-Based MDSR (verbal autopsy)	Investigation within 3 weeks
3	Facility-Based MDSR (facility review)	Investigation form within 24 hrs; review within 48 hrs

Step	Action	Timeline
4	District-Level Review (CMO-chaired monthly; DM-chaired quarterly)	Monthly / Quarterly
5	State-Level Review and Confidential Review	Monthly / Quarterly / Annual
6	Response, Action Tracking and Near-Miss Audit	30-day action loop; parallel to all steps

Step 1: Notification

Any maternal death occurring in a facility or community should be notified within 24 hours, in line with the MDSR framework. The proposed Matritva Suraksha App may be used as a state-level facilitative digital layer for faster notification by the attending doctor, nurse, ASHA, or ANM. The App may generate a unique case ID, geo-tag the location, and send alerts to the facility in-charge, District CMO, and State War Room, while ensuring that the death is also entered in the official MDSR/MPCDSR software.

For community deaths, ASHA/ANM may initiate the process for verbal autopsy/community-based review through the App within the prescribed timeline. Existing Ayushman/empanelled private hospitals may be required to follow the same reporting protocol, and any non-compliance may be dealt with as per applicable empanelment rules and government orders.

Step 2: Facility-Level Rapid Review

For deaths occurring in health facilities, the facility may undertake a **confidential rapid review** through a small review team comprising the obstetrician, paediatrician, senior nurse, and administrator or other designated personnel. Using a standardised digital checklist in the Matritva Suraksha App, the team may analyse:

- clinical care delivered,
- adherence to applicable obstetric protocols including PPH, hypertensive disorders, anaemia, and sepsis management,
- referral pathway and timing,
- the Three Delays Model,
- near-miss identification, where applicable.

The team may prepare a concise case summary and initial recommendations. The summary may be uploaded to the App and shared with the district-level committee, while the formal review remains aligned with the prescribed MDSR process.

Step 3: District-Level Confidential Audit

The **District MDSR Committee**, chaired by the District Magistrate or other authority as per the

State protocol, may meet at regular intervals, and more frequently for high-burden districts/blocks. Every maternal death may undergo **root-cause analysis** using the Three Delay Model and other accepted review tools. The committee may identify gaps in protocols, referral systems, transport, infrastructure, training, private sector participation, or accountability.

A **time-bound action plan** may be prepared for each major gap identified, with clear ownership, timeline, and measurable indicators. The App may generate a district dashboard and escalation summary for decision support, while remaining supplementary to the official MDSR reporting structure.

Step 4: State-Level Review and Independent Validation

The **State MDSR / State Task Force Committee** may review aggregated findings periodically in the State War Room. The State may identify systemic issues such as FRU functionality, compliance of facilities, blood availability, transport gaps, HRP tracking, or clinical capacity deficits, and issue statewide advisories or policy corrections accordingly.

Where considered appropriate by the State, **third-party validation / audit of a sample of cases** by academic institutions or independent experts may also be undertaken periodically to improve objectivity, learning, and credibility of the review process.

Step 5: Response and Action Tracking

As per the spirit of MDSR, every review should lead to **Response**. Therefore, every action plan may be uploaded into the Matritva Suraksha App and tracked on the War Room dashboard. Progress may be reviewed in subsequent district and state meetings. Delays in implementation may be escalated through the appropriate administrative mechanism. Successful interventions may be documented as **best practices** and scaled across the State.

Step 6: Near-Miss Reviews

In addition to maternal death review, **maternal near-miss reviews may also be undertaken in parallel**, particularly at higher facilities and priority institutions, as they provide rich opportunities for learning and prevention. The same digital framework may be used for documentation and analysis, wherever adopted by the State.

5. Digital Integration with Matritva Suraksha App

The proposed App may function as a **state-level digital enabler** for faster surveillance, review support, and action tracking, while ensuring alignment with official MDSR reporting requirements. It may include:

- one-tap MDSR notification module with auto-population from delivery and PNC records,

- real-time dashboards at facility, district, and state levels,
- AI-assisted preliminary Three Delay analysis for rapid review support,
- linkage with CRS, PM-JAY, LaQshya, and relevant clinical protocols,
- offline mode with sync when connectivity is restored.

6. Committees and Membership

A standardised committee structure may be adopted across levels:

- **Facility Committee:** 4–5 members, including clinical and administrative staff,
- **District Committee:** 8–10 members, multi-sectoral and including private-sector representation where appropriate,
- **State Committee:** senior officials and experts, with provision for periodic external review support.

All committees may meet on a fixed calendar, and minutes/action points may be uploaded in the App within a defined timeline.

7. Training and Capacity Building

Doctors, nurses, ASHA, and ANM may be given structured orientation and training on MDSR, maternal death review tools, root-cause analysis, and the Three Delay Model. Existing Ayushman/empanelled private hospitals may also be included in such trainings and review structures to improve convergence and reporting completeness.

8. Key Performance Indicators

The proposed strengthened MDSR framework may track the following key indicators

KPI	Target	Measurement
Maternal deaths notified within 24 hours	100%	Proportion of deaths notified on time / total deaths reported
CBMDSR verbal autopsies completed within 3 weeks	100%	Proportion completed / total deaths reported
FBMDSR investigations completed within 24- 48 hours	100%	Proportion of Form 4s submitted on time / total facility deaths
FBMDSR committee meetings held	12 per facility per year (monthly)	No. of meetings held / 12
District MDSR committee meetings held	12 per district per year (monthly)	No. of meetings held / 12

KPI	Target	Measurement
DC quarterly review meetings held	4 per district per year	No. of meetings held / 4
Action plans generated from reviews	100%	Action plans uploaded / total deaths reviewed
Actions implemented within 30 days	≥90%	Actions completed on time / total actions assigned
Cause of death classified as 'Others'	<10% of total deaths	Proportion classified as 'Others' in MDSR software
Reduction in preventable maternal deaths	≥25% year-on-year	Annualised rate of change in facility-reviewed deaths with avoidable factors
Zero under-reporting verification	Cross-checked against CRS	% deaths reported in MDSR / % deaths registered in CRS
Near-miss cases reviewed	100% parallel to deaths	Near-miss reviews / total near-misses notified

The strengthened MDSR protocol would transform maternal death review from a paper-based exercise into a real-time, digital, action-oriented learning system. Every maternal death, and where adopted, every near-miss, can become a tool to prevent the next one. When linked with clinical protocols and War Room monitoring, this can provide the accountability backbone required for rapid reduction in maternal mortality.

Child Health Care Services:

In Facility based services like Newborn care corner & New born stabilization units, SNCU, Extramural SNCU & MNCU, Lactation Management Centres & CLMC, PICU, PREM Units & Nutrition Rehabilitation Centres should be strengthened to reduce neonatal mortality, stunting and wasting.

Similarly in Community based services like Immunization services, Homebase Newborn & Young Children, Anaemia Mukt Bharat & Vitamin A Supplementation, Social awareness and action to neutralise pneumonia successfully (SAANS) be activated to supplement the efforts of neonatal care.

There are other important schemes which need strengthening like Neonatal Ambulance Service, Rashtriya Bal Swasthya Karykram (RBSK), District Early Intervention Centre: Digital platform for real-time capture and monitoring of child screening data, Rashtriya Kishore Swasthya Karyakram (RKSK) and Menstrual Hygiene Scheme.

It is advisable to have a CHC AN Mother registration Target per year and its regular monitoring on ANC and birth planning. The entire target of 61 lac deliveries be tentatively assigned to public and facilities and private facilities who are willing to work under government schemes. The CHCs should follow the protocol of HSC- UPT Card – Refer to PHC – UPT Card – USG – Pregnancy confirmed by MO. Then ANM –Registration on App – AN mother registration and vitals – lab investigation – Birth Plan – normal / high risk. The PHC and CHC should also hold AN mother clinic and action should be taken as per the progress like in normal cases – regular visits to PHC – Vitals and investigations on all visits – If the mother found HR in any trimester the birth plan should be changed immediately. The CHC / PHC / DH /MC should all do Birth Plan – delivery of Nutrition Kit @ 3&6 months –Benefits disbursement– After delivery – MBC Kit, JSY, JSSK and Birth Certificate – PN Visit.

In case of High Risk – AN Mother should be referred to higher centre for further management. Follow up HR AN Mother (ANM, SHN, CHN & MO) – 37 Weeks referred to higher centre for delivery plan. The registration is completed in New AN Mother Lab Register. In ANC

Mother Clinic it should be reviewed weekly for high risk. The topics for Review should be All AN mother & nearing EDD with high risk mother on priority, PN mother who got delivered and discharged, SNCU babies that got discharged. This review should be by MO. Monthly review by BMO – Block wise. Similarly, District review by DHO / CMO. In these review meetings following should be present: MO, Staff Nurse, ANM, SHN of all PHCs under that block.

There should be a High- Risk Pregnancy Register in each PHC / CHC. Phone call tracking at PHC: Covers all AN mother nearing EDD of that respective PHC by Staff Nurse daily.

MCH Call Centre: Timely follow up and intervention of high -risk mothers through periodic calling; follow up of SNCU discharged babies; following up and constant updating of the referred patients for further evaluation and intervention.

Strategy for reducing MMR at CHC / PHC level

- Obtaining weekly ANC Clinic report from all PHCs with line list of newly identified High risk mothers.
- Identified High Risk mothers list is being shared with Rashtriya Bal Swasthya Karyakram (RBSK) team / Mobile Medical Unit (MMU) / Anganwadi Worker (AWW) /ASHA.
- Grand Multiparas are identified and being tracked at all levels for motivation of sterilization.
- Line list of uncovered delivered mothers being shared through WhatsApp from serving tertiary care centres and followed at field for sterilization.
- Delivered performance and intra partum referral details from PHC is being reported by I/c Mos in HUD WhatsApp group on daily basis.
- Weekly review with BMO & MOs by District Health Officer regarding follow- up of antenatal & post- natal mothers.
- District MCH call centres BE created for follow-up of Antenatal & Post natal mothers.
- Private hospitals WhatsApp group should be created to follow the mothers admitted for treatment.
- MCH help desk to be created for continuous monitoring of antenatal and post- natal mothers.
- MCH WhatsApp group to be created to monitor the mothers admitted in PHC's for delivery by using partograph monitoring and timely referral of mothers if tertiary care services are needed.
- Follow up of antenatal and post- natal mothers discharged from secondary and tertiary care centres ANM at field level by ASHA.

Detailed Q&A Framework (Foundational Knowledge Base)

This section serves as the foundational knowledge base for the entire Mukhyamantri Matritva Suraksha Sankalp. It compiles the core questions and evidence-based answers that guide the development of every protocol in the roadmap. The Q&A is organised into thematic sections for easy reference by doctors, nurses, ASHA workers, administrators, and policymakers.

- ***What are the major causes of maternal mortality in India and Uttar Pradesh?***
  Major causes in India (SRS 2021–23 trends and national studies) include obstetric haemorrhage (postpartum haemorrhage, approximately 47%), pregnancy-related infections and sepsis (12%), hypertensive disorders (7%), obstructed labour, unsafe abortions, and anaemia as an indirect cause. In Uttar Pradesh, postpartum haemorrhage dominates, accounting for approximately 50% of all maternal deaths (as per state strategy data), followed by hypertensive disorders and sepsis; anaemia and poor antenatal care exacerbate risks.

- ***What are the top three causes of maternal deaths in the state?***
  In Uttar Pradesh: (1) Postpartum haemorrhage (accounts for approximately 50% of deaths), (2) hypertensive disorders (pre-eclampsia and eclampsia), (3) sepsis and infection.

- **Timeline:** *Launch targeted PPH prevention protocols and training statewide by July 2026; full cause-of-death analysis dashboard to be live by September 2026.*

- ***Explain the Three Delay Model in maternal mortality.***
  The Three Delay Model identifies preventable delays leading to maternal deaths: (1) Delay in the decision to seek care (household level lack of awareness, poverty, cultural barriers, and family decision-making); (2) Delay in reaching the health facility (transport, distance, and cost); (3) Delay in receiving adequate care at the facility (shortage of staff, equipment, 24×7 services, and poor quality).

- ***How can maternal death be prevented at the community level?***
  Through 100% early pregnancy registration via the self-registration application, danger-sign awareness, activation of Village Health, Sanitation and Nutrition Committees (VHSNC), use of the Vulnerability Reduction Fund (₹1.5 lakh per Village Organisation) for local transport, involvement of Pradhans and Self-Help Groups for escorting women, and COMBI behavioural-change campaigns with panchayat and religious leaders.

- ***What indicators are used to measure progress in reducing maternal mortality?***
  Key indicators include the maternal mortality ratio (real-time via application), percentage of institutional deliveries, 4+ antenatal care coverage, skilled birth attendance rate, postnatal care within 48 hours, proportion of high-risk pregnancies identified and managed, C-section audit compliance (Robson criteria), and the timely maternal death review completion rate.

- ***What interventions during antenatal care help reduce maternal deaths?***
  Early registration (before 12 weeks), regular antenatal care visits with blood pressure, weight, and haemoglobin monitoring, high-risk identification, nutrition kits (Moringa, soya, eggs, and iron and folic acid supplements), tetanus toxoid, Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) services, pre-birth planning, and depression screening (Ammamanassu model).

- ***How does institutional delivery reduce maternal mortality?***
  It ensures skilled birth attendance, immediate access to emergency obstetric care, uterotonics for PPH, blood transfusion, magnesium sulphate for eclampsia, and partograph monitoring, thereby eliminating the third delay.
- **Timeline:** *Achieve 100% institutional delivery through the public-private network and ambulance integration by December 2027.*

- ***What role do skilled birth attendants play?***
  They conduct safe deliveries, recognise danger signs early, administer uterotonics, manage basic complications, use the partograph strictly, and refer emergencies promptly, directly reducing PPH and sepsis deaths.

- ***How can postpartum haemorrhage (PPH) be prevented and managed?***
  Prevention: Active management of the third stage of labour and prophylactic uterotonics (Oxytocin), along with partograph use. Management: Uterine massage, additional uterotonics, tranexamic acid, non-pneumatic anti-shock garment (NASG), bimanual compression, and timely referral and blood transfusion.

- ***What is the role of emergency obstetric care?***
  Emergency Obstetric and Newborn Care (EmONC) both basic and comprehensive provides 24×7 life-saving services for haemorrhage, eclampsia, sepsis, and obstructed labour through C-section capability, blood storage, magnesium sulphate, and trained teams, addressing all three delays.

- ***How would you identify high-risk pregnancy using health data?***
  Through application data on maternal age (over 35 or under 18), parity (grand multipara), previous C-section, anaemia (haemoglobin below 11 g/dL), hypertension, diabetes, multiple pregnancy, and adverse obstetric history; dynamic weekly line lists are generated accordingly.

- ***What indicators would you track in a maternal death surveillance system?***
  Number and causes of deaths, delays involved (Three Delay Model), place of death, facility readiness score, time from complication to death, and post-audit action taken.

- ***How can a real-time data dashboard improve the maternal health programme?***
  It provides instant high-risk alerts, monitors antenatal care completeness and referrals, flags district-level variations, tracks ambulance response time, and enables data-driven resource allocation.

- ***How would you analyse district-level variation in maternal deaths?***
  Via the application dashboard showing the maternal mortality ratio per district and block, cause-wise breakdown, institutional delivery percentage, high-risk pregnancy management rate, and referral response time; monthly reviews are conducted under District Health Officer leadership.

- ***How can artificial intelligence or predictive analytics help identify high-risk mothers?***
  AI analyses historical and real-time parameters (blood pressure, haemoglobin, age, parity, and previous complications) to generate risk scores and predict PPH and eclampsia weeks in advance, triggering alerts to ASHA workers, ANMs, and the War Room for immediate action.

- ***If you are given a district with high maternal mortality, what would be your first three interventions?***
  Launch a unified mobile application for 100% self-registration and tracking; (2) strengthen the 108 and 102 ambulance network with zero-delay protocols and 24×7 First Referral Unit (FRU) functionality; (3) roll out mandatory PPH training and confidential death audits with accountability.

- ***How would you improve referral systems for obstetric emergencies?***
  Define clear standard operating procedures, create Red-Alert multidisciplinary WhatsApp groups, implement pre-birth planning with designated Comprehensive Emergency Obstetric and Newborn Care (CEmONC) facilities, and integrate real-time application-based ambulance tracking.

- ***How can community health workers like Accredited Social Health Activists (ASHAs) help reduce maternal deaths?***
  ASHAs register pregnancies early, escort women for antenatal care and delivery, identify danger signs, use the Vulnerability Reduction Fund for transport support, ensure follow-up visits, and track the delivery of benefits.

- ***What strategies would you use to increase early registration of pregnancy?***
  Self-registration in the application with automatic RCH-ID and benefit linkage, SMS reminders, involvement of Pradhans, ICDS workers and VHSNC, Muthulakshmi-style cash incentives, and community rallies.

- ***How would you improve transport for emergency delivery cases?***
  Strengthen 108 and 102 services with dedicated neonatal ambulances, make vehicles available for antenatal care check-ups, integrate real-time tracking in the application, and utilise the Vulnerability Reduction Fund for last-mile support.

- ***How can mobile applications or digital tracking systems help pregnant women?***
  They enable self-registration, antenatal care reminders, benefit tracking (Janani Suraksha Yojana, Janani Shishu Suraksha Karyakram, and Ayushman Bharat), danger-sign education, one-tap ambulance request, and direct linkage to the designated ANM, doctor, and facility.

- ***How would you design an AI system to predict maternal risks?***
  Input demographic, clinical, and history data into a machine-learning model trained on past maternal mortality cases to generate a risk score; alerts are then sent to the ASHA worker, ANM, and War Room for immediate action.

- ***What kind of data integration is needed between hospitals and primary health centres?***
  Seamless real-time linkage of Ayushman Bharat, HMIS, RCH, Civil Registration, and the new application, so that antenatal care records, referrals, deliveries, and deaths are automatically synchronised and visible to all stakeholders.

- ***How can telemedicine support high-risk pregnancy management?***
  By enabling virtual consultations with specialists for remote high-risk pregnancy cases, remote blood pressure and glucose monitoring, decision support for ANMs, and follow-up without the need for travel.

- ***How do you handle a shortage of doctors in rural areas?***
  Task-shifting to trained nurses and ANMs, telemedicine linkage to specialists, empanelment of Ayushman Bharat private hospitals, and mentoring through champion doctors.

- ***How would you motivate frontline workers to track pregnant women?***
  Monthly performance dashboards showing lives saved, recognition awards, performance-linked incentives, regular training, and supportive WhatsApp groups.

- ***What steps would you take if maternal deaths are under-reported?***
  Make reporting mandatory through the application with cross-verification against Civil Registration and Ayushman Bharat data, conduct community-level verbal autopsies, and enforce strict accountability for misreporting.

- ***How would you co-ordinate between the health department, district administration, and NGOs?***
  Form a District Task Force chaired by the District Magistrate with monthly joint reviews, a single application platform for all stakeholders, defined roles for NGOs (awareness and mentoring), and direct Chief Minister-level oversight.

- ***What would be your strategy to reduce the maternal mortality ratio by 50%?***
  Implement the four-pillar framework (Antenatal Care, Total Digitalisation, Clinical Care, and Logistics) with time-bound targets, War Room monitoring, monthly state-level reviews, and public-private integration.

- ***How would you monitor the performance of district hospitals?***
  Track LaQshya and NQAS certification, Robson C-section audits, institutional delivery rates, Emergency Obstetric Care (EmOC) functionality, maternal death review completion, and live dashboard key performance indicators.

- ***How can you ensure accountability after a maternal death audit?***
  Conduct confidential "no names, no blame" audits, publish systemic gap reports every five years, link preventable deaths to facility performance scores, and take corrective action within 30 days.

Summary of Actions

1. Antenatal Care

Early, high-quality antenatal care is the foundation of a low maternal mortality ratio.

- Achieve 100% early pregnancy registration (before 12 weeks) through the Mukhyamantri Matritva Suraksha Sankalp App with a self-registration option.
- Conduct fixed-day antenatal clinics every Tuesday (and Thursday if needed), with due lists prepared by staff nurses and automated phone reminders.
- Identify high-risk pregnancies weekly, generate line lists, and share them immediately with RBSK teams, Mobile Medical Units (MMUs), Anganwadi Workers (AWWs), and Women Health Volunteers.
- Implement pre-birth planning for every mother in the application (non-high-risk at CHC or private level; high-risk at CEmONC level).
- The total expected delivery in State should be divided among all the health facilities including Medical Colleges, Institutions, and hospitals.
- Provide nutrition kits, Ayush kits, kit on delivery and antenatal diet support, PMSMA services, and the full benefits of existing schemes (JSY, JSSK, and PM-JAY).
- Track grand multiparas at all levels for sterilisation motivation.
- Run continuous COMBI behavioural-change campaigns with panchayat and religious leader engagement, and hold rallies in high-risk blocks under the theme "Early Beginnings, Hopeful Futures".

2. Digitalisation

- Roll out the Mukhyamantri Matritva Suraksha Sankalp Application with live dashboards for active antenatal mothers, high-risk flags, antenatal care visit entry, delivery entry, and data completeness tracking.
- Establish a dedicated War Room at NHM and its digital twin at the State Transformation Commission, integrated with the 102 Call Centre for 24×7 real-time monitoring.
- Set up District MCH Call Centres in all districts for daily follow-up of antenatal and postnatal mothers, with a target of a minimum of 200 calls per district per day.
- Create operational WhatsApp groups for high-risk tracking, Red-Alert multidisciplinary co-ordination, private hospital obstetrics and gynaecology, and MCH partograph monitoring.
- Establish a central MCH Help Desk for continuous monitoring of all cases.

3. Clinical Care

- Implement confidential "no names, no blame" Maternal Death Audits (including the private sector), with desk reviews every three months and full analytical reports every five years.
- Audit every government C-section using the modified Robson criteria, obtain the opinion of two consultants, and mandate the most senior obstetrician for all primary lower-segment C-sections (LSCS).
- Strengthen the entire newborn-care network, including Special Newborn Care Units (SNCUs), Newborn Stabilisation Units (NBSUs), Newborn Care Corners, Milk Banks, District Early Intervention Centres (DEICs), and dedicated neonatal 108 transport.
- Deploy dedicated obstetric physicians for high-risk complications (for example, percutaneous

transmitral commissurotomy for antenatal cardiac cases) and enforce strict partograph use.

- Establish structured postnatal clinics on the 15th day and between the 35th and 42nd day for all mothers.
- Provide comprehensive family planning services and online continuing medical education (CME) on the prevention of preventable maternal deaths.

4. Logistics

- Strengthen 108 and 102 ambulance services with zero-delay referral protocols to the nearest functional CEmONC facility and dedicated neonatal transport.
- Ensure a continuous 24×7 supply of disposable delivery kits, mother-baby care kits, belt napkins, and essential drugs at every delivery point.
- Fully implement the Janani Shishu Suraksha Karyakram (JSSK) free drop-back transport and timely cash assistance under maternity benefit schemes.
- Integrate all existing Ayushman Bharat private hospitals through the application for birth-planning data sharing and seamless referrals.
- Conduct weekly District Health Officer (DHO) reviews of high-risk cases nearing the estimated date of delivery, discharged postnatal mothers, and SNCU babies.
- Build an unbroken continuum of care from the Family Health Centre (FHC) through the Community Health Centre (CHC) to the CEmONC facility and Medical College Hospital.

Postpartum Hemorrhage

Introduction

PPH is defined as the loss of 500 ml or more of blood from the genital tract after a vaginal delivery or in excess of 1000ml in caesarean delivery.

Incidence of PPH is about 5-8% in India.

Etiology of PPH

Primary PPH

- Uterine atony 70-80%
- Tissue trauma
- Retained placental tissue
- Coagulation defects

Secondary PPH

- Retained placental bits
- Metritis

Risk factors for PPH

- Poor maternal nutrition
- Anaemia
- Inadequate antenatal supervision
- Mismanaged III stage of labour
- Sometimes it may occur in women with no risk factor at all.

Prevention Strategies of PPH

- Birth preparedness
- Skilled provider at childbirth
- Treatment of anaemia
- Avoid unnecessary procedures (e.g. episiotomy)
- Active management of third stage of labour
  - Oxytocin 10 units IM
  - Controlled cord traction
  - Fundal massage after delivery of placenta

Laboratory testing includes the following-

- Complete blood count (CBC) with platelet count and differential cell count
- Coagulation studies including prothrombin time (PT), fibrinogen level and D- dimer
- Blood urea nitrogen (BUN) and creatinine
- Liver function tests

Comprehensive Emergancy Obstetric and Newborn Care

Management of PPH

- Call for Help, RIA - evaluate vital signs: PR, BP, RR & Temp
- Establish two I.V. lines with wide bore cannulae (16-18 gauge)
- Draw blood for grouping & cross matching
- If heavy bleeding P/V, infuse NS/RL 1L in 15-20 minutes
- Give O2 @ 6-8 L /min by mask, Catheterize
- Check vitals & blood loss every 15 min, Monitor input & output

↓

- Give Inj. Oxytocin 10 IU IM (if not given after delivery)
- Start Inj. Oxytocin 10 IUin 500 ml RL @ 40-60 drops per minute
- Give Tranexemic acid 1gm in 100 ml NS IV over 10 min, repeat another dose after 30 min of first dose, if required
- Check to see if placenta has been expelled

↓

Placenta not delivered

↓

- Continue Oxytocin
- Do P/V examination to rule out inversion of uterus
- Attempt Controlled Cord Traction

↓

Placenta not delivered
- **Do MRP under anesthesia**
- Give IV antibiotics

Placenta delivered
- Continue Uterine massage & Oxytocin

Placenta delivered

↓

- Massage uterus and continue oxytocin drip (not to exceed 100 IU in 24 hrs)
- Examine placenta & membranes for completeness (if available)
- Explore uterus for **Retained placental bits** – if present, evacuate uterus

↓

P/A for uterine consistency

↓

Uterus well contracted **(Traumatic PPH)**

↓

- Look for cervical/ vaginal/ perineal tear - Repair tear, Continue Oxytocin
- Scar dehiscence / Rupture uterus – Laparotomy

Uterus soft flabby **(Atonic PPH)**

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Manage as Atonic PPH Chart

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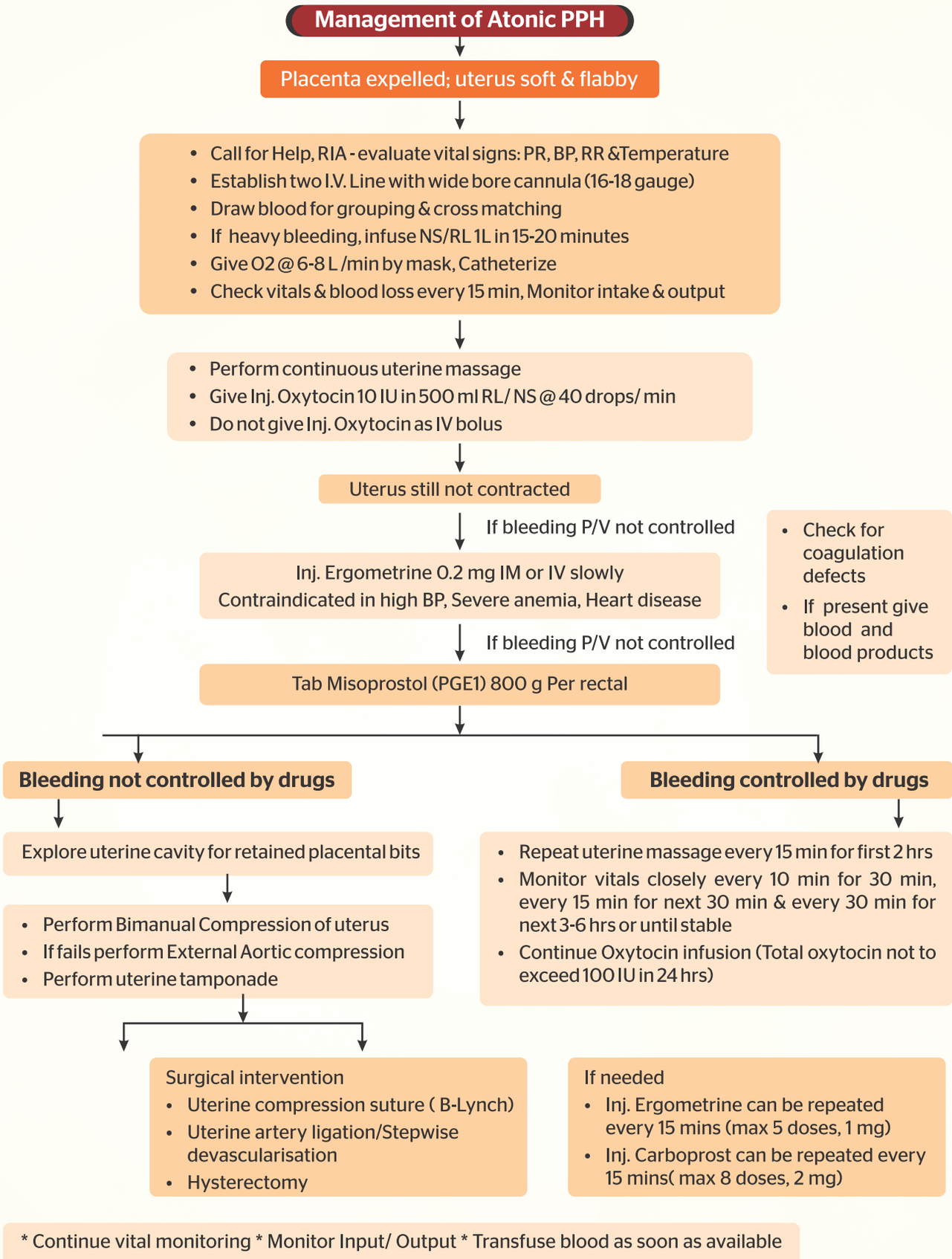
- Blood transfusion if indicated

If bleeding continues check for Coagulopathy

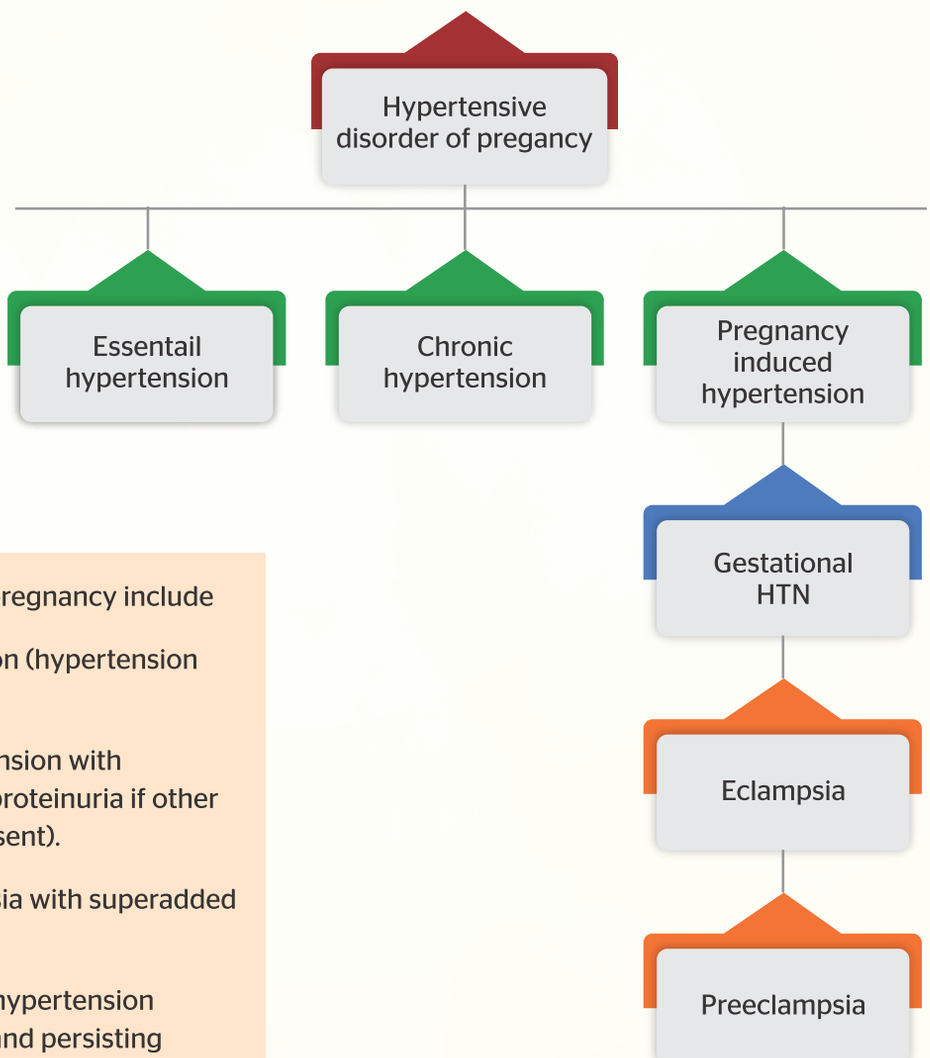

Management of Atonic PPH
Placenta expelled; uterus soft & flabby
• Call for Help, RIA - evaluate vital signs: PR, BP, RR &Temperature
• Establish two I.V. Line with wide bore cannula (16-18 gauge)
• Draw blood for grouping & cross matching
• If heavy bleeding, infuse NS/RL 1L in 15-20 minutes
• Give O2 @ 6-8 L /min by mask, Catheterize
• Check vitals & blood loss every 15 min, Monitor intake & output
• Perform continuous uterine massage
• Give Inj. Oxytocin 10 IU in 500 ml RL/ NS @ 40 drops/ min
• Do not give Inj. Oxytocin as IV bolus
Uterus still not contracted
If bleeding P/V not controlled
Inj. Ergometrine 0.2 mg IM or IV slowly
Contraindicated in high BP, Severe anemia, Heart disease
If bleeding P/V not controlled
Tab Misoprostol (PGE1) 800 g Per rectal
• Check for coagulation defects
• If present give blood and blood products
Bleeding not controlled by drugs
Bleeding controlled by drugs
Explore uterine cavity for retained placental bits
• Perform Bimanual Compression of uterus
• If fails perform External Aortic compression
• Perform uterine tamponade
• Repeat uterine massage every 15 min for first 2 hrs
• Monitor vitals closely every 10 min for 30 min, every 15 min for next 30 min & every 30 min for next 3-6 hrs or until stable
• Continue Oxytocin infusion (Total oxytocin not to exceed 100 IU in 24 hrs)
Surgical intervention
• Uterine compression suture (B-Lynch)
• Uterine artery ligation/Stepwise devascularisation
• Hysterectomy
If needed
• Inj. Ergometrine can be repeated every 15 mins (max 5 doses, 1 mg)
• Inj. Carboprost can be repeated every 15 mins(max 8 doses, 2 mg)
* Continue vital monitoring * Monitor Input/ Output * Transfuse blood as soon as available

Hypertensive Disorders of Pregnancy

The hypertensive disorders of pregnancy include Chronic Hypertension (elevation of the BP before 20 weeks of gestation) and Gestational Hypertension (elevation of the BP after 20 weeks of gestation).

The possible presentations of hypertensive disorders of pregnancy are:

- A pregnant woman has an elevated B P.
- A pregnant woman or a woman, who has delivered recently, complains of severe headache and/or blurred vision.
- A pregnant woman or a woman, who has delivered recently, is found unconscious or is having convulsions.



Hypertensive disorders in pregnancy include

- Gestational hypertension (hypertension with no proteinuria).
- Pre-eclampsia (hypertension with proteinuria or without proteinuria if other features of severity present).
- Eclampsia (pre-eclampsia with superadded convulsions).
- Chronic hypertension (hypertension antedating pregnancy and persisting postpartum).
- Chronic hypertension with superadded pre-eclampsia or eclampsia.

Differential diagnosis of Hypertensive disorders of pregnancy

Symptoms and signs	Probable diagnosis
• BP >140/90 mmHg before 20 weeks of gestation	Chronic hypertension
• BP >140/90 mmHg before 20 weeks of gestation	Chronic hypertension with superimposed pre-eclampsia
• Proteinuria after 20 wks of gestation • Two readings of BP >140/90 mmHg taken at least 4 hours apart, after 20 weeks of gestation • No Proteinuria	Gestational hypertension
• Two readings of BP 140/90 mmHg but <160/110 mmHg, taken 4 hours apart, after 20 weeks of gestation • Proteinuria >1+ (>300 mg/L)	Non severe pre-eclampsia
• BP >160/110 mmHg after 20 weeks of gestation, at least 2 readings taken 10 mins apart. • BP may be >140/90 mm Hg with presence of any of the features of severity • Proteinuria may or may not be present with any of the features of severity • Features of severity: - Headache, new onset cerebral/ visual disturbance, severe persistent right upper quadrant or epigastric pain - Oliguria - Thrombocytopenia (Platelet count < 100000/ L) - Impaired liver function (liver enzymes twice the normal limits) - S Creatinine > 1.1 mg/dL or doubling of levels over previous levels in absence of renal disease - Pulmonary oedema	Severe pre-eclampsia

ECLAMPSIA

Pregnancy with Convulsion and BP ≥ 140/90 mm Hg

Immediate Management

1 Keep women in bed with padded rails on sides, preferably near nursing station

2 Position her on left side, Oropharyngeal airway to be kept patent, Oronasal suction to remove secretions and put airway

3 Ensure preparedness to manage maternal and foetal complications

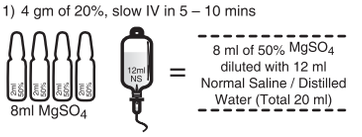
Start Oxygen by mask at 6-8 l/min, Start IV fluids-RL/ NS at 75 ml/hr

Anti Convulsants

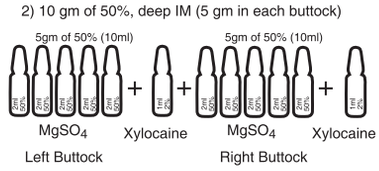
Drug of Choice - Magnesium Sulfate ($MgSO_4$)

- *Loading Dose - Total 14 gm of $MgSO_4$

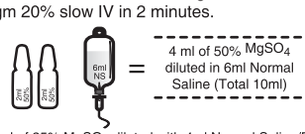
1) 4 gm of 20%, slow IV in 5 – 10 mins



2) 10 gm of 50%, deep IM (5 gm in each buttock)

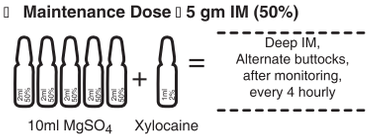


If recurrent fits after 15 – 30 mins of loading dose – repeat 2 gm 20% slow IV in 2 minutes.



*Preparation of IV loading dose with 25% $MgSO_4$; 16ml of 25% $MgSO_4$ diluted with 4ml Normal Saline/Distilled water (Total 20 ml)

- **Maintenance Dose 5 gm IM (50%)**



- **Monitor**

Presence of Patellar Jerks	Respiratory Rate (RR)>16/min	Urine Output ≥30ml/hr in last 4 hours

Continue maintenance dose till 24 hours after last fit/delivery, whichever is later

If Patellar jerk absent or urine output <30 ml/hr withhold MgSO4 and monitor hourly- restart maintenance dose when criteria is fulfilled

If RR < 16/min, withhold MgSO4, give antidote Calcium Gluconate 1 gm IV 10 ml of 10% solution in 10 minutes

Acute hypertensive crisis

SBP ≥ 160 mm Hg or
DBP ≥ 110 mm Hg

Aim for SBP between 130-150 mm Hg DBP 80-100 mm Hg.

- **Inj Labetalol** 20 mg IV bolus slowly over 1-2 min, if BP not controlled, repeat 40 mg after 10 minutes, repeat 80 mg every 10 minutes if BP not controlled (max 300 mg) with cardiac monitoring

OR

- **Inj Hydralazine** 5 mg I/V slowly over 1-2 min, if BP not controlled, repeat 5-10 mg over 2 min after 20 min. If BP not controlled again repeat 10 mg over 2 min (max 20 mg). If no response switch to other antihypertensive drug

OR

- **Tab Nifedipine** orally 10 mg stat, repeat 10-20 mg after 20 min, if BP not controlled repeat 10-20 mg after 20 min (max 30 mg). {Give through Ryle's tube if unconscious patient}. If no response switch to other antihypertensive drug
- Keep record of BP as sometimes there is sudden hypotension
- Continue B.P monitoring every 15 minutes for 2 hours after stabilization then every 30 min for 1 hour. Then every hour, if in labor or 4 hours, if not in labor

Manage patient in Obstetric HDU. Active management of third stage of labour is a must. Use of Methergine is contraindicated.

Supportive management:
Catheterize bladder. Monitor fluids input and output. Maintain airway, regular suction. Monitor vital signs: pulse, BP, temperature, respiration.

If platelet count is less than 30,000 (thrombocytopenia), I/M regime is contraindicated. Use I.V regimen of Zuspan: Magnesium sulphate 4g is given as IV loading dose in the beginning. This is followed by intravenous infusion of Magnesium sulphate at the rate of 1g/hour till 24 hours have elapsed after the last seizure or after delivery, whichever is later.

- Deliver the baby irrespective of gestational age after stabilization and reviewing investigations
- Convulsion-delivery interval should not be more than 12 hours. But can wait for vaginal delivery if patient goes in active labor within this time

Favourable Cervix
Bishop score 6 or more- Cervix soft, short, partially dilated

- Induction with Artificial Rupture of Membranes and Oxytocin
- 2nd stage to be cut short by Forceps/ Ventouse

Unfavourable Cervix
Bishop score 5 or less- Cervix firm, long, closed

- Ripening with Dinoprostone gel/Misoprostol tablet/indwelling catheter and assess after 6 hours

Indication for C-Section: • If fits not controlled/status eclampticus • Foetal distress • Deteriorating maternal condition • Failed Induction • Any other obstetric indication

PRE-ECLAMPSIA

Period of gestation > 20 weeks

SBP ≥ 140mm Hg or DBP ≥ 90 mm Hg or both on 2 occasions, 4 hours apart in a previously normotensive patient

Proteinuria ≥ 0.3 g/24-hour urine specimen or protein/ creatinine ratio ≥ 0.3 (mg/mg) or (30 mg/mmol) in a random urine specimen or dipstick ≥ 2+

Pre Eclampsia without severe features

- SBP ≥ 140mm Hg or DBP ≥ 90 mm Hg or both
- Proteinuria ≥ 0.3 g/24-hour urine specimen or protein/creatinine ratio ≥ 0.3 (mg/mg) or (30 mg/mmol) in a random urine specimen or dipstick ≥ 2+

- Hospitalize, reassure, advice rest
- Start anti-hypertensive agent when SBP ≥ 150mm Hg and or diastolic ≥ 100mm Hg
- Tab Labetalol 100 mg 8–12 hourly (max 2.4 gm/day)

OR

- Tab Alpha Methyldopa 250-500 mg / 6-8 hourly (max 2gm/day) (as per availability)
- Investigate — CBC with peripheral smear and platelet count, LFT, KFT and fundus exam
- BP and urine output monitoring

- Continue hospitalization
- Regular foetal + maternal surveillance

- Maintain DBP 90-100 mm Hg
- No foetal compromise

If disease is severe, manage as severe pre-eclampsia

Deliver at 37 completed weeks

Frequency of Investigation

Parameter	Frequency
Hb	Weekly
Platelets	Weekly
LFT	Weekly
KFT	Weekly
Fundus	Once
NST/BPP	After 32 Weeks
Doppler Study	3 □ 4 Weeks
BP Monitoring	4 times a day

Version 2022

Ministry of Health and Family Welfare
Government of India

LAQSHYA लक्ष्य

SEVERE PRE-ECLAMPSIA

Period of gestation > 20 weeks

SBP ≥ 140mm Hg or DBP ≥ 90 mm Hg or both on 2 occasions, 4 hours apart in a previously normotensive patient

Proteinuria ≥ 0.3 g / 24-hour urine specimen or protein/ creatinine ratio ≥ 0.3 (mg/mg) or (30 mg/mmol) in a random urine specimen or dipstick ≥ 2+

Severe Pre-Eclampsia

- BP ≥ 160/110 mm Hg and Proteinuria ≥ 0.3g/24-hour urine specimen or protein/creatinine ratio ≥ 0.3 (mg/mg) or (30 mg/mmol) in a random urine specimen or dipstick ≥ 2+

OR

- BP ≥ 140/90 mm Hg with danger symptoms like severe headache, blurring, epigastric pain, breathing difficulty and or new onset end organ dysfunction:
  - Platelet count < 100,000/microL
  - Serum creatinine > 1.1 mg/dL or doubling from baseline levels
  - Liver transaminases at least twice the upper limit of the normal
  - Pulmonary edema
  - Cerebral or visual disturbances like severe headache, flashes, partial or complete loss of vision

- Urgent hospitalization
- Give MgSO4 as in Eclampsia
- Start anti hypertensive agent if BP ≥ 150/100 mm Hg. Initiate therapy for acute hypertensive crisis if BP ≥ 160/110 mm Hg as in eclampsia
  - Inj Labetalol 20 mg IV bolus, repeat 40 mg after 10 minutes if BP not controlled, repeat 80 mg every 10 minutes if needed (max 300 mg) with cardiac monitoring

OR

- Inj Hydralazine 5 mg IV slowly over 1-2 min, repeat 5-10 mg over 2 min after 20 min. If BP not controlled, again repeat 10 mg over 2 min (max 20 mg). If no response switch to other antihypertensive drug

OR

- Tab Nifedipine orally immediate release 10 mg stat, repeat 10-20 mg after 20 min. If BP not controlled, repeat 10-20 mg after 20 min (max 30 mg). {Give through Ryle's tube if unconscious patient}. If no response switch to other antihypertensive drug
- Keep record of BP as sometimes there is sudden hypotension
- Continue B.P monitoring every 15 minutes for 2 hours after stabilisation, then every 30 minutes for 1 hour. Then every hour, if in labour or 4 hours, if not in labour

- Continue Tab Nifedepine 10 mg 8 hourly (max 80 mg/day) OR Tab Labetalol 100 mg 8 -12 hourly (max 2.4 gm/day)
- Investigate – CBC with peripheral smear, platelet count, LFT, KFT, S LDH, Coagulation profile and fundus exam
- Urine output charting
- BP monitoring
- Keep the BP between 130-150 systolic and 80-100 diastolic

Frequency of Investigation

Parameter	Frequency
Hb	Alternate days
Platelets	Alternate days
LFT	Alternate days or earlier
KFT	Alternate days or earlier
Coagulation Profile	Weekly profile as needed if parameters change
Fundus	Weekly unless abnormal
NST/BPP	Bi weekly or more if changes seen
Doppler Study	Weekly or frequent as per the findings
BP Monitoring	4 Hrs

Treatment should be individualised

< 24 Weeks

Foetal salvage difficult

Offer termination of pregnancy

≥ 24 - < 34 Weeks

Inj Dexamethasone 6 mg IM repeat every 12 hrs (Total 4 doses)

BP Controlled
- Explain maternal and foetal adverse effect to relatives
- Regular maternal + foetal surveillance

Terminate at 34 weeks

BP Uncontrolled
- Worsening of clinical/ biochemical parameters
- Signs of foetal compromise

≥ 34 weeks

Either induction of labour as per Bishop Score or C-section as per the indication

Version 2022

Annex-II: Questions to be asked and answers to be filled up by calls and meetings with the high-risk mothers

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
1	Ectopic egnancy	1. At how many weeks was the ectopic pregnancy detected in the previous pregnancy?			
		2. By which method was the ectopic pregnancy managed: Laparotomy or Laparoscopy?			
		3. For how many days were you in the hospital?			
		4. Plan for current delivery at hospital or medical college.			
2	Pregnancy induced hypertension (PIH)	1. Do you know you have high blood pressure?			
		2. Are you taking medication regularly for that? From which month of pregnancy you are taking medicines?			
		3. Do you have vomiting, dizziness, swelling in hands and feet, headache, blurred vision, or problem in vision?			
		4. Are you going visiting hospital to receive continuous antenatal care services?.			
		5. Are you following doctors advise for medications, investigations and delivery planning?			
3	Severe Anaemia (<7 gm)	1. Do you know you have anaemia?			
		2: Have you received or are you receiving medicines/injections for this?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		3:Are you aware of the dietary requirements and what all needs to be included in the diet to help improve your anaemia?			
		4: Do you feel severe weakness even when doing normal household chores?			
		5: When was the last blood test done for haemoglobin?			
		6. Are you visiting hospital for regular ANC services?			
		7. Are you following doctors advice for medication, investigations, admission and delivery planning?			
4	Heart Disease Complicating Pregnancy	1. At what age was heart problem detected and how?			
		2. Do you usually take medicines for this? Did you consult any cardiologist before planning pregnancy?			
		3. Where do you get your antenatal care services from? Hospital/Medical College Hospital/Private Hospital. Where are you consulting for heart problem ? At Medical college/private hospital/district hospital			
		4. Have you undergone any surgery for heart disease?			
		5. Do you feel weak, dizzy, or have difficulty breathing when doing normal household chores?			
		6. Do you have bleeding from your gums?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		7. Are you visiting hospital for regular ANC services?			
		8. Are you following doctors advice for medication, investigations, admission and delivery planning?			
5	Antepartum Haemorrhage (APH) Placenta Previa, Abruptio Placenta	1. Is there bleeding currently?			
		2. Is bleeding associated with pain?			
		3. Has this bleeding happened for the first time or their have been earlier episodes of bleeding?			
		4. Do you have high blood pressure or history of trauma?			
		5. Where you visiting hospital for regular ANC check ups?			
		6. Have you got an ultrasound anytime during pregnancy?			
		7. Are you following doctors advice for medication, investigations, admission and delivery planning?			
6	Abnormal Presentation > 37 Weeks (Transverse lie, breech etc)	1. Was abnormal presentation breech/tranverse lie told to you during ANC check ups?			
		2. Where you going for regular ANC check ups ?			
		3. Have you planned and discussed delivery mode, timing and place of delivery with your doctor?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
7	Hyperthyroidism	1. Did you have Hyperthyroidism before pregnancy and what medicines you were taking?			
		Have your doctor changed the dosage after you conceived?			
		2. Are you getting regular ANC check ups and investigations especially thyroid profile as and when advised by your doctor?			
		3. Do you often have tremors, sweating, heat intolerance and what are the changes noticed in pregnancy?			
		4. Are you taking medicines for thyroid disorder as prescribed by your doctor?			
		5. Is the delivery plan discussed with the doctor and relatives?			
8	Bad Obstetric History (BOH)	1. How many abortions have occurred so far?			
		What were the investigations and treatment advised then and by whom?			
		2. Post abortion did you get any tests and medicines ?			
		3. In this pregnancy from when are you getting ANC check ups- As early as pregnancy test being positive or later?			
		4. Are you visiting hospital for regular ANC services?			
		5. Are you following doctors advice for medication, investigations, admission and delivery planning?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
9	Haemoglobinopathies	1. Do you have a difference in blood type?			
		2. In that case, can you feel the baby's movements in the womb?			
		3. Do you have false labour pains?			
		4. Your husband should also be tested for this.			
		5. Does anyone else in your family have such blood variations?			
		6. To know if your child is affected by this disease, special tests should be done at a higher hospital.			
10	Active Tuberculosis (TB) in Pregnancy	1. Did you have tuberculosis before this pregnancy?			
		2. Did you take continuous medication after doing sputum and blood tests for it?			
		3. Does anyone in your house have tuberculosis?			
		4. Are you taking tuberculosis medicines regularly during pregnancy?			
		5. Sputum or blood test should be done as per doctor's advice.			
		6. Delivery should be done only in hospitals.			
11	Auto Immune Diseases (SLE)	1. Did you have this condition before pregnancy?			
		2. Are you continuously taking medications for this?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		3. Is blood pressure high?			
		4. Is the leg swollen?			
		5. Are the baby's movements less?			
		6. Your antenatal checkups and tests for this disease, and delivery should be done only in a medical college hospital.			
		7. You should be admitted to the hospital 7 to 10 days before the delivery date.			
12	HIV/AIDS	1. When did you find out that you have this infection?			
		2. Was your husband also tested?			
		3. Are you taking the medicines for this regularly?			
		4. Do you have children?			
		5. Were they tested immediately after birth?			
		6. This delivery must be in a hospital			
13 (i)	Pyrexia in Pregnancy Malaria	1. How many days has the fever been?			
		2. Is it accompanied by chills?			
		3. Is there excessive sudden sweating?			
		4. Are there many mosquitoes in the area where you live?			
		5. Did they give you blood test and medicine?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		6. You must continue to take those medicines as per the doctor's advice			
(ii)	Dengue	1. How many days has the fever been?			
		2. Is there bleeding in gums, urine, and stool?			
		3. Were you admitted to the hospital and treated?			
		4. Was blood transfused to you in the hospital?			
		5. If you have symptoms like fever, bleeding, go to the hospital immediately			
(iii)	Scrub typhus	1. How many days has the fever been?			
		2. Are there any wound-like patches on the body?			
		3. Was a blood test done in the hospital?			
		4. If any wound-like patches are seen, immediately go to hospital			
(iv)	Typhoid	1. Do you have a fever?			
		2. Were you admitted to the hospital and treated or treated as an outpatient?			
		3. Did anyone in your house have typhoid?			
		4. Maintain personal hygiene, especially keep your hands clean			
		5. Drink plenty of fluids			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
(v)	H1N1	1. Do you have fever and cough?			
		2. Do you have difficulty breathing?			
		3. Did you take medicines?			
		4. Cover your mouth and nose with a handkerchief when coughing			
		5. Go to the hospital immediately if you have difficulty breathing			
14	Hepatitis B/ Jaundice	1. When was Hepatitis B detected?			
		2. Was it detected before or after pregnancy?			
		3. Be sure to do prenatal care in the hospital.			
		4. Delivery should be done in the hospital or medical college hospital one week before the expected date of delivery.			
15	Renal Diseases complication pregnancy	1. When was urinary tract disorder detected during pregnancy?			
		2. Any one of the following: high blood pressure, swelling of legs, face, and passing less urine. Is it there?			
		3. Are you taking medicine before or during pregnancy?			
		4. Need to go for checkup to the medical college hospital once every 15 days.			
		5. Delivery should be kept at the medical college hospital			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		6. Continue to take medicines for urinary problems even after delivery			
16	Congenital Malformation	1. Has anyone in your family had a baby with birth defects?			
		2. Have you done any tests for birth defects?			
		3. Pregnancy care and delivery should be kept at the hospital or medical college hospital			
		4. After delivery, the doctor's advice should be followed			
17	Elderly Primi (>35yrs)	1. Are you going for regular ANC check ups as advised by the doctor?			
		2. Do you have any existing diseases like hypertension, diabetes etc.?			
		3. Are you following doctors advice for medication, investigations, admission and delivery planning?			
18	Gestational Diabetes Mellitus	1. Do you know about your blood sugar level?			
		2. Are you taking tablets or insulin injections for gestational diabetes?			
		3. If you are taking insulin injections, how many times a day, and what amount are you injecting?			
		4. Who is injecting you?			
		5. If you are a tablet user, how many tablets are you taking per day?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		6. From where are you getting the tablets or insulin medicine? Primary Health Center/Hospital/Medical College Hospital/Outside pharmacy			
		7. Do you have any dizziness or vertigo?			
		8. How many times a day do you urinate?			
		9. How often do you get your blood test done?			
		10. Where do you get the blood test done?			
19	Previous LSCS	1. Is this your second or third pregnancy?			
		2. In your previous delivery, in which year, in which hospital, where was the LSCS performed?			
		3. How many days did you stay in the hospital?			
		4. Where do you get your regular pregnancy care services?			
		5. During the current pregnancy, are you going to a hospital or medical college hospital for checkups?			
		6. Do you have any pain in the scar from the surgery you had?			
		7. Where have you decided to have the current delivery?			
20	Multiple Pregnancy	1. Do you know that you have more than one baby/twins in this pregnancy?			
		2. Did you have twins in your past or previous pregnancy?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		3. How many years has it been since you got married?			
		4. Is there a history of twins in your family?			
		5. Did you take any medicines to have a baby?			
		6. Can you feel the baby moving?			
		7. If you have amniotic fluid or blood coming out of your vagina, you should go to the medical college hospital immediately.			
		8. Where are you seeking your prenatal care?			
		9. If you have any problems, you should go to the hospital or medical college hospital and show them.			
		10. You should have your delivery at the hospital or medical college hospital			
21	Epilepsy	1. Since when have you been having seizures?			
		2. How long have you been taking medicine?			
		3. Where do you get these medicines from? - Hospital/medical college			
		4. Are you currently taking epilepsy medication while pregnant?			
		5. When did you last have a seizure?			
		6. Do you know what to do if you have a seizure?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		7. You should be admitted to the hospital or medical college hospital one week before the expected date of delivery and have the delivery. Do you know that having a short height will cause problems during delivery?			
22	Short Primi (Height Less than 145 cm)	1. Have you visited a hospital/medical college hospital for antenatal care services?			
		2. Must be admitted to the hospital/medical college hospital before the due date of delivery			
		3. Do you know that having a short height will cause problems during delivery?			
23	Intra Uterine Growth Restriction (IUGR)	1. As the baby's growth is less, continue to check and monitor blood pressure (BP)			
		2. You go to the hospital and get an antenatal checkup.			
		3. Consume the nutrient powder provided at AWC.			
		4. Check and monitor the baby's growth at PHC or hospital			
		5. Consume nutritious food			
24 (i)	Hydramnios (Oligo)	1. Due to less amniotic fluid and baby's growth, continue to check blood pressure (BP) Test and monitor			
		2. You go to the hospital and do a pregnancy test.			
		3. Eat the nutritious flour provided at AWC.			
		4. Monitor the baby's growth by testing at PHC or hospital.			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		5. Eat nutritious foods			
24 (ii)	Hydramnios (Poly)	1. Since there is a lot of amniotic fluid, have you gone to the hospital to check the baby's growth and defects?			
		2. As there is a possibility of sudden rupture of the amniotic sac and leakage of amniotic fluid, do not do hard work.			
		3. Should be admitted to hospital/medical college hospital before delivery date			
25	Multipara > Gravida 4/ HOB	1. How many children do you have who are healthy?			
		2. Did you follow any family welfare methods?			
		3. To prevent anaemia, take iron-rich foods and tablets regularly.			
		4. Should be admitted to the hospital and medical college hospital before the date of delivery and delivered.			
		5. It is better to have permanent family welfare surgery after delivery.			
26	Hyperthyroidism	1. Before pregnancy, did you have Hyperthyroidism, did you take any medicine?			
		2. Blood test should be done once a month			
		3. Do you have frequent chest palpitations?			
		4. Antenatal examination and Thyroid blood test must be done regularly.			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		5. Medicines should be continued even after delivery. Delivery should be done in a hospital or medical college hospital.			
27	Differently Abled Mother	1. Did you do blood test, scan test?			
		2. If you have problems, will you go to the hospital?			
		3. If you are taking pills for your health, continue to take them			
		4. Your delivery should be kept in a hospital or medical college hospital.			
28	Pregnancy following long period of Infertility	1. How many years have you been married?			
		2. Have you never been pregnant or had a delayed pregnancy so far?			
		3. Did you do any tests and take medicines to conceive?			
		4. You must go to the hospital for continuous observation and delivery.			
		5. Should be admitted to the hospital 7 to 10 days before the date of delivery.			
29	Pregnancy following assisted reproductive technique	1. How many years have passed?			
		2. Has conception not occurred so far? Has pregnancy occurred?			
		3. Did you take any treatments, tests, medicines for pregnancy?			
		4. Foetal growth must be continuously monitored in the hospital.			
		5. Must be admitted to the hospital 7 to 10 days before the delivery date.			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
30	Teenage Pregnancy (< 19 Years)	1. Do you know that due to your young age, complications may arise during pregnancy and delivery?			
		2. Are you going for your antenatal care as advised by the doctor?			
		3. If there are any disturbances, go to the hospital.			
		4. Delivery should take place in a hospital or medical college hospital one week before the delivery date.			
31	Mild Anaemia	1. Do you know that you have anaemia?			
		2. You should continuously eat iron-rich greens, vegetables, eggs, meat, dried fruits, etc.			
		3. Iron tablets should be taken daily.			
		4. Are you monitoring with Hb test every month?			
		5. Regular antenatal care should be continued.			
		6. Are the baby's movements less frequent?			
32	Intra Uterine Death (IUD)	1. Are you going for your pregnancy care as advised by the doctor?			
		2. Go to the hospital if there are any problems			
		3. Delivery should be done in the hospital or medical college hospital one week before the delivery date			
30	Teenage Pregnancy (< 19 Years)	1. Do you know that due to your young age, complications may arise during pregnancy and delivery?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		2. Are you going for your antenatal care as advised by the doctor?			
		3. If there are any disturbances, go to the hospital.			
		4. Delivery should take place in a hospital or medical college hospital one week before the delivery date.			
31	Mild Anaemia	1. Do you know that you have anaemia?			
		2. You should continuously eat iron-rich greens, vegetables, eggs, meat, dried fruits, etc.			
		3. Iron tablets should be taken daily.			
		4. Are you monitoring with Hb test every month?			
		5. Regular antenatal care should be continued.			
		6. Are the baby's movements less frequent?			
32	Intra Uterine Death (IUD)	1. Are you going for your pregnancy care as advised by the doctor?			
		2. Go to the hospital if there are any problems			
		3. Delivery should be done in the hospital or medical college hospital one week before the delivery date			
33	Post Dated Pregnancy (Beyond 42 weeks)	1. Is the baby's movement less?			
		2. Your delivery should be done in the hospital or medical college hospital.			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
34	Pregnancy Due to Contraceptive Failure	1. Have you confirmed your pregnancy by testing?			
		2. Do you want to have an abortion?			
		3. Do you want to continue the pregnancy?			
		4. Your pregnancy test and delivery should be done in the hospital or medical college hospital.			
35	Moderate anaemia (Hb 7 to 9 grm)	1. Have you taken the iron injection?			
		2. Hb test should be done during pregnancy test			
		3. Green leafy vegetables, vegetables, eggs, meat, dry fruits should be eaten regularly			
		4. Your delivery should be done in the hospital or medical college hospital.			
36	Vesicular Mole	1. Have you confirmed your pregnancy by scan test?			
		2. Special tests should be done at the hospital as per the doctor's advice			
		3. Is there blood flow			
		4. Go for follow-up care as per the doctor's advice			
37	Rh Iso immunization	1. Your husband should also get an Rh blood test done.			
		2. If the Rh is different, you should go to the hospital and get additional tests done.			
		3. If you have already had a delivery, was the child given the Rh vaccine?			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
		4. If this is the first delivery, the baby's Rh type should be tested after delivery.			
		5. If necessary, the Rh vaccine should be given.			
38	Diabetes Mellitus	1. Do you know about your blood sugar level?			
		2. Are you taking tablets for high blood sugar?			
		3. Do you have any dizziness or vertigo?			
		4. How often do you get your blood tested?			
		5. You should be admitted to the hospital or medical college hospital a week before the due date of delivery and have the delivery.			
39	Cephalopelvic disproportion	1. Do you know about having a narrow hip bone?			
		2. Are you regularly getting your antenatal care done at the hospital?			
		3. You should be admitted to the hospital or medical college hospital a week before the due date of delivery and have the delivery.			
40	Weight Above 70KG	1. Tests and ECHO should be done.			
		2. Simple exercise and walking should be done.			
		3. Blood pressure should be checked once every 15 days.			
		4. Delivery should take place in a hospital or medical college hospital.			

S.N	Ante Natal High Risk Condition	Questions	Category		
			Red	Yellow	Green
41	Weight Below 40KG	1. Since you have low weight, you should get tested for tuberculosis and heart diseases.			
		2. You should eat more nutritious food.			
		3. You should regularly consume the nutritious food powder provided at Anganwadi centers.			
		4. Weight should be monitored by checking it once every 15 days.			
		5. Pregnancy care services should be regularly checked at the hospital.			

Source:

1. *The deliberations and presentations in State Level Workshop held on 15.01.2026 at Lucknow*
2. *Lancet Obstet Gynaecol Women's Health 2026 published online on 26.03.2026*
3. *Materials and Informations provided during visit to well performing states.*

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