

स्वास्थ्य आपत्काल तथा विपद् व्यवस्थापन सुमारिका-२०८२

Souvenir: Health Emergency and Disaster Management



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाई

स्वास्थ्य आपत्कालीन कार्यसंचालन केन्द्र

रामशाह पथ, काठमाडौं, नेपाल

स्वास्थ्य आपत्काल तथा विपद् व्यवस्थापन

स्मारिका, २०८२

(HEDMU/HEOC Souvenir-2082)



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई

स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्र

रामशाह पथ, काठमाडौं, नेपाल

स्वास्थ्य आपतकाल तथा विपद् व्यवस्थापन
स्मारिका, २०८२

प्रमुख संरक्षक

मानिनय स्वास्थ्य तथा जनसंख्या मन्त्री प्रदीप पौडेल

संरक्षक

डिल्लीराम शर्मा, सचिव, स्वास्थ्य तथा जनसंख्या मन्त्रालय
डा विकास देवकोटा, सचिव, स्वास्थ्य तथा जनसंख्या मन्त्रालय

सम्पादन तथा तयारी समिति

अध्यक्ष: डा प्रकाश बुढाथोकी, प्रमुख, HEDMU/HEOC

सदस्य: निशान राज गौतम, प्रमुख, NEOC

सदस्य: उपेन्द्र ढुंगाना, NHEICC

सदस्य: डा शुभाष न्यौपाने, NPO/WHO

विज्ञ सदस्य: डा रमेश कुमार महर्जन, त्रि.वि. शिक्षण अस्पताल,

विज्ञ सदस्य: डा सुमना बज्राचार्य, पाटन स्वास्थ्य विज्ञान प्रतिष्ठान,

विज्ञ सदस्य: डा सुरेश शर्मा, राष्ट्रिय चिकित्सा विज्ञान प्रतिष्ठान, वीर अस्पताल

सदस्य सचिव: गौरी प्रसाद आचार्य, शाखा अधिकृत, HEDMU/HEOC

बन्दना भट्ट, जनस्वास्थ्य प्रशासक, HEDMU/HEOC

डा. गौरव देवकोटा, HEO/WHO

संजीव गौतम, IMO/WHO

महेश भट्टराइ, ना.सु., HEDMU/HEOC

प्रकाशक:

नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई

स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्र

रामशाह पथ, काठमाडौं, नेपाल

यस स्मारिकामा प्रकाशित लेख रचनाहरूमा अभिव्यक्त विचार लेखकका निजी हुन् ।

सम्पादकीय

नेपाल सरकार स्वास्थ्य तथा जनसंख्या मन्त्रालय अन्तर्गतको स्वास्थ्य आपतकालीन तथा विपद् व्यवस्थापन इकाई र स्वास्थ्य आपतकालिन कार्यसंचालन केन्द्रद्वारा प्रस्तुत यो स्मारिका केवल दस्तावेज होइन—यो समर्पण, संघर्ष र सफलताको यात्रा हो । हामी सबै पाठकलाई यो स्मारिकामा हार्दिक स्वागत गर्दै तपाईंलाई यस ऐतिहासिक यात्राको साक्षी बन्न आमन्त्रण गर्दछौं । स्वास्थ्य प्रणालीमा भएका सुधारहरू, खासगरी आपतकालिन व्यवस्थापनको क्षेत्रमा गरिएको प्रयास, प्रत्येक नेपाली नागरिकको सुरक्षासँग जोडिएको छ । महामारीको अँध्यारो समयदेखि लिएर प्राकृतिक विपद्का चुनौतीहरूसम्म, हामीले सँगै लड्यौं, सिक्यौं र अघि बढ्यौं । यो स्मारिका त्यही यात्राको प्रतिबिम्ब हो, जसले हामीलाई जहाँ पुर्याएको छ त्यसमा गर्व गर्न पर्याप्त आधार दिन्छ ।

२०७२ को महाभूकम्पको त्रासद क्षणमा सुरु भएको हाम्रो संस्थागत यात्रा आज एक सशक्त प्रणालीमा परिणत भएको छ । कोभिड-१९ को चुनौतीपूर्ण दिनहरूमा रातदिन नभनी खट्ने स्वास्थ्यकर्मीहरूको समर्पण अझै ताजा छ । जाजरकोटको भूकम्प होस् वा डेंगु प्रकोप, हाम्रा समन्वय र प्रतिकार्य प्रणालीहरूले सशक्त भूमिका निर्वाह गरेका छन् । प्रत्येक चुनौतीले हामीलाई निखारेको छ, र आजको स्थिति हाम्रा सामूहिक प्रतिबद्धता र अनुशासनको परिणाम हो । स्मारिकाले ती सबै पलहरूलाई संझनायोग्य बनाएको छ, जहाँ आँसु, हिम्मत र आशा एउटै पृष्ठमा मिसिएका छन् ।

यस स्मारिकाको मूल उद्देश्य विगत दुई वर्षभित्र स्वास्थ्य क्षेत्रद्वारा गरिएको कार्यको अभिलेख राख्नु हो, जुन नीतिगत मार्गदर्शन र ज्ञानको स्रोत बन्ने अपेक्षा गरिएको छ । “आपतकालीन स्वास्थ्य प्रणाली सुदृढीकरण” भन्ने मूल विषयले समेटेका पूर्वतयारी, समन्वय, सूचना प्रवाह, रोग निगरानी लगायतका विषयहरू यथार्थमा आधारित छन् । लेखहरू केवल सूचनामूलक होइनन्, ती अनुभव र भावनाका दस्तावेज हुन्—जहाँ स्वास्थ्यकर्मीको आवाज, एम्बुलेन्स चालकको धैर्यता र समुदायको संयम गुन्जिएको छ । यस स्मारिका नीति निर्माता, अनुसन्धानकर्ता र स्वास्थ्य क्षेत्रमा संलग्न हरेक व्यक्तिका लागि मार्गदर्शनको ज्योति बल्नेछ । यसले ज्ञानको मात्रै नभई साहस र सहकार्यको पनि कथा सुनाउँछ ।

स्मारिकाले टोल फ्री नम्बर ‘१०२’ एम्बुलेन्स सेवा, जी.पी.एस्. ड्याकिड, अस्पताल-पूर्व र अस्पताल-पश्चातका सेवा संरचना, तथा हब-स्याटेलाइट नेटवर्कहरूको विस्तृत प्रस्तुति दिएको छ । यिनै अभ्यासहरू हाम्रो सेवामा गुणस्तर र प्रभावकारिता ल्याउने आधारशिला बनेका छन् । प्रादेशिक स्वास्थ्य आपतकालिन कार्यसंचालन केन्द्रहरू र सोको संजालको निर्माणले संघीय प्रणालीमा समन्वयलाई जीवन्त बनाएको छ । अन्तर्राष्ट्रिय अभ्यासहरूसँग तुलना गर्दा नेपालका केही अभ्यासहरू उदाहरणीय मानिएका छन्—त्यसमा नीतिगत सुधार र व्यवस्थापनको स्पष्ट दिशा पाइन्छ । स्मारिकाको प्रत्येक अनुभागले एउटा आवाज बोलिरहेको छ—“हामी सक्षम छौं, किनभने हामी सँगै छौं ।”

यस स्मारिका निर्माणको शुरुवातदेखि प्रकाशनको अन्तिमसम्म अहोरात्र खटिनुभएका डा गौरव देवकोटा, संजिव गौतम, र महेश भट्टलाई हामी मनैदेखि धन्यवाद दिन चाहन्छौं । स्मारिका निर्माणमा योगदान पुर्याउने स्वास्थ्य आपतकालीन तथा विपद् व्यवस्थापन इकाईका बन्दना भट्ट र गौरी प्रसाद आचार्यज्यूका साथै स्वास्थ्यकर्मी, लेखक, सम्पादक, समन्वयकर्ता, तथा साझेदार संस्थाहरू प्रति हामी गहिरो कृतज्ञता प्रकट गर्दछौं । विपद्का बेलामा अग्रपंक्तिमा खटिने अनुहारहरूको योगदान अमूल्य छ—तिनीहरूको आत्मबल नै हाम्रो सफलताको मेरुदण्ड हो । यो स्मारिका पढेर भविष्यप्रति अझ सचेत, संगठित र जिम्मेवार बन्न प्रेरित हुनेछौं भन्ने आशा हामीले लिएका छौं । चुनौती अझै आउँदै छन्—तर सबैको सहकार्य, सद्भाव र समर्पणले हामीलाई हरेक संकटबाट अघि बढ्न मद्दत गर्नेछ । अन्ततः यो स्मारिका पढ्ने प्रत्येक पाठकलाई हामी आग्रह गर्छौं—यसलाई व्यवहारमा उतारौं, किनभने सशक्त, एकीकृत, र सहृदय प्रतिकार नै जनताको जीवन रक्षा गर्ने शक्तिशाली औजार हो ।

धन्यवाद !!!

हेल्लो स्वास्थ्य



१११५

गुनासो पठाउनुहोस्, हामी समाधान खोज्ने छौं ।



+९७७ ९८५१३३०५९२



hellohealth@mohp.gov.np



@MOHPNEP



घुमपान तथा सुतीजन्य पदार्थको लत त्याग्न परामर्श सेवाको लागि

हेल्प लाईन ११३२

माननीय स्वास्थ्य तथा जनसंख्या मन्त्री प्रदिप पौडेल ज्यूबाट

शुभारम्भ



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

नियमित सञ्चार संवाद तथा अन्तरक्रिया

हेल्लो स्वास्थ्य ☎ 1115

f x @MOHPNEP

✉ mediabriefmohp@gmail.com

हरेक शुक्रवार दिउँसो १:३० बजे

प्रदीप पौडेल
Pradip Paudel

स्वास्थ्य तथा जनसङ्ख्या मन्त्री
Minister for
Health and Population



नेपाल सरकार
Government of Nepal

स्वास्थ्य तथा जनसङ्ख्या मन्त्रालय
Ministry of Health and Population



०१-५-३६२५३४
०१-५-३६२५३४

Website: www.mohp.gov.np

रामशाहपथ, काठमाडौं, नेपाल
Ramshahpath, Kathmandu, Nepal

पत्र संख्या (Ref. No.):

चलानी नं. (Dispatch No.):

मिति (Date): २०८२ असार १३

शुभकामना



नेपाल भौगोलिक रूपमा जलवायुजन्य प्रभावका कारणले हुने सम्भावित जोखिमयुक्त तथा अति संवेदनशील तथा राष्ट्र हो। प्राकृतिक तथा भूकम्प, बाढी, पहिरो, डुबान, महामारी, आगलागीजस्ता विविध प्रकृतिका विपद्हरूका कारण ठुलो क्षति व्यहोर्नुपरेको छ। यस्ता आपतकालीन परिस्थितिहरूले हाम्रो सार्वजनिक स्वास्थ्य प्रणालीलाई अपार चुनौती खडा गर्नुका साथै नागरिकहरूको जीवन, स्वास्थ्य र समग्र सामाजिक संरचनामा गहिरो प्रभाव पार्ने गरेका छन्।

यी सबै चुनौतीहरूको सन्दर्भमा जनस्वास्थ्य सुरक्षालाई सर्वोच्च प्राथमिकता दिँदै मन्त्रालयले विगत वर्षहरूमा आपतकालीन स्वास्थ्य सेवा व्यवस्थापन, पूर्वतयारी, प्रतिकार्य र पुनःस्थापनामा महत्वपूर्ण कदम चालेको छ। यसै सन्दर्भमा, स्वास्थ्य तथा जनसंख्या मन्त्रालयअन्तर्गतको स्वास्थ्य आपतकालीन कार्यसञ्चालन केन्द्र (HEOC) ले विपद् व्यवस्थापन सम्बन्धी स्वास्थ्य क्षेत्रको अनुभव, सिकाइ, चुनौती र अवसरहरूलाई समेटेर तयार पारेको स्मारिका एक ऐतिहासिक दस्तावेज बन्ने विश्वास लिएको छ। यस स्मारिकाले विगतका घटनाबाट प्राप्त अनुभवहरूको आधारमा स्वास्थ्य प्रणालीलाई अझ सुदृढ, प्रत्युत्तरमुखी र दिगो बनाउने दिशामा नीति निर्माणदेखि व्यवहारिक कार्यान्वयनसम्म मार्गनिर्देशन प्रदान गर्नेछ भन्ने विश्वास लिएको छ।

विपद्का बेला स्वास्थ्य सेवा प्रवाहलाई सुनिश्चित गर्नु, जोखिम संचारलाई प्रभावकारी बनाउनु, संवेदनशील समुदायहरूलाई केन्द्रमा राखेर सेवा प्रवाह गर्नु तथा समन्वयात्मक ढाँचामा सबै सरोकारवाला निकायहरूसँग सहकार्य गर्नु आजको आवश्यकता हो। यस कार्यमा निरन्तर खटिएर आम नागरिकको सेवामा लाग्नु भएका (HEOC) साथै मन्त्रालयका सम्पूर्ण राष्ट्र सेवकहरूमा आभार व्यक्त गर्दछु।

अन्त्यमा, म स्वास्थ्य प्रणालीका सबै तहमा संलग्न व्यक्तित्वहरूलाई स्मारिकाबाट प्राप्त सन्देश र मार्गनिर्देशनलाई व्यवहारमा उतार्न अनुरोध गर्दै स्मारिका प्रकाशनका लागि शुभकामना व्यक्त गर्दछु।

धन्यवाद।

२०८२ असार

प्रदीप पौडेल
मन्त्री



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय



शाखा)

फोन नं.

४२६२५१०
४२६२८०२
४२६२७०६
४२६२५३५
४२६२८६२
४२२३३८०

प्राप्त पत्र संख्या :-

पत्र संख्या :-

चलानी नं. :-

रामशाहपथ,
काठमाडौं, नेपाल ।

मिति : २०८२ असार १५

विषय :-

शुभकामना



नेपाल प्राकृतिक तथा मानवजन्य विपद्हरूको उच्च जोखिममा रहेको मुलुक हो । जलवायु परिवर्तनका प्रभाव, भौगोलिक जटिलता तथा शहरीकरणको तीव्र प्रवृत्तिले विपद् जोखिमलाई अझ बढाएको छ । यस्ता आपतकालीन अवस्थाहरूमा जनस्वास्थ्यमा गम्भीर असर पर्ने भएकाले समयमै तयारी, प्रतिकार्य र पुनःस्थापनामा सबै तहका सरकारी तथा निजी निकायबीच सहकार्य अत्यावश्यक छ ।

नेपाल सरकारको विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन ऐन, २०७४ र त्यसअनुसार बनेको विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन कार्यढाँचा (DRRM Framework 2081-2030) ले विपद् व्यवस्थापनको संस्थागत संरचना स्पष्ट पार्दै आएको छ । यस संरचनामा केन्द्र, प्रदेश र स्थानीय तहमा स्थापित आपतकालीन कार्यसञ्चालन केन्द्रहरू (EOCs), विशेषगरी राष्ट्रिय आपतकालीन कार्यसञ्चालन केन्द्रहरू (NEOC) र राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्रधिकरण (NDRRMA) को भूमिका अत्यन्त महत्वपूर्ण रहेको छ ।

स्वास्थ्य तथा जनसंख्या मन्त्रालय अन्तर्गतको जनस्वास्थ्य आपतकाल तथा विपद् व्यवस्थापन इकाइ (HEDMV/HEOC) ले यी सबै संस्थाहरूसँग समन्वय गर्दै, एक स्वास्थ्य दृष्टिकोण, समग्र जोखिम व्यवस्थापन र जनस्वास्थ्य आपतकालमा कार्य गर्दै आइरहेको छ । यस स्मारिकाको प्रकाशनले विगतका अनुभव र सिकाइहरूलाई समेटी आगामी रणनीतिहरूलाई मार्गदर्शन गर्नेछ भन्ने विश्वास लिएको छु । यस स्मारिका 'जनस्वास्थ्य आपतकाल तथा विपद् व्यवस्थापन' स्वास्थ्य क्षेत्रमा नीति निर्माता, कार्यान्वयनकर्ता, अनुसन्धानकर्ता र सरोकारवाला सबैका लागि उपयोगी दस्तावेज हुनेमा म विश्वस्त छु । यस प्रयासमा संलग्न सम्पूर्ण टिमलाई बधाई ज्ञापन गर्दै, आगामी दिनमा थप समन्वित, पूर्वतयारीयुक्त र प्रभावकारीयुक्त स्वास्थ्य आपतकालीन प्रणाली निर्माणका लागि सफलताको शुभकामना व्यक्त गर्दछु ।

धन्यवाद ।

डिल्ली राम शर्मा
सचिवडिल्लीराम शर्मा
सचिव



नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय

(.....शाखा)

फोन नं.

४२६२५५०
४२६२८०२
४२६२७०६
४२६२५३५
४२६२८६२
४२२३५८०

प्राप्त पत्र संख्या :-

पत्र संख्या :-

चलानी नं. :-

रामशाहपथ,

काठमाडौं, नेपाल ।

मिति : २०८२ असार २२

विषय :-

शुभकामना



प्राकृतिक तथा मानव सृजित विपद्को दृष्टिले उच्च जोखिम भएको हाम्रो देशले विगत देखिनै विभिन्न प्रकारका स्वास्थ्य आपतकाल, प्राकृतिक विपद्, महामारी, तथा आकस्मिक अवस्थाहरूको सामना गर्दै आएको छ। यी घटनाहरूले नेपालको स्वास्थ्य प्रणालीको उत्थानशिलता (resilience), प्रतिक्रियाशीलता (responsiveness) र संस्थागत क्षमता (Institutional Capacity) को निरन्तर परीक्षण गरेका छन्। यस्ता चुनौतीहरूको सामना गर्ने क्रममा समग्र स्वास्थ्य क्षेत्रले गरेका जनस्वास्थ्य आपतकालीन पूर्वतयारी, प्रतिकार्य तथा पुनर्लाभ र त्यसलाई पार गर्न नीति, संरचना र कार्यसम्पादनका स्तरहरूमा गरिएका प्रयासहरूको अनुभव, सिकाई, प्रणालीगत अभ्यास र चुनौतीहरूलाई संस्थागत गर्न अत्यन्तै आवश्यक रहेको छ।

स्वास्थ्य तथा जनसङ्ख्या मन्त्रालयले विगत एक दशकयता स्वास्थ्य आपतकाल तथा विपद् व्यवस्थापनको क्षेत्रमा भए गरेका प्रयास, अनुभव, चुनौती र समाधानहरू समेटी प्रकाशन गरेको यस "विपद् स्मारिका" संस्थागत स्मृतीको महत्वपूर्ण दस्तावेज हुने विश्वास लिएको छु। यस स्मारिकामा समावेश गरिएका लेख, अनुभवका उदाहरणहरू, नीतिगत तथा कार्यक्रमगत हस्तक्षेपहरू, बहुक्षेत्रीय समन्वयका अभ्यासहरू स्थानीयदेखि केन्द्रसम्मका संयन्त्रहरूलाई समेटेर प्रस्तुत गरिएको छ। यस स्मारिकाले सम्बद्ध सरोकारवाला सबैलाई स्वास्थ्य आपतकालीन तयारी र प्रतिकार्यमा सक्रिय साझेदारीको सन्देश दिनेछ। यी सबै पहलहरू आपतकालीन अवस्थामा जीवन रक्षा, स्वास्थ्य प्रणालीको दृढता र समुदायस्तरसम्म सेवा प्रवाहमा महत्वपूर्ण प्रभाव पार्ने स्वास्थ्य तथा जनसङ्ख्या मन्त्रालयको प्रतिबद्धता, नेतृत्व र बहुक्षेत्रीय समन्वयको सजीव प्रतिबिम्बको रूपमा रहनेछन्।

प्रस्तुत स्मारिका केवल विगतका प्रयासहरूको दस्तावेजीकरण मात्र नभई भविष्यका चुनौतीहरूलाई अझ प्रभावकारी ढंगले व्यवस्थापन गर्न नीति निर्माता, योजनाकार, निर्णयकर्ता, अनुसन्धानकर्ता, स्वास्थ्य सेवा प्रदायक, सुरक्षा निकाय, अन्तर्राष्ट्रिय साझेदार र समुदायका अगुवाहरूका लागि एक उपयोगी मार्गदर्शन हुनेछ भन्ने विश्वास लिएको छु।

अन्ततः यस यथार्थपरक, प्रेरणादायी र उपयोगी स्मारिकाको निर्माणमा योगदान गर्ने सम्पूर्ण संस्थाहरू, लेखक, विशेषज्ञ र स्वास्थ्य तथा जनसङ्ख्या मन्त्रालयका सबै समर्पित कर्मचारीहरूलाई हार्दिक धन्यवाद ज्ञापन गर्दछु। स्वास्थ्य आपतकालीन जोखिम व्यवस्थापनमा निरन्तर सुधार, सुदृढ प्रणाली र बहुक्षेत्रीय साझेदारीको यात्रालाई अझ द्रुत र समृद्ध बनाउन आगामी दिनहरूमा यस दस्तावेजको निरन्तर र नियमित अद्यावधिक हुँदै जाने समेत विश्वास लिएको छु।

डा. विकास देवकोटा

सचिव



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

फोन नं.

४२६२५६०
४२६२८०२
४२६२७०६
४२६२५३५
४२६२५६२
४२२३५८०

(शाखा)

प्राप्त पत्र संख्या :-

पत्र संख्या :-

चलानी नं. :-



रामशाहपथ,

काठमाडौं, नेपाल ।

मिति : २०८२ असार २३

विषय :-

कृतज्ञता



नेपालमा वर्षेनी बाढी, पहिरो, भूकम्प, महामारी, र सडक दुर्घटनाजस्ता बहु-विपद्का घटनाहरू दोहोरिरहन्छन्। यस्ता स्वास्थ्य आपत्कालीन अवस्थाहरूको प्रभावकारी व्यवस्थापनका लागि २०७२ सालमा स्वास्थ्य मन्त्रालयले विश्व स्वास्थ्य संगठनको सहयोगमा स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्र (HEOC) स्थापना गर्‍यो र २०७५ सालदेखि स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाईसँगै पूर्वतयारी तथा प्रतिकार्यका कार्यहरू गरिरहेको छ। केन्द्रले २०७२ को विनाशकारी भूकम्पदेखि कोभिड-१९ महामारी हुँदै जाजरकोट भूकम्प र पूर्वी नेपालको बाढी-पहिरोसम्ममा विभिन्न निकायहरूसँग समन्वय गरेर सूचना प्रवाह, उद्धार, क्वारेन्टिन व्यवस्थापन र स्वास्थ्य सामग्री आपूर्ति सुनिश्चित गर्दै आएको छ। यसले स्वास्थ्य क्षेत्रका साझेदारहरूबीचको समन्वयलाई समेत सुदृढ गर्दै राष्ट्रिय स्तरमा केन्द्रीय संयोजनकर्ता भूमिका खेलेको छ।

विपद्का बेला मृत्युदर घटाउन गृह मन्त्रालयअन्तर्गतका सुरक्षा निकायहरूको खोज, उद्धार र व्यवस्थापनजस्तै स्वास्थ्य संस्थाहरूको उपचार व्यवस्थापन पनि अत्यावश्यक हुन्छ। यस समन्वयमा जिल्लाका स्वास्थ्य कार्यालय, प्रादेशिक स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्र, र अन्य सरोकारवालाहरूको सहकार्यले महत्वपूर्ण योगदान पुऱ्याउँछ। संघीय संरचनाअनुसार सातै प्रदेशमा प्रादेशिक स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्र स्थापना भइसकेका छन्, जसले स्थानीय तहसम्म तयारी र प्रतिकार्यलाई सशक्त बनाएका छन्। आपत्कालीन अवस्थामा मात्र नभएर स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाईले विपद्पूर्व तयारी, मूल्याङ्कन, आपत्कालीन स्वास्थ्य सामग्री सञ्चिति, आपत्कालीन चिकित्सकीय समूह (EMT) को गठन, तालिम तथा कृत्रिम अभ्यासहरूको समन्वय जस्ता क्रियाकलापहरू सञ्चालन गरी स्वास्थ्य प्रणालीको उत्थानशीलता अभिवृद्धिमा उल्लेखनीय योगदान पनि पुऱ्याएको छ।

स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाई/स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्रको स्थापना देखिका सूचनाहरू; स्वास्थ्य आपत्कालीन तथा विपद् व्यावस्थापन इकाईको आ.व. २०८०/८१-२०८१/८२ का कार्यहरूको अभिलेख; तथा स्वास्थ्य क्षेत्रका सरोकारवाला निकायहरू जस्तै विश्व स्वास्थ्य संगठन (WHO), स्वास्थ्य संस्थाहरू, स्वास्थ्यकर्मी र साझेदार संस्थाहरूको प्रतिकार्य, अनुभव, भोगाइ तथा सिकाईहरूको संग्रहको रूपमा यस "स्मारिका" को प्रकाशन गर्न पाउँदा म अत्यन्तै हर्षित छु। यस "स्मारिका"लाई मूर्त रूप दिन अहोरात्र खटिनुहुने स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाईका सबै सहकर्मी साथीहरूलाई म धेरै धन्यवाद दिन चाहन्छु। मेरा पूर्ववर्ती साथीहरूको प्रयासमा स्थापना र विस्तार भएको यस इकाई/केन्द्रको कार्यगत विस्तार गरी यस इकाई/केन्द्रका कार्यहरू तथा स्वास्थ्य क्षेत्रका विभिन्न निकायहरूको जनस्वास्थ्य आपत्काल तथा विपद् व्यवस्थापन कार्यहरूलाई यस "स्मारिका" को माध्यमबाट विधिसामु चिनाउन पाएकोमा म निकै नै गौरवान्वित छु।

सादर धन्यवाद

४.२.१६/१०

डा. प्रकाश बुढाथोकी

प्रमुख

स्वास्थ्य आपत्कालीन तथा विपद् व्यवस्थापन इकाई/स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्र

22, June 2025



Message from the WHO Representative to Nepal

On behalf of the World Health Organization (WHO Nepal), I extend my sincere congratulations to the Health Emergency Operation Center (HEOC), Health Emergency and Disaster Management Unit (HEDMU) under the of the Ministry of Health and Population (MoHP) on the publication of "Souvenir". This comprehensive document highlights key preparedness and response activities carried out by the HEOC from July 2023–June 2025. It serves not only as a valuable record of achievements but also a learning tool and a source of reflection for future improvements.

Since its establishment in 2014 with support from WHO, the HEOC has played a crucial role in coordinating health responses to various disasters and public health emergencies in Nepal. It has consistently demonstrated its leadership, especially during the COVID-19 pandemic and other major crises by providing timely information, aligning efforts among humanitarian health partners, and has earned the trust of key stakeholders.

Its contributions to strengthening legal frameworks, policies and systems for effective public health emergency management are equally commendable. Over the years, the HEDMU/HEOC has made significant progress in enhancing Nepal's health emergency preparedness and response capacities. These include improved coordination and information management across the HEOC network, strengthened collaboration among the hub and satellite hospitals network, formation of Emergency Medical Teams (EMTs), assessments of pre-hospital care, hospital safety assessments and preparedness, post-hospital and rehabilitative care, strengthening of the Emergency Care System (ECS) and ambulance services. These accomplishments set an example for other WHO Member States working to improve emergency health systems.

WHO has been a committed partner in this journey, providing technical, financial and human resources, in alignment with the recommendations of the International Health Regulations Joint External Evaluation priority actions completed in 2022. Through this close collaboration, we have witnessed substantial progress in preparedness planning, simulation exercises, and the integration of health emergency risk management into national policies and programs. WHO is proud to have supported the development of critical infrastructure, human resources, and coordination mechanisms that underpin the effective functioning of HEDMU/HEOC and its network throughout the country.

This publication is more than a summary of achievements, it is a testament to Nepal's growing ability to anticipate, prepare for, and respond to public health emergencies. I commend the dedication and tireless efforts of the HEDMU/HEOC team, health workers, emergency responders, and government officials who continue to serve at the frontlines of disaster and emergency risk management.

WHO Nepal remains committed to supporting the Government of Nepal in strengthening all technical areas of the International Health Regulations, including strengthening of the Health Emergency Management and related systems, for better preparedness, readiness, and response to future public health emergencies.



Dr Rajesh Sambhajirao Pandav
WHO Representative to Nepal

Message from SEARO



It is with great respect and appreciation that I congratulate the Health Emergency and Disaster Management Unit (HEDMU) under the Health Emergency Operation Center (HEOC) of the Ministry of Health and Population (MoHP), Government of Nepal, on this publication entitled "Souvenir". This compilation of achievements from July 2023 to June 2025 reflects Nepal's firm commitment to strengthening disaster and health emergency preparedness and response at all levels.

Across the South-East Asia Region, countries are increasingly challenged by emerging infectious diseases, natural disasters, the impacts of climate change, and humanitarian crises. In this context, Nepal's proactive steps—ranging from enhanced multi-hazard preparedness planning and simulation exercises to health emergency operations coordination and information communication and management—serve as an inspiring example of leadership and resilience. HEDMU/HEOC has demonstrated exemplary performance in preparedness and response readiness, particularly areas of PHEOCs and EOCs coordination, pre-hospital and emergency care services, hub and satellite hospital networking and coordination, surge capacity deployment, and emergency logistic management, working in close coordination with all levels of WHO and through the effective use of regional emergency funds.

I would like to commend HEDMU/HEOC for its strong coordination and support for organizing different regional programmes led by the WHO South East Asia Regional Office (SEARO) in Nepal, as well as for its active participation in regional and global preparedness and response readiness activities on behalf of SEARO Member States. In recognition of its dedication and leadership, particularly as Nepal's national focal point for the Emergency Medical Teams (EMTs) HEDMU/HEOC was selected as co-chair of the SEARO EMT Strategic Advisory Group.

We recognize the progress made by HEDMU/HEOC under Nepal's multisectoral approach to health security, which aligns with the South-East Asia Regional Roadmap for Health Emergency Preparedness (2020–2025) and the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III). Its work, particularly in coordination with provincial and district-level structures, highlights the importance of decentralized, community-centered, and adaptive health emergency systems.

WHO SEARO remains a committed partner to the Government of Nepal in building capacities under the International Health Regulations (2005), fostering cross-border and cross-sectoral collaboration, and ensuring that preparedness translates into timely and effective responses in times of crisis.

On behalf of the World Health Organization's South-East Asia Regional Office, I commend the dedication, professionalism, and resilience of everyone involved in Nepal's health emergency and disaster management efforts. May this publication inspire continued progress toward a safer, healthier, and more resilient future for all.



Regional Emergency Director
World Health Organization Regional Office for South East Asia

विषयसूची

१	परिचय	
१.१.	स्वास्थ्य तथा जनसंख्या मन्त्रालय - एक परिचय	१
१.२.	स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई - एक परिचय	३
१.३.	प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरू	१७
२.	लेख रचनाहरू	१९
३.	स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरूबाट आर्थिक वर्ष २०८०/८१ - २०८१/८२ मा सम्पादन भएका प्रमुख क्रियाकलापहरू	७६
४.	जनस्वास्थ्य आपतकाल तथा विपद् प्रतिकार्यहरू	८६
५.	HEOC मा कार्यरत प्रमुख र हाल कार्यरत कर्मचारीहरूको विवरण	९०
६.	आपत्कालिन सम्पर्क नम्बरहरू	९३
६.१.	प्रदेश अन्तर्गत स्वास्थ्य हेर्ने मन्त्रालय	९३
६.२.	स्वास्थ्य निर्देशनालय	९३
६.३.	प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रमा कार्यरत सम्पर्क व्यक्तिको विवरण	९३
६.४.	हब अस्पतालमा कार्यरत अस्पताल प्रमुख तथा अस्पताल विपद् सम्पर्क व्यक्तिको विवरण	९४
६.५.	जिल्ला प्रशासन कार्यालय प्रमुखहरूको सम्पर्क नम्बर	९५
६.६.	स्वास्थ्य कार्यालय	९७
७.	फोटो ग्यालरी	१०१

१.१. स्वास्थ्य तथा जनसंख्या मन्त्रालय - एक परिचय

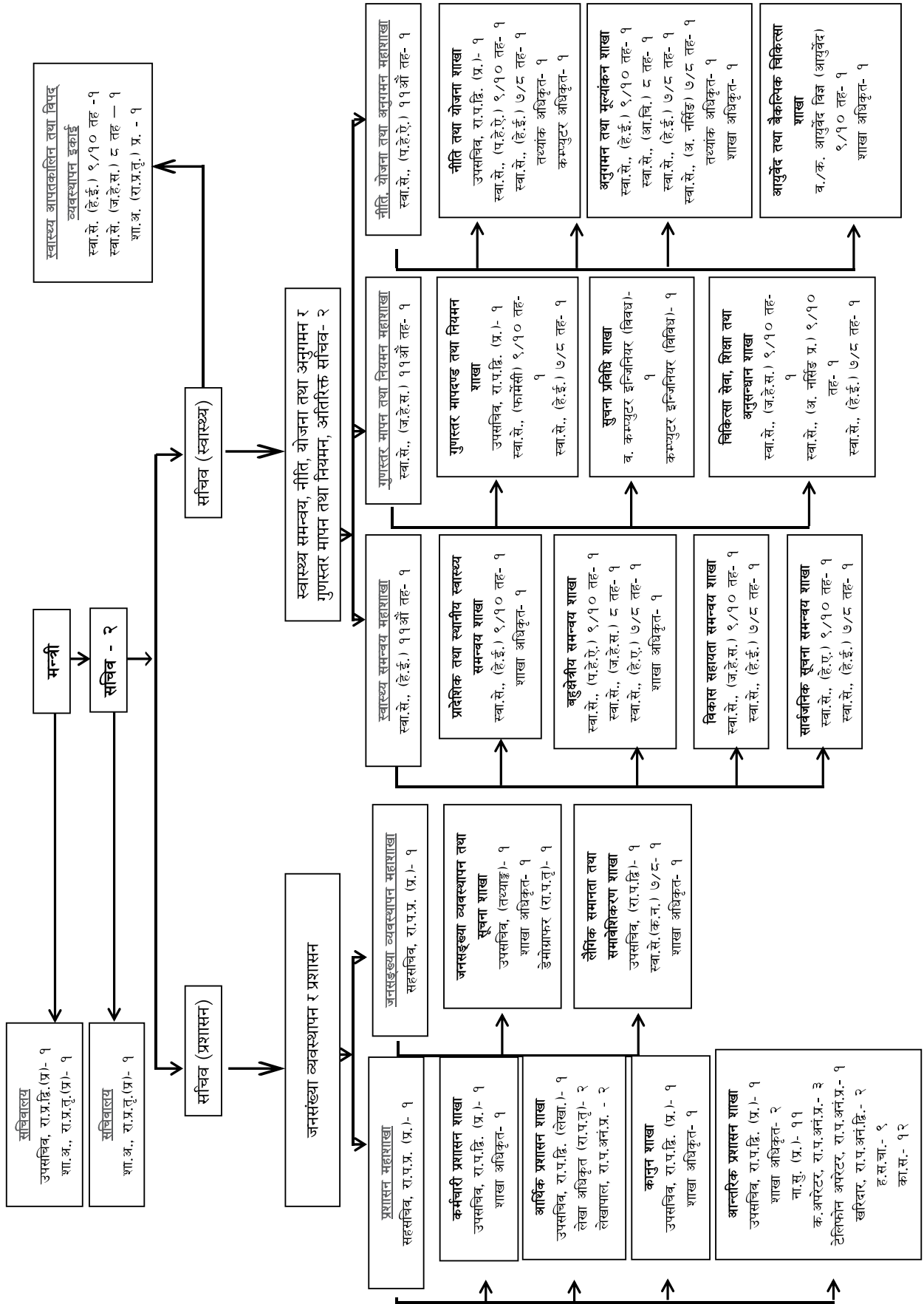
नेपालको संविधानले आधारभूत स्वास्थ्य सेवालाई प्रत्येक नागरिकको मौलिक हकको रूपमा स्थापित गरेको छ । देश संघीय शासन प्रणालीमा गइसकेकोले संघीय संरचनाको वस्तुगत धरातलमा आधारित रही गुणस्तरीय स्वास्थ्य सेवालाई सबै नागरिकको सर्वसुलभ पहुँचमा पुर्याउनु राज्यको दायित्व हो । संविधानबमोजिम राज्यका संघ, प्रदेश र स्थानीय तहले सम्पादन गर्ने कार्यहरूको एकल तथा साझा अधिकार सूची, नेपाल सरकारका नीति तथा कार्यक्रमहरू, नेपालले विभिन्न समयमा गरेका अन्तर्राष्ट्रिय प्रतिबद्धता अनुरूप कार्य गर्दै आएको छ । प्रथम पञ्चवर्षिय योजना (सन् १९५६-१९६२) बाट नेपाल केन्द्रिकृत योजना चरणमा प्रवेश गरेसँगै सन् १९५६ मा नेपालका राष्ट्रिय स्तरको औलो उन्मुलन कार्यक्रम सुरु भएको थियो । त्यसपछि सन् १९६२ मा ठेउला उन्मुलन कार्यक्रम र सन् १९६५ मा क्षयरोग कार्यक्रम, मातृ शिशु तथा परिवार नियोजन कार्यक्रम, र कुष्ठरोग नियन्त्रण कार्यक्रम जस्ता राष्ट्रिय स्तरका कार्यक्रमहरू सञ्चालन भएका थिए । यसरी छुट्टा छुट्टै चलिरहेका कार्यक्रमहरूलाई एकिकृत गर्ने काम सन् १९९३ मा सम्पन्न भएको थियो ।

संस्थागत रूपमा वि.स. १९९० मा औपचारिक रूपमा स्वास्थ्य सेवा विभागको स्थापना भई स्वास्थ्य क्षेत्रमा नयाँ विषयहरूको प्रवेशलाई एकीकृत गरी संचालनका लागि वि.सं. २०११ सालमा स्वास्थ्य मन्त्रालयको स्थापना भए पश्चात विभिन्न संरचनागत सुधार गर्दै देशभरी स्वास्थ्य सेवा प्रवाहलाई निरन्तरता दिइरहेको छ । नेपालको संविधानले स्वास्थ्यलाई मौलिक हकको रूपमा अङ्गिकार गर्दै प्रत्येक नागरिकलाई राज्यबाट आधारभूत स्वास्थ्य सेवा निःशुल्क प्राप्त गर्ने मौलिक हकको प्रत्याभूति गरेको छ । स्वास्थ्य सेवामा सबैको समान पहुँचको व्यवस्था गर्ने, कसैलाई पनि आकस्मिक स्वास्थ्य सेवाबाट वञ्चित नगरिने, प्रत्येक व्यक्तिलाई आफ्नो स्वास्थ्य उपचारको सम्बन्धमा जानकारी पाउने हकको व्यवस्था गरेको छ । साथै नागरिकलाई स्वस्थ बनाउन राज्यले स्वास्थ्य क्षेत्रमा लगानी वृद्धि गर्दै गुणस्तरीय तथा सर्वसुलभ स्वास्थ्य सेवामा समान पहुँच बढाउँदै सबैको स्वस्थ जीवन प्रत्याभूत गरी दिगो बिकास सुनिश्चित गर्नु पर्ने दायित्व रहेको छ । यसैगरी तीनै तहले सम्पादन गर्ने कार्यहरूको सूची, नेपाल सरकारका सान्दर्भिक बिद्यमान नीतिहरू, नेपालले विभिन्न समयमा गरेको अन्तर्राष्ट्रिय प्रतिबद्धताहरूलाई कार्यान्वयन गर्ने विभिन्न ऐन तथा नीतिगत व्यवस्था र सो अनुरूप कार्यक्रमहरूलाई सञ्चालन गर्दै आएको छ ।



अनुसूचि २१.१

स्वास्थ्य तथा जनसङ्ख्या मन्त्रालयको संगठन



१.२. स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई एक परिचय

नेपाल विभिन्न प्रकारका प्राकृतिक विपद्हरूको उच्च जोखिममा रहेको मुलुक हो । भूकम्प र विपद् जोखिम सम्बन्धी अध्ययन अनुसार, नेपाल भूकम्प जोखिमको दृष्टिले विश्वमै ११औं र बाढी जोखिमको हिसाबले ३०औं स्थानमा पर्छ । भौगोलिक र मौसमसम्बन्धी जोखिमहरूको उच्च सम्भाव्यता र पहिलेदेखि रहेको सामाजिक-आर्थिक कमजोरीका कारण नेपाल प्राकृतिक विपद्हरूको दृष्टिले अति संवेदनशील राष्ट्र मानिन्छ । प्राकृतिक विपद्, रोग प्रकोपहरू तथा अन्य आकस्मिक सार्वजनिक स्वास्थ्य जोखिमहरू प्रायः पूर्वानुमान गर्न कठिन हुन्छन्, तर प्रभावकारी तयारी, तत्परता र समयमै गरिएको प्रतिकार्यबाट तिनीहरूको नकारात्मक प्रभावलाई उल्लेखनीय रूपमा न्यूनीकरण गर्न सकिन्छ । नेपालको संविधानको धारा ३५ अनुसार, प्रत्येक नागरिकले राज्यबाट निःशुल्क आधारभूत स्वास्थ्य सेवा प्राप्त गर्ने अधिकार राख्दछ, र कसैलाई पनि आकस्मिक स्वास्थ्य सेवाबाट वञ्चित गरिने छैन भन्ने संवैधानिक व्यवस्थाको कार्यान्वयनका लागि जनस्वास्थ्य सेवा ऐन, २०७५ ले आपत्कालिन स्वास्थ्य सेवा तथा यसको व्यवस्थापन सम्बन्धी आवश्यक प्रावधानहरू गरेको छ ।

नेपाल सरकार, गृह मन्त्रालय अन्तर्गत राष्ट्रिय आपत्कालिन कार्यसञ्चालन केन्द्र (NEOC) को स्थापना वि.सं. २०६७ पौष १७ (सन् २०१०) मा विपद् पूर्वतयारी, प्रतिकार्य तथा समन्वयका लागि केन्द्रीय संयन्त्रका रूपमा गरिएको थियो । सोही अवधारणालाई विस्तार गर्दै, स्वास्थ्य तथा जनसंख्या मन्त्रालय (MoHP) ले स्वास्थ्य क्षेत्रमा विपद् तथा आपत्कालिन अवस्थाहरूको प्रभावकारी व्यवस्थापन गर्नुपर्ने आवश्यकता पहिचान गरी वि.सं. २०७१ चैत्र (सन् २०१४) मा स्वास्थ्य आपत्कालिन कार्यसञ्चालन केन्द्र (HEOC) स्थापना गरेको हो । यसका साथै, International Health Regulations (IHR 2005) अन्तर्गत प्रत्येक राष्ट्रलाई सार्वजनिक स्वास्थ्य आपत्कालको व्यवस्थापन र समन्वयका लागि आधारभूत संरचना र क्षमताहरू विकास गर्नुपर्ने दायित्व छ । सोही सन्दर्भमा, जनस्वास्थ्य आपत्कालिन कार्यसञ्चालन केन्द्र (Public Health Emergency Operation Center) को अवधारणा विकसित गरिएको हो, जसले महामारी, प्राकृतिक विपद् वा अन्य जनस्वास्थ्य संकटका अवस्थामा योजनाबद्ध समन्वय, शिघ्र निर्णय र स्रोत परिचालन सुनिश्चित गर्छ । नेपालमा HEOC को स्थापना र यसको निरन्तर सुदृढीकरणले IHR 2005 का अन्तर्राष्ट्रिय दायित्वहरू पूरा गर्न मद्दत गर्ने मात्र नभई, स्वास्थ्य प्रणालीको दिगोपन र आपत्कालिन प्रतिकार्य क्षमतामा अभिवृद्धि पनि गरेको छ । यस केन्द्रको कार्यक्षमता र दायित्वलाई थप प्रभावकारी बनाउन, वि.सं. २०७५ (सन् २०१८) मा सो HEOC लाई स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई (HEDMU) अन्तर्गत समावेश गरी मन्त्रालयको सचिवको प्रत्यक्ष मातहतमा रहने गरी संस्थागत सुदृढीकरण गरिएको छ । HEOC ले स्वास्थ्य क्षेत्रको बहु-विपद् पूर्वतयारी र प्रतिकार्य संयन्त्रहरू तथा स्थानीय, प्रदेश र संघीय तहका वर्तमान र उदाउँदै गरेका अन्य क्षेत्रका विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन सम्बन्धी संयन्त्रहरू बीच समन्वय तथा सहकार्यको सेतुको रूपमा महत्वपूर्ण भूमिका निर्वाह गर्दै आएको छ । साथै, HEOC ले आपत्कालिन अवस्थामा कार्यसञ्चालनको प्रमुख जिम्मेवारी निर्वाह गर्दै, नीति तथा रणनीतिहरूको कार्यान्वयनमा सहयोग पुर्याउने, योजना निर्माण, उपकरण, तथ्याङ्क प्रणाली लगायतको तयारी तथा अद्यावधिक गर्ने कार्य गर्दछ ।

स्वास्थ्य आपत्कालिन कार्यसञ्चालन केन्द्र (HEOC) स्वास्थ्य तथा जनसंख्या मन्त्रालय (MoHP) अन्तर्गतको घटना आदेश प्रणाली (Incident Command System-ICS) को सचिवालयको रूपमा क्रियाशील छ । HEOC को २०७२ को विनाशकारी भूकम्प, कोभिड-१९ महामारी जस्ता आपत्कालिन अवस्थाहरूमा देखिएको सक्रियता, समन्वय, क्षमता र प्रभावकारी भूमिका मार्फत यसको महत्व स्पष्ट रूपमा स्थापित भएको छ । यस सम्बन्धि सम्पूर्ण कार्यको योजना, समन्वय तथा व्यवस्थापन गर्न प्रमुख समेत ३ जना कर्मचारीको व्यवस्था छ भने हाल प्रमुख समेत १० जना र विश्व स्वास्थ्य संगठनद्वारा हाल ४ जना कर्मचारीको प्राविधिक सहयोगमा केन्द्र संचालनमा रहेको छ ।

स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रले आफ्नो स्थापनाको एक महिना भित्रमा (वि.सं. २०७२ साल बैशाख)

आफ्नो संचालन कार्यविधि निर्माण गरेको थियो । यसै कार्यविधिमा तोकिएका घटना आदेश प्रणाली तथा अस्पताल संजालको २०७२ भूकम्पको प्रतिकार्यमा ठूलो योगदान थियो । २०७२ को भूकम्प प्रतिकार्यका बेला गृह मन्त्रालय लगायत अन्य मन्त्रालय, स्वास्थ्य साझेदार तथा मानवीय सहायता निकायहरु र अन्तराष्ट्रिय चिकित्सकीय टोलीहरूसंग समन्वय गर्न स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रको भूमिका अहम रहेको थियो ।

भूकम्पको प्रतिकार्यमा सिकेका पाठहरुलाई अवलम्बन गर्दै तथा विश्वमा भएका र हुदैँ गरेका प्रगतिहरुलाई समेट्दै स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रले आफ्नो कार्यविधिलाई समयानुकूल परिमार्जन गर्दै आएको छ । २०७५ सालमा संघीय संरचना अन्तर्गत स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई (HEDMU) को व्यवस्था भएपश्चात स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रले यहीँ इकाईअन्तर्गत रही ठूला-साना जनस्वास्थ्य आपत्काल तथा विपद्हरुको प्रतिकार्य गर्दै आइरहेको छ ।

जनस्वास्थ्य सेवा ऐन, २०७५ र नियमावली, २०७७ मा व्यवस्था भए अनुरूप तथा भूकम्पका अनुभवहरुलाई आत्मसात गर्दै इकाईले कोभिड-१९ महामारीमा प्रत्येक हब अस्पतालमा आवश्यक आपत्कालिन चिकित्सकीय समुहहरु गठन गर्नका लागि आवश्यक समन्वय एवं सहजीकरण गरेको थियो । विपद् पछिको ठूलो संख्यामा हुने घाइतेहरुलाई चाहिने उपचारका साथै महामारीका बेला पनि धेरै संख्यामा विरामी हुने हुनाले अस्पताल विपद् पूर्वतयारी तथा प्रतिकार्य योजना विकासमा पनि इकाईले आफ्ना पूर्वतयारीका कार्यहरु गर्दै आएको छ । साथै, इकाईले अस्पताल-पूर्वका सेवाहरुलाई पनि व्यवस्थापन गर्दै समुदाय, एम्बुलेन्स र आकस्मिक मेडिकल टिममा पनि आफ्ना कार्यहरु गरिरहेको छ र सो व्यवस्थापनका लागि आवश्यक कानुनी दस्तावेजहरु तयार गरेको छ वा समयानुकूल परिमार्जन गरिरहेको छ ।

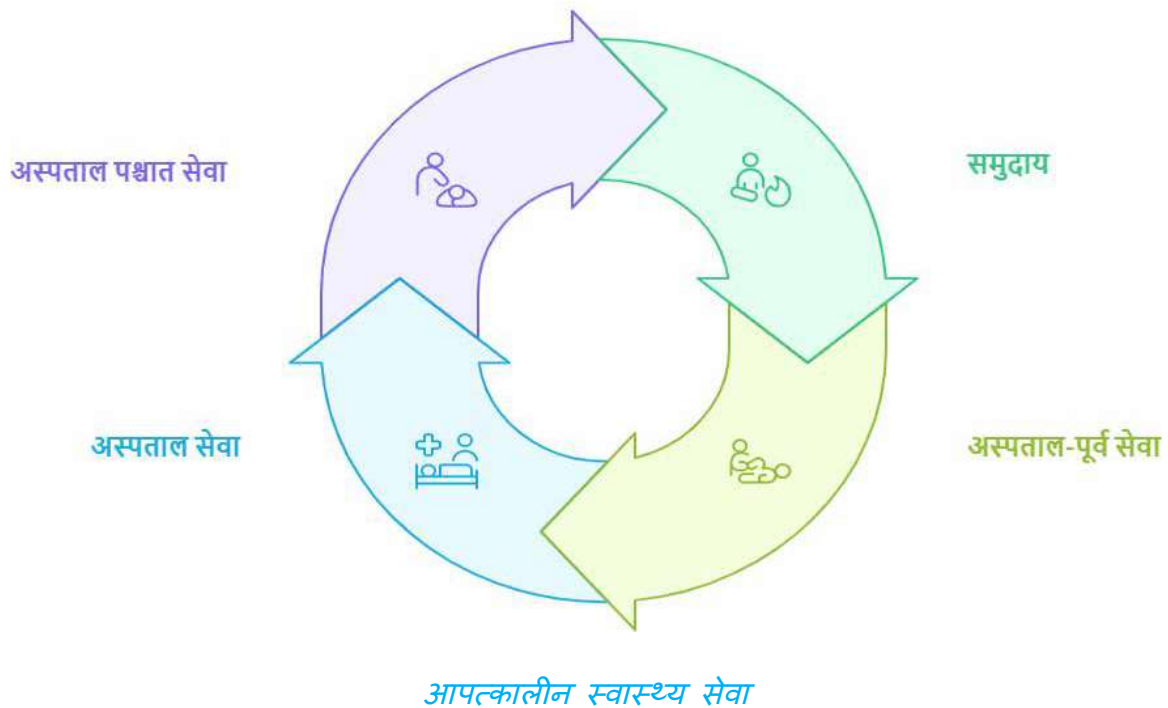
हाल इकाईले राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन केन्द्र, राष्ट्रिय आपत्कालिन कार्यसंचालन केन्द्र, सुरक्षा निकायहरु, हब तथा स्याटेलाइटअस्पताल संजाल र प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरुसँग प्रत्यक्ष तथा प्रदेश आपत्कालिन कार्यसंचालन केन्द्रहरु, जिल्ला आपत्कालिन कार्यसंचालन केन्द्रहरु, जिल्ला स्वास्थ्य कार्यालयहरु,स्थानीय आपत्कालिन कार्यसंचालन केन्द्रसंग प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रमार्फत समन्वय गर्दै आईरहेको छ । इकाईले नेपालका लागि आपत्कालिन चिकित्सकीय समूहको फोकल प्वाइन्टका रुपमा कार्य गर्दै आपत्कालिन चिकित्सकीय समूह परिचालन कार्यविधि, २०८१ निर्माण गरी संघीय र प्रादेशिक स्तरमा परिक्षण पनि गरिसकेको छ ।

जनस्वास्थ्य आपत्कालमा प्रतिकार्यमा खट्ने संस्था तथा संरचनाहरुको काम, कर्तव्यलाई लिपिबद्ध गर्न र विपद्का बेला स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरुको सूचना संचार, सम्प्रेषण, तथा प्रतिकार्यमा एकरूपता ल्याउन क्रमशः जनस्वास्थ्य आपत्काल व्यवस्थापन निर्देशिका,२०८२ र स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्र संचालन कार्यविधि, २०८२ पनि स्वीकृति गरिएको छ । एम्बुलेन्स व्यवस्थापन सम्बन्धी निर्देशिका २०८२ स्वीकृतिको अवस्थामा रहेको छ भने स्वास्थ्य तथा गैर-स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरु बिचमा जनस्वास्थ्य आपत्काल तथा विपद्को बेला छिटो छरितो सूचना आदानप्रदानका लागि सूचना व्यवस्थापन ढाँचा पनि निर्माण गरिएको छ ।

हालसम्म स्वीकृत दस्तावेजहरु

क्र.सं.	दस्तावेजहरु	स्वीकृत मिति
१	राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८	
२	आपत्कालिन चिकित्सकीय समूह परिचालन कार्यविधि, २०८१	२०८१/०६/०८
३	जनस्वास्थ्य आपत्काल व्यवस्थापन निर्देशिका,२०८२	२०८२/०३/१३
४	स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्र संचालन कार्यविधि, २०८२	२०८२/०३/१३

इकाई र केन्द्रले आफ्ना प्रतिकार्यहरुको सिकाई र राष्ट्रिय-अन्तराष्ट्रिय अभ्यासहरुलाई आत्मसात गर्दै आफूलाई थप परिष्कृत बनाउँदै छ र आवश्यकता अनुरूपनै आफ्ना दस्तावेजहरुमा परिमार्जन गर्ने नै छ ।



स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई तथा स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरूले समुदायमा दिइने सेवा, अस्पताल-पूर्व सेवा, अस्पतालमा प्रदान गरिने सेवा र अस्पताल-पश्चातको सेवा प्रदान गर्दछन् । अस्पताल-पूर्व सेवाअन्तर्गत विरामी वा घाइतेलाई घटनास्थल देखि अस्पताल पुर्याउनुसम्म गरिने आकस्मिक उपचार र चिकित्सकीय सेवा पर्दछन् भने अस्पताल-पश्चात सेवाअन्तर्गत बिरामीलाई अस्पतालबाट डिस्चार्ज गरिसकेपछि समय-समयमा पुनः स्वास्थ्य परिक्षण तथा सेवाका लागि प्रदान गरिने स्वास्थ्य सेवा पर्दछन् । समुदाय सेवा अन्तर्गत समुदायमा भएका मानिसहरूले स्वास्थ्यको प्रथम सेवाप्रदायक वा सहजकर्ताको रूपमा कार्य गर्ने व्यवस्था छ भने अस्पताल सेवा अन्तर्गत अस्पतालका सम्पूर्ण स्वास्थ्य सेवा बुझ्नु पर्दछ । जनस्वास्थ्य आपत्काल पूर्व, जनस्वास्थ्य आपत्कालका बेला र जनस्वास्थ्य आपत्काल पश्चात यी इकाई र केन्द्रहरूले निम्न बमोजिमका पूर्वतयारी, प्रतिकार्य तथा पुनर्स्थापनाका कार्यहरू गर्दछन् ।

(क) जनस्वास्थ्य आपत्कालको पूर्वतयारीका अवस्थामा:-

- (१) जनस्वास्थ्य आपत्कालका बेलामा समुदायमा दिइने सेवा, अस्पताल-पूर्व सेवा, अस्पतालमा प्रदान गरिने सेवा र अस्पताल-पश्चातको सेवाका लागि आवश्यक निर्देशिका, मापदण्ड, योजना, कार्यविधि तयार गर्ने ।
- (२) अस्पतालपूर्व सेवा प्रणालीलाई सुदृढिकरण गर्दै देशभरका एम्बुलेन्सहरूलाई प्रेषण केन्द्र (टेलिफोन नम्बर १०२) मार्फत सञ्चालन गर्न व्यवस्था गर्ने ।
- (३) सरकारी, सामुदायिक, निजी तथा शिक्षण अस्पतालहरूसँग समन्वय गरी हब-स्याटेलाइट अस्पताल सञ्जाल निर्माण गर्ने र अस्पतालको विपद् व्यवस्थापन योजना तयार गर्न सहयोग गर्ने ।
- (४) हब तथा स्याटेलाइट अस्पताल सञ्जाललाई व्यवस्थित गर्दै आपत्कालिन अवस्थामा प्रतिकार्यको लागि तयारी अवस्थामा राख्ने ।
- (५) जोखिम मूल्याङ्कनको लागि विकसित गरिएका विधिहरू र अन्तर्राष्ट्रिय स्वास्थ्य नियमावली (International Health Regulation, 2005) को मूल्याङ्कन रूपरेखा (Monitoring and Evaluation Framework) का आधारमा प्राप्त सुझावहरू र प्राथमिकता क्षेत्रहरूलाई ध्यानमा राख्दै आवश्यक कार्ययोजना तयार गरि कार्यान्वयन गर्ने ।

- (६) जनस्वास्थ्य आपत्कालको तयारीका लागि जोखिम विश्लेषण गर्दै नियमित रूपमा नमुना अभ्यास (Simulation Exercise) सञ्चालन गर्न सहयोग गर्ने ।
- (७) जनस्वास्थ्य आपत्काल व्यवस्थापनका लागि आवश्यक क्षमता अभिवृद्धि गर्न सम्बन्धित निकायसँग समन्वय र सहजीकरण गर्ने ।
- (८) जनस्वास्थ्य आपत्कालसँग सम्बन्धित आवश्यक विभिन्न स्रोत-साधनहरूको अनुमान तथा लगत अद्यावधिक राख्ने ।
- (९) जनस्वास्थ्य आपत्कालसँग सम्बन्धित सबै किसिमका तथ्यांकहरू संकलन, अद्यावधिक र विश्लेषण गर्ने ।
- (१०) मौसमी रूपमा देखा पर्ने प्राकृतिक तथा मानवजन्य विपद्हरूको पूर्वसतर्कतासम्बन्धी कार्यका लागि सम्बन्धित निकायहरूसँग समन्वय गरी लक्षित समूहमा जानकारी प्रदान गर्ने ।
- (११) विपद्को पूर्वसूचना प्रणालीको आधारमा तयारी तथा प्रतिकार्यलाई प्रभावकारी बनाउने ।
- (१२) विश्वका कुनै पनि भूभागमा जैविक आतङ्कवाद (Bioterrorism) साथै महामारीको अवस्था सिर्जना भएमा त्यसबाट नेपालमा हुनसक्ने जोखिम विश्लेषणको निम्ति आवश्यक तयारी तथा समन्वय सुनिश्चित गर्ने ।
- (१३) जनस्वास्थ्य आपत्काल व्यवस्थापनका लागि विज्ञहरूको रोस्टरको व्यवस्था गर्ने ।
- (१४) जनस्वास्थ्य आपत्काल व्यवस्थापनका लागि प्रत्येक वर्ष आवश्यकता र क्षमताका आधारमा बजेट व्यवस्थापन गर्ने वा सोका लागि आवश्यक समन्वय गर्ने ।

(ख) जनस्वास्थ्य आपत्कालको अवस्थामा:-

- (१) जनस्वास्थ्य आपत्कालको अवस्थामा मन्त्रालयको इन्सिडेन्ट कमाण्ड सिस्टम (आई.सि.एस्.) सक्रिय भएमा आई.सि.एस्. को सचिवालयको कार्य गर्दै आई.सि.एस्. का सबै निर्णयहरू र अनुमोदन भएको कार्ययोजना कार्यान्वयन गर्ने गराउने ।
- (२) थप जनशक्ति आवश्यक परेमा आई.सि.एस्. को निर्णयअनुसार स्थायी दरबन्दीका कर्मचारीहरू वा आन्तरिक स्रोत वा करार सेवामार्फतका कर्मचारीहरू खटाउने ।
- (३) जनस्वास्थ्य आपत्कालको स्थिति विश्लेषण गरी घटना, रोग वा जोखिम फैलिएको स्थानको सूक्ष्म नक्सा तयार गरी आई.सि.एस्. मा जानकारी प्रस्तुत गर्ने ।
- (४) बहुक्षेत्रीय आपत्कालिन पूर्वतयारी तथा प्रतिकार्य गतिविधिको लागि स्वास्थ्य क्षेत्रको सम्पर्क केन्द्रको रूपमा कार्य गर्ने ।
- (५) जनस्वास्थ्य आपत्कालका बेला गलत सूचना प्रवाह हुन वा अफवाह (infodemic) फैलिन नदिने सम्बन्धमा आवश्यक व्यवस्था गर्ने ।
- (५) सम्बन्धित मन्त्रालय, निकाय तथा अस्पतालहरूसँग समन्वय गरी समग्र प्रतिकार्यलाई प्रभावकारी बनाउने ।
- (६) अस्पतालपूर्व सेवा प्रणालीअन्तर्गत देशभरका एम्बुलेन्सहरूलाई प्रेषण केन्द्रमार्फत प्रत्यक्ष निगरानी र परिचालन गर्ने ।
- (७) अस्पताल सञ्जालसँगको समन्वयमा अत्यावश्यक स्वास्थ्य सामग्री तथा स्रोत साधनहरूको तथ्यांक संकलन र अद्यावधिक गर्ने ।

- (८) अस्पतालहरूको विपद् पूर्वतयारी तथा प्रतिकार्य योजनाको कार्यान्वयनमा सहजीकरण र अनुगमन गर्ने ।
- (९) आपत्कालिन चिकित्सकीय समूहहरूको आवश्यकता भएमा आपत्कालिन चिकित्सकीय समूह परिचालन कार्यविधि, २०८१ अनुसार आपत्कालिन चिकित्सकीय समूह परिचालन गर्ने ।
- (१०) जनस्वास्थ्य आपत्कालको प्रतिकार्य तथा सोको स्रोत व्यवस्थापनका लागि सरोकारवाला निकायसँग समन्वय गर्ने ।

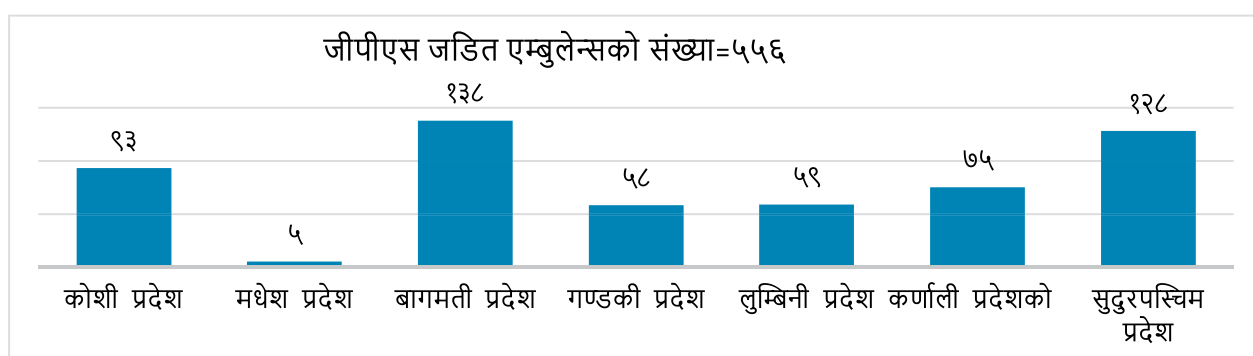
(ग) जनस्वास्थ्य आपत्काल पश्चातको अवस्थामा:-

- (१) अस्पतालपश्चातको विशेषज्ञ सेवाको सम्बन्धमा श्रोत, साधन पहिचान गरी आवश्यक व्यवस्था मिलाउने ।
- (२) जनस्वास्थ्य आपत्कालबाट प्रभावित समुदायको स्वास्थ्य सम्बन्धी पुर्नलाभ तथा पुर्नस्थापनाका लागि आवश्यक समन्वयकारी भूमिका निर्वाह गर्ने ।

समुदाय तथा अस्पताल-पूर्व सेवा (Community and Pre-Hospital)

आवश्यक परेका बेला सहयोग गर्ने समुदायका मानिसहरू नै जनस्वास्थ्य आपत्काल तथा विपद्का बेला घाइते तथा बिरामीहरूको उचित स्वास्थ्य व्यवस्थापनमा प्रथम सहजकर्ता विन्दुको रूपमा अहम् भूमिकामा हुन्छन् । यसलाई मध्यनजर गर्दै स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाईले समुदायमा प्रदान हुने/हुनुपर्ने स्वास्थ्य सेवाको उचित व्यवस्थापनका लागि समुदाय स्तरमा पनि पूर्वतयारी तथा प्रतिकार्यहरूका कार्यहरू गर्दै आइरहेको छ । समुदाय स्तरमा भएका स्वयंसेवीहरू र क्लब र सँस्थाहरूले स्वास्थ्य आपत्कालिन तथा विपद्का बेला गर्ने स्वास्थ्य हेरचाहलाई अझ प्रभावकारी बनाउन इकाईको पहिलमा राष्ट्रिय स्वास्थ्य तालिम केन्द्रले सामुदायिक प्रथम स्वास्थ्य प्रतिकार्यकर्ताको Learning Resource Package (तालिम) निर्माण गरी piloting पनि गरिसकेको छ । इकाईले यही सामुदायिक प्रथम स्वास्थ्य प्रतिकार्यकर्तालाई जनस्वास्थ्य आपत्कालका बेला प्राथमिक स्वास्थ्य सेवा प्रदान गर्ने वा स्वास्थ्य क्षेत्रसँग सम्पर्क गराउन समुदायमा आफ्नो प्रथम सेवा विन्दुको रूपमा क्षमता विकास गरिरहेको छ ।

विरामी वा घाइतेलाई घटनास्थलदेखि अस्पतालमा पुर्याउँदासम्म गरिने आकस्मिक उपचार र चिकित्सकीय सेवा वा अन्तर-अस्पताल स्थानान्तरण गर्नेक्रममा गरिने स्याहारलाई अस्पतालपूर्व सेवा भनिन्छ । एम्बुलेन्स, प्रेषण केन्द्र (टोल फ्री नम्बर १०२) र तालिम प्राप्त प्रेषक, एम्बुलेन्स चालक र स्वास्थ्यकर्मीहरू यस अस्पताल-पूर्व प्रणालीका अभिन्न अङ्गहरू हुन् । एम्बुलेन्सको ड्र्याकिङ, दुरुपयोग नियन्त्रण, र मूल्यांकन तथा अनुगमन प्रणालीलाई सशक्त बनाउन एम्बुलेन्समा GPS (Global Positioning System) को जडान र प्रभावकारी सञ्चालन गरिएको छ भने “१०२” प्रेषण केन्द्रहरूबाट एम्बुलेन्स प्रेषण भइरहेका छन् । स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाईले एम्बुलेन्सलाई बिरामी वा घाइते बोक्ने वा छिटो अस्पताल



पुर्याउने भन्दापनि आवश्यक स्वास्थ्य सेवा प्रदान गर्दै अस्पताल सेवासम्म पुर्याउने माध्यम बनाएको छ ।

स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाईको अगुवाईमा राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८ ले व्यवस्था गरे अनुरूप, हालसम्म राष्ट्रिय तथा प्रादेशिक स्वास्थ्य तालिम केन्द्रहरूले करिब ८०० जना एम्बुलेन्स चालकहरूलाई तीन दिने “एम्बुलेन्स चालक तालिम” (Ambulance Driver Training), करिब १०० जना स्वास्थ्यकर्मीहरूलाई तीस दिने “Basic Emergency Medical Technician (BEMT)” तालिम, र ५० जना प्रेषकहरूलाई तीन दिने “Emergency Medical Dispatch” अभिमुखिकरण तालिम प्रदान गरिसकेका छन्। स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाईले राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८ लाई अध्यावधिक गर्दै एम्बुलेन्स सेवालाई परम्परागत परिचालनमा मात्र सिमित नराखी विद्युतीय एम्बुलेन्स, हेली एम्बुलेन्स र एयर एम्बुलेन्सको परिकल्पना समेत गरिरहेको छ ।

अस्पताल सेवा (Hospital Service)

हब तथा स्याटेलाइट अस्पताल संजाल (Hub and Satellite Hospital Network):

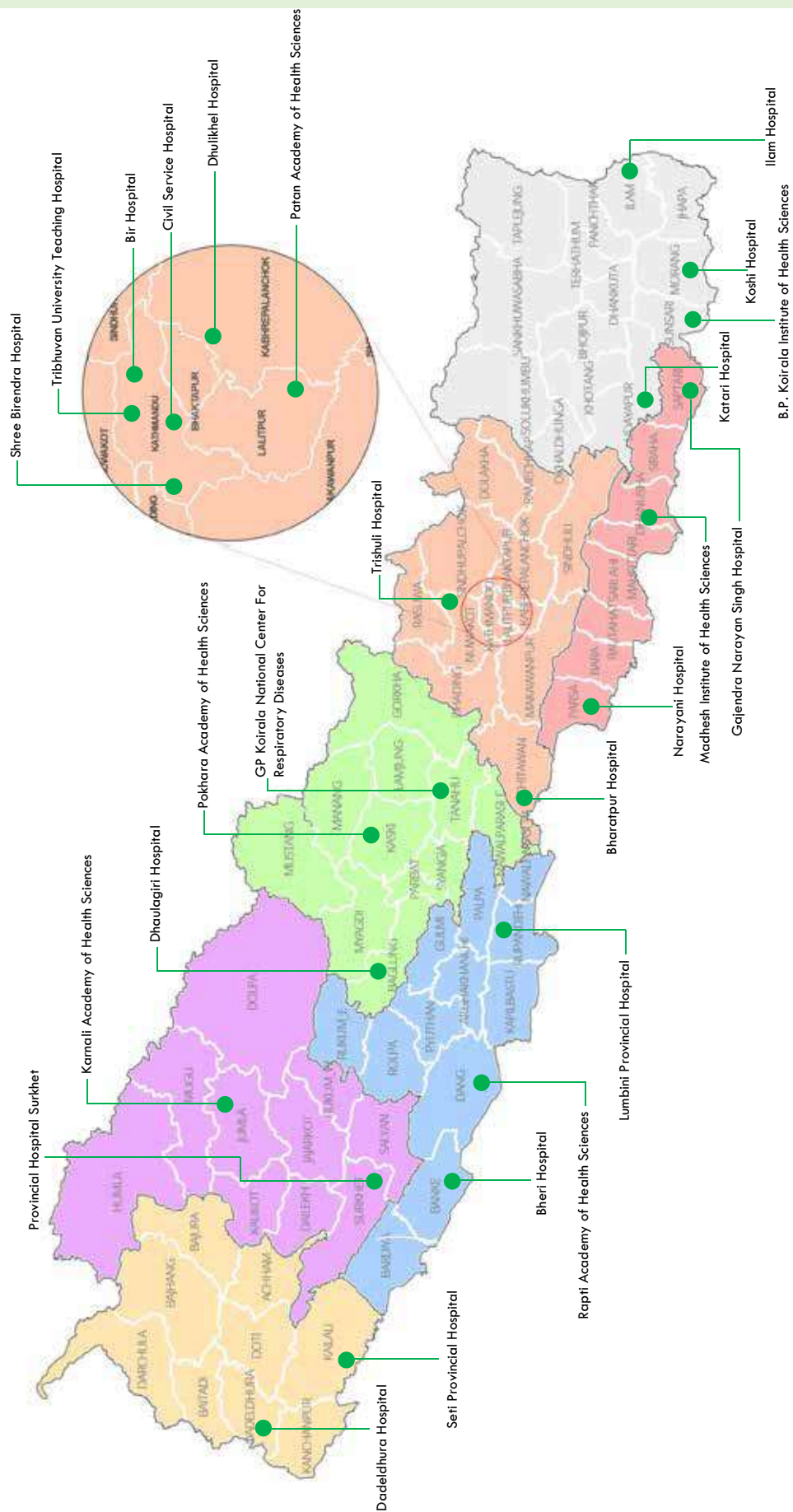
स्वास्थ्य विषयगत क्षेत्रको समन्वय, सहकार्य तथा व्यवस्थापनलाई थप प्रभावकारी बनाउँदै, अस्पतालहरूबाट प्रदान गरीने सेवाहरूलाई समन्वयात्मक ढंगले संचालन गर्ने उदेश्यले हब अस्पताल (Hub Hospital) र स्याटेलाइट अस्पताल (Satellite Hospital) को अवधारणा विकास गरिएको छ ।

वि.स. २०७१ देखि नै विपद् तथा जनस्वास्थ्य आपतकालीन अवस्थामासम्बन्धि पूर्वतयारी तथा प्रतिकार्यलाई सहज, सरल र गुणस्तरीय बनाउन स्वास्थ्य संस्थाहरूबीच समन्वय र सहकार्यको आवश्यकता भए अनुरूप हब तथा स्याटेलाइट अस्पताल संजालको विकास गरिएको हो । यसै अनुरूप हाल देशभर २५ वटा अस्पतालहरूलाई हब अस्पतालको रूपमा जिम्मेवारी तोकिएको छ ।

उक्त अवधारणा अनुसार वि.स. २०७१ सालमा काठमाडौं उपत्यकाभित्रका ६ वटा अस्पताल हरू:- राष्ट्रिय चिकित्सा विज्ञान प्रतिष्ठान, वीर अस्पताल, त्रिभुवन विश्वविद्यालय शिक्षण अस्पताल, निजामती कर्मचारी अस्पताल, पाटन अस्पताल, भक्तपुर अस्पताल र नेपाली सेनाको श्री विरेन्द्र अस्पतालहरूलाई हब अस्पतालको रूपमा जिम्मेवारी तोकिएको थियो । यी अस्पतालहरूले वि.स. २०७२ को भूकम्प पछिको अवस्थामा पूर्व निर्धारित योजनाअनुसार समयमै सेवा प्रवाह, क्षतिको न्यूनीकरण गर्न, समन्वय तथा रेफर सेवामा सहज भएको थियो । उनीहरूको प्रयास सराहनीय भए तापनि, आवश्यक सामग्री र स्रोत साधन व्यवस्थापनका लागि मन्त्रालयसँग समन्वय गर्न कठिनाई भएको देखिएको थियो। यही अनुभवले नेपालको स्वास्थ्य सेवा प्रणालीमा हब तथा स्याटेलाइट अस्पताल सञ्जाललाई राष्ट्रिय स्तरमा विस्तार गर्ने दिशामा महत्वपूर्ण कदम सावित गरेको थियो ।

स्वास्थ्य तथा जनसंख्या मन्त्रालयले समयानुकूल हब अस्पतालहरूको सूची परिमार्जन एवं अद्यावधिक गर्दै आएको छ। वि.सं. २०८० साल जेठ ७ गतेको सचिवस्तरको निर्णयअनुसार, हब अस्पतालहरूको क्षेत्रभित्र पर्ने सरकारी, गैरसरकारी, सामुदायिक तथा निजी स्वास्थ्य संस्थाहरूसँग समन्वय र सहकार्य गरी आपतकालीन सेवा सञ्चालन गर्ने जिम्मेवारी तोकिएको छ। हालसम्म नेपालभर २५ वटा हब अस्पतालहरू सञ्चालनमा रहेका छन्, जसमा काठमाडौं उपत्यकामा ५ वटा हब अस्पतालहरू समावेश छन्। आगामी दिनमा जनसंख्या, भौगोलिक अवस्था, जोखिमको प्रकृति र सेवा आवश्यकतालाई ध्यानमा राख्दै हब अस्पतालहरूको संख्या विस्तार गर्नु अपरिहार्य देखिन्छ।

Network of Hub Hospital in Nepal



हब अस्पतालको क्षेत्र सम्बन्धमा (Catchment Area of Hub Hospitals):-

#	प्रदेश	हब अस्पताल (मुख्य सम्पर्क अस्पताल)	क्षेत्र भित्रका स्याटेलाईट अस्पताल (सरकारी, गैरसरकारी, सामुदायिक तथा निजी स्वास्थ्य संस्थाहरू)
१.	कोशी	ईलाम अस्पताल, ईलाम	ताप्लेजुङ, पाँचथर र ईलाम जिल्ला
२.	कोशी	कटारी अस्पताल, उदयपुर	ओखलढुंगा, खोटाङ, सोलुखुम्बु र उदयपुर जिल्ला
३.	कोशी	वी. पी. कोइराला स्वास्थ्य विज्ञान प्रतिष्ठान	सुनसरी, धनकुटा, संखुवासभा, भोजपुर र तेरथुम जिल्ला
४.	कोशी	कोशी अस्पताल	मोरङ र झापा जिल्ला
५.	मधेश	गजेन्द्र नारायण सिंह सगरमाथा अस्पताल	सप्तरी र सिरहा जिल्ला
६.	मधेश	मधेश स्वास्थ्य विज्ञान प्रतिष्ठान/ प्रादेशिक अस्पताल जनकपुर	धनुषा, महोत्तरी, र सर्लाही जिल्ला
७.	मधेश	नारायणी अस्पताल	बारा, पर्सा र रौतहट जिल्ला
८.	बागमती	भरतपुर अस्पताल	चितवन, नवलपुर, मकवानपुर र गोरखा जिल्ला
९.	बागमती	धुलिखेल अस्पताल	सिन्धुपाल्चोक, काभ्रेपलाञ्चोक, दोलखा, रामेछाप र सिन्धुली जिल्ला
१०.	बागमती	पाटन स्वास्थ्य विज्ञान प्रतिष्ठान	काठमाडौँ, ललितपुर, भक्तपुर र धदिङ्ग जिल्ला (तोकिएका अस्पताल)
११.	बागमती	निजामती कर्मचारी अस्पताल	
१२.	बागमती	वीर अस्पताल	
१३.	बागमती	त्रिभुवन विश्वविद्यालय शिक्षण अस्पताल	
१४.	बागमती	श्री विरेन्द्र सैनिक अस्पताल	
१५.	बागमती	त्रिशुली अस्पताल, नुवाकोट	नुवाकोट र रसुवा जिल्ला
१६.	गण्डकी	धौलागिरी अस्पताल	बाग्लुङ, मुस्ताङ, पर्वत र म्याग्दी जिल्ला
१७.	गण्डकी	जी.पी. कोइराला राष्ट्रिय श्वास प्रश्वास उपचार केन्द्र	गोरखा, लमजुङ, मनाङ र तनहु जिल्ला
१८.	गण्डकी	पोखरा स्वास्थ्य विज्ञान प्रतिष्ठान	कास्की, स्याङ्गजा जिल्ला
१९.	लुम्बिनी	लुम्बिनी प्रादेशिक अस्पताल	रुपन्देही, नवलपरासी, पाल्पा, गुल्मी र कपिलवस्तु जिल्ला
२०.	लुम्बिनी	राप्ती स्वास्थ्य विज्ञान प्रतिष्ठान	रोल्पा, प्यूठान, रुकुम पूर्व, अर्घाखाँची र दाङ जिल्ला

२१.	लुम्बिनी	भेरी अस्पताल	बाँके र बर्दिया जिल्ला
२२.	कर्णाली	प्रदेश अस्पताल, सुर्खेत	सुर्खेत, दैलेख, रुकुम पश्चिम, डोल्पा, सल्यान, हुम्ला र जाजरकोट जिल्ला
२३.	कर्णाली	कर्णाली स्वास्थ्य विज्ञान प्रतिष्ठान	मुगु, जुम्ला र कालिकोट जिल्ला
२४.	सुदूरपश्चिम	डडेल्धुरा अस्पताल	डडेल्धुरा, डोटी, बैतडी, दार्चुला, बझाङ, बाजुरा र अछाम जिल्ला
२५.	सुदूरपश्चिम	सेती प्रादेशिक अस्पताल	कैलाली र कंचनपुर जिल्ला

मुख्य सम्पर्क (हब) अस्पतालको काम, कर्तव्य र अधिकार देहाय बमोजिम रहेको छः-

- (क) अस्पताल प्रमुखले अस्पतालको आकस्मिक विभाग प्रमुखलाई हब अस्पतालका लागि मुख्य सम्पर्क व्यक्तिको रूपमा तोक्ने, र सो को जानकारी प्रादेशिक केन्द्र र केन्द्रमा गराउने ।
- (ख) हब अस्पतालले आफ्नो सञ्जाल भित्रका अस्पतालहरूसँग पूर्वतयारीको अवस्थामा त्रैमासिक रूपमा र प्रतिकार्य अवधिमा आवश्यकतानुसारको समन्वय बैठक सञ्चालन गर्ने ।
- (ग) जनस्वास्थ्य आपत्कालको पूर्वतयारीका लागि जनशक्ति व्यवस्थापन, आपूर्ति व्यवस्थापन, भौतिक श्रोत, औषधि तथा औषधीजन्य औजार उपकरण आदिको विद्युतीय प्रणालीमा नियमित रूपमा नक्साकन र अद्यावधिक गर्ने गराउने ।
- (घ) जनस्वास्थ्य आपत्कालको अवस्थामा कुनै पनि समयमा परिचालन हुनका लागि आपतकालिन चिकित्सकीय समूह परिचालन कार्यविधि २०८१ मा व्यवस्था भएअनुसार आपतकालिन चिकित्सकीय समूह तयारी अवस्थामा राख्ने ।
- (ङ) आपतकालिन अवस्थामा प्रभावकारी सञ्चारका लागि योजना बनाई कार्यान्वयन गर्ने गराउने ।
- (च) जनस्वास्थ्य आपत्कालका समयमा स्वास्थ्य हेर्ने प्रादेशिक मन्त्रालय र अन्य सरोकारवाला निकायसंग समन्वय गरि आपतकालिन चिकित्सकीय समूह परिचालन कार्यविधि २०८१ मा तोकेको द्रुत मुल्यांकन गर्ने गराउने ।
- (छ) जनस्वास्थ्य आपत्कालका समयमा सम्बन्धित सञ्जालभित्रका अस्पताललाई स्वास्थ्य उपचारका लागि आवश्यक स्रोत सामग्री तथा जनशक्तिको लागि समन्वय गर्ने ।
- (ज) जनस्वास्थ्य आपत्काल अवस्था तथा आपत्काल पश्चात रेफरल सेवालाई सम्बन्धित अस्पतालहरूसँग निरन्तरताका लागि सहकार्य गरि व्यवस्थित गर्ने ।
- (झ) अस्पताल विपद् पूर्वतयारी तथा प्रतिकार्य योजना तर्जुमा गर्ने, सो योजनालाई विद्युतीयकरण गर्ने र सबै कर्मचारीहरूलाई वार्षिक रूपमा अभिमुखीकरण गर्ने ।
- (ञ) आफ्ना संजाल अन्तर्गतका स्याटेलाइट अस्पतालहरूको विपद् पूर्वतयारी तथा प्रतिकार्य योजना बनाउन सहजीकरण गर्ने ।
- (ट) आफ्ना संजाल अन्तर्गतका स्याटेलाइट अस्पतालहरूको नविकरण, स्याटेलाइट अस्पतालका उपकरणहरूको भन्सार छुट जस्ता कार्यमा सिफारिश गर्ने ।
- (ठ) जनस्वास्थ्य आपत्कालको समयमा अस्पतालको भौतिक संरचनामा क्षति भई अस्पतालभित्र सेवा दिन कठिन भएको अवस्थामा निरन्तर स्वास्थ्य सेवा सुनिश्चितताका लागि वैकल्पिक सेवा क्षेत्र (Alternate Care Site) को व्यवस्था गर्ने ।

- (ड) जनस्वास्थ्य आपत्काल व्यवस्थापनका लागि प्रत्येक वर्ष आवश्यकता र क्षमताका आधारमा बजेट विनियोजन गर्ने ।
- (ढ) इकाई, केन्द्र र प्रादेशिक केन्द्रको समन्वयमा आवश्यक कार्यहरू गर्ने गराउने ।

स्याटेलाइट अस्पतालको काम, कर्तव्य र अधिकार देहाय बमोजिम हुनेछः-

- (क) जनस्वास्थ्य आपत्काल व्यवस्थापनका लागि मुख्य सम्पर्क व्यक्ति तोक्ने र सोको जानकारी हब अस्पताललाई गराउने,
- (ख) जनस्वास्थ्य आपत्काल पूर्व तयारीको लागि अस्पतालको सञ्जालमा आबद्ध भई इकाई, केन्द्र र मुख्य सम्पर्क अस्पतालको समन्वयमा रही जनशक्ति व्यवस्थापन, आपूर्ति व्यवस्थापन, भौतिक स्रोत, औषधि तथा औषधिजन्य औजार उपकरण लेखाजोखा आदिको विद्युतीय प्रणालीमा नियमित रूपमा नक्साकन र अद्यावधिक गर्ने गराउने,
- (ग) आपत्कालिन अवस्थामा प्रभावकारी सञ्चारका लागि योजना बनाई कार्यान्वयन गर्ने,
- (घ) अस्पताल विपद् पूर्वतयारी तथा प्रतिकार्य योजना तर्जुमा गरी सो योजनालाई विद्युतीय प्रणालीद्वारा मुख्य सम्पर्क अस्पताल र केन्द्रमा जानकारी गराउने,
- (ङ) जनस्वास्थ्य आपत्काल तथा विपद्को समयमा अस्पतालको भौतिक संरचनामा क्षति भई अस्पतालभित्र सेवा दिन कठिन भएको अवस्थामा निरन्तर स्वास्थ्य सेवा सुनिश्चितताका लागि वैकल्पिक सेवा क्षेत्र (Alternate Care Site) को व्यवस्था गर्ने,
- (च) जनस्वास्थ्य आपत्काल तथा विपद् व्यवस्थापनका लागि प्रत्येक वर्ष आवश्यकता र क्षमताका आधारमा बजेट विनियोजन गर्ने,
- (छ) केन्द्र, प्रादेशिक केन्द्र र हब अस्पतालको समन्वयमा आवश्यक कार्य गर्ने ।

Emergency Medical Logistic Warehouse:

स्वास्थ्य तथा जनसंख्या मन्त्रालय तथा विश्व स्वास्थ्य संगठनको सहयोगमा स्वास्थ्य क्षेत्रको लागि विभिन्न निम्न रणनीतिक ठाउँको आधारमा हब अस्पतालहरूमा तयारी अवस्थामा राखिएका छन् :-

#	Prepositioning/Warehouse	प्रदेश
१	त्रि.बि. शिक्षण अस्पताल, महाराजगन्ज	बागमती प्रदेश
२	भक्तपुर अस्पताल, भक्तपुर	बागमती प्रदेश
३	वीर अस्पताल, महाबौद्ध, काठमाडौं	बागमती प्रदेश
४	श्री विरेन्द्र अस्पताल, छाउनी	बागमती प्रदेश
५	पाटन स्वास्थ्य विज्ञान प्रतिष्ठान, ललितपुर	बागमती प्रदेश
६	निजामती कर्मचारी अस्पताल, नयाँ-बानेश्वर	बागमती प्रदेश
७	डडेलधुरा उप-क्षेत्रीय अस्पताल, डडेलधुरा	सुदुरपश्चिम प्रदेश
८	सेती प्रदेश अस्पताल, धनगढी	सुदुरपश्चिम प्रदेश
९	राप्ती स्वास्थ्य बिज्ञान प्रतिष्ठान, दाङ्ग	लुम्बिनी प्रदेश
१०	भेरी प्रदेश अस्पताल, नेपालगन्ज, बाँके	लुम्बिनी प्रदेश

* साथै आवश्यकता अनुसार Emergency Stock को व्यवस्था गर्न समन्वय गर्ने ।

अस्पताल विपद् पूर्व तयारी तथा प्रतिकार्य योजना

(Hospital Disaster Preparedness and Response Plan (HDPRP))

अस्पताल विपद् पूर्व तयारी भनेको कुनै ठूलो विपद् आउनु अघि अस्पतालको क्षमता र तयारी सुधार गर्न तयार पारिएका प्रणाली, प्रक्रिया र कार्यहरू हुन्। विपद् तथा जनस्वास्थ्य आपतकालीन अवस्थालाई सफलतापूर्वक व्यवस्थापन गर्न अस्पतालले पहिलो कदमका रूपमा विपद् व्यवस्थापन रणनीति तयार गर्नुपर्छ।

अस्पताल विपद् पूर्व तयारी तथा प्रतिकार्य योजना (HDPRP) मा विपद् पूर्व तयारी, न्यूनीकरण, प्रतिकार्य र पुनःस्थापनाका चरणहरूको लागि स्पष्ट कार्ययोजना समावेश गरिएको छ। यसमा अस्पताल विपद् व्यवस्थापन समिति, कार्यदल, कार्ययोजना, आकस्मिक चिकित्सकीय टोली, ट्रायज प्रणाली, अस्पताल फ्लोर प्लान, प्रवेशद्वारहरू, कर्मचारीहरूको भूमिका तथा जिम्मेवारीहरू, आन्तरिक र बाह्य संचार, हब अस्पतालहरूको स्रोत नक्साङ्कन, विपद् समयमा फरक क्षमता भएका व्यक्तिहरूको व्यवस्थापन, विपद् समयमा प्रजनन स्वास्थ्यको सम्बोधन, लैङ्गिक आधारित हिंसा सम्बन्धी व्यवस्था र कोभिड-१९ व्यवस्थापनसमेत समेटिएको छ।

अस्पताल विपद् पूर्व तयारी तथा प्रतिकार्य योजना प्रारम्भको वि.सं. २०७२ देखि विभिन्न अस्पतालहरूमा विकास गरिएको थियो, जसले केही अवस्थामा सुधार आवश्यकताको महसुस गराइ नयाँ योजना निर्माण गर्ने आवश्यकता उत्पन्न गर्‍यो। सोहि अनुरूप नेपालभरका २५ वटै हब अस्पतालहरूको वि.सं. २०७५ सम्म योजना निर्माण भइसकेको अवस्था थियो। विभिन्न अस्पतालहरूले विपद् जोखिमको अवस्थालाई मध्यनजर गरी आंशिक रूपमा भए पनि पूर्वतयारी र प्रतिकार्य गरिरहेका बेला, सम्बन्धित कार्यहरूको तथ्यांकलाई एकरूपता र वैधताका लागि स्वास्थ्य आपतकालीन तथा विपद् व्यवस्थापन ईकाई (HEDMU) को नेतृत्व र विश्व स्वास्थ्य संगठन, नेपालको आर्थिक तथा प्राविधिक सहयोगमा विपद् सम्बन्धी मार्गदर्शन, योजना विकास र अध्यावधिक गर्न Hospital Safety Index Plus (HSI+) एप विकास गरियो।

वि.सं. २०८० देखि यो एपमार्फत HDPRP को विकास प्रक्रिया थप सहज, छिटो र प्रभावकारी बनाउन सहयोग पुग्दै आएको छ। हाल नेपालभरका २५ वटा हब अस्पताल र १२० भन्दा बढी स्याटेलाइट अस्पतालहरूमा योजना निर्माण भइसकेको अवस्था छ। साथै, HEDMU/HEOC को मार्गदर्शनमा अन्य साझेदार निकायले पनि सहयोग गरी अस्पतालहरूमा योजना निर्माण भैरहेको अवस्था छ।

विपद् व्यवस्थापनलाई समयमा नै उचित सम्बोधन गर्न अस्पताल विपद् पूर्व तयारी तथा प्रतिकार्य योजना (Hospital Disaster Preparedness and Response Plan, HDPRP) निर्माण गरी कार्यान्वयन हुँदै आएको छ।

अस्पताल विपद् व्यवस्थापन योजना टेबलटप अभ्यास र सिमुलेशनमार्फत गहिराइका साथ विकास र परिमार्जन हुँदै आएको छ भने HEDMU ले HEOC-PHEOC Information Management Repository - dashboard मार्फत यस योजनाको अध्यावधिक र निरन्तर कार्यान्वयन भए/नभएको निगरानी गर्दै आइरहेको छ।

अस्पताल पश्चात सेवा (Post-Hospital)

अस्पताल-पछिको सेवा भन्नाले बिरामीलाई अस्पतालबाट डिस्चार्ज भएपछि आवश्यक पर्ने सेवा, रेखदेख र सहयोगलाई जनाउँछ, जसले उनीहरूलाई घर वा अर्को स्वास्थ्य संस्थामा सहजरूपमा फर्किन सहयोग गर्छ। अस्पताल-पछिको सेवा गम्भीर स्वास्थ्य समस्या, जटिल अवस्थाहरू वा आघातजन्य चोटपटकपछि आवश्यक पर्न सक्छ। यसमा चिकित्सकीय निगरानी, औषधीको व्यवस्थापन, पुनर्स्थापना सेवा तथा समाजमा घुलमिलजस्ता विभिन्न सेवा समावेश भएका हुन्छन्, जसले बिरामीको सफल पुनःस्थापनामा महत्वपूर्ण भूमिका खेल्दछ। सबै व्यक्तिलाई यस्ता थप सेवाको आवश्यकता नपर्न पनि सक्छ; कतिलाई त आफुले भेट्नुपर्ने डाक्टरलाई भेट पनि पुग्छ। अस्पतालमा पहिलानै भर्ना भएका बिरामीहरू भन्दा झन् गम्भीर

प्रकृतिका व्यक्तिलाई उपचार गर्नुपर्ने देखिएमा अस्पतालको क्षमता नपुगेमा यसले अर्को विपद निम्त्याउन सक्छ ।

केही सीमित अस्पतालहरूमा मात्र पुनःस्थापनामा सेवा उपलब्ध छन् जस्तै: स्पाइनल इन्जुरी पुनःस्थापना केन्द्र, HRDC र केही निजी अस्पतालहरू। मानसिक स्वास्थ्य वा मनोसामाजिक पुनःस्थापना केन्द्रहरू नेपालमा सीमित छन् । नेपालका मुख्य शहरहरूमा घरमै प्रदान गरिने पालीएटिभ हेरचाह सेवा सुरु भएका छन् । FCHVहरूले समुदाय स्तरमा दीर्घरोगी बिरामीहरूलाई केही सहयोग गर्न सक्छन्। विशेष रूपमा अस्पताल-पछिको सेवाका लागि आवश्यक तालिमप्राप्त भने छैनन्।

MoHP ले WHO र EU को सहयोगमा “नेपालमा आपतकालीन अवस्थामा अस्पताल-पछिको सेवाबारे पहिलो राष्ट्रिय सम्मेलन” मिति २०७५ कार्तिक ८-९ गते (सन् २०१८) काठमाडौंमा सम्पन्न सम्मेलनले अस्पताल-पछिको सेवालाई मार्ग निर्देशन गर्ने माथि उल्लेखित १४ वटा बुदा समेटिएको काठमाडौं घोषणा प्रस्तुत गरेको थियो ।

सन् २०२१ मा “Standard Operating Procedures (SOP) for Step-down Facility in Hub-hospitals of Nepal” मन्त्रालयद्वारा कार्यविधि पारित भयो । स्वास्थ्य आपतकालीन अवस्थामा पनि हब-हस्पिटलहरूले आकस्मिक सेवाहरू सहजरूपमा संचालनगर्नको लागि स्टेप-डाउन पददतिलाई उचित ठानिन्छ । दुर्घटनामा परि विरामी, घाइते वा अपाङ्गता भएकाहरू घर वा समुदाय वा पुनःस्थापना वा स्टेप-डाउन सुविधा भएको ठाउँ अस्पताल पहुँचमा कठिनाई हुनुहुदैन । विपद्को समयमा आपतकालीन उपचार प्राप्त गर्नसक्ने पीडितहरूको संख्या कति हुन्छ भन्ने हालसम्म कुनै प्रमाणित तथ्यांक उपलब्ध छैन। तर, सन् २०१५ को नेपालको भूकम्पको तथ्यांकलाई हेर्दा, भूकम्पबाट घाइते भएका मध्ये लगभग १०% लाई पुनःस्थापना सेवा र दीर्घकालीन अनुगमन आवश्यक परेको अनुमान गरिएको थियो। यस तथ्यांकका आधारमा, सम्बन्धित हब-हस्पिटलमा स्टेप-डाउन सुविधाका शैयाको संख्या कुल शैयाको लगभग १०% सम्म पुग्न सक्ने सुझाव दिन सकिन्छ। स्टेप-डाउन सुविधाको लागि तल उल्लेखित आवश्यक सुविधा र उपकरण सिफारिस गरिएको छ:

Equipment	Quantity
Beds	
Patient beds	20 beds (or 10% of hub hospital bed capacity)
Caretaker beds	20 beds (or same or proportion of patient beds)
Buildings/Tents	
General tents (sleeping quarters) for staff and patients	6 tents
Transition tent for patients and caretaker	4 beds
Tent for administration and staff quarters	3 beds
Security tent	1 tent
Physiotherapy tent	1 tent
Psychosocial tent	1 tent
Kitchen and adjoining dining room	1 kitchen/dining hut
Laundry area	1 outdoor area

WASH Facilities	
Patient latrines (2F/2M)	4 latrines
Patient bathrooms (2F/2M)	4 bathrooms
Staff latrines (1F/1M)	2 latrines
Staff bathrooms (1F/1M)	2 bathrooms
Water tanks-large (3000 Liters)	2
Hand washing stations-small tanks (200 Liters)	8

Source: Standard Operating Procedures (SOP) for Step-down Facility in Hub-hospitals of Nepal, 2021, MoHP

स्वास्थ्य तथा जनसंख्या मन्त्रालयले सन् २०१९ को कुरिनटारमा सम्पन्न राष्ट्रिय कार्यशालाले अस्पताल-पछिको सेवामा कार्यरत स्वास्थ्यकर्मीहरूलाई निम्न तालिमहरूको सिफारिस गरेको थियो:

1. Public Health Management in Humanitarian Complex Emergency
2. Post Hospital Referral Pathway orientation
3. Orientation on Step Down Facilities
4. Social Protection Related Training
5. Psychosocial support/counseling training - vulnerable people
6. Nutrition package training during emergency for health workers
7. Injury Trauma Management and Emergency Trauma Management

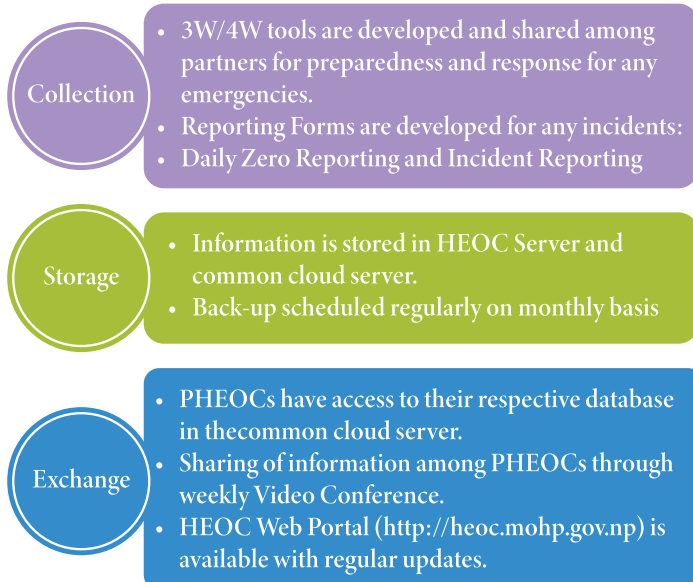
सूचना व्यवस्थापन (Information Management)

स्वास्थ्य आपतकालीन तथा विपद व्यवस्थापन इकाईले स्वास्थ्य क्षेत्रको विपद पूर्व तयारी, योजना र प्रतिकार्यका लागि आवश्यक पर्ने सूचना तथा तथ्यांकहरू उपलब्ध गराउनुका साथै सोको लागि राष्ट्रिय तथा अन्तरराष्ट्रिय साझेदार निकायहरू संग निरन्तर समन्वय गर्ने काम गर्दै आइरहेको छ।

यस इकाईले राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन केन्द्र, राष्ट्रिय आपतकालीन कार्यसंचालन केन्द्र, सुरक्षा निकायहरू, हब तथा स्याटेलाइटअस्पताल संजाल र प्रादेशिक स्वास्थ्य आपतकालीन कार्यसंचालन केन्द्रहरू सँग प्रत्यक्ष तथा प्रदेश आपतकालीन कार्यसंचालन केन्द्रहरू, जिल्ला आपतकालीन कार्यसंचालन केन्द्रहरू, जिल्ला स्वास्थ्य कार्यालयहरू, स्थानीय आपतकालीन कार्यसंचालन केन्द्रसंग प्रादेशिक

स्वास्थ्य आपतकालीन कार्यसंचालन केन्द्रमार्फत समन्वय गर्दै विपद् प्रतिकार्य तथा सिध पुनर्लाभमा संलग्न निकायबीच पनि सम्पर्क र समन्वय सुत्रका रूपमा भूमिका पनि निर्वाह गर्दै आएको छ ।

विपद् का सबै चक्र (mitigation, preparedness, response and recovery) मा सूचना व्यवस्थापनमा तथ्यांकहरूलाई वेब पोर्टल मार्फत उचित व्यवस्थापन गर्न र विपद् सम्बन्धी ऐन, रणनीति, निर्देशिका,



योजना, प्रोटोकल आदिको विधुतीय पुस्तकालय (e-library) तयार गरेको छ जसले गर्दा छिटो र छरितो रूपमा आम जनसमुदायलाई समयमै सूचना प्रवाह गर्न सफल भएको छ।

स्वास्थ्य आपतकालीन विपद व्यवस्थापन इकाईबाट विपद व्यवस्थापन पूर्व-तयारी तथा प्रतिकार्य सम्बन्धि अभिलेख तथा प्रतिवेदन विधुतीय प्रविधि मार्फत संचालन गरिदै आएको छ। सातै प्रदेशमा रहेका प्रादेशिक स्वास्थ्य आपतकालीन कार्य संचालन केन्द्रहरू लगायत सरोकारवाला निकायसम्म नेटवर्कको संजाल विस्तार गर्न र सूचनाहरूको एक रुपता र एकद्वार प्रणालीमार्फत संकलन गर्न आवश्यक छ। यस केन्द्रले सूचनाहरूलाई प्रभावकारी रूपमा सम्प्रेषण गर्न heoc.mohp.gov.np, press release तथा सामाजिक संजाल (facebook, twitter) मार्फत अध्यावधिक सूचना सम्प्रेषणका कार्यहरू गर्दै आएको छ । यसले विपदको समयमा जनताको समयमै जानकारी पहुँचलाई सुनिश्चित गर्नुका साथै नीति तथा निर्णयकर्ताहरूलाई सही निर्णय लिन सहयोग पुर्याएको छ। आपतकालीन समयमा नियमित सूचनाका स्रोतहरू अवरुद्ध भएको अवस्थामा समेत इकाईमा आपतकालीन संचार BGAN, alternate power backup को व्यवस्था समेत रहेको छ । सामान्य अवस्थामा पनि समय-समयमा संचार माध्यमको नियमित रूपमा अध्यावधिक एवं परिक्षण गर्दै आएको छ ।

आगामी रणनीति:-

- १) घटना आदेश प्रणाली सँस्थागत, समन्वय तथा पूर्व-अभ्यास
- २) पूर्व-अस्पताल सेवा सुदृढीकरण र हवाई/हेली एम्बुलेन्स परिचालन
- ३) एम्बुलेन्स प्रेषण प्रणालीको सवलिकरण
- ४) स्वास्थ्य सँस्थाहरूको समन्वय र विपद् योजनाको प्रभाकारी कार्यान्वयनको सुनिश्चितता
- ५) विपद् व्यवस्थापनमा मानवीय क्षमता अभिवृद्धी तथा आपूर्ति व्यवस्थापन
- ६) स्वास्थ्य आपतकालीन जनशक्ति व्यवस्थापन
- ७) जनस्वास्थ्य आपत्काल पूर्वतयारी तथा प्रतिकार्यमा आन्तरिक तथा बाह्य सूचना व्यवस्थापनको सबलीकरण

Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks.

It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

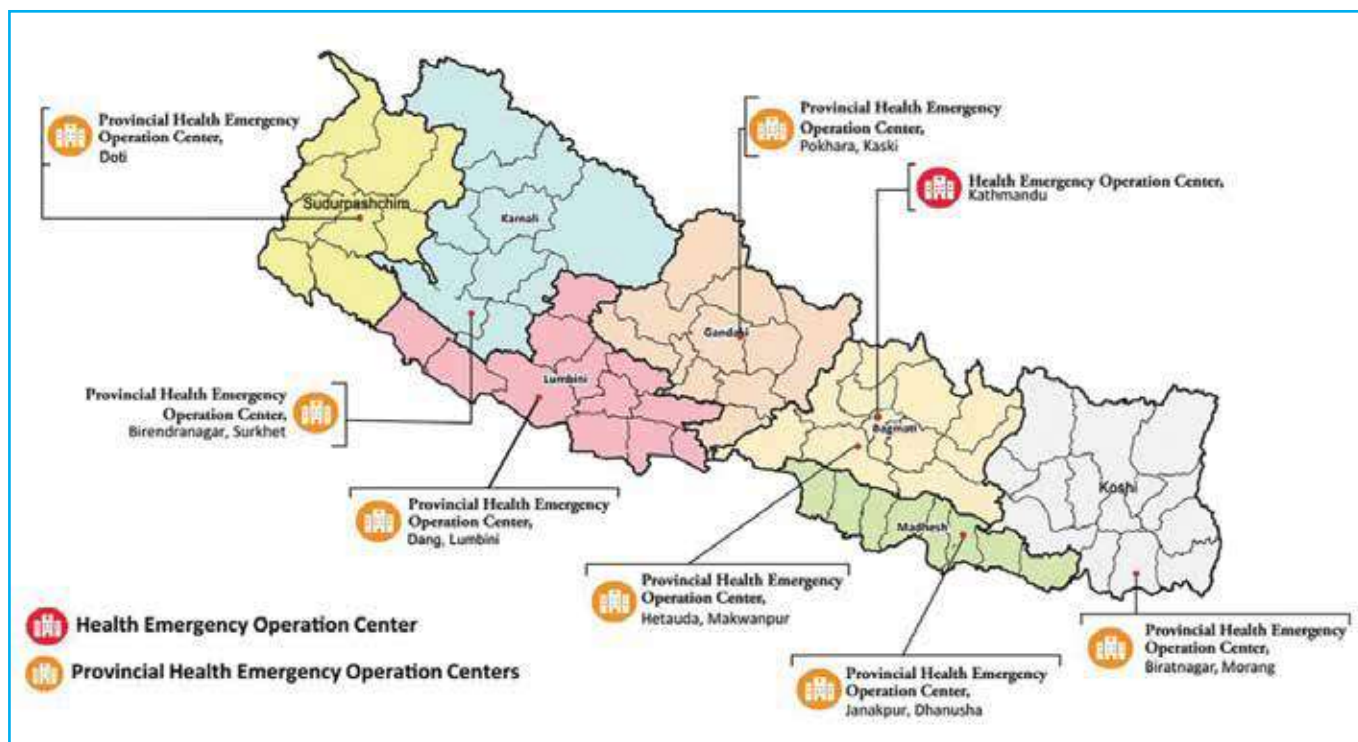
Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030
--	--	---	---	---	--	---

१.३. प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरू

संघीय ढाँचा अनुरूप मन्त्रालयबाट प्रदेश स्तरमा समेत प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्र (PHEOC) हरूको आवश्यकता महशुस गरी सन् २०२० सम्म सातै प्रदेशमा विश्व स्वास्थ्य संगठनको सहयोगमा स्थापना गरियो । कोभिड-१९ महामारी र अन्य विभिन्न विपद् पूर्वतयारी तथा व्यवस्थापनमा PHEOC हरूले प्रभावकारी भूमिका निर्वाह गर्दै आएका छन् । यी केन्द्रहरूले आपत्कालिन कार्यसंचालन केन्द्रहरू (EOCs), हब तथा स्याटेलाइट अस्पताल संजाल, साथै स्वास्थ्य तथा अन्य क्षेत्रका सरोकारवाला निकायहरूसँग आवश्यक समन्वय गर्दै प्रदेश, जिल्ला र स्थानीय तहसम्मको विपद् पूर्व तयारी र प्रतिकार्यलाई सुदृढ पार्न महत्वपूर्ण योगदान पुर्याएका छन् ।



प्रदेश/स्थान	स्थान	मिति	कैफियत
काठमाडौँ	स्वास्थ्य तथा जनसंख्या मन्त्रालयको हाता भित्र	२०७०	
कोशी प्रदेश	कोशी अस्पतालको हाता भित्र	२०७६	
मधेश प्रदेश	प्रदेश स्वास्थ्य निर्देशनालयको हाता भित्र	२०७६	
बागमती प्रदेश	स्वास्थ्य मन्त्रालयको हाता भित्र	२०७६	
गण्डकी प्रदेश	प्रदेश स्वास्थ्य निर्देशनालयको हाता भित्र	२०७४	
लुम्बिनी प्रदेश	स्वास्थ्य मन्त्रालयको हाता भित्र		
कर्णाली प्रदेश	प्रदेश स्वास्थ्य निर्देशनालयको हाता भित्र	२०७४	
सुदुरपश्चिम प्रदेश	प्रदेश स्वास्थ्य निर्देशनालयको हाता भित्र	२०७४	

२. लेख रचनाहरू

लेख रचनाहरू	लेखक	पाना नं.
स्वास्थ्यजन्य विपद् व्यवस्थापनमा प्राधिकरणको पहल	ई. दिनेश प्रसाद भट्ट	२१
Emergency Medical Teams : A Decade of Impact & Leadership in Nepal	Dr. Prakash Budhathoky	२३
Strengthening Emergency Health System through training	Yesodha Aryal	२७
नेपालमा अस्पतालपूर्व सेवाका चुनौतीहरू र अबको बाटो	अस्पताल पूर्व समूह, स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई	३०
विपद् पूर्वतयारी तथा प्रतिकार्यमा राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्र	निशान राज गौतम	३३
When Every Second Counts: A Decade of Building Health Emergency Systems in Nepal with WHO	Dr Allison Gocotano, Dr Subash Neupane, Dr Dipendra Gautam, Prahlad Dahal, Deepesh Sthapit, Dr Gaurav Devkota, Dr Bigyan Prajapati, Dr Amit Kumar Singh, Bimal Singh Bist, Sanjib Gautam, Ganesh Singh Dhami	३५
Strengthening Health Emergency Preparedness in Nepal: A Model of Coordination and Progress	Emergency Operations, WHO Health Emergencies Programme, Regional Office for South-East Asia	४२
Disease Surveillance in Nepal: Past, Present, and Future	Hem Raj Pandey	४३
विपद् व्यवस्थापनमा सशस्त्र प्रहरी बल, नेपाल र नेपाल ए.पी.एफ. अस्पतालको भूमिका	SSP Dr. Sailendra Kumar Duwal Shrestha	४६
Pre-Hospital Care Services in Nepal: Challenges and Progress	Prof. Dr Pradeep Vaidya	४८
आकस्मिक चिकित्सा सेवा प्रणाली	प्रा.डा.नारायण सिंह गुरुङ्ग	५०
Saving Lives, Building Hope: Nepali Army Medical Corps in Myanmar	Lt. Col. Dr. Bikash Bahadur Rayamajhi, MS	५२

लेख रचनाहरू	लेखक	पाना नं.
Nepal's First Air Mass Evacuation and Quarantine Operation during COVID-19 Pandemic	Dr Naveen Phuyal	५५
Disaster Medicine Education for Transitioning from Reactive Response to Proactive Leadership	Dr. Ashis Shrestha	५९
सवारी दुर्घटना मा परेको एउटा घाइते को साबिती	डा. सानुकृष्ण श्रेष्ठ	६२
Rapid Response to Cholera Outbreak in Dhangadhi, Kailali: A Multi-Sectoral Public Health Intervention	PHEOC Sudurpaschim	६४
Jajarkot Earthquake Response	PHEOC Karnali	६८
Strengthening Disease Surveillance and Information Management for Public Health Emergency Preparedness in Gandaki Province	PHEOC Gandaki	७०
Community-Based Disease Surveillance: A Local Leadership Model for Early Outbreak Detection and Response	Chandan Subedi	७३
Barju's Battle with the Red Rash: Measles and the Moments that Followed	Rusha Upadhyaya	७५

स्वास्थ्यजन्य विपद् व्यवस्थापनमा प्राधिकरणको पहल

ई. दिनेश प्रसाद भट्ट

कार्यकारी प्रमुख,

राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरण



स्वास्थ्यजन्य विपद्मा प्राधिकरणको उपस्थिति

विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन ऐन, २०७४ को दफा १० ले राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरणको व्यवस्था गरिएको छ । प्राधिकरणले विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन सम्बन्धी केन्द्रीय स्रोत निकायको रूपमा कार्य गर्दछ । आम रूपमा जलवायुजन्य विपद्का अतिरिक्त आगलागी, वन डढेलोलगायतका विपद्मा बढी ध्यान जाने भए पनि जलवायु परिवर्तन, बसाई सराई, अव्यवस्थित शहरीकरण तथा किटजन्य संक्रमणहरुको विस्तारसँगै स्वास्थ्यजन्य घटनाहरु पनि विपद्का रूपमा विकास हुन थालेका छन् । तापक्रम बृद्धिका कारण सर्पदंश, डेंगीलगायतका स्वास्थ्यजन्य विपद् पनि बढ्दो छ । त्यसैले, अन्य विपद्सँग यसमा पनि पर्याप्त ध्यान दिनुपर्ने आवश्यकता टड्कारो बनिसकेको छ ।

राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरणले स्वास्थ्यजन्य विपद्का हकमा समेत नीतिगत तथा कार्यक्रमगत पहल गर्दै आएको छ । ऐनमा उल्लेख विपद्मध्ये महामारीमध्ये तातो हावाको लहर, शीतलहर, किट वा सूक्ष्म जीवाणु आतंक, पशु तथा चराचुङ्गीमा हुने फलु, प्यान्डामिक फलू, सर्पदंश, विशाक्त ग्यास, रसायन वा विकीरण चुहावट, विषाक्त सेवन, वातावरणीय प्रदूषण आदिलाई स्वास्थ्यसँग प्रत्यक्ष जोडिने विपद्का रूपमा लिन सकिन्छ । तथापि, यी विपद्मध्ये तातो हावाको लहर, शीतलहरमा कार्ययोजना बनाएर कार्यान्वयनका लागि समन्वय गरिरहेको छ भने एवं वायु प्रदूषणजन्य विपद् सम्बन्धमा कार्ययोजना बनिरहेको छ ।

स्वास्थ्यजन्य विपद्का घातक असर

जल तथा मौसम विज्ञान विभागका अनुसार अनुसार मनसुन नेपाल भित्रिनु पूर्व दुई दिनअगाडि जेठ १६ गते नेपालगञ्जमा यस वर्षकै अधिकतम तापक्रम ४४.२ डिग्री सेल्सियस मापन भयो । यस वर्षको मनुसुन आकलन अनुसार एकातिर भारी वर्षाको संभावना र त्यसबाट सिर्जना हुने विपद्को जोखिम छ भने अर्कोतिर अत्यधिक गर्मी, सुकखा र त्यसबाट उत्पन्न हुने डेंगीलगायतका विपद्को जोखिम बढ्दो छ ।

विशेष गरी, सहरी क्षेत्रमा हरितगृह ग्यास उत्सर्जनमा बृद्धि र अव्यवस्थित भू-उपयोग भएसँगै वायुमण्डलीय तापक्रम बढेको र गर्मी महिनामा तातो हावाको अवस्था सृजना हुने गरेको विभिन्न अध्ययनले देखाएको छ । वन तथा वातावरणको एक प्रतिवेदन (MoFE, 2021) अनुसार नेपालमा विगत केही दशकदेखि वार्षिक औसत अधिकतम तापक्रम ०.०५६ डिग्री सेल्सियसले बृद्धि भएको छ ।

ऐनले तातो हावालाई विपद्कै रूपमा उल्लेख गरेको छ तर यसको प्रभाव तत्काल नदेखिन भएकोले यो विषय प्रायः ओझेलमा परेको देखिन्छ । तर, तातो हावाको असर प्रत्यक्ष रूपमा स्वास्थ्यसँग जोडिएको हुन्छ । विश्व स्वास्थ्य संगठनले सार्वजनिक गरेको सन् २०२४ को प्रतिवेदन अनुसार सन् २००० देखि २०१९ सम्मको अवधिमा गरिएको अध्ययनमा हरेक वर्ष तापसम्बन्धी मृत्यु करिब ४,८९,००० हुने गरेका छन्, जसमध्ये एशियामा ४५% र युरोपमा ३६% हुने गर्छन् । बढ्दो तापले विशेषगरी, वृद्धवृद्धा, बालबालिका र दीर्घरोगी अति प्रभावित हुने देखिएको छ । स्वास्थ्यका अतिरिक्त तातो हावाको लहरले शिक्षा, कृषि तथा पशुपंक्षी, आवास तथा भौतिक पूर्वाधारमा पनि प्रभाव पारिरहेको छ ।

तातो हावाको लहरजस्तै वायु प्रदूषणजन्य विपदले मानव स्वास्थ्य गम्भीर असर पारिरहेको छ । युरोपियन इनभ्यारोमेन्ट एजेन्सी अनुसार वायुप्रदूषणले गर्दा ब्रोन्काइटिस, दम, फोक्सोको क्यान्सर, एसबेस्टोसिस, साइस्टिक फाइब्रोसिस, निमोनिया जस्ता श्वासप्रश्वास सम्बन्धी रोगहरु हुनुका साथ मुटुको रोग, स्ट्रोक, मस्तिष्कघात, आँखा, नाक, कान, घाँटी र छालाको जलन, हाइपर टेन्सनका बिरामीहरुको संख्या बढ्दै गइरहेको देखाएको छ । घरभित्र हुने वायु प्रदूषणले खासगरी गर्भवती तथा सुत्केरी महिला, दीर्घरोगी, अपाङ्गता भएका व्यक्ति, ज्येष्ठ

नागरिक र बालबालिकाहरुलाई अत्यधिक प्रभावित हुन्छन् । विश्व बैंकको सन् २०१९ मा प्रकाशित प्रतिवेदन अनुसार नेपालमा प्रदूषणका कारण सन् २०३० सम्ममा झण्डै १,३८६ मिलियन अमेरीकी डलर बराबरको आर्थिक भार पर्न सक्ने अनुमान गरिएको छ ।

प्राधिकरणको ठोस पहल

यी अवस्थालाई ख्याल गरेर यसै वर्षमात्र स्थान विशेषको अवस्थाअनुसार तातो हावाको लहरको प्रभाव न्यूनीकरण सम्बन्धी पूर्वतयारी, पूर्वकार्य तथा शीघ्र प्रतिकार्य लगायतका गतिविधिलाई सहयोग पुर्याउने उद्देश्यले 'अत्यधिक गर्मी (Extreme Heat) वा तातो हावाको लहर (Heat Wave) का लागि पूर्वतयारी, पूर्वकार्य तथा शीघ्र प्रतिकार्य कार्ययोजना' तयार गरी जिल्ला तथा स्थानीय तहहरुलाई सम्प्रेण गरिएको छ ।

यसका साथै तातो हावाको लहरका असरहरु कम गर्ने उपायसहितका जनचेतनाका सामग्री विभिन्न भाषा तथा रुपमा संचारका सबै माध्यममार्फत् प्रकाशन तथा प्रसारण गरिरहेको छ । वन डढेलो न्यूनीकरणको लागि वन डढेलो व्यवस्थापन सम्बन्धी कार्ययोजनाको मस्यौदा तयार भइरहेको छ । त्यस्तैगरी, वायु प्रदूषणजन्य विपद्को लागि राष्ट्रिय कार्ययोजनाको मस्यौदा पनि तयार गरिएको छ ।

स्वास्थ्यजन्य विपद्का जोखिमहरु कम गर्न अथवा व्यवस्थापन गर्न प्राधिकरणले पूर्वतयारी, पूर्वकार्य र शीघ्र प्रतिकार्यका जोड दिइएको छ । विपद्को पूर्वतयारीदेखि प्रारम्भिक पुनर्लाभसम्मका लागि ११ वटा क्लस्टरमध्ये स्वास्थ्य र पोषणको नेतृत्व स्वास्थ्य तथा जनसंख्या मन्त्रालयले गर्दै आएको छ ।

स्वास्थ्यजन्य विपद्को जोखिम कम गर्न पनि सक्षम स्थानीय तह र बलियो समुदाय हुनुपर्छ भन्ने प्राधिकरणको विश्वास छ । स्थानीय तहलाई बलियो र सक्षम बनाउँदै गयो भने यी विपद् व्यवस्थापनको बाटो सहज हुनसक्छ । यसका लागि हाम्रा ऐन र नियमावलीले विपद् स्वयंसेवक, गोदामघरलगायतका व्यवस्थाको परिकल्पना पनि गरेको छ ।

स्थानीय तहले आफ्नो अधिकार क्षेत्रमा रहेका अस्पतालहरुलाई स्वास्थ्यजन्य विपद् सम्बन्धी कमसेकम प्रारम्भिक उपाचार गर्न सक्नेगरी काम गर्नुपर्ने हुन्छ । कोभिडको अनुभवले पनि देखाइसकेको छ, स्वास्थ्यजन्य महामारीमा पनि स्थानीय तहको निर्णायक भूमिका हुन्छ र उनीहरुले त्यो भूमिका निर्वाह गर्न सक्छन् । त्यसैगरी, आवश्यकताअनुसार एम्बुलेन्स, स्वास्थ्य जनशक्तिको व्यवस्थापनमा पनि पर्याप्त ध्यान दिनु आवश्यक छ ।

स्वास्थ्य सम्बन्धी स्वयंसेवकको तयारी अर्को महत्वपूर्ण पक्ष हो । अवकासप्राप्त चिकिस्तक एवं नर्स, स्वास्थ्यसम्बन्धी तालिम लिएका पूर्व सुरक्षाकर्मी, विद्यालयका नर्स आदिले स्वयंसेवकका रुपमा काम गर्न सक्छन् । त्यसैगरी, गाउँगाउँमा खटिएका महिला सामुदायिक स्वास्थ्य स्वयंसेविकालाई पनि आधारभूत तालिम दिन सकिन्छ । यसका साथै, आधारभूत तालिमहरु माध्यमिक विद्यालय तहका पाठ्यक्रममा समावेश गर्नुपर्ने देखिन्छ ।

जलवायुजन्य विपद्सँग सम्बन्धित स्वास्थ्यजन्य विपद्मा समेत पूर्वसूचना प्रणालीमा महत्व बुझेर तातो हावा तथा शीतलहर सम्बन्धी कार्ययोजनाहरुमा पूर्वकार्य गर्ने क्रियाकलापलाई प्राथमिकता दिइएको छ । यसमा विभिन्न विकास साझेदार एवं राष्ट्रिय तथा अन्तराष्ट्रिय गैरसरकारी संस्थाहरुको सहयोग पनि रहेको छ । हाम्रा प्रक्षेपणको विश्वसनीयता बढेसँगै अब हामीले ती जानकारी तथा सन्देश समबन्धित समुदायसम्म समयमै र बुझ्न सक्ने ढंगले पुर्याउनुपर्ने दायित्व छ । बिस्तारै हामीले कृत्रिम बौद्धिकता (Artificial Intelligence) को सहायताले हाम्रो पूर्वसूचना प्रणाली तथा प्रतिकार्यलाई समृद्ध गर्नुपर्नेछ । विपद्मा उपयोगी सावित भइसकेको लागेको 'ड्रोन' हरूको प्रयोगलाई हामीले अवलम्बन गर्नुपर्ने छ ।

विपद् व्यवस्थापन सरकारको कर्तव्य हो तर सरकार एकलैको प्रयासले स्वास्थ्यजन्य विपद् जोखिम न्यूनीकरण गर्न सकिँदैन । त्यसैले, निजी क्षेत्र, विकास साझेदार, साझेदार संघसंस्थाहरु, संचार क्षेत्र, प्राज्ञिक क्षेत्रको पनि सहयोग आवश्यक पर्दछ । विपद् व्यवस्थापनमा सहयोग गर्नु हरेक नागरिकको पनि कर्तव्य र दायित्व हो ।

सन्दर्भ सामग्री

1. NDRRMA. (n.d.). <https://ndrrma.gov.np/np/plan/205>
2. World Bank. (2024). [Towards clean air in Nepal] (Report No. P176456). World Bank
3. Ministry of Forests and Environment, Government of Nepal. (2021). Vulnerability and Risk Assessment and Identifying Adaptation Options. European Environment Agency. (2024). Harm to human health from air pollution in 2024.

Emergency Medical Teams (EMT): A Decade of Impact and Leadership in Nepal

Dr. Prakash Budhathoky

Spokesperson, Ministry of Health and Population (MoHP),
Chief of Health Emergency Operation Center (HEOC),
and Co-Chair, SEAR EMT Working Group



Global Perspective of EMTs

The Emergency Medical Team (EMT) initiative was launched by the World Health Organization (WHO) in the wake of the 2010 Haiti earthquake to improve coordination, quality, and accountability of international emergency medical response.

EMTs are groups of health professionals - doctors, nurses, logisticians, and others - trained and equipped to provide direct clinical care to people affected by emergencies and disasters.

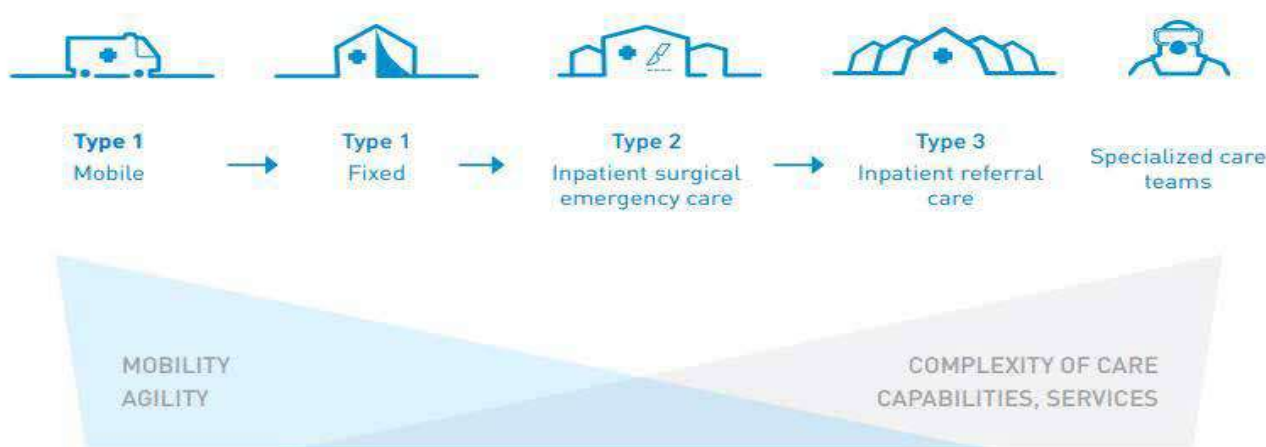
EMT Classification:

Type 1: Outpatient emergency care

Type 2: Inpatient surgical emergency care

Type 3: Complex inpatient care with intensive care units

Specialized Care Teams: Focused clinical specialties (e.g., burn, trauma, maternal care)



Global Status:

- 42 EMTs accredited by WHO globally
- 26 countries have at least one WHO-classified EMT
- EMTs have been deployed in over 100 international emergencies including COVID-19, Ebola, earthquakes, and armed conflicts

The EMT 2030 Strategy outlines a 7-year vision to localize and institutionalize EMT

capacities, integrate them into national systems, and ensure equitable access to emergency care.

Regional Perspective of EMT in South-East Asia Region (SEAR)

The South-East Asia Region (SEAR) remains highly vulnerable to climate-induced disasters, pandemics, and mass casualty incidents. The EMT initiative in SEAR has gained momentum through regional consultations, technical workshops, and national adaptation of global guidelines.

Progress in SEAR:

Regional EMT Working Group formed

Co-chaired by Nepal since 2024

Countries including India, Indonesia, Thailand, and Nepal have made significant EMT advancements

WHO-SEARO supports capacity building, simulations, and guideline development aligned with the EMT 2030 strategy

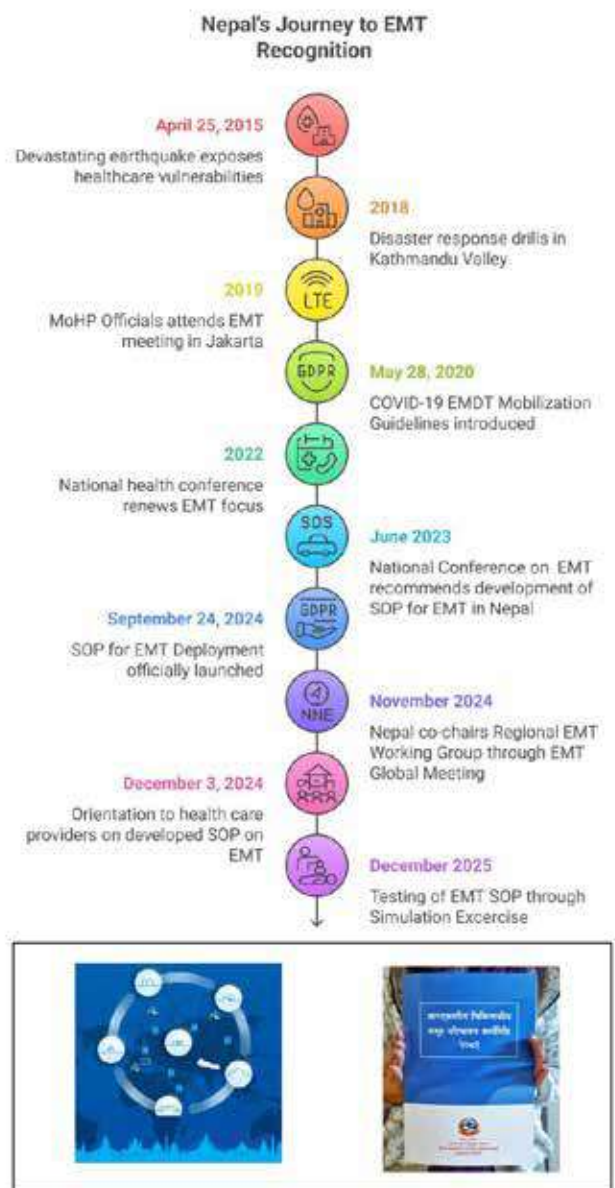
The SEAR EMT initiative is aligned with EMT 2030's vision to shift from reactive international deployment to strengthening national and subnational EMT systems.

Achievements of the EMT Initiative

- EMTs have responded to over 100 international emergencies since 2010
- Improved coordination and transparency through the EMT Online Directory
- Standardization of EMT minimum standards and verification process
- Capacity-building across regions, especially in SEAR
- Increased localization of EMTs to ensure faster, culturally appropriate response
- Enhanced multi-hazard preparedness in response to the COVID-19 pandemic

National EMT in Nepal and Achievements in the Last 10 Years

Nepal's EMT journey began during the 2015 earthquake when 135 EMTs from 36 countries responded to the disaster. This catalyzed Nepal's efforts to build its own EMT system.



Key Achievements:

- 2018-2019:** Initiation of EMT readiness drills; participation in regional technical meetings
- 2020:** Development of COVID-19 EMDT Mobilization Guidelines; 50 EMTs formed across 25 hub hospitals; over 225 health professionals trained
- 2022:** MoHP commits to national EMT & RRT guideline development at global EMT meeting in Armenia
- 2023:** National EMT workshop held with multi-sectoral participation
- September 2024:** Endorsement and launch of EMT Standard Operating Procedures (SOP) by MoHP
- 2024-2025:** Table-top exercises and field simulations conducted in Kathmandu and Nepalgunj following orientation to the health care workers throughout the country.

Today, Nepal has 50 functional EMTs, each hub hospital hosting two teams (for infectious disease and mass casualty). EMTs are coordinated by HEOC through Emergency Medical Team Operation Committee (EMTOC).

Nepal as Co-Chair of the SEAR EMT Working Group

In November 2024, Nepal was selected as Co-Chair of the SEAR EMT Working Group at the Global EMT Meeting. This recognition underscores Nepal’s leadership and commitment to regional EMT development.

Nepal’s role:

- Guides regional EMT strategies and capacity-building
- Shares national experience and good practices
- Strengthens cross-border EMT collaboration within SEAR

Nepal’s Co-chairmanship ensures that experiences from high-risk, resource-constrained settings guide regional EMT planning and strengthen SEAR’s collective emergency preparedness.

Alignment with EMT 2030 Strategy

Nepal’s EMT development aligns with all three pillars of the EMT 2030 Strategy:

EMT 2030 Strategic Pillars	Nepal's Achievements
National EMT Capacities Institutionalized	50 EMTs integrated into 25 hub hospitals; SOP endorsed; trainings underway
Integrated into Health Emergency Systems	EMTs linked to HEOC/EMTOC with clear operational roles
Available for National and International Response	Preparing for global accreditation; aspirations for international deployment articulated

Nepal calls upon the global community for continued support towards WHO accreditation, enabling future international deployment and cross-border solidarity.

Acknowledgement

The author sincerely acknowledges the invaluable support provided by WHO Country Office for Nepal, whose technical and strategic guidance has been instrumental in the conceptualization, development, and operationalization of the Emergency Medical Team (EMT) system in Nepal. From the early post-earthquake coordination efforts to the development of national EMT guidelines and the endorsement of the Standard Operating Procedure, WHO Nepal's consistent partnership has been critical in shaping a resilient and responsive national emergency health framework.

Gratitude is also extended to the European Commission for its generous financial and policy support, which enabled the translation of Nepal's EMT vision into reality. Their contribution has not only strengthened institutional capacities but also laid the groundwork for Nepal's leadership role at the regional level through the South-East Asia EMT Working Group.

This journey - from a response-dependent system to a nationally led, regionally recognized EMT model - would not have been possible without the steadfast collaboration and commitment of these key partners.

Conclusion

From a disaster-stricken nation in 2015 to a regional EMT leader by 2025, Nepal's EMT journey is one of transformation and resilience. Under the stewardship of the Ministry of Health and Population, guided by HEOC, and supported by WHO, Nepal is now positioned to contribute both regionally and globally in the EMT movement.

As Co-Chair of the SEAR EMT Working Group, Nepal reaffirms its commitment to EMT 2030 goals—ensuring that no life is lost due to delays in accessing emergency health care.

(Dr Budhathoky also serves as the Spokesperson, Ministry of Health and Population (MoHP), Chief of Health Emergency Operation Center (HEOC))

EMTs in Nepal

Composition of Mass Casualty Management EMT

Mass Casualty Management (MCM)	Nos.
General Practitioner and Emergency Physician (MD-GP/EM)	1
General Surgeon* (MS General Surgery)	1
Orthopedic Surgeon* (MS-Orthopedic)	1
Anesthesiologist* (MD-Anesthesiology)	1
Medical Officer (MBBS)	2
Paramedics (HA/AHW)	3
Nursing Staffs (ER and OT experienced)	2
Attendant	2
Laboratory Personnel (LA/LT)	1

* To be deployed as per need.

Infectious Disease Management (IDM) Team

Infectious Disease Management (IDM)	Nos.
General Practitioner and Emergency Physician (MD-GP/EM)	1
General Physician (MD-Internal medicine)	1
Anesthesiologist* (MD-Anesthesiology)	1
Medical Officer (MBBS)	2
FETP Graduate Health Worker	1
Nursing staff (SN/ANM; IPC Experienced)	3
Paramedics (HA/AHW)	2
Attendant	2
Laboratory Personnel (LA/LT)	1

* To be deployed as per need

Strengthening Emergency Health System through training

Yeshoda Aryal

Director, NHTC



National Health Training Centre (NHTC) under Ministry of Health and Population (MoHP) is responsible for coordination and management of health trainings related activities at federal level. NHTC in coordination with Health Training Centers at Provincial Level conducts training dedicated for enhancing the competency of health care providers to deliver quality health services ranging from Preventive, Promotive, Curative, Rehabilitative up to Palliative care services. Clinical trainings are conducted at 66 accredited clinical training sites all over the country. Per year around 14000 health workers are trained through National Health Training System network of Center and Province including preservice, induction and in-service trainings. The objective of the National Health Training Center (NHTC) is to standardize Learning Resource Packages (LRPs), develop and update training materials, organize and implement in-service trainings that address national needs while enhancing the competency of service providers to improve quality of care. NHTC also aims to ensure the quality of training activities through adherence to national standards and by strengthening the capacity of training sites. Additionally, it seeks to adopt and promote innovative training approaches and to reinforce mechanisms and capacity for effective blended approach, online based trainings, post-training follow-up, support, and ongoing professional development.

As per the constitutional mandate of right of citizen of not being deprived of Emergency health services, Based on Public Health Service Act 2075 provision of quality emergency health services ranging from prehospital, hospital, posthospital and community with continuum of care, Trained and competent human resource is essential to provide quality emergency health service to save life and prevent disability. A competent, motivated healthy workforce forms the core of a high quality, effective and efficient health system. A well-functioning emergency health system consists of an integrated continuum of care that spans the prehospital, hospital and post-hospital phases. Each of these components plays a vital role in ensuring timely, effective, and life-saving care during emergencies. Firstly, enhancing pre-hospital care is essential. This involves developing efficient ambulance services, equipping communities with basic first-aid skills, and improving coordination between first responders and healthcare facilities. Similarly, it is crucial to establish a robust network of well-equipped emergency departments staffed with trained medical professionals. This network should provide tiered levels of care—ranging from basic stabilization units to advanced trauma centers—tailored to the severity of each case. Likewise, promoting prevention and public education is key to minimizing the demand for emergency care. This involves increasing awareness of risk factors for illness and injury, encouraging healthy lifestyle choices, and ensuring access to affordable primary healthcare services.

Training related to Emergency Health Services

National Health Training Center and Provincial Health training center is currently conducting following trainings in field of emergency health services.

Basic Life Support (BLS) is a one-day, simulation based, hands-on competency based course designed for all health workers and also to the general public to learn essential life-saving techniques such as CPR and emergency response. This primary training is expected to increase the access of all health workers as well as public since its recognition as life saving intervention.

Prehospital Ambulance Driver Training Based on the National Ambulance Service Guideline of MOHP 2078 Ambulance Driver training is one of the most important training ensuring quality prehospital care services. The three days training is targeted to ambulance drivers >25yrs with driving license consists of achieving critical skill of life saving, BLS, appropriate patient transfer, IPC, Traffic rules, regulation and well-functioning, coordination and deployment by 102.

Basic Emergency Medical Technician (BEMT) is a 30 days in-person and 30 days on the job model comprehensive 60-day program for health assistants and staff nurses working in emergency departments are expected to provide critical emergency medical care at ambulance during patient transfer. They are expected to coordinate with ambulance drivers and well deployed by dispatch centers.

Primary Emergency Care (PEC) is a competency based six days training course is targeted to health assistants, staff nurses, and medical officers involved in emergency services at primary health centers and hospitals. Training involves the modules of BLS, PTC, Orthopedic emergency, Mass Casualty Incident management, Medical emergencies.

Hospital Preparedness for Emergency (HOPE) HOPE is one of the PEER course adapted from USAID/ADPC by Government of Nepal in our context. It is a four-days compact, team-based, in-person training for hospital managers, administrators, technical staffs, administrative staff to improve hospital readiness for disaster response. It consists of simulation drills as well to sensitize the importance of readiness and response effectively during disaster with effective activation of Incident Command System.

HOPE Training for Instructors (HOPE TFI) is a five-day facilitation skill course for HOPE graduates as a pathway of trainer, instructor, coordinator and monitor of the HOPE training.

Basic Critical Care Training for Nurses (BCCTN) is a 35-days intensive training conducted in accredited clinical training site based course for nurses working in ICUs to enhance their critical care skills.

Essential Critical Care Training (ECCT) is a six-days site based training program for health assistants, nurses and medical officers working in critical care units to improve essential critical care competencies.

Pediatric Essential Critical Care Training (PECCT) is a four-days training aiming to address the competency requirement for delivering essential critical care services focused on children.

Primary Burn Care and Management (PBCM) is a six days site based training targeting health assistants, nurses, and medical officers in primary care to enhance the competency on burn injury management.

Field Epidemiology Training Program (FETP) - Frontline is a course adapted from US-CDC, a 12-week course with three workshop modules on for in-service health officials of Government working in with degrees working in disease surveillance system focusing on

improve competency on systematic outbreak investigation, response and surveillance capacity.

Basic Emergency Care (BEC) Piloting Training is a five days training targeting the emergency care providers primarily working in basic, primary hospitals emergency units/departments focusing on systematic approach on ABCDE and SAMPLE history approach, trauma, difficulty in breathing, shock, altered mental status with standard Emergency Care Toolkit.

Community First Health Responder (CFHR) Piloting Training is a newly developed three-days course to ensure strengthening pre-hospital emergency capacity of community members, volunteers, as well as other formal sector employees to provide basic first aid and emergency response, appropriate transfer and referral for saving life.

Minimum Initial Service Package (MISP) for RH Emergencies is a four-days training for healthcare providers and managers on delivering reproductive health services during emergencies focusing on the knowledge and skills on ensuring uninterrupted service delivery of reproductive health services during emergencies.

Basic Burn Care (BBC) is a one-day basic training for all primary-level health workers, focusing on basic burn first aid and management.

Trauma and Injury Life Support (TILS) is a newly piloted three-day course for medical doctors working in emergency settings to develop trauma care and life support skills.

Primary Trauma Care / Basic Life Support (PTC/BLS) is a three-day training involving both modules on BLS and PTC targeting for health workers.

Achievement on Emergency Related Trainings conducted by National Health Training System			
SN	Name of Training	Total Till date	F/Y 2081/82 Up to Jestha
1	Basic Life Support	1432	343
2	Ambulance Driver	1108	113
3	Basic Emergency Medical Technician	107	0
4	Primary Emergency Care	721	185
5	Hospital Preparedness for Emergency	346	79
6	Hospital Preparedness for Emergency TFI	43	0
7	Basic Critical Care Training for nurses	319	25
8	Essential Critical Care Training	1095	127
9	Pediatric Essential Critical Care Training	431	32
10	Primary Burn Care and Management	201	91
11	Field Epidemiology Training Program (FETP)	185	64
12	Basic Emergency Care (BEC) *Piloting	357	71
13	Community First Health Responder *Piloting	47	47
14	Minimum Initial Service Package MISP for RH	778	276
15	Basic Burn Care* Piloting	43	20
16	Trauma and Injury Life Support *Piloting	24	24
17	PTC/BLS Primary Trauma Care	742	98

नेपालमा अस्पतालपूर्व सेवाका चुनौतीहरू र अबको बाटो

अस्पताल पूर्व समूह

स्वास्थ्य आपत्कालिन तथा विपद् व्यवस्थापन इकाई

EMS को अन्तराष्ट्रिय अभ्यास

Emergency Medical Services (EMS) अर्थात् अस्पतालपूर्व सेवा पनि स्वास्थ्य सेवा प्रणालीको अभिन्न अंग हो । विश्व स्वास्थ्य संगठन र संयुक्त राष्ट्रसंघीय क्षेत्रीय आयोगहरूले “सडक सुरक्षा कार्यका लागि दशक २०२१-२०३०”, जसको उद्देश्य सन् २०३० सम्ममा सडक दुर्घटनाबाट हुने मृत्यु र घाइते हुनेको संख्या कमिमा ५०% ले घटाउने महत्वाकांक्षी लक्ष्य लिएको छ। विकसित देश अमेरिकाले नागरिक-केन्द्रित “EMS Agenda 2050” ल्याएको छ (Gausche-Hill, Krung & Wright, 2021) । यस एजेन्डाले बिरामीहरू, तिनीहरूको परिवारहरू र उनीहरूले सेवा गर्ने समुदायहरूको आवश्यकताको प्राथमिकता र कल्याणलाई केन्द्रमा राखेर छवटा मार्गदर्शक: स्वाभाविक रूपमा सुरक्षित र प्रभावकारी, एकीकृत र निर्बाध, भरपर्दो र पूर्वतयारीयुक्त, सामाजिकरूपमा समानुपातिक, दिगो र प्रभावकारी, अनि अनुकूलनशील र नवप्रवर्तनशील सिद्धान्तहरू ल्याएको छ । दक्षिण कोरियाको राष्ट्रिय बारुण यन्त्रका १८ वटा विभाग अन्तर्गतको डिस्प्याच केन्द्रहरूद्वारा EMS प्रणाली सञ्चालित हुन्छ र यिनीहरूको मुख्य काम अस्पतालपूर्व सेवा, आगो नियन्त्रण र उद्धार नै हो (Park, Song & Shin, 2023) । बेलायत, अस्ट्रेलिया, क्यानाडा र युरोपमा EMS को संस्थागत विकास भएको छ । दक्षिण कोरियामा अस्पतालपूर्व सेवामा कार्यरत स्वास्थ्यकर्मीहरूले ३-४ वर्षको औपचारिक शिक्षा हासिल गरेको हुनुपर्छ । निम्न तथा मध्यम आय भएका देशहरू जस्तै घानामा २००४ बाट EMS प्रणाली सुरु भएतापनि घटनास्थलको सबैभन्दा नजिमा रहेको एम्बुलेन्स भनेको झन्डै १५० किमिको दूरीमा हुन्छ । पाकिस्तानको १६९ जिल्लाहरूमध्ये इंधी फाउन्डेसनले ३५ वटा जिल्लामा ७ मिनेटमा एम्बुलेन्स सेवा उपलब्ध गराएको एक अध्ययनले देखाएको छ (Plummer & Boyle, 2017) । निम्न र मध्यम आय भएका देशहरूमा EMS प्रणाली अझै पनि संस्थागत विकास हुन सकिरहेको छैन र यसका विभिन्न चुनौतीहरूको सामना गरिरहेका छन् जस्तै: माग भए अनुसार सेवा दिन नसक्नु, सीमित स्रोत साधन, जीर्ण पूर्वाधार, प्रविधिको विकास र कानुनी पक्षहरू हुन् (Basnawi, 2024).

EMS प्रणाली नेपालमा

विरामी वा घाइतेलाई घटनास्थलबाट अस्पताल पुर्याउनु अधिको आपतकालीन उपचार, विरामीको प्राथमिक व्यवस्थापन, हेरचाह वा स्याहार अस्पतालपूर्व सेवाका कामहरू हुन्। अस्पतालपूर्व सेवाको प्रभावकारिता वृद्धि गर्न स्वास्थ्य तथा जनसंख्या मन्त्रालयले राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८ जारी गर्दै नीतिगत तथा संरचनात्मक सुधारको थालनी गर्यो। स्वास्थ्य संस्थाबाट मात्र एम्बुलेन्स सेवा सञ्चालन, प्रेषण केन्द्रहरूको स्थापना, १०२ टोल-फ्री नम्बरको सुरु, GPS प्रविधि जडान, एम्बुलेन्स व्यवस्थापनमा दक्ष जनशक्ति (चालक तथा स्वास्थ्यकर्मी) का लागि मान्यता प्राप्त तालिम र नागरिकको सेवामा पहुँच यस निर्देशिकाका विशेषता हुन् । साथै, विद्युतीय एम्बुलेन्स सेवाको विस्तार र Heli Emergency Medical Services (HEMS) अर्थात् हेली आपतकालीन स्वास्थ्य सेवाका लागि मापदण्ड निर्माण जस्ता पहलहरूले नेपाल सरकार, अस्पतालपूर्व सेवाको आधुनिकीकरणतर्फ उन्मुख भएको छ । हाल, प्रदेशस्तका प्रेषण केन्द्रहरू क्रमशः सञ्चालनमा आइरहेका छन्। प्रदेशमा संचालित प्रेषण केन्द्रहरूबाट प्रत्येक महिनामा झन्डै एक हजार नागरिकले एम्बुलेन्स सेवा लिइरहेका छन् । यद्यपि, एम्बुलेन्स सेवाको लागि “१०२” नम्बरको प्रचार-प्रसार तथा सेवाको गुणस्तर, पहुँच र उत्तरदायित्व वृद्धि गर्न अझै पनि आवश्यक छ। वर्तमानमा भईरहेका पहलहरूले अस्पतालपूर्व सेवा प्रणालीलाई गुणस्तरीय, उत्तरदायी र दिगो बनाउँदै लैजान सहयोग गर्ने अपेक्षा गरिएको छ ।

एउटा प्रेषण केन्द्र वा अस्पतालपूर्व सेवालार्इ संचालनमा ल्याउन कम्तिमा निम्न कुराहरू संचालनमा राख्न सक्नुपर्छ:

सबै प्रेषण केन्द्रहरू सञ्चालन गरी एम्बुलेन्स प्रेषणको क्षमता सुदृढी गर्ने, एम्बुलेन्स निर्देशिकालाई प्रभावकारी रूपमा कार्यान्वयन गरी एम्बुलेन्स सेवा सञ्चालनमा एकरूपता सुनिश्चित गर्ने र सम्बन्धित निकायहरूसँग समन्वय गरी एम्बुलेन्स सवारी सजिलै प्राप्त गर्न सुनिश्चित गर्ने ।

सबै एम्बुलेन्सहरूमा अनिवार्य जीपीएस जडान गरी एम्बुलेन्स सेवाको रिएल टाइममा अनुगमन तथा मूल्यांकन प्रणालीको अभ्यास गर्ने ।

राष्ट्रिय/प्रादेशिक स्वास्थ्य तालिम केन्द्रसँग समन्वय गरी स्वास्थ्यकर्मी र एम्बुलेन्स चालकहरूको लागि आवश्यक शिप र ज्ञानको तालिम आयोजना गर्ने ।

एम्बुलेन्स सेवा शुल्कलाई निष्पक्षता र पारदर्शिता गर्ने र भूगोल र जनसंख्याको आधारमा एम्बुलेन्सको संख्या तय गर्ने ।

एम्बुलेन्स सेवाको उचित प्रयोग, पहुँच अनि उपलब्धता सम्बन्धी नागरिक, समुदाय र सरोकारवालाहरू सबैले “१०२” को प्रयोग लगायतका बिषयमा अभिमुखीकरण र जनचेतना अभिवृद्धि गर्ने ।

EMS को क्षेत्रमा अझ केही नीतिगत र प्राविधिक कार्यहरूको थालनी पक्कै पनि भएको छ तैपनि यसको व्यवस्थापन र संचालन गर्दा चुनौतीहरू पनि छन्:

प्रेषण केन्द्रहरू अवरुद्ध हुँदा एम्बुलेन्स सेवा समन्वय गर्न ढिलाई भएको र आकस्मिक घटनामा समयमा एम्बुलेन्स सेवा दिन नसकिने अवस्था सिर्जना भैरहेको ।

कमजोर भौगोलिक पहुँचका कारण दुर्गम तथा पहाडी क्षेत्रका कमजोर सडक संरचना र प्राकृतिक अवरोधहरूले वर्षभर एम्बुलेन्स सेवा पुर्याउन कठिन बनाईरहेको ।

तालिम नपाएका चालक र स्वास्थ्यकर्मीका कारण आपतकालीन सेवाको गुणस्तरमा कमि भएकोले बिरामीको जीवन जोखिम रहेको ।

अधिकांश एम्बुलेन्सहरू कच्ची वा पहाडको वाटोमा चलन नसक्ने अवस्थाका छन् यसका धेरै कारणहरूमध्ये 2WD र समयमै सर्बिसिंग नहुनु पनि हो, यी एम्बुलेन्सहरू सामान्य ढुवानीका लागि मात्र उपयुक्त हुनु पनि चुनौती भएको छ ।

जीपीएस निष्क्रिय राख्ने र नवीकरण नगर्ने, प्रेषण केन्द्रसँग समन्वय नगर्ने, सेवा विवरण अभिलेख नराख्ने, र तोकिएको सेवा शुल्क लागु नगर्ने जस्ता अभ्यासहरूले अनियमितता र जवाफदेहिता कमजोर बनिरहेको छ ।

अबको संस्थागत प्रणाली

तीन अंकको टोल फ्री नम्बर र एकीकृत प्रणाली

विकसित देशहरूले छिटो छरितो र प्रभावकारीरूपमा अस्पतालपूर्व सेवा प्रदान गर्नको लागि “एकीकृत प्रणाली” लाई अवलम्बन गरेको छन् । जस्तै: आगो लाग्यो वा कुनै दुर्घटना भयो, वा इमर्जेन्सी सहयोग चाहिएमा तोकिएको तीन डिजिट नम्बरमा फोन गर्यो भने घटनाको प्रकृति हेरेर उक्त प्रणालीले आपतकालीन सेवा प्रवाह हुन्छ । आपतकालीन अवस्थामा सम्झन सजिलो होस् भनेर तीन अंकको नम्बर चलाउने गरिन्छ । धेरै वटा तीन अंकका नम्बरहरू हुँदा आपतको बेलामा दोधार हुने भएकोले कुनै पनि इमर्जेन्सी सेवाको लागि “एकीकृत नम्बर” हुन्छ । विकासोन्मुख देशहरूमा “एकीकृत प्रणाली” सेवाको अभ्यास छ, जस्तै: श्रीलंकामा एम्बुलेन्स, दमकल र उद्धार सेवाको लागि ११० डायल गरे पुग्छ । नेपालको सन्दर्भमा, प्रहरी -१००, दमकल-१०१ र एम्बुलेन्स सेवा-१०२ को लागि यी तीन विभिन्न नम्बरमा डायल गर्नुपर्ने अभ्यास छ । समयमै सम्बन्धित निकायमा संचार हुन सकेमा नागरिक र धन-जनको थप क्षति हुनबाट बचाउन सकिन्छ, त्यसको लागि “एकीकृत प्रणाली” को संस्थागत विकास गर्न आवश्यक छ ।

व्यवस्थापन र संचालन

EMS भनेको २४सै घण्टा सेवा एउटा संचार प्रणाली हो । यो प्रणालीलाई संचालन गर्नको लागि जनशक्ति, योजना, भौतिक, आर्थिक र आपूर्ति व्यवस्थापनको आवश्यक पर्छ । विकसित देशहरूमा EMSको ५ देखि ३० वर्षे दीर्घकालीन योजना बनाई अघि बढेका छन् । कतिपय देशहरूले EMS काउन्सिलको रूपमा संचालन गरेका छन् जसले कर्मचारीको क्षमतामा वृद्धि, नियमन, गुणस्तर सेवा, व्यवस्थापन, संचालन र कानुनी पाटो हेर्ने गर्छ । नेपालमा सन् २०१८ देखि विभिन्न गोष्ठी, कार्यशाला तथा नीतिगत छलफलहरूमा EMS को महत्वको बारेमा उठाइएको पाइन्छ । तर EMS लाई निर्वाधरूपमा संचालन गर्नको लागि यसको आफ्नै ऐन, नियमावली लगायत कानुनि व्यवस्था हुनुआवश्यक छ, जसको आधारमा मन्त्रालयले नागरिक-मुखि EMS सेवाको दीर्घकालीन रणनीतिक योजना बनाउन सकोस र सरोकारवालाहरूलाई पनि नियमन गर्न सकोस । अहिले, स्वास्थ्य तथा

जनसंख्या मन्त्रालय अन्तर्गतको स्वास्थ्य आपतकालिन विपद तथा व्यवस्थापन इकाईले हेर्ने EMS लाई संरचनात्मक विकास र विस्तार गर्नुपर्ने देखिन्छ ।

प्रस्तावित:

उद्देश्य: समयमै, छिटो, छरितो, सुरक्षित र प्रमाणमा आधारित अस्पतालपूर्व सेवा प्रणालीको सुदृढीकरण गर्नु।

मिशन: अस्पतालपूर्व सेवा प्रणालीलाई संस्थागत, एकीकृत र संघीय संरचनाअनुसार बनाउने, पहुँचविहीन, विपद् सम्भावित तथा ग्रामीण क्षेत्रसम्म सेवा विस्तार गर्ने, र नीति, योजना, पूर्वाधार, जनशक्ति र तालिम प्रणालीको दीर्घकालीन विकास सुनिश्चित गर्ने।

प्रमुख कार्यक्षेत्र: राष्ट्रिय EMS नीति, मापदण्ड, निर्देशिका, नियमावली तथा प्रोटोकलहरूको निर्माण र अद्यावधिक गर्ने सिफारिस गर्ने। अन्तरमन्त्रालय, प्रदेश, स्थानीय सरकार र निजी क्षेत्रलगायत सरोकारवाला निकायहरूसँग समन्वय गर्दै EMS प्रणालीलाई एकीकृत ढंगले सञ्चालन गर्ने। AEMT, HEMS-EMT, Air-EMT, Paramedics, Dispatcher लगायतका लागि तालिम, प्रमाणीकरण, नवीकरण प्रणाली निर्माण गर्दै भौगोलिक तथा जनसङ्ख्या आधारमा दक्ष जनशक्ति उत्पादन गर्ने। डिजिटल प्लेटफर्म (जस्तै मोबाइल एप) मा आधारित एम्बुलेन्स डिस्प्याच प्रणाली, जीपीएस ट्र्याकिङ, डेटा संकलन, विश्लेषण र गुणस्तर अनुगमन प्रणाली विकास गर्ने। नागरिक स्तरमा EMS को महत्व र सेवा सम्बन्धी जनचेतना कार्यक्रम सञ्चालन गर्ने। विद्यालय, विश्वविद्यालय, मेडिकल कलेजहरू र तालिम संस्थाहरूमा EMS सम्बन्धी पाठ्यक्रम विकासमा प्राविधिक सहयोग प्रदान गर्ने।

साझेदार निकायहरू: वर्तमान अवस्थामा स्वास्थ्य तथा जनसंख्या मन्त्रालय, गृह मन्त्रालय (प्रहरी, ट्राफिक, आपतकालीन व्यवस्थापन), रक्षा मन्त्रालय, नेपाली सेना, नेपाल प्रहरी, सशस्त्र प्रहरी बल, विपद् व्यवस्थापन प्राधिकरण, सडक सुरक्षा परिषद्, नेपाल रेडक्रस सोसाइटी, निजी एम्बुलेन्स सेवा प्रदायक, स्थानीय तह, विश्व स्वास्थ्य संगठन, गैरसरकारी राष्ट्रिय र अन्तराष्ट्रिय संघसंस्थाहरू साझेदार छन् ।

दीर्घकालीन रणनीति अन्तर्गत EMS को संरचनात्मक विकासले नेपालमा अस्पतालपूर्व सेवा प्रणालीलाई समग्र रूपमा रूपान्तरण गर्नेछ, नागरिकले पाउनुपर्ने आकस्मिक सेवा छिटो छरितो र प्रभावकारीरूपमा प्राप्त गर्ने छन् र आधुनिक प्रणालीमा रूपान्तरण गर्दै नागरिकको स्वास्थ्य अधिकार सुनिश्चित हुनेछ।

सन्दर्भ सामाग्रीहरू:

कानून, न्याय तथा संसदीय मामिला मन्त्रालय (२०८१). भन्सार महसुल सम्बन्धी कानूनलाई संशोधन र एकीकरण गर्न बनेको ऐन. नेपाल सरकार

स्वास्थ्य आपतकालीन तथा विपद् इकाई (२०२१). राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८. स्वास्थ्य तथा जनसंख्या मन्त्रालय, नेपाल सरकार । गोरखापत्र (२०७९). नेता भण्डारीलाई एयर एम्बुलेन्समार्फत मुम्बई लगियो । <https://gorkhapatraonline.com/news/54627>

राष्ट्रिय प्रेषण केन्द्र (२०८२). अस्पतालपूर्व सेवाको तथ्यांक, स्वास्थ्य आपतकालीन तथा विपद् इकाई (२०२१). राष्ट्रिय एम्बुलेन्स निर्देशिका, २०७८. स्वास्थ्य तथा जनसंख्या मन्त्रालय, नेपाल सरकार ।

Basnawi, A. (2024). Addressing Challenges in EMS Department Operations: A Comprehensive Analysis of Key Issues and Solution. *Emergency Care and Medicine*, 1(1), 11-23. <https://doi.org/10.3390/ecm1010003>

Gausche-Hill, M., Krug, S., & Wright, J. (2021). Emergency medical services (EMS) 2050: a vision for the future of pediatric prehospital care. *Prehospital Emergency Care*, 25(1), 91-94.

Mould-Millman NK, De Vries S, Stein C, Kafwamfwa M, Dixon J, Yancey A, et al (2015). Developing emergency medical dispatch systems in Africa - Recommendations of the African Federation for Emergency Medicine/ International Academies of Emergency Dispatch Working Group. *African J Emerg Med [Internet]*. 2015;5(3):141-7.

MoHP (2019). Workshop on standardization of training program for health sector emergency preparedness and response plan: community, prehospital, hospital, posthospital and response plan. 12-14 January 2019 (28–30 Poush 2075), Kurintar, Chitwan. Government of Nepal.

Pant, PR, Sehain, B, Bist, BS (2025). Injury prevention and control (Nepali). NIRI, Kathmandu, Nepal.

Park, J. H., Song, K. J., & Shin, S. D. (2023). The prehospital emergency medical service system in Korea: its current status and future direction. *Clinical and experimental emergency medicine*, 10(3), 251-254. <https://doi.org/10.15441/ceem.23.081>

Plummer, V., & Boyle, M. (2017). EMS systems in lower-middle income countries: a literature review. *Prehospital and disaster medicine*, 32(1), 64-70.

WHO (2020) WHO Emergency Care System Framework Infographic. Available from: www.who.int/emergencycare

WHO (2021). Prehospital care framework for eastern mediterranean region (unpublished).

विपद् पूर्वतयारी तथा प्रतिकार्यमा राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्र

निशान राज गौतम

प्रमुख राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्र



विपद् बाट हुने क्षति न्यूनीकरणको लागि विपद् व्यवस्थापनलाई प्रभावकारी बनाउनुपर्ने हुन्छ । विपद् व्यवस्थापन अन्तर्गत विपद् जोखिम न्यूनीकरण, विपद् पूर्वतयारी तथा प्रतिकार्य र विपद् पुनर्लाभसँग सम्बन्धित सम्पूर्ण क्रियाकलाप पर्दछन् । विपद् व्यवस्थापनको चक्रमा पूर्वतयारी (Preparedness) तथा प्रतिकार्यका (Emergency Response) कार्यहरु अत्यन्तै जिम्मेवारी एवं सावधानीपूर्वक गर्नुपर्ने हुन्छ । यस अवधिमा विपद्का सम्भावित जोखिमबारे सर्वसाधारणलाई समयमै सही ढंगले सूचित गर्ने, विपद्का आधिकारिक सूचनाहरु प्रवाह गर्ने तथा छरितो र समन्वयात्मक रुपमा खोज एवं उद्धारका कार्यहरु सम्पन्न गर्न जरुरी हुन्छ । नेपालमा विपद् पूर्वतयारी तथा प्रतिकार्यको समन्वय तथा सञ्चालन गर्ने महत्वपूर्ण केन्द्रीय निकायको रुपमा राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्र (NEOC) सञ्चालनमा रहेको छ । यस केन्द्रले विपद्का सम्भावित घटनाहरुको बारेमा सम्बन्धित सबैलाई पूर्वजानकारी गराउने, तत्काल सूचना सङ्कलन, विश्लेषण तथा सम्प्रेषण गर्ने र खोज, उद्धार तथा राहत सम्बन्धी कार्यको समन्वय तथा परिचालन गर्ने कार्य गर्दछ । गृह मन्त्रालय अन्तर्गत विपद् तथा द्वन्द्व व्यवस्थापन महाशाखामा रहेको विपद् पूर्व तयारी तथा प्रतिकार्य शाखाले नै हाल राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्रको रुपमा कार्य गरिरहेको छ । यस केन्द्रको स्थापना वि.सं. २०६७ साल पौष १७ गते भएको हो । भूकम्प, बाढी, पहिरो, आगलागी, स्वास्थ्य संकट लगायत अन्य विपद्जन्य आपत्कालिन अवस्थाहरु आउनुपूर्व र विपद्को समयमा सूचना सङ्कलन गर्ने, खोज तथा उद्धारका कार्यहरुको समन्वय गर्ने एवं विपद् प्रभावितहरुलाई तत्काल राहत उपलब्ध गराउने कार्यको समन्वय यस केन्द्रले गर्दै आएको छ ।

आपत्कालीन अवस्थामा यस केन्द्रले कसरी काम गर्ने भन्ने सम्बन्धमा आपत्कालिन कार्यसञ्चालन केन्द्र सञ्चालन कार्यविधि २०७२, ले स्पष्ट कार्यढाँचा निर्धारण गरेको छ । विपद्का घटनामा कुन निकाय, पदाधिकारी वा संस्थाको अधिकार, जिम्मेवारी, भूमिका र कार्य के हुने र कुन कुन समय अवधिमा कुन कुन कृयाकलाप कसरी सम्पादन गर्ने भन्ने विषय कार्यविधिले विस्तृतरुपमा परिभाषित गरिदिएको छ । विपद्को समयमा आदेशको एकात्मकता हुन सकेन र सूचना वा निर्देशन एकद्वार प्रणालीबाट सम्प्रेषण हुन सकेन भने त्यसले समग्र कार्य प्रणालीमा नकरात्मक प्रभाव पर्ने भएकोले यस केन्द्रलाई सो सम्बन्धी कार्यको लागि जिम्मेवार बनाईएको छ ।

केन्द्रले रेडियो सेट, टेलिफोन, ईन्टरनेट लगायतका माध्यमबाट स्थानीय तह, जिल्ला, प्रदेश र राष्ट्रिय केन्द्रहरुबाट सूचना संकलन तथा विश्लेषण गर्ने गरेको छ । विषयगत विज्ञ निकायहरु जस्तै जल तथा मौसम विज्ञान विभाग, राष्ट्रिय भूकम्प मापन केन्द्रबाट प्राप्त सूचनाको आवश्यकतानुसार थप पुष्टि गरी पूर्व तयारी र प्रतिकार्यका लागि पूर्व सूचना, सावधानी सम्बन्धी चेतावनी (Alerts) र परामर्शहरु (Advisory) जारी गर्ने गरेको छ । विपद् प्रोटल (drrportal.gov.np) मा विपद्जन्य घटनाहरुको नियमित प्रविष्टि र अद्यावधिक हुने गरेको छ । विपद्जन्य घटनाहरुको सूचना तथा तथ्याङ्कको आधिकारिक स्रोत केन्द्रको रुपमा रहेको छ । विपद्जन्य घटनाहरुको नियमित प्रतिवेदन र सम्प्रेषण सम्बन्धी कार्य सम्पादन गरिरहेको छ । आपत्कालिन कार्यसञ्चालन केन्द्रहरु बीचको निरन्तर सञ्चार र समन्वय कायम राख्ने गरेको छ ।

त्यसैगरी विपद्को समयमा आवश्यक पर्ने खोज, उद्धार र राहतका सामग्रीहरु तयारी अवस्थामा राख्न यस केन्द्रले नेतृत्वदायी र समन्वयकारी भूमिका निर्वाह गर्ने गरेको छ । विभिन्न राष्ट्रिय तथा अन्तराष्ट्रिय निकायहरु, दातृ संस्थाहरु, निजी क्षेत्र एवं मानवीय सहायताको क्षेत्रमा कृयाशील संघसस्थाहरूसँग समन्वय गरी यस प्रकारका सामग्री प्राप्त गर्ने, उद्धार तथा राहत सामग्रीहरुको संकलन, सन्चय तथा भण्डारण गर्ने कार्य समेत यस केन्द्रको

अगुवाईमा हुने गर्दछ । विपद्को समयमा राहतका सामग्रीहरु तत्काल प्रभावित क्षेत्रमा पु-याउन सकियोस भन्ने उद्देश्यले मुलुकका विभिन्न रणनीतिक स्थानहरुमा गोदामहरुको प्रवन्ध गरी वितरण हुने व्यवस्था मिलाईएको छ । यो समग्र कार्यमा विश्व खाद्य कार्यक्रमले सहयोग गरेको छ ।

साथै राष्ट्रिय आपत्कालिन कार्यसञ्चालन केन्द्रले विपद्जन्य घटनाहरुमा तत्काल खोज, उद्धार तथा राहत कार्यका लागि सरकारी तथा गैरसरकारी निकायहरुको स्रोत साधन परिचालन गर्न समन्वय गर्ने गरेको छ । नेपाली सेना, नेपाल प्रहरी, सशस्त्र प्रहरी बल, नेपाल, नेपाल रेडक्रस सोसाईटी र समुदायस्तरका संघ संस्थाहरुको परिचालनमा सहजीकरण गरिरहेको छ । विषयगत मन्त्रालय/विभाग र राष्ट्रसंघीय निकायहरुको संलग्नतामा रहेका क्षेत्रगत समूहलाई आपत्कालिन अवस्थामा आ-आफ्नो क्षेत्र विशेषमा कृयाशील बनाउन केन्द्र क्रियाशील रहेको छ ।

विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन ऐन, २०७४ को दफा ११ को विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरणको काम, कर्तव्य र अधिकार अन्तर्गत उपदफा (१)(थ) मा विपद्को सम्भावित घटनाका बारेमा सम्बन्धित सबैलाई पूर्व जानकारी गराउन, तत्काल सूचना संकलन, विश्लेषण तथा सम्प्रेषण गर्न र खोज, उद्धार तथा राहत सम्बन्धी कार्यको समन्वय तथा परिचालन गर्न राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्रको सञ्चालन तथा व्यवस्थापन गर्ने उल्लेख छ । हालसम्म यस केन्द्रको सामान्य सञ्चालन तथा व्यवस्थापन गृह मन्त्रालयको विपद् तथा द्रव्य व्यवस्थापन महाशाखा अन्तर्गत रहेको विपद् पूर्व तयारी तथा प्रतिकार्य शाखाबाट हुने गरेको छ । गृह मन्त्रालय अन्तर्गत विपद् व्यवस्थापनसम्बन्धी विशिष्टिकृत निकायको रुपमा रहेको प्राधिकरण अन्तर्गत केन्द्रको व्यवस्थापन गर्ने तर्फ पहल भईरहेको छ । यस केन्द्रलाई विपद् पूर्वतयारी तथा प्रतिकार्यमा प्रभावकारी रुपले सञ्चालन गर्नको लागि मौजुदा संगठन संरचना, दरवन्दी, कार्यप्रकृति तथा कार्यबोझको विश्लेषण गर्नुपर्ने हुन्छ । साथै ऐनले निर्दिष्ट गरेको मार्गदर्शन अनुसार तीनवटा विषयमा केन्द्रीत रही सो अनुसार कार्यक्षेत्र तथा जिम्मेवारी यकिन गरी संगठन संरचना र दरवन्दी निर्धारण गर्नुपर्ने हुन्छ । केन्द्रलाई परिवर्तित स्वरुपमा सञ्चालन गर्ने प्रक्रिया तथा विधि समेत नयाँ ढंगबाट निर्दिष्ट गर्नुपर्ने हुन्छ । यसको लागि संगठन तथा व्यवस्थापन सर्वेक्षण गर्ने, कार्यविधिको मस्यौदा तर्जुमा गर्ने, छलफल तथा परामर्श गर्ने सम्बन्धी कार्य अघि बढेका छन् ।

राष्ट्रिय आपत्कालिन कार्य सञ्चालन केन्द्रलाई प्रभावकारी बनाउन आधुनिक सूचना प्रणालीको उपयोग, पूर्वाधार विकास र जनशक्तिलाई आवश्यक तालिम र क्षमता अभिवृद्धिको माध्यमबाट संस्थागत क्षमता बढाउनु पर्छ । यसको लागि राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरणसंग रहेको स्रोत परिचालन गर्नु पर्ने हुन्छ । साथै तहगत सरकारका निकायसंग कार्यगत साझेदारी गरी स्रोत साधनको व्यवस्थापन गर्न सकिन्छ । आधुनिक प्रविधि, भौगोलिक सूचना प्राणली (GIS), डिजिटल उपकरणहरु, कृत्रिम बौद्धिकता(AI) को प्रयोगबाट विपद् पूर्वानुमान, जोखिम विश्लेषण र जानकारी प्रवाहलाई थप प्रभावकारी बनाउन तर्फ ध्यान दिनुपर्छ । विपद्जन्य घटना घट्नुपूर्व वा घटना घटी सकेपछिको वास्तविक-समय (Real Time) को सूचना प्राप्ति, विश्लेषण र सम्प्रेषण गरी पूर्व सावधानी प्रणालीलाई प्रभावकारी बनाउन जरुरी छ । निकायगत समन्वय प्रभावकारी बनाई शिघ्र प्रतिकार्य (खोज उद्धार तथा अन्तरिम राहतका कार्य) लाई समेत प्रभावकारी बनाउन छरितो समन्वय संयन्त्र तयार गर्नुपर्छ । हाल सञ्चालनमा रहेका विभिन्न आपत्कालिन सेवाहरुबीच सञ्जालीकरण गर्न सकिन्छ ।

विपद् पूर्व तयारी तथा प्रतिकार्यमा आपत्कालिन कार्य सञ्चालन केन्द्रको भूमिका अत्यन्त महत्वपूर्ण रहेको हुन्छ । यसै तथ्यलाई मनन गरी नेपाल सरकारले विगत १५ वर्ष देखी आपत्कालिन कार्य सञ्चालन केन्द्र सञ्चालनमा ल्याएको छ । विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन ऐन, २०७४ ले केन्द्रलाई राष्ट्रिय विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरणको मातहत ल्याई विपद्को सम्भावित घटनाका बारेमा पूर्व जानकारी गराउन, तत्काल सूचना संकलन, विश्लेषण तथा सम्प्रेषण गर्न र खोज, उद्धार तथा राहत सम्बन्धी कार्यको समन्वय तथा परिचालन कार्यलाई थप सशक्त र प्रभावकारी बनाउन खोजेको छ । त्यसैले केन्द्रको संरचना, कार्यक्षेत्र, सञ्चालन पद्धति लगायतका विषयमा हालसम्मको हाम्रै अनुभव तथा अन्तर्राष्ट्रिय अभ्याससमेतको आधारमा अध्ययन तथा विश्लेषण गरी यसलाई विपद् बाट जनधनको क्षति रोक्ने अस्त्र, विपद् सम्बन्धी सूचनाको प्लेटफर्म तथा विपद्को समयमा खोज, उद्धार र राहत सम्बन्धी कार्यको कमाण्ड सेण्टरको रुपमा विकास गर्नुपर्ने आवश्यकता देखिन्छ ।

When Every Second Counts: A Decade of Building Health Emergency Systems in Nepal with WHO



Dr Allison Gocotano, Dr Subash Neupane, Dr Dipendra Gautam, Prahlad Dahal, Deepesh Sthapit, Sunil Aryal, Dr Gaurav Devkota, Dr Bigyan Prajapati, Dr Amit Kumar Singh, Bimal Singh Bist, Sanjib Gautam, Ganesh Singh Dhami

Ten years of Resilience: Laying the Foundation

Nepal, due to its location and topography, has always been prone to geophysical and hydrometeorological hazards like earthquakes, floods, and landslides, as well as epidemics and outbreaks, often resulting in a high number of casualties. To strengthen disaster response, the Ministry of Home Affairs (MoHA) established the National Emergency Operation Center (NEOC) in 2010, providing an overarching framework to enhance the nation's capacity to respond to and manage disasters through coordination with various government agencies.

At the global level, the World Health Organization (WHO) established the Public Health Emergency Operations Center Network (EOC-NET) in 2012 to support member states in establishing Health Emergency Operations Centers (HEOCs), thereby promoting best practices and standards in public health emergency management.

In line with these global and national initiatives, the Ministry of Health and Population (MoHP), recognizing the need for coordinated efforts in the health sector to ensure uninterrupted health service delivery during emergencies, conceptualized the Health Emergency Operation Center (HEOC) in 2012. With support from WHO, the HEOC was formally established at the premises of MoHP in 2014. Given its envisioned role in coordinating multiple stakeholders and managing large volumes of data, the HEOC was equipped with technical human resources and the latest information and communication technologies for its smooth functioning.

Concurrently, MoHP and WHO discussed the idea of creating a network of hospitals and surge human resources for response during large-scale disasters, coordinated through the HEOC. The concept was informed by past disasters in Nepal, which had damaged or destroyed many health facilities, rendering some non-functional. This led to the establishment of the hub and satellite hospital network, along with a roster mechanism of medical personnel ready for emergency deployment. This was complemented by a deployment plan integrated within the Hospital Disaster Plan. Moreover, in 2015, the Standard Operating Procedure (SOP) for the HEOC was developed, incorporating MoHP's Incident Command System (ICS) to facilitate coordinated efforts in health emergencies and disasters.

Turning Point: The 2015 Earthquake as Catalyst

Before the concept could fully develop, and the structures and documents be tested in theoretical scenarios through simulation exercises, the MoHP-ICS, HEOC, and hub and satellite hospital network had to respond to the major earthquake in 2015. At the request of the government, WHO facilitated the mobilization of the South-East Asia Regional Health Emergency Fund (SEARHEF) and distributed emergency kits containing essential medicines, life-saving medical supplies, and treatment guidelines, among others. An urgent call for help

from Nepal fueled global solidarity, with countries and organizations bringing health aid. With the formal activation of the Health Cluster, WHO assisted the MoHP in coordinating and facilitating humanitarian health agencies and their aid, in cooperation with UNFPA, UNICEF, and both national and international NGOs. WHO personnel at HEOC supported the conduct of health cluster meetings, the development of situation reports through communication with relevant stakeholders, and information sharing as required.

Technical expertise was provided at HEOC for a coordinated response among the hub and satellite hospital network, including coordination of 135 Foreign Medical Teams (FMTs) from 36 countries. WHO also established field operational hubs in the most affected districts (Gorkha and Sindhupalchowk) to support sub-national level health cluster coordination through the District Health Offices, deployed staff to the most affected sites, and supported the establishment of 50 Medical Camp Kits and the supply of basic medicines and medical equipment.

After the response phase, an after-action review of the earthquake response was conducted and recommended several action points, including the need to streamline MoHP's response and coordination with health partners, improve resource mapping, develop guidelines for national and international surge deployment, establish resilient health facilities with structural, non-structural, and functional safety, develop information management systems with standardized data collection and reporting tools, and implement effective logistics management and strategic stockpiling.

Building the Health-Emergency Architecture

Provincial HEOCs: Extending the Nerve-Center

During his participation at the 68th session of the World Health Assembly in May 2015, the then Health Minister requested WHO's support to develop similar HEOCs at the sub-national level. That year, WHA also discussed the global response to the Ebola outbreak, antimicrobial resistance, maternal and child nutrition, and integration of health into the post-2015 development agenda. During this time, WHO also underwent major reforms to address gaps in emergency response capacity, thus establishing the three-level WHO Health Emergencies Programme (WHE). Using resources for post-earthquake reconstruction and support from partners, the establishment of provincial HEOCs (PHEOCs) soon commenced.

As the western part of Nepal was identified to be more at risk of future earthquakes, PHEOCs were first established in these regions, then expanded to the remaining provinces, following the adoption of the new constitution in September 2015, when Nepal became a federal democratic republic. Similar infrastructures with modern ICT provisions were established in all provinces. MoHP and WHO then conducted capacity building and coordination-strengthening activities, including a multisectoral emergency response simulation in 2018, a workshop on standardizing the training program for health sector emergency preparedness and disaster response plan (community, pre-hospital, hospital, and post-hospital care) in 2019, the HEOC-PHEOCs network expansion and strengthening workshop in 2021, and the Nepal Health Sector Simulation Exercise in 2022.

Global partnership was also emphasized through support for the recognition of the HEOC as a Global Outbreak Alert and Response Network (GOARN) partner and the organization of a GOARN roadshow and regional workshop in Nepal. National partnerships extended beyond the health sector through coordination with NEOC and NDRRMA, as well as the organization

of the civil-military collaboration strengthening workshop involving the Nepal Police, Armed Police Force, and Nepal Army.

Through these HEOCs, WHO temporarily deployed personnel to support the provincial governments in coordinating response activities, while systematically strengthening information management during acute health emergencies and disaster response, including the 2017 floods and landslides, and the 2019 Bara-Parsa windstorm. Later, WHO personnel based at the PHEOCs continued to support preparedness and response to COVID-19, the 2022 cholera outbreak, the 2023 Jajarkot earthquake, and the 2024 floods and landslides.

Health Cluster: Coordination That Saves Lives

Following its active coordination, stewardship, and information management during the 2015 Nepal earthquake—and as recommended in the after-action review—the health cluster, though no longer formally activated by the Inter-Agency Standing Committee (IASC), continued its preparedness role. Pursuant to the provisions of the National Disaster Response Framework (2019), WHO supported MoHP as the co-lead and secretariat in developing disaster-specific response plans at national and sub-national levels, updating health partner contacts annually, and contributing to the United Nations Country Team’s emergency response plan in Nepal, in coordination with humanitarian health partners.

When COVID-19 struck, partners and donors depended on health cluster coordination meetings for timely information and guidance. WHO co-led 72 health cluster coordination meetings from 2020 to 2022, provided secretarial support, responded to partner queries, and ensured information standardization through tools such as the 4W matrix to prevent duplication. An evaluation of the effectiveness of coordination during COVID-19 response by the health sector conducted in 2022 identified the need for capacity building and development of a guidance document for health cluster partners.

Government officials participated in the Global Health Cluster training, which prepared them to later serve as course trainers. In August 2023, Nepal hosted the Global Health Cluster Coordination training, capacitating provincial authorities and partners. These learnings were immediately applied during the Jajarkot earthquake in November 2023 when the Health Service Directorate of Karnali Province, as the provincial health and nutrition cluster lead, had to lead response. WHO’s Incident Management System (IMS) was also activated, supporting both national and provincial health clusters, developing situation updates, and assisting partners in fulfilling provincial government requests. WHO and GIZ conducted a detailed damage assessment (DDA) of the affected health facilities. Based on the DDA and the contextualized Health Resources and Services Availability Monitoring System (HeRAMS) assessment, temporary health facilities using Medical Camp Kits were later established upon provincial requests.

A national guidance document to guide humanitarian response coordination for the health sector was drafted with government input and endorsed in 2024. During the eastern Nepal floods and landslides that year, WHO once again co-led the health cluster coordination with MoHP. WHO also established Medical Camp Kits—one in Koshi Province and another in Bagmati Province—upon requests from municipalities, using HeRAMS data assessed by local health focal persons trained on the tool.

Emergency Care Systems: From Community, to Ambulance, to Emergency Room Readiness

In 2018, with WHO's support, MoHP organized national conferences on pre-hospital and post-hospital care, endorsing their resulting declarations. In 2019, WHO supported a "Stakeholder Mapping of Pre-Hospital Care Service Providers and Enablers in Nepal" to gather essential information from existing service providers and enablers. That same year WHO also supported a national-level workshop that developed consensus on the need to standardize and , update essential training programs for pre-hospital care.

WHO provided technical support for developing the National Ambulance Guidelines, endorsed by MoHP in 2021 and actively participates in ambulance steering and management committee meetings, including in updating the ambulance guideline based on consultative workshop inputs.

WHO supported the National Health Training Center (NHTC) in providing certified training to ambulance drivers and emergency medical technicians across Nepal along with the Learning Resource Package (LRP) transition and government ownership of the Hospital Preparedness in Emergencies (HOPE) training (11 batches across the country). Aligned with HEOC's vision of empowering all people in Nepal to respond to or communicate for basic health support during emergencies, WHO supported NHTC develop and pilot the LRP for Community First Health Responders (CFHR).

In 2019, MoHP conducted the national Emergency Care System Assessment (ECSA) and stakeholder consultation under WHO's Global Emergency and Trauma Care Initiative (GETI). The assessment identified 39 priority actions for improving emergency care in Nepal, and in 2021, MoHP published the ECSA report, coinciding with the launch of the GoN-WHO Emergency Care System Strengthening Project. In December 2022, WHO supported a national workshop with participation of hub hospitals to review Emergency Care tools, which were endorsed by MoHP and initially implemented in one hospital per province. Later, WHO supported two batches of field testing of the contextualized Basic Emergency Care (BEC) course. This was then adapted into NHTC's LRP framework and is expected to be rolled out nationwide.

Hub-and-Satellite Hospitals: A Nationwide Safety Net

Following the recommendations of the 2015 earthquake response review, MoHP and WHO began preparedness activities for the hub and satellite hospital network with drills and simulation exercises. . Fail-safe shipping container-based Emergency Medical Logistic Warehouses (EMLWs) were established at six Kathmandu Valleyhub hospitals in 2017. In 2018, tent simulation exercises occurred, and by 2019, four additional EMLWs were set up in hub hospitals outside Kathmandu.

In 2019, MoHP with support from WHO Nepal, Geo-Hazards International, and the Department of Urban Development and Building Construction (DUDBC) conducted hospital safety assessments using the WHO Hospital Safety Index (HSI) tool, integrated with DUDBC's structural tool and expanded to assess disability access barriers. While some hospitals had been developing paper-based disaster plans, there was a need to improve standardization. Recognizing the need for digital tools, WHO supported developing the mobile and web-based Hospital Safety Index Plus (HSI+) app. Launched in November 2019, the app enabled digital

safety assessments and generation of Hospital Disaster Preparedness and Response Plans (HDPRPs).

During the COVID-19 pandemic, the hub-and-satellite hospital network managed cases, while WHO and HEOC ensured coordination through site visits and virtual meetings. The national hub and satellite hospital conference was organized in June 2022 with WHO support, which resulted in an 11-point declaration focusing on HDPRP development, capacity building, hospital assessments, Emergency Medical Team strengthening, and regular conduct of simulation exercises.

In 2022, WHO supported drafting a standard HDPRP template, incorporating COVID-19 lessons, Alternate Care Sites (ACS), and developing plans for 25 hub hospitals. In 2023, WHO supported digitization of the HDPRPs using the HSI+ app and created digital HDPRPs for 97 satellite hospitals through 15 workshops in 2024-2025. These were followed by table-top exercises, drills, site monitoring and coaching.

Surge Capacity in Action: Emergency Medical Teams

In response to the earthquake review's recommendations on human resource management, WHO supported to conduct a disaster response drill in 2018 as an initial step in shaping Nepal's Emergency Medical Team. In May 2019, the Director General of the Department of Health Services attended the EMT Technical Working Group meeting in Jakarta to better understand the concept of EMT from a global perspective.

When COVID-19 overwhelmed hospitals and healthcare workers fell ill, WHO supported to develop the COVID-19 Emergency Medical Deployment Team (EMDT) Mobilization Guidelines (2020), identified EMTs in 25 hub hospitals, and trained over 225 health professionals. EMTs were also equipped with locally designed deployment backpacks. WHO also supported Nepal's participation in the Second South-East Asia (SEA) Regional EMT Working Group Meeting on 8 June 2022.

A national conference in June 2022 reiterated the need for a structured EMT system in all hub hospitals. Nepal's delegation, with WHO representatives, participated in the Global EMT Meeting in Yerevan, Armenia (October 2022) which resulted in a commitment to develop national EMT and Rapid Response Team (RRT) guidelines. This commitment was realized by the end of 2022. MoHP organized the National EMT Workshop in June 2023, which brought together MoHP leaders, security forces, WHO experts from its three levels, and health professionals from across Nepal. The workshop strongly recommended developing a Standard Operating Procedure (SOP) for EMT deployment. Following this, WHO supported a series of consultative workshops that resulted in the SOP's development, which was endorsed in September 2024. WHO further supported provincial-level dissemination of the endorsed SOP and testing through table-top exercises.

Data That Informs Response: Transforming Information Management

As recommended in the earthquake response review for ensuring uniformity and standardization in information management, WHO supported HEOC in developing tools for incident reporting, zero reporting, resource mapping, and situation updates. WHO personnel deployed at HEOC to provide technical support developed and maintained the HEOC web portal, which functions both as a public-facing information dissemination platform and an internal information repository.

Based on HEOC's needs and the availability of servers for HEOC and PHEOCs, WHO has been upgrading the web platform into an integrated HEOC-PHEOC network. This enhanced platform serves as an information management repository to standardize and enable seamless exchange of real-time information, resources, health-related data, and health cluster information.

During COVID-19, WHO Nepal helped establish an Information Management Unit and support the development of the Hamro Swasthya (Our Health) platform, enabling near real-time public information dissemination. Moreover, HEOC staff prepared situation reports, infographics, media briefs, and web portal updates. Additionally, in alignment with Nepal's growing digital health initiatives, WHO supported the development of a GIS-monitored ambulance application.

Aligned with HEOC's vision for rapid communication during health emergencies and disasters across health and non-health sectors at all levels of the government, WHO provided technical support for a cross-sectoral stakeholders' workshop in 2023. This led to the development of an information flow matrix, which was tested during table-top exercises in 2024. Further, an information management workshop in 2025, supported by WHO, reviewed existing practices and variables, resulting in the proposal of a standardized list of variables and data flow. This will enhance the availability and processing of data needed to inform and organize an appropriate health response.

Innovation & Inclusion: Digital Tools, Disability, and Fire Safety

During the response to the 2023 Jajarkot earthquake, WHO supported the functional assessment of affected health facilities by piloting the Health Resources and Services Availability Monitoring System (HeRAMS). This approach was later rolled out to the municipal level during the 2024 floods and landslides in eastern Nepal. Based on the findings from these assessments, WHO established Medical Camp Kits (MCKs) in areas where health facilities were completely damaged and non-functional.

As hospital safety assessments and HDPRP development used the HSI+ application, WHO's technical experts continued to upgrade the application to meet the evolving demands, including fire safety and disability inclusion. In 2024, MoHP conducted the safety assessment of seven prioritized hospitals (one in each province) using this upgraded application—making Nepal the first country to use the digital tool for hospital safety assessment with WHO support.

Drawing from a decade of experience in health emergency and disaster management, the MoHP, with WHO's technical expertise, is developing the Public Health Emergency Management Directive and the SOPs for HEOC. These documents will incorporate key lessons from past emergencies to better anticipate and address future needs. Additionally, MoHP with WHO's support, is planning to train government officials at the subnational level to strengthen coordination through HEOCs in future emergencies.

Global Recognition, Local Ownership

There are several examples of Nepal's preparedness and response activities that have gained recognition at the international level. WHO Nepal's support in the 2023 Jajarkot earthquake response was described as "a textbook response" in line with the Organization's emergency response framework. A national guidance document, with partners' commitments, defined roles, and a yearly action plan, now guides humanitarian health partners in preparedness

and response following the humanitarian cluster approach.

HeRAMS has become the primary tool for functional assessment of affected health facilities during emergencies, owing to its standardized use and interpretation for informed decision-making. The disability-related component added by WHO Nepal is also an important reference to enable an inclusive response.

Moving toward digitization, the upgraded HSI+ mobile and web applications now fully supports structural, non-structural, and functional assessments of health facilities, disability audits, fire safety evaluations, and digital HDPRP development—with real-time linkages to HEOC dashboards.

At the Global EMT Meeting in November 2024, MoHP shared its journey from the 2015 earthquake to the recent SOP launch. The global community responded with trust, selecting Nepal to co-chair the WHO South-East Asia Regional EMT Working Group (2025-2027), with Dr Prakash Budhathoky, Chief of HEOC, as chair.

These milestones reflect not only Nepal's growing technical capacity, but also its emergence as a regional leader in shaping and sharing global best practices in health emergency preparedness and response

From Preparedness to Promise

In just a decade, Nepal has transitioned from vulnerability to resilience. With the World Health Organization as a steadfast partner, the country now commands a health-emergency system that can anticipate, absorb, and adapt to shocks—be it earthquake, pandemic, or flash flood. Provincial HEOCs relay real-time data to the national hub, a revitalized Health Cluster unites every partner behind one plan, and digital tools such as HeRAMS and HSI+ transform raw field observations into actionable dashboards in a timely manner. Most importantly, frontline professionals: be it doctors, nurses, or ambulance drivers across all seven provinces now share a common vision and confidence rooted in hard-earned experience, with consistent drive towards excellence.

These achievements aren't mere milestones; they are the foundation for Nepal's next leap—toward a people-centered, inclusive and climate-resilient health system that contributes to global health security. The story told in these pages reflects how strategic investment, local ownership and global solidarity can transform the lessons of disaster into a lasting legacy of preparedness. The work continues, but the foundation is firm and the path ahead is clear.

Partners in Progress: Acknowledging Collective Support

WHO Nepal would like to express appreciation for MoHP's leadership towards achieving these successes as well as the European Union's consistent support towards improving disaster risk reduction and emergency preparedness and readiness within the health sector. No single entity, be it an individual or organization, can accomplish such achievements on its own. We also express sincere appreciation to our WHO colleagues at Headquarters and Regional office, humanitarian and development donors, international and national health partners, experts and friends, who have contributed to be where we are now. Together, we have laid the stones of resilience—step by step, hand in hand—and as we look ahead to an uncertain world, it is this spirit of solidarity that will light the path to safer, stronger, and more prepared communities in Nepal, and indeed, across the globe.

Strengthening Health Emergency Preparedness in Nepal: A Model of Coordination and Progress

Emergency Operations, WHO Health Emergencies Programme, Regional Office for South-East Asia.

In recent years, Nepal has made remarkable progress in enhancing its health emergency preparedness and response systems. Spearheaded by the Health Emergency and Disaster Management Unit (HEDMU) under the Ministry of Health and Population (MoHP) and operationalized through the Health Emergency Operation Centre (HEOC), this progress has been driven by strong national leadership and strategic partnerships—particularly with the World Health Organization (WHO) at both the regional and country levels.

Health emergency architecture in Nepal has been shaped by its experience in managing a series of major and complex calamities—from the aftermath of the 2015 earthquake to the COVID-19 pandemic, and more recently, the 2023 Jajarkot earthquake and 2024 floods and landslides. These emergencies have underscored the need for agile coordination and rapid response mechanisms. With support from WHO and partners, the central HEOC and Provincial Health Emergency Operation Centres (PHEOCs) were promptly activated during these events, playing a vital role in ensuring effective coordination and real-time communication across federal, provincial, and local levels.

A key milestone towards preparedness efforts in Nepal was the multisectoral emergency response simulation exercise held in September 2022 in Kathmandu, conducted in collaboration with WHO. Bringing together over 575 participants from 18 organizations, the exercise tested both functional and field-level emergency response capacities. Stakeholders from the MoHP, National and Provincial Emergency Operation Centres, hospitals, laboratories, search and rescue units, and ambulance services participated, strengthening interoperability and coordination across sectors. Proactive engagement with regional and global preparedness platforms further demonstrates commitment of Nepal to health security. The country participated in the Global Emergency Operations Centre Exercise (GEOCX 2024) and the GHEC Exercise Polaris, a pandemic response simulation under the Global Health Emergency Corps. These experiences have helped align the Country's emergency practices with international standards and strengthen their health emergency workforce through ongoing capacity-building initiatives.

Nepal has also successfully embarked on institutionalizing health emergency preparedness and readiness adopting a whole-of-government and whole-of-society approach. The development of the Public Health Emergency Management (PHEM) Guideline and updated Standard Operating Procedures (SOPs) for HEOCs have established clear, standardized protocols for emergency preparedness and response. These frameworks have laid a solid foundation for integrated, multi-level coordination during public health emergencies.

Another exemplary innovation is the Hub-and-Satellite Hospital Network model, developed as part of the HEOC framework. This system has enabled efficient patient referral pathways, timely information exchange, and rapid deployment of medical resources—further illustrating the maturity and effectiveness of the emergency response capabilities of the country. Experiences from Nepal offers valuable lessons for other countries in the Region aiming to strengthen their own preparedness and response capacities.

Through these multiple initiatives and sustained efforts, Nepal has emerged as a champion in the WHO South-East Asia Region in strengthening health emergency preparedness and response capacities.

Disease Surveillance in Nepal: Past, Present, and Future

Hem Raj Pandey

Chief, Disease Surveillance and Research Section
Epidemiology and Disease Control Division



Disease surveillance is a continuous public health effort to remain vigilant for the occurrence of any disease or health event of concern, to prevent its spread and mitigate its impact. It primarily aims to detect and prevent outbreaks while measuring the burden of priority diseases to monitor their trends in the community over time. The surveillance cycle typically involves signal detection, verification, data collection, analysis, interpretation, and timely action.

Early Surveillance Efforts in Nepal

Disease surveillance efforts in Nepal can be traced back to the era of smallpox control and eradication. When the Smallpox Control Pilot Project (SCPP) was launched in 1962, early forms of surveillance began, although they were not formally termed as such. The project involved reporting cases of smallpox and associated deaths from the community.

In 1967, the SCPP was transformed into the Smallpox Eradication Program, and surveillance activities were intensified, especially after the launch of a nationwide vaccination campaign in 1971. Recognizing the importance of disease detection, vaccinators were deployed to villages, markets, schools, and households to identify suspected smallpox cases, investigate deaths, and verify vaccination coverage.

After the official eradication of smallpox in 1975, post-eradication surveillance continued. Malaria workers and community members supported smallpox surveillance activities. To encourage reporting, the government offered financial incentives—initially Rs 100, later increased to Rs 1000—for verified reports of smallpox outbreaks. This generated high community engagement, although no actual cases were detected.

Expansion of Surveillance

Nepal's formal disease surveillance capacity expanded with the introduction of polio surveillance in 1996 through the Early Warning and Reporting System (EWARS), initially in 8 hospitals. By 1998, 16 more hospitals were added as sentinel sites, and by 2015, EWARS was expanded to cover all districts. Until 2016, reporting was paper-based, after which the DHIS2 platform was adopted for electronic case reporting.

Currently, 134 hospitals serve as sentinel sites for disease surveillance including vaccine-preventable diseases. While the Disease Surveillance and Research Section (DSRS) under the Epidemiology and Disease Control Division (EDCD) leads the national surveillance system, the Family Welfare Division (FWD)—with support from WHO-IPD—conducts parallel surveillance for VPDs from the community.

EWARS, operating on DHIS2, captures a broad range of disease conditions, as outlined in the Guide to EWARS (2019).

VPD surveillance, originally centred in sentinel hospitals, has expanded to community-based reporting. Approximately 1,000 health facilities have been identified by FWD and WHO-IPD to report immediately on any suspected VPD cases, with weekly zero-reporting otherwise. Suspected cases trigger sample collection and transport by WHO-IPD for laboratory confirmation.

Recent Advances and Innovations

Until 2023, disease surveillance in Nepal largely relied on hospital-based sentinel sites. In 2024, the Ministry of Health and Population introduced a new digital platform called Surveillance, Outbreak Response and Management Analysis System (SORMAS) as a pilot in Sudurpaschim and Gandaki Provinces. Though not yet rolled out to all health facilities, SORMAS has proven effective in managing recent COVID-19 and dengue outbreaks, offering a user-friendly and efficient surveillance tool.

The National Public Health Laboratory (NPHL) also contributes significantly by conducting Influenza, Respiratory Syncytial Virus (RSV), and antimicrobial resistance (AMR) surveillance for 10 pathogens across 15 sentinel sites.

Recognizing the link between water quality and diarrheal diseases, EDCD introduced the Water Quality Surveillance Guideline in 2013. Testing capacity has since expanded, and all 77 districts have been equipped and trained to perform water testing. However, some sites remain non-functional due to equipment issues or lack of trained personnel.

In a significant step toward climate-informed surveillance, a Memorandum of Understanding (MoU) was signed between the Department of Hydrology and Meteorology (DHM) and the Department of Health Services (DoHS) for data sharing on climate parameters. Work is ongoing to develop epidemiological models that incorporate weather data to forecast potential outbreaks.

Challenges and the Way Forward

Despite early efforts dating back to the 1960s, Nepal's surveillance system has struggled to evolve into a fully integrated, community-centred model. VPD surveillance continues to function as a parallel system operated by FWD and WHO-IPD, rather than being institutionally embedded. Fragmented and uncoordinated surveillance systems persist, and surveillance has often been underprioritized.

However, there is a silver lining. Nepal has produced over 180 Field Epidemiology Training Program (FETP) frontline graduates, who play a critical role in strengthening public health surveillance at various levels. During the COVID-19 pandemic, the EDCD launched the 1115 hotline, enabling public reporting of unusual health events—this hotline holds strong potential as a community-based early warning mechanism.

To ensure real-time, comprehensive surveillance, the integration of fragmented systems should be a national priority. Though data exist, they remain scattered and underutilised. Developing a unified, integrated disease surveillance dashboard using API connectivity between platforms is an essential step. Ultimately, Nepal should aim to operate a single, robust surveillance information system for the health sector and incorporate data from multiple sources, including inputs from the Department of Livestock Services and the Department of Environment (One Health Approach)

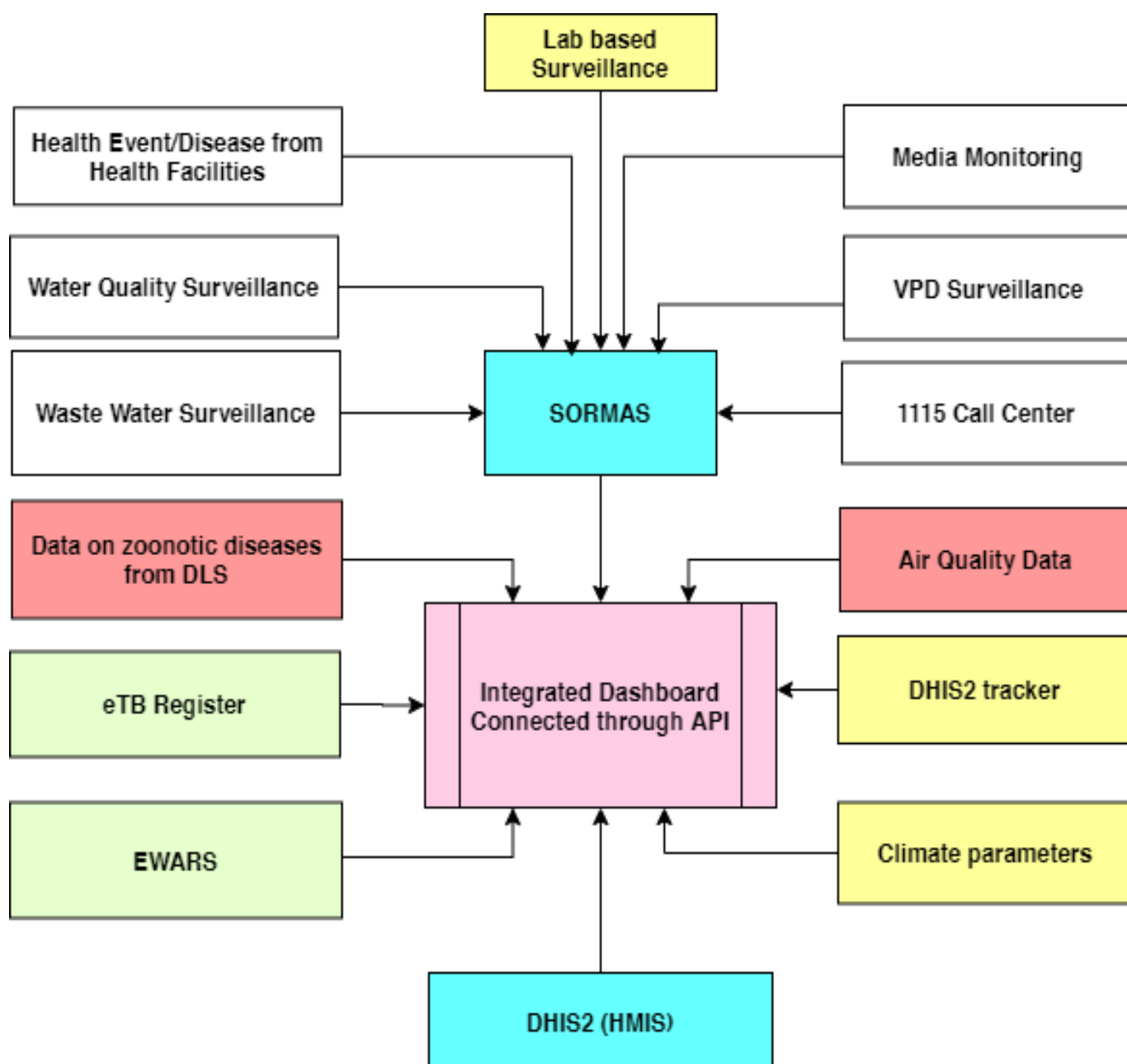


Fig: Conceptual Framework for Integrated Disease Surveillance

Strong legal and policy frameworks, leadership commitment, and resource mobilization are crucial to realizing this vision. The Infectious Disease Act of 2020 (BS) remains one of the oldest legislative tools in the health sector, emphasizing surveillance, quarantine, and isolation. However, in light of the changing epidemiological landscape, a new legislative framework with clear mandates and enforcement mechanisms is urgently needed.

Several key documents and initiatives are currently in development or revision, including:

- Integrated Disease Surveillance Roadmap
- Community-Based Disease Surveillance Guidelines
- Updated Water Quality Surveillance Guidelines
- Revised EWARS Guidelines

Moreover, support from the Pandemic Fund is proving instrumental in institutionalizing integrated and community-based surveillance systems across the country.

विपद् व्यवस्थापनमा सशस्त्र प्रहरी बल, नेपाल र नेपाल ए.पी.एफ. अस्पतालको भूमिका

SSP Dr. Sailendra Kumar Duwal Shrestha
Nepal APF Hospital



क. सशस्त्र प्रहरी बल, नेपाल

नेपाल सरकार गृह मन्त्रालय अन्तर्गत संचालनमा रहेको सशस्त्र प्रहरी बल, नेपाल एक महत्वपूर्ण अर्धसैनिक बल हो । यसको मुख्य कार्यक्षेत्रहरूमा आन्तरिक सुरक्षा, सीमा सुरक्षा, आतङ्कवादविरुद्धको कारवाही तथा विपद् व्यवस्थापन आदि पर्दछ । विशेष गरी प्राकृतिक एवं मानव श्रीजित विपद्का समयमा सशस्त्र प्रहरी बल, नेपाल अग्रपङ्क्तिमा खटिई प्रभावकारी ढंगबाट उद्धार तथा राहत कार्यमा संलग्न हुदै आईरहेको छ ।

खोज तथा उद्धार कार्यमा खटिनको लागि विपद् व्यवस्थापन तालिम प्राप्त र प्राविधिक सशस्त्र प्रहरी कर्मचारीहरू सहितको टोलीहरू सशस्त्र प्रहरी बल, नेपालमा तयारी हालतमा राखिएका छन्, जसले विपद्को अवस्थामा तत्कालै विपद् प्रतिकार्यमा संलग्न हुने गर्दछन् ।

सशस्त्र प्रहरी बल, नेपालले गरिरहेका विपद् व्यवस्थापन सम्बन्धि कृयाकलापहरू:

१. खोज तथा उद्धार :

पहिरो, बाढी, भूकम्पजस्ता विपद्हरूमा परेका घाईते तथा विरामी आमनागरिकहरूको खोज तथा उद्धार घाइतेहरूको प्राथमिक उपचार पश्चात आवश्यकता अनुसार स्वास्थ्यसंस्थाहरूमा पुर्याउने विभिन्न निकायहरूसँग समन्वय गरि विपद्मा परेका आमनागरिकहरूलाई सुरक्षित स्थानमा स्थानान्तरण गरि अस्थायी एवं स्थायी वासस्थानको व्यवस्था मिलाउने

२. राहत सामग्रीहरूको व्यवस्थापन :

अत्यावश्यक सामग्रीहरू जस्तै खाद्यान्न, लताकपडा, पिउने पानी, औषधि आदिको व्यवस्थापन गरि प्रभावित समुदायमा वितरणको व्यवस्था मिलाउने

३. स्थानीय, प्रादेशिक तथा संघिय निकायहरूसँग समन्वय:

जिल्ला प्रशासन, स्थानीय तह, नेपाली सेना, नेपाल प्रहरी, स्वास्थ्यकर्मी, रेडक्रस लगायतका विपद्सँग सम्बन्धित निकायहरूसँग सहकार्य गरि विपद् व्यवस्थापन कृयाकलापहरू संचालन

४. शान्ति सुरक्षा व्यवस्थापन:

विपद् प्रभावित क्षेत्रहरूमा शान्ति सुरक्षा व्यवस्थापन गर्न गस्ती, निगरानी एवं सुरक्षा कारवाहीहरू गर्ने चोरी, लुटपाट लगायतका अराजक गतिविधि नियन्त्रण गर्ने

५. यातायात तथा सञ्चार:

विपद्को समयमा हुने सडक, पुल तथा संचारका अवरोधहरूलाई हटाई अस्थायी रूपमा सञ्चालनमा ल्याउन सहयोग गर्ने

६. शव व्यवस्थापन:

विपद्मा परि मृत्यु भएका आमनागरिकहरूको पहिचान एवं सुरक्षित व्यवस्थापन कार्य गर्ने यसका अलावा सशस्त्र प्रहरी बल, नेपालले विपद् व्यवस्थापनका चरणहरू जस्तै पूर्वतयारी, प्रतिकार्य, राहत,

पुनःस्थापना तथा पुनर्निर्माण कार्यहरूमा सक्रिय सहभागिता हुदै आईरहेको र तालिमप्राप्त जनशक्ति, आधुनिक उपकरण, कुशल कार्यशैलीका कारणले गर्दा सशस्त्र प्रहरी बल, नेपाल विपद् व्यवस्थापनमा राष्ट्रको एउटा महत्वपूर्ण एवं भरपर्दो संगठनको रूपमा आफुलाई परिचित गराउन सफल भएको छ ।

ख. नेपाल ए.पी.एफ. अस्पताल

नेपाल ए.पी.एफ. अस्पताल सशस्त्र प्रहरी बल, नेपाल अन्तर्गत चन्द्रागिरी नगरपालिका १२ बलम्बुमा ३०० शैया क्षमतामा केन्द्रिय अस्पतालको रूपमा संचालनमा रहेको छ । यस अस्पतालले सशस्त्र प्रहरी कर्मचारी लगायत आम नागरिकलाई नियमित स्वास्थ्य सेवा उपलब्ध गराउनुको साथै विपद् तथा प्रकोप पिडित जनसमुदायहरूलाई निशुल्क स्वास्थ्य सेवा उपलब्ध गराउदै आईरहेको छ । विभिन्न किसिमको विपद्हरूको समयमा अस्पतालले आपत्कालिन स्वास्थ्य सेवा, स्वास्थ्यकर्मीहरूको परिचालन, औषधि तथा औषधिजन्य सामग्रीहरूको आपूर्ति र गुणस्तरीय स्वास्थ्य सेवा मार्फत प्रभावकारी प्रतिकार्य गर्दै आईरहेको छ । नेपाल ए.पी.एफ. अस्पताल लगायत २ वटा क्षेत्रिय अस्पतालहरू, ५ वटा फिल्ड अस्पतालहरू र १ वटा ट्रमा केयर अस्पताल गरी सशस्त्र प्रहरी बल, नेपाल अन्तर्गत ९ वटा अस्पतालहरू देशका विभिन्न भागमा संचालनमा रहेका छन् ।

नेपाल ए.पी.एफ. अस्पतालले गरिरहेका विपद् व्यवस्थापन सम्बन्धि कृयाकलापहरू:

१. आपत्कालिन स्वास्थ्य सेवा

भूकम्प, बाढी, पहिरो, आगलागी, महामारीजस्ता विपद्का घटनामा घाइते तथा पीडितहरूको तत्कालै स्वास्थ्य उपचारको व्यवस्था

नेपाल ए.पी.एफ. अस्पतालको Mass Casualty Management Plan अनुरूप घाइतेहरूको उपचारको व्यवस्था

२. स्वास्थ्यकर्मीहरूको परिचालन:

विपद् प्रभावित क्षेत्रहरूमा चिकित्सक लगायत स्वास्थ्यकर्मी एवं आवश्यक स्वास्थ्य सामग्री सहितको मेडिकल टोली परिचालन

दुर्गम क्षेत्रहरूमा स्वास्थ्य शिविरहरू संचालन

३. औषधि उपकरणको व्यवस्थापन:

औषधि, सर्जिकल उपकरण, आपत्कालिन स्वास्थ्य सामग्रीहरूको व्यवस्थापन

आवश्यकता अनुसार विभिन्न निकायहरूसँग समन्वय गरि औषधि तथा औषधिजन्य सामग्रीहरूको व्यवस्थापन

४. मनोपरामर्श सेवा:

विपद् एवं प्रकोप प्रभावित व्यक्तिहरूलाई आवश्यकता अनुसार मनोपरामर्श सेवा उपलब्ध गराउने

५. समन्वय र सूचना व्यवस्थापन:

सशस्त्र प्रहरी बल, नेपालका इकाइहरू, स्थानीय प्रशासन, स्वास्थ्य तथा जनसंख्या मन्त्रालय लगायतका सरोकारवाला निकायहरूसँग समन्वय गरि कार्य सञ्चालन

अस्पतालको स्वास्थ्यसँग सम्बन्धित तथ्याङ्क व्यवस्थापन, सूचना प्रवाहको व्यवस्था मिलाउने

६. जनशक्ति व्यवस्थापन:

विपद्को समयमा स्वास्थ्यकर्मीहरूको आवश्यकता अनुसार परिचालन

यसका साथसाथै नेपाल ए.पी.एफ. अस्पतालले विगतका भूकम्प, कोभिड जस्ता विपद् तथा महामारीको समयमा भएका घाइते एवं विरामीहरूलाई गुणस्तरीय स्वास्थ्य सेवा पुर्याई आफुलाई एक जिम्मेवार स्वास्थ्य संस्थाको रूपमा परिचित गराउन सफल रहेको छ ।

Pre-Hospital Care Services in Nepal: Challenges and Progress

Prof. Pradeep Vaidya

Medical Director, Norvic International Hospital



Introduction

Pre-hospital care refers to the emergency medical assistance provided to patients before they reach a hospital. It includes first aid, basic life support, and sometimes advanced life support, typically delivered by paramedics, emergency medical technicians (EMTs), or trained laypersons. In Nepal, a country with difficult terrain, scattered settlements, and a developing health infrastructure, pre-hospital care plays a critical role in saving lives, especially in trauma, obstetric emergencies, and disaster situations.

Current Scenario

Limited Emergency Medical Services (EMS)

Nepal's pre-hospital care system is still in a nascent stage. Most EMS providers are based in urban centers like Kathmandu, Pokhara, and a few provincial capitals. Rural areas, where over 80% of the population resides, often lack timely emergency care. Ambulances are available, but many are not equipped with essential medical equipment or trained personnel.

Role of Ambulance Services

The Nepal Ambulance Service (NAS), a nonprofit established in 2011, is among the few organized services offering trained EMTs and dispatch systems. The NAS operates a 102 emergency number, aiming to respond rapidly with Basic Life Support (BLS)-equipped ambulances. Other ambulance services are typically run by hospitals, NGOs, local governments, or private companies, with varying levels of capability.

Government and Policy Support

Nepal's Ministry of Health and Population has recognized the importance of emergency care, but policies and guidelines specific to pre-hospital care are still underdeveloped. The 2017 National Health Policy acknowledges emergency services but lacks robust implementation frameworks or funding allocation for EMS development.

Challenges

Infrastructure and Geography: Nepal's mountainous terrain, poor road networks, and seasonal weather disruptions hinder the timely deployment of EMS, especially in remote areas. Develop Air ambulance and EMT system for remote area.

Lack of Trained Personnel: There is a severe shortage of trained paramedics and EMTs. Most ambulance staff are drivers or untrained volunteers with minimal first-aid knowledge.

Limited Equipment and Technology: Many ambulances lack essential medical tools like defibrillators, oxygen cylinders, and communication systems.

Financial Constraints: EMS services are often not affordable or covered by insurance, making access unequal, especially for low-income populations.

Public Awareness: Many people do not know how to access EMS or when to use it appropriately, leading to misuse or delayed care.

Recent Developments

Training Programs: Initiatives by National Health Training Center (NHTC) and institutions like the Patan Academy of Health Sciences and private medical colleges have begun training paramedics and EMTs.

Disaster Preparedness: After the 2015 earthquake, emergency response capabilities were strengthened, including better coordination between local and international responders.

Technology Integration: Mobile apps and GPS-enabled dispatch systems are slowly being introduced in urban ambulance services.

Public-Private Partnerships: Collaborations between the government, NGOs, and private sector have shown promise in expanding EMS reach.

Way Forward

To improve pre-hospital care services in Nepal, a multi-pronged strategy is necessary:

National EMS Policy and Regulation: Implement the Ambulance and Pre-hospital care regulation prepared by MOHP.

Training and Capacity Building: Although EMT training is integrated in the national health workforce plan, it is not implemented regularly.

Infrastructure Investment: Equip ambulances and build strategically located EMS stations with telemedicine support. Implement the Provincial dispatch center system with GPS and good ambulance.

Awareness Campaigns: Educate the public on EMS access and first aid through schools, media, and community programs.

Integration with Health System: Ensure EMS is linked with hospital emergency departments and health insurance schemes.

Conclusion

Pre-hospital care in Nepal remains underdeveloped but holds immense potential to improve health outcomes, particularly in emergencies. With a powerful will of the government and people support, sustained investment, policy support, and community engagement, Nepal can build an inclusive and efficient EMS system that saves lives across its diverse and challenging landscape.

आकस्मिक चिकित्सा सेवा प्रणाली

Emergency Medical Service System

प्रा.डा. नारायण सिंह गुरुङ्ग

विभागीय प्रमुख, जनरल प्राक्टिस तथा इमर्जेन्सी मेडिसिन बिभाग,
पोखरा स्वास्थ्य बिज्ञान प्रतिष्ठान, drnsgurung@gmail.com | 9846049382



बेलैमा उपचार नपाउदा दुर्घटनामा परि मृत्यु हुनेहरुको संख्या बढ्दोछ । उद्धारको क्रममा ढिला सुस्ती भैरहेका समाचार आइरहन्छन । घटनास्थलमा स्वास्थ्य सम्बन्धि आधारभूत ज्ञान प्राप्त व्यक्तिको अभाव, उपयुक्त बाहन बेलैमा उपलब्ध नहुनु, स्वास्थ्य संस्थामा आवश्यक तालिम प्राप्त स्वास्थ्यकर्मीहरुको कमि, भर पर्दा उपचारात्मक सेवा प्रदायक स्वास्थ्य चौकी, अस्पतालको कमि, आदि अकाल मृत्युका प्रमुख कारण हुन् ।

दुर्घटना मात्र होइन हृदयघात, मस्तिष्काघात जस्ता ज्यान जोखिममा पर्ने आकस्मिक स्वास्थ्य समस्या आइपर्दा बेलैमा उपचार नपाएर अकाल मृत्यु बरण गर्नु पर्ने घटनाहरु घटिरहेकै हुन्छन ।

जन्मे पछि मृत्यु स्वाभाविक प्रक्रिया हो । यहि नै जीवनको तितो यथार्थ सत्य हो । प्रश्न केवल मृत्यु प्राकृतिक थियो वा अप्राकृतिक थियो भन्ने मात्र हो । बाच्ने वा बचाउन सकिने सम्भावना हुदा हुदै पनि हुने मृत्यु अप्राकृतिक हो । यहि मापदण्डले कुन देश कति समृद्ध छ भन्ने निकर्ष गर्दछ । अप्राकृतिक मृत्युलाई न्यूनीकरण गर्दै जनताको सुस्वास्थ्य एबम दिर्घायुका लागि हर सम्भव प्रयास भैरहेकाछन ।

गम्भीर अवस्थाका बिरामीको मृत्युको मूल कारण तथा उपचारको बिषयमा जीवन रक्षार्थ गुणस्तरिय स्वास्थ्य सेवा प्रदान गर्न ध्यान नदिने हो भने त्यसको शिकार आफै भइन सक्छ भन्ने यथार्थ हामी सबैले बुझ्नु आवश्यक छ । आकस्मिक गम्भीर स्वास्थ्य समस्या बाट बाच्न सके औकात अनुसार संसारको जुन सुकै ठाउँमा गएर पनि उपचार गराउन सकिन्छ तर आकस्मिक गम्भीर अवस्था जुन सुकै बेला, जहाँ पनि, जसलाई पनि हुन सक्ने हुदा उपचारका लागि अन्यत्र कतै जान भ्याइदैन । यसैले हरेक अस्पताल वा स्वास्थ्य संस्थाका इमर्जेन्सी सेवा बिभाग उच्च गुण स्तरिय, चुस्त दुरुस्त हुनै पर्छ ।

ढिला सुस्ती एबम लापरबाही को प्रमुख कारक तत्व अज्ञानता हो । काल आए पछि मरिहालिन्छ भन्ने मानसिकताले ग्रसित हाम्रो समाजको सबै तह तप्कामा स्वास्थ्य चेतनाको अभाव देखिन्छ । परिणाम स्वरुप बेकालै मृत्यु बरण गर्नु पर्ने बाध्यात्मक परिस्थिति सृजना हुन जान्छ ।

समय आफैमा उपचारको एउटा प्रमुख बिधि हो । समय बलबान हुन्छ । अझ ज्यान नै जोखिममा पर्ने अवस्थामा उपचारमा जति ढिलाई हुदै जान्छ मृत्युको सम्भावना त्यति नै बढ्दै जान्छ । प्राय अप्राकृतिक मृत्युका घटनाहरुमा अज्ञानता, उचित ब्यबस्थापनको अभाव एबम समयमै उपचार पाउन नसक्नु अर्थात् समयको भूमिका महत्वपूर्ण रहेको हुन्छ ।

ज्यानै जान सक्ने जोखिमपूर्ण अवस्थाका बिरामीहरुको जीवन रक्षार्थ अबलम्बन गरिने अति शिघ्र चिकित्सा सेवा प्रणालीलाई आकस्मिक चिकित्सा सेवा प्रणाली भनिन्छ । स्वास्थ्य सेवालाई सबैभन्दा प्राथमिकतामा राखिएका प्रायः सबै मुलुकहरुमा ५०-६० वर्ष पहिले नै आकस्मिक चिकित्सा सेवा प्रणालीको विकास भैसकेको देखिन्छ । हाम्रो देशमा पनि यस्तो प्रणालीको विकास गरिएकोछ यो प्रणाली बिस्तारै प्रभावकारी हुने अपेक्षा गर्न सकिन्छ । कुनै पनि नाजुक अवस्थामा भएको बयस्क (बिभिन्न उमेरका शिशु तथा बालकमा अपनाइने विधिमा बयस्क भन्दा केहि भिन्नता हुन्छ जुन यो लेखमा प्रस्तुत गरिएको छैन) मानिसलाई जीवित राख्न ६ तहको शिघ्र चिकित्सा सेवा आवश्यक पर्दछ ।

शिघ्र जानकारी: दुर्घटना होस् वा हृदयघात, मस्तिष्काघात होस् वा अन्य कुनै पनि प्रकारको गंभीर अवस्था होस् प्रत्येक व्यक्तिलाई यस्तो अवस्थामा कहाँ, कसलाई, कसरि सम्पर्क गर्ने भन्ने बारेमा जानकारी हुनु पर्दछ । आकस्मिक चिकित्सा सेवा प्रणाली अबलम्बन गरिने मुलुकहरुमा सम्पूर्ण नागरिकहरुलाई यस बिषयमा आवश्यक जानकारी गराइएको हुन्छ । हाम्रो देशमा पनि यस्तो अवस्थामा १०२ नम्बरमा फोन गरेर सुबिधा सम्पन्न

एम्बुलेन्स बोलाउने प्रणालीको बिकास गरिदैछ । यद्यपि यो प्रणालीको प्रभावकारिता देखिन समय लाग्न सक्छ ।

शिघ्र प्राथमिक उपचार:

कुनै पनि प्रकारको गंभीर अवस्थामा भएको बिरामी देखे पश्चात घटनास्थल सुरक्षित छ छैन हेर्दै बिरामीको काधमा थपथप्याएर बिरामी होसमा भएको वा नभएको पता लगाउनु पर्दछ । बिरामी होसमा नभएमा बिरामीले सास फेरी रहेको छ छैन, घाटिमा हुने क्यारोटिड आर्टेरी छामेर चलेको छ छैन जाच्नु पर्दछ । बिरामीले सास फेरिरहेको छैन, क्यारोटिड आर्टेरी चलेको छैन भने बिरामी कार्डियाक अरेस्ट अर्थात मुटुको धडकन बन्द भएको मरणासन्न अवस्थामा छ भन्ने बुझ्नु पर्छ । बिरामीको स्वास प्रस्वास चलेको वा नचलेको तथा नाडी चले नचलेको पता लगाउने प्रक्रियामा १० सेकेन्ड भन्दा बढी समय खेर फाल्नु हुदैन अर्थात फटा फट गर्नु पर्दछ । बिरामी कार्डियाक अरेस्टमा छ भन्ने पता लगाई सके पछि अरुको सहयोग माग्दै सबै प्रथम १०२ नम्बरमा फोन गरेर एम्बुलेन्स बोलाउनु पर्दछ । तालिम प्राप्त स्वास्थ्यकर्मी सहितको जीवन रक्षार्थ आवश्यक औषधि तथा आधुनिक यन्त्र द्वारा सुसज्जित सुबिधा सम्पन्न एम्बुलेन्स नआउन्जेल कार्डियो पल्मोनरि रिससिटेसन (CPR) अर्थात मुटु पुनः संचालन गर्न १ मिनेटमा १०० देखि १२० पटक छाती थिच्ने प्रक्रिया शुरु गर्नु पर्दछ साथै मुख बाट मुख वा मास्क प्रयोग गरि कृत्रिम स्वास दिनु पर्दछ । प्रत्येक ३० पटक छाती थिचे पछि २ पटक कृत्रिम स्वास दिनु पर्दछ । बिरामीले सास फेर्न थाल्यो नाडी चलन थाल्यो भने बिरामीलाई कोल्टे फर्काएर आराम गर्न दिनु पर्छ तर गर्दनमा चोट लागेको बिरामीलाई कोल्टे परेर सुताउनु हुदैन ।

शिघ्र डिफिब्रिलेसन:

हृदयगति बन्द भएका बिरामीलाई विद्युतीय यन्त्र द्वारा झट्का दिएर हृदयगति पुनः संचालन गरिने विधिलाई डिफिब्रिलेसन भनिन्छ । स्वचालित हृदय संचालन यन्त्र (AED) Automated External Defibrillator) यो यन्त्र स्वास्थ्यकर्मी वा अन्य जो सुकै सामान्य मानिसले पनि चलाउन सक्छन । यो यन्त्र आफैले के गर्नु पर्ने हो सबै कुरा आदेस दिन्छ । यसैले यो यन्त्र जो सुकैले पनि चलाउन सक्छन । यो ज्यान जोगाउने यन्त्र (AED) हाम्रो देशका स्वास्थ्य संस्थाहरु अझ कतिपय अस्पतालहरुमा समेत उपलब्ध नहुन सक्छ । अमेरिकन रेडक्रसले हरेक अमेरिकन नागरिकलाई आवश्यक परेको बेला ४ मिनेट भित्र (AED) उपलब्ध हुनु पर्छ भन्ने निर्णय गरे संगै अस्पताल वा स्वास्थ्य संस्थामा मात्र होइन सिनेमा घर, सार्वजनिक स्थल आदि स्थानहरुमा समेत (AED) उपलब्ध गराइएकोछ । यस्तो ज्यान जोगाउने यन्त्र कमसेकम सबै स्वास्थ्य संस्थामा अनिवार्य उपलब्ध हुनु पर्ने ब्यबस्था गर्नु पर्छ ।

सुबिधा सम्पन्न एम्बुलेन्स: १०२ नम्बरमा फोन गरि तालिम प्राप्त स्वास्थ्यकर्मी सहितको जीवन रक्षार्थ आवश्यक औषधि तथा आधुनिक यन्त्र द्वारा सुसज्जित सुबिधा सम्पन्न एम्बुलेन्स आए पश्चात बिरामीलाई स्वास्थ्यकर्मीको जिम्मा लगाउनु पर्छ । यतिखेर हाम्रो देशमा पनि सबै प्रदेशहरुमा प्रेषण केन्द्र Dispatch Center स्थापना गर्दै ब्यबस्थित रुपमा गुण स्तरिय, आधुनिक, सुबिधा सम्पन्न एम्बुलेन्स संचालन गर्ने, एम्बुलेन्स चालक तथा स्वास्थ्यकर्मीहरुलाई तालिम दिने, एम्बुलेन्सहरुको स्तर वृद्धि गर्ने कार्य भैरहेकोछ ।

सुबिधा सम्पन्न अस्पताल सेवा: बिरामीलाई छिटो छरितो तरिकाले उपचार गर्दै अस्पताल पुर्याइए पछि स्वास्थ्य संस्था वा अस्पतालको स्तर अनुसार उपचार गरिन्छ । अस्पताल तथा स्वास्थ्य संस्थाहरु बाट प्रदान गरिने सेवामा एकरूपता तथा गुणस्तरीय बनाउनु जरुरी छ । यसका लागी हर सम्भव प्रयास गरिदैछ ।

ज्यान जोगिए पश्चातको सेवा: ज्यान जोगीए पनि बिरामीमा विभिन्नखाले जटिलता, स्वास्थ्य समस्याहरु देखिन सक्छन । यस्ता समस्याहरुको उपचार साथै आरामको ब्यबस्था आवश्यक हुन्छ । अस्पताल वा अन्य स्वास्थ्य संस्थाहरुले आवश्यक सेवा प्रदान गर्दै सुरक्षित अवस्थामा मात्रै बिरामीलाई पठाउने गरिन्छ ।

आकस्मिक सेवालाई उच्च प्राथमिकतामा राख्दै आकस्मिक चिकित्सा सेवा प्रणालीको विकास एबम सुदृधिकरण नगरीए सम्म अप्राकृतिक मृत्युका घटनाहरु दोहोरिरहनेछन । यसैले आकस्मिक गम्भीर अवस्थामा बिना कुनै अन्यौल सुबिधा सम्पन्न गुण स्तरिय एम्बुलेन्स संग सम्पर्क, तुरुन्त गरिनु पर्ने प्राथमिक उपचार, उच्च गुणस्तरिय स्वास्थ्य संस्था, अस्पताल एबम ज्यान जोगीए पछि दिइनु पर्ने स्वास्थ्य सेवाका को सुदृधिकरणका लागि स्वास्थ्यकर्मीहरु मात्र नभएर सबै तह तप्काका जिम्मेवार नागरिकहरुले योगदान पुर्याउनु आजको आवश्यकता हो ।

Saving Lives, Building Hope: Nepali Army Medical Corps in Myanmar

Lt. Col. Dr. Bikash Bahadur Rayamajhi, MS

EMRT Leader, Shree Birendra Hospital, Nepali Army Medical Corps

Email: drbikashrayamajhi@gmail.com, Mobile: +977-9851030976



When the Earth Shakes, Brotherhood Stands

On March 28, 2025, at 6:20 UTC, a devastating 7.7-magnitude earthquake struck the Sagaing Region of central Myanmar, with its epicenter near Mandalay, the country's second-largest city. The disaster caused widespread destruction and overwhelmed the local healthcare infrastructure. Homes were reduced to rubble, entire communities were displaced, communication lines were severed, and roads were blocked, hampering rescue operations. Official reports confirmed over 3,600 fatalities, with more than 11,000 injured and hundreds still missing. In response, the government of Myanmar declared a national emergency and appealed for international support to manage the escalating humanitarian crisis.

Among the first international responders was Nepal, a nation deeply familiar with the trauma of earthquakes, having experienced the catastrophic Gorkha Earthquake in 2015. On April 2, 2025, the Nepali Army Medical Corps' Emergency Medical Response Team (EMRT) was deployed to assist the disaster-stricken country marking its first-ever international disaster response mission. The operation concluded successfully after ten days, on April 11, 2025.

Nepal responded to Myanmar's call for help with commendable speed and coordination. Following directives from the Government of Nepal, the Nepali Army Medical Corps guided by its motto "सर्व रोग निवारण" swiftly activated its EMRT on April 2, 2025. The 16-member team comprised a general surgeon, an orthopedic surgeon, medical officers, nurses, paramedics, and a logistics officer.

The team was airlifted to Naypyidaw, Myanmar, via military transport, equipped with a self-sustained medical unit, essential medicines, trauma and surgical kits, a sufficient supply of food and water, and a satellite communication system. The Embassy of Nepal provided vital guidelines and a coordination platform to support the team's deployment.

Upon arrival in the Yamethin District of the Mandalay Region, one of the hardest hit areas, the team encountered a chaotic scene. The local hospital had suffered structural damage and was overwhelmed with people in desperate need of care. Medical staff and essential resources were in short supply.

The arrival of the EMRT brought a renewed sense of hope. Within 6 hours, the team had set up a medical unit on the premises of Yamethin District Hospital, including outpatient departments, minor operating theaters, and inpatient tents. Working in close coordination with local hospital staff, the team helped expand emergency services in the ER, OT, and hospital wards.

Between 3rd April and 9th April, 2025, the EMRT delivered:

☆ 1,300+ outpatient consultations.

- ☆ 27 life- and limb-saving surgeries, including emergency laparotomies, crush injury debridement, and orthopedic procedures.
- ☆ 239 minor surgical interventions such as wound cleaning, suturing, dressing, cast/slab application, and physiotherapy.
- ☆ Distribution of essential medications and surgical supplies.

Among the many poignant experiences was the case of a 38-year-old woman who sustained severe crush injuries to her chest and abdomen. Ultrasound revealed a Grade IV liver injury with moderate hemoperitoneum, and her condition was rapidly deteriorating. Advanced imaging and ICU care were unavailable. With no local surgeon on-site, the local team requested our intervention. The EMRT performed an emergency laparotomy and successfully repaired the liver injury. The patient survived and later thanked us saying, “In the middle of disaster, you were my miracle.”

Despite the mission’s success, the EMRT faced several challenges:

- ☆ Language barriers hampered communication.
- ☆ High patient volume and limited resources strained logistics.
- ☆ Extreme heat posed physical challenges.
- ☆ Ongoing aftershocks increased operational risk.

Nonetheless, the EMRT adapted through resilience, teamwork, and a strong sense of duty. As Nepali Army’s first international disaster deployment, the mission marked a milestone in military medical operations. Despite limited international experience, the EMRT performed with distinction.

Key takeaways for future preparedness include:

- ☆ Enhancing coordination between the Government (Ministry of Health, Disaster Preparedness Cell) and the Nepali Army.
- ☆ Optimizing the supply chain for medical logistics.
- ☆ Strengthening interoperability with international agencies.
- ☆ Investing in telemedicine and mobile diagnostics.
- ☆ Building local partnerships to foster trust.
- ☆ Emphasizing adaptability and flexibility in all emergency responses.

From the Local Community and Patients

- ☆ Patients and community leaders, including the Chief District Officer of Yamethin, offered heartfelt appreciation to the NAMC for the medical support provided.

From Myanmar National Authorities

- ☆ The Union Minister of Health and Sports visited the site to commend the EMRT’s efforts.
- ☆ In a formal ceremony, the Government of Myanmar through the Ministry of Health

expressed deep gratitude and awarded the EMRT with a Commemorative Medals of Appreciation.

Media Recognition: The mission received widespread national and international media coverage

From the Nepali Army

Each EMRT member was awarded the Chief of Army Staff Commendation Badge.

The Nepali Army Medical Corps' EMRT mission during the Myanmar Earthquake exemplified regional solidarity, medical excellence, and human compassion. From conducting surgeries in makeshift tents to consoling grieving families, the EMRT not only healed bodies but also built bridges of trust and empathy. As natural disasters become more frequent and severe, such missions remind us of our shared responsibility and resilience. Once a recipient of global aid, Nepal now stands as a beacon of hope for others.



Nepal's First Air Mass Evacuation from Wuhan and Quarantine Operation During the COVID-19 Pandemic

Lt Col Dr Naveen Phuyal

Preventive Medicine Officer, Nepal Army Medical Corps
Associate Professor, Nepalese Army Institute of Health Sciences



In December 2019, a novel coronavirus outbreak in Wuhan led to global concern, prompting Nepal to repatriate its citizens stranded in China. Due to limited resources and a lack of experience, the Nepal Army (NA) was tasked with leading the mission. Within days, the NA developed an evacuation plan covering airport screening, transportation, and quarantine, with guidance from the WHO, CDC, and support from the Health Emergency Operations Center (HEOC). Safety protocols were strictly followed, and quarantine centers were set up at Kharipati and Nagarkot.

Dubbed Operation COVID-19, this was Nepal's first mass air evacuation, involving multi-sector collaboration under the Prime Minister's Office. Led by a Preventive Medicine Officer of the Nepal Army Medical Corps, the operation focused on evacuating students, quarantining all involved personnel, and ensuring full logistical support. Conducted from 1st February to 3rd March 2020, it was widely praised for its effectiveness. This article evaluates the operation to identify strengths and future preparedness needs.

This article aims to identify strengths, weaknesses, and best practices of Nepal's first air mass evacuation during a pandemic, offering insights for future national emergency responses. Its primary limitation lies in its focus on a single operational event.

A structured SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted. The following key points were identified:

Strengths

High-level Leadership: Direct involvement of the Prime Minister's Office ensured authoritative coordination.

Intersectoral Coordination: Seamless collaboration among ministries, military, health agencies, and civil aviation authorities.

Committed Workforce: A highly motivated and disciplined team enabled efficient execution.

Role of Security Forces: The Nepal Army played a pivotal role, demonstrating preparedness and logistical strength in crisis response in support with NA and APF.

Weaknesses

Institutional Gaps: Absence of a dedicated body for managing health emergencies.

Human Resource Limitations: Lack of trained personnel for mass evacuations and quarantine operations.

Logistical Constraints: Shortages in specialized equipment and infrastructure.

Mitigation: These challenges were partially addressed through the integration of multi-agency teams, adaptive training, and leveraging inter-agency resources.

Opportunities

Systemic Strengthening: The operation catalyzed broader preparedness efforts for the COVID-19 response in Nepal.

Resource Localization: Emphasis on utilizing local manpower and technologies increased feasibility and resilience.

International Health Regulations (IHR 2005): The initiative aligned with global standards, reinforcing Nepal's international public health commitments.

Threats

Risk of Transmission: Potential outbreaks within or outside the quarantine facility were key concerns.

Public Fear and Stigma: Miscommunication could have undermined public trust.

Mitigation: Contingency measures included outbreak surveillance, backup medical facilities, and public engagement strategies.

The operation represented Nepal's only proactive, large-scale intervention against COVID-19, executed with precision and widely commended for its impact and professionalism.



NA Evacuation Team with Aircrew Members of Nepal Airlines

Best Practices

Compliance with Standards: Quarantine centers adhered to CDC and global guidelines, ensuring robust infection control and logistics.

Strong Leadership and Teamwork: A committed, multidisciplinary team operated effectively under competent leadership, despite limited resources.

Organized Quarantine Practices: Clear protocols, self-monitoring, and active engagement fostered responsibility among evacuees.

Intersectoral Collaboration: Cooperation among ministries, health agencies, and security forces facilitated effective resource utilization and role clarity.

Proactive Media Handling: Timely communication shaped public perception and built trust.

Rapid Response: The Nepali Army's "Quick In, Quick Out" model ensured swift action and minimized exposure.

Public Engagement: Community awareness initiatives reduced stigma and strengthened social support.

Lessons Learned

Several key lessons were derived from the execution of Nepal's first mass evacuation and quarantine operation:

Operational Flexibility of Security Forces: The Nepal Army's rapid and adaptive response highlights the need to further strengthen the crisis-response capacity of security forces.

Dedicated Emergency Agency: The lack of a central public health emergency body calls for the creation of a specialized agency with trained personnel for outbreak preparedness.

Quarantine Infrastructure Expansion: There's a clear need for permanent quarantine facilities in all provinces and improved hospital isolation capacity.

Unified Government Response: While multi-agency collaboration was achieved, the absence of predefined protocols hindered efficiency—future responses should institutionalize interoperable systems.

Political Leadership Matters: Direct involvement from the Prime Minister's Office was key to success, underscoring the importance of strong political commitment in public health emergencies.



The HEOC technical team for Covid-19 Ops

Recommendations

Based on the analysis of the evacuation and quarantine operation, the following recommendations are proposed to strengthen Nepal's future public health emergency preparedness and response:

Strengthen HEOC and Hospital Network: Enhance the Health Emergency Operation Center and its hub-and-satellite hospitals by improving communication, standardizing protocols, and building surge capacity at all levels.

Boost CBRNE Readiness in Security Forces: Equip and train security personnel for Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) emergencies through regular drills and specialized resources.

Institutionalize Rapid Deployment Protocols: Formalize "quick in, quick out" procedures for security forces to enable swift response and timely transition to civilian handover.

Establish a National Center for Disease Control (NCDC): Create a dedicated NCDC to lead surveillance, outbreak response, multisectoral coordination, and public health policy during emergencies.

एमपक्स रोग कसरी सङ्घ ?

सङ्क्रामित व्यक्ति वा सङ्क्रामित पशुसँगको सम्पर्कमा आउँदा निम्न अवस्थाबाट सङ्घ :

- १) घाउ-सटिरा-बिमिराको सम्पर्कबाट
- २) शरीरबाट निस्किएको तरल पदार्थ जस्तै थुक, न्यालको सम्पर्कबाट
- ३) माइरसबाट दूषित सतह र सामाग्रीको प्रत्यक्ष सम्पर्कबाट
- ४) सङ्क्रामित बौदर, मुसा, लोसक लगायतका जनावर र माइरस रहेको ओख्यान र लुगाबाट पनि यो माइरस फैलिन सक्छ ।

निम्न अङ्गबाट माइरस शरीरमा प्रवेश गर्न सक्छ:

- काटिएको, बिमिरा वा फुटेको छाला
- आँखा, नाक वा मुख
- श्वासनली




एमपक्स रोगका लक्षणहरु के के हुन् ?

- ज्वरो आउनु
- सामान्यतया ज्वरो सुरु भएपछि १ देखि ३ दिन भित्रमा छाला, अनुहार, हटकेला र पैतालामा डाबर देखा पर्नु
- डाबर परिवर्तन भई फोका हुँदै पाप्ता लागेर उठ्किनु
- टाउको, ढाढ र मांसपेशी दुस्नु
- शरीरका ग्रन्थिहरु बढ्नु



यस्ता लक्षणहरु देखा परेमा नजिकैको स्वास्थ्य संस्थामा सम्पर्क गर्नुहोस् ।

सन्दर्भ स्रोत: WHO

कोभिड-१९ को 'ओमिक्रोन' भेरियन्टबाट बच्ने ६ उपाय

- सही तरिकाले मास्क लगाउने
- कम्तीमा २ मिटरको भौतिक दूरी कायम गर्ने
- बेलाबेलामा साबुनपानीले हात धुने वा स्थानिटाइजर प्रयोग गर्ने
- मिडभाड नगर्ने
- हावा आवतजावत हुने स्थानमा बस्ने
- कोभिड-१९ विरुद्धको खोप लगाउने








कोभिड-१९बाट बच्नका लागि जलवायुबाट दुरि सम्पर्कको प्रभाव गर्नु

काठमाडौं काठमाडौं काठमाडौं

Disaster Medicine Education for Transitioning from Reactive Response to Proactive Leadership

Dr. Ashis Shrestha

Associate Professor

Department of General Practice and Emergency Medicine
Patan Academy of Health Sciences, Lagankhel, Lalitpur, Nepal



Nepal is highly disaster-prone, facing frequent earthquakes, floods, and landslides. In fact, the United Nations ranks Nepal as the 11th most earthquake-vulnerable country¹; the 2015 Gorkha earthquake (magnitude 7.6) killed about 9,000 people and caused massive health impacts.¹ The health system was strained revealing health system gap in preparedness during the COVID-19 pandemic (2019-2020). Global frameworks now emphasize health-system resilience: for example, the Sendai Framework and WHO's Health Emergency and Disaster Risk Management (Health-EDRM) approach place human health at the center of disaster risk reduction.² Likewise, the Sustainable Development Goals (notably SDG3 on health and SDG13 on resilience) call for building capacity to manage health emergencies.³ In Nepal, national laws - such as the Disaster Risk Reduction and Management Act, 2074 (2017 AD)⁴ and the Public Health Service Act, 2075 (2018 AD)⁵ - mandate disaster committees and emergency health services at all levels. Despite these frameworks, Nepal currently has no formal academic program in disaster medicine running through medical universities or academies.

Current Status of Disaster Medicine Training in Nepal

To date, disaster-related training in Nepal has been primarily practical and ad hoc. The first formal push came with two programs: (a) Hospital Preparedness for Emergencies (HOPE), and (b) the Hospital Disaster Preparedness and Response Plan (HDPRP) training. HOPE was introduced in Nepal in 2004 and was conducted under Tribhuvan University Teaching Hospital. More recently, Ministry of Health and Population developed an official Hospital Disaster Preparedness and Response Plan (HDPRP) in 2015.⁶ These two programs are now running through National Health Training Centre and Health Emergency and Disaster Management Unit, Ministry of Health and Population. Similarly, few short courses have been running through academia but not on a regular basis. In past there has also been collaboration with Singapore's Temasek Foundation to run basic on-site disaster medical support courses in Nepal. However, these efforts are scattered and not part of a standard curriculum. The Patan Academy of Health Sciences (PAHS) has taken an initiative to include disaster medicine in undergraduate, post graduate general practice-emergency medicine and emergency medicine fellowship curriculum⁷, though there is no standalone disaster medicine course. Some of the institution though are running crisis management courses which covers disaster but not specifically medical perspective.

Challenges

Several interlinked challenges hinder disaster medicine education and workforce development in Nepal:

☆ Lack of formal programs or standards. As noted, there is no structured disaster medicine curriculum in medical schools or postgraduate programs. A recent World Association of Disaster and Emergency Medicine (WADEM) position paper states that disaster medicine is often neglected in health curricula worldwide.⁸ Without national guidelines or accreditation for disaster medicine, educational efforts remain fragmented.

☆ Uncertain career pathways: Even if one were trained in disaster medicine, professional roles are poorly defined. There is no established “disaster medicine specialist” cadre or recognized posting for such experts in the health system or government. Hospital and health administrators generally have no formal need to hire disaster medicine experts. Without government-funded positions or clear employment opportunities a disaster medicine career has no obvious pathway.

☆ Intersectoral complexity: Disaster medicine overlaps with emergency medical services, public health, nursing, infectious disease management, trauma surgery and pre-hospital care. Coordinating across these domains requires interdisciplinary skills. In Nepal, administrative and clinical leaders often come from separate tracks, making integration of disaster expertise challenging.⁹

☆ Resource and capacity gaps: Nepal’s overall health workforce is limited, especially outside Kathmandu. There are shortages of trained emergency physicians and public health personnel. Many health institutions lack basic emergency infrastructure, so advanced training may seem a lower priority. Notably, the pandemic revealed shortages in healthcare management capacity: a 2024 study found that Nepal’s newly federalized local governments lacked experience and resources to implement emergency plans effectively.⁹ Scaling up disaster medicine education thus requires building institutional capacity at national, provincial and local levels.

☆ Need for leadership. Practical responders often “prepare managers” on the ground, but academia must “develop leaders.” In other words, experience in a crisis teaches tactics, but disciplined education cultivates vision and strategy. Nepal’s experience with the 2015 quake and COVID-19 showed that health professionals rose to the occasion, but often on an ad-hoc basis. Nepal needs health leaders who can plan for disasters, not just respond; this requires formal education and mentorship in disaster risk management.

The Road Ahead

To strengthen disaster medicine in Nepal, it is essential to develop formal curricula and degree programs within medical and nursing institutions, establish professional career pathways supported by government-funded positions, and enhance institutional capacity through dedicated training centers and faculty. Education in disaster medicine should be integrated with national and provincial disaster policies, aligned with the Disaster Risk Reduction and Management Act and the Public Health Service Act. Additionally, fostering global partnerships and investing in context-specific disaster health research are crucial. These measures will shift Nepal from a reactive approach to proactive leadership in disaster preparedness, producing visionary leaders equipped to protect communities from future hazards.

References

- Quah J.L.J., Bierens J., Anantharaman V. Evaluation of an On-Site Disaster Medical Management Course in Nepal. *Healthcare (Basel)*. 2024;12(13):1308.
- Hung, K.K.C.; Mashino, S.; Chan, E.Y.Y.; MacDermot, M.K.; Balsari, S.; Ciotto, G.R.; Della Corte, F.; Dell'Arima, M.F.; Egawa, S.; Evio, B.D.; et al. Health Workforce Development in Health Emergency and Disaster Risk Management: The Need for Evidence-Based Recommendations. *Int. J. Environ. Res. Public Health* 2021, 18, 3382. <https://doi.org/10.3390/ijerph18073382>
- United Nations. Sustainable Development Goals: 17 goals to transform our world [Internet]. New York: United Nations; 2020 [updated 2023 Aug; cited 2025 Jun 15]. Available from: <https://www.un.org/en/exhibits/page/sdgs-17-goals-transform-world>
- Government of Nepal. Disaster Risk Reduction and Management Act, 2074 (2017 AD) [Internet]. Kathmandu: Government of Nepal; 2017 [cited 2025 Jun 15]. Available from: <https://drportal.gov.np/uploads/document/176.pdf>
- Government of Nepal. Public Health Service Act, 2075 (2018 AD) [Internet]. Kathmandu: Government of Nepal; 2018 [cited 2025 Jun 15]. Available from: <https://mohp.gov.np/downloads/Public%20Health%20Service%20Act,%202075.pdf>
- Singh P, Lamine H, Eriksson A. Implementation of Hospital Disaster Preparedness and Response Plan in Nepal: A Mixed Study in 3 Public Hospitals of Nepal. *Prehospital and Disaster Medicine*. 2023;38(S1):s132-s133. doi:10.1017/S1049023X23003503
- Patan Academy of Health Sciences. Fellowship in Emergency Medicine: Prospectus 2024 [Internet]. Lalitpur: Patan Academy of Health Sciences; 2024 [cited 2025 Jun 15]. Available from: <https://web.pahs.edu.np/wp-content/uploads/2024/12/Prospectus-2024-Fellowship-in-Emergency-Medicine.pdf>
- World Association for Disaster and Emergency Medicine (WADDEM). Disaster medicine education in health care profession training [Internet]. Madison (WI): WADDEM; [cited 2025 Jun 15]. Available from: <https://wadem.org/about/position-statements/#:~:text=,health%20care%20training%20programs%20incorporate>
- Regmi, S., Bertone, M.P., Shrestha, P. et al. Understanding health system resilience in responding to COVID-19 pandemic: experiences and lessons from an evolving context of federalization in Nepal. *BMC Health Serv Res* 24, 428 (2024). <https://doi.org/10.1186/s12913-024-10755-0>

गर्मीमा तातो हावा 'लू' बाट जोगिन गर्न हुने र गर्न नहुने कुराहरू

गर्न हुने

- बाहिर निस्कने परे धरस ओझ्ने वा पतलो कपडाको टाउको छोप्ने हल्का खानाको सितल हुने कपडा लगाउने
- ठेरे पानी पिउने
- सोतबारी वा घर बाहिर काम गर्दा बिहान वा बेलुका गर्ने
- कामती पानी नरिक्ल पानी तथा फलफूलको रस पिउने फलफूल काँचो खानाबाट घरमा बनाएको ताजा सातैकुरा खाने

गर्न नहुने

- व्याक्तिगतले ठेरे पिसाब अरामले हुँदा घिसा, कफी, सोडा जस्ता पेयपदार्थ नपिउने
- दिउँसो सक्कर घर बाहिर निस्कने
- माथिलगा छेरे राम्रर खस्ने बरन धरेमा प्रशस्त पानी पिउने
- धुमपान तथा मदिरा सेवन गर्ने

गुठ्ठो घाल तीब्र हुने, श्वासाप्रश्वासा सम्स्या हुने, रातघास कम हुने, शरीरबाट पसिना ननिरिक्ने, टाउको अत्यधिक दुख्ने, चक्कर लाग्ने, हबहबी ज्वरो आउने जस्ता सम्स्या देखिए विरामीलाई तुरुन्तै अस्पताल लैजाओ ।
बालबालिका, पृष्ठवृद्ध तथा दीर्घरोगीको विशेष ख्याल गरौ ।

तपाईंको घर गाउँ बाढी, पहिरो वा डुबानको जोखिममा छ ?

पुर्वतयारीका लागि गरौ यी ५ काम

- नदीको जलसतहले सतर्कता तह पार गरेका केही स्थानमा पो आओ कि बेला बेला गोबाङलमा चेक गर्नुहोस्, स्थानीय रेडियोका समाचार पनि बेला बेला सुन्नुहोस् ।
- सुरक्षित स्थानतिर जान भनिएको छ भने सुचनामा भनिए जस्तै सुरक्षित स्थान तिर जानुहोस् ।
- गोबाङलमा ब्याट्री र ब्यालेन्स छ छैन चेक गर्नुस् । यस्तो बेला अनावश्यक तथा लाग्ने कुराकाको नगर्नुहोस्, ब्याट्री बचाएर ब्यालेन्स हालेर गोबाङल आफैँसँग राख्नुहोस् ।
- गोबाङलमा अत्यावश्यक फोन नम्बरहरू सेम गरेर राख्नुहोस् । जस्तो कि काढीबारे बुझ्न ९९५५, मदुको लागि ९९८८, प्रहरी डायाल १०० र स्वास्थ्य सम्स्या नत्र ९९९५ र ९९३३
- अत्यावश्यक कामकाहरू जस्तो कि तामाकिता, लालपूजा, जन्मदत्त, विवाहदत्त, राहदानी, शैक्षिक प्रमाणपत्रहरू साथै नरजहान र नजद, साथै अत्यावश्यक औषधि, टर्नलफाईट, पानी तथा खाना जस्ता सामानहरू एउटा सफ्टपेट गोलाका सुरक्षित राख्नुहोस् र सुरक्षित स्थान तिर जान तयै राख्नुहोस् ।

सवारी दुर्घटनामा परेको एउटा घाइतेको साबिती

डा. सानुकृष्ण श्रेष्ठ

एमडीजीपी, धुलिखेल अस्पताल



बसन्त ऋतुको सुन्दर बिहानी । सूर्योदयसँगै चराचुरुङ्गीहरूको चिरबिर आवाज अनि बिहानीको शितल पवनले धुलिखेलको वातावरण थप मनमोहक हुँदै थियो । करिब ५२ वर्षका हरि सर सदाझैँ चिया नास्तापछि बिहानी कक्षा पढाउन स्कुटर स्टार्ट गरि कलेजतिर जाँदै गर्दा बाटोमा बिछ्याएको गिट्टीमा चिप्लिएर एक्कासी पछारिन पुग्न भयो । संयोगबस टाउकोबाट रगत बगेर अचेत भएका हरिसरलाई नजिकै बारीमा काम गरिरहेका छिमेकीहरूले देखे । तिनीहरू हतारिँदै घटनास्थलतर्फ पुगे । केहि हप्ता मात्र पहिले नगरपालिकाद्वारा संचालित प्राथमिक उपचार सम्बन्धी तालिम लिएका उहाँहरूले तालिममा सिकाए बमोजिम गर्धनलाई कतिपनि हलचल नहुने गरि स्थिर अवस्थामा राखेपछि एम्बुलेन्स मगाउन १०२ हटलाईन नम्बरमा कल गरि घटना सम्बन्धी अत्यावश्यक संक्षिप्त जानकारी गराए । धुलिखेल अस्पतालमा अवस्थित जिल्ला एम्बुलेन्स प्रेषण केन्द्रबाट राम्रो रेस्पोन्स भयो । नम्र र प्रष्ट भाषामा नआतिनुहोस्, हामी तुरुन्तै उद्धारको लागि एम्बुलेन्स पठाउने छौं भने । त्यतिन्जेल गर्धनलाई नचलाउनु होला अनि कुनै सफा कपडाले टाउकोको घाऊमा थिचेर रगत थाम्ने प्रयास गर्दै रहनु होला भन्ने सल्लाह पनि दिए । प्रेषण केन्द्रको प्रेषकले तुरुन्तै आफ्नो अगाडी रहेको टिभी मनिटरमा जी पी एस नेटवर्कबाट घटनास्थलको सबैभन्दा नजिकको एम्बुलेन्स पहिचान गर्यो र, तत्काल एम्बुलेन्स चालकलाई फोन गरि विरामीको उद्धारको लागि जान निर्देशित गर्यो । त्यतिखेरै प्रेषकले एम्बुलेन्स चालकको मोबाइलमा घटनास्थलको गुगल नक्शा पठाए । एम्बुलेन्सको EMT (ईमर्जेन्सी मेडिकल टिम) लाई पनि विरामीको अवस्था बारे SMS मार्फत जानकारी गराए । उता एम्बुलेन्सको व्यग्र पर्खाईमा रहेका उद्धारकर्ताहरूलाई पनि बा अ क १६६६ नम्बरको एम्बुलेन्स अब करिब १० देखि १५ मिनेटमा घटनास्थल आईपुग्दैछ भन्ने जानकारी गराए । केहि समयमै प्राथमिक उपचारको तालिम प्राप्त चालक अनि EMT, जीवन रक्षाको लागि चाहिने अत्यावश्यक औषधि, AED (अटोमेटेड एक्सटर्नल डिब्रिलेटर) भन्ने बन्द मुटुलाई पुन संचालनमा ल्याउने मेसिन अनि नेपाल सरकारले तोके बमोजिमका उपकरणहरु सहित घटनास्थलमा साइरन बजाउँदै, छतमा नीलो फनफनी बल्ने बत्ति बाल्दै एम्बुलेस घटनास्थलमा पुगे ।

रातो ज्याकेट लगाएका, पिडुँलासम्म आउने गम्बुट जुता लगाएका स्वास्थ्यकर्मी आवश्यक औषधि सहितको झोला भिरेर हातमा स्पाईनल बोर्ड सहित आउँदा उद्धारकर्ता सबै खुशी भए । एम्बुलेस चालक पनि निकै चनाखो भएर EMT लाई सहयोग गरिरहेका थिए । तत्कालै विरामीको गर्धन वरिपरि कडा खालको COLLAR बाँधेर टाउकोको चोटमा पनि मलम पट्टि बाँधिदिए । त्यसपछि नशामा सलाइन पनि जोडे । उद्धारकर्तामध्ये एकजनाले सलाइन बोक्न मद्धत गरे । सबै मिलेर घाईते हरिसरलाई स्पाईनल बोर्डमा राखी एम्बुलेसमा सारे र, अस्पताल तर्फ हुईकिए । जाँदाजाँदै EMT ले अस्पतालको आकस्मिक कक्षमा विरामीको अवस्थाबारे जानकारी गराई सकेको हुनाले चिकित्सकको टोली पनि पूर्ण तयारी अवस्थामा रहेको थियो ।

विरामी ल्याउने बितिकै ट्रियाज* नर्सले बिरामीको प्रारम्भिक विश्लेषण गरि आकस्मिक कक्षको रातो क्षेत्रमा लान निर्देश गरिन् । चिकित्सकहरूको प्रारम्भिक जाँचपछि हरिसरको टाउको र गर्धनको सीटी स्क्यान, एक्सरे र अन्य जाँचपछि टाउकोमा गम्भीर चोट लागी दिमागमा रगत बगेको अनि नितम्ब (पुट्टा) को हड्डी भाँचेको देखियो । गर्धन को पनि चोट देखियो । न्युरो सर्जनले ४ पोका रगत तयार गर्न लगाई आधा घण्टा भित्रमै अप्रेसन कोठामा लगे । नितम्बको चोटको लागी बिशेष खालको पेटी लगाई दिए । करिब २ घण्टाको शल्यक्रियापछि अप्रेसन सफल भएपनि केहि दिन जोखिम कायम रहेको जानकारी गराए । त्यसबेला अप्रेसन कोठा बाहिर कुरेर बसेका आफन्तहरूले केहि ढुक्क भएको महशुस गरे ।

बिरामीलाई सघन उपचार कक्षमा सारियो । चिकित्सकहरूले बेला बेलामा आफन्तहरूलाई बिरामीको अवस्थाबारे जानकारी दिँदै थियो । विरामीको स्वास्थ्य अवस्थामा पनि क्रमिक सुधार हुँदै थियो । ३ दिनको उपचारपछि हरिसरको होश खुल्यो । सातौँ दिनमा उहाँलाई सघन उपचार कक्षबाट सामान्य वार्डमा सरियो । हरिसरको

अवस्था बुझ्न अस्पतालमा आफन्तजन र विद्यार्थीहरूको घुईचो लाग्थ्यो । आफ्नो प्रिय गुरुको स्वास्थ्य लाभको कामना गरिरहेका बिद्यार्थीहरू पनि हरिसरलाई भेट्न उत्सुक थिए ।

हरिसरको बेड वरिपरि परिवारका सदस्यहरू बसिरहेका थिए । हरिसरले बिस्तारै हात उठाउँदै नातिनीको कपाल सुम्सुम्याउँदै भन्दै थिए 'समयले कति फड्को मारिसक्यो । पहिले हाम्रो पालामा कोहि विरामी परे डोकोमा बोकेर काठमाडौँ लानु पर्थ्यो । कति विरामीहरू बाटामै बित्थे । अहिले सरकारले एकिकृत एम्बुलेन्स सेवा शुरू गरे पश्चात् विरामीको छिटो उद्धार हुन थालेको छ । अस्पताल पुग्नु भन्दा पहिले नै दक्ष स्वास्थ्यकर्मीले प्रारम्भिक उपचार गर्दा म बाँच्न सफल भए । धन्य मेरा छिमेकिहरू, धन्य एम्बुलेन्स चालक अनि EMT भाई । धन्य नेपाल सरकार । धन्य मलाई उपचार गर्ने डाक्टर साहेब हरु' भन्दै भावुक भए । यतिकैमा कतिखेर आँखाबाट आँसु झर्‍यो पतै पाएनन ।

(डिस्कलेमर: माथि उल्लेखित कथा र पात्रहरू काल्पनिक हुन् । यो घटना एकिकृत एम्बुलेन्स सेवा प्रभावकारी हुन सकेको खण्डमा कसरी जनधनको क्षति कम गर्न सकिन्छ भनी गरिएको कल्पना हो ।)

ट्रियाज भन्नाले स्वास्थ्य समस्या भएका वा दुर्घटनामा परेका घाइतेको स्वास्थ्य अवस्था विश्लेषण गरि विरामी वा घाइतेको वर्गीकरण गर्ने प्रक्रिया ।*

Trauma Bag

All City of Winnipeg Aquatics Branch Swimming Pools are equipped with **Trauma Bags**. These large orange first aid bags contain all necessary first aid and oxygen supplies. The trauma bags do not necessarily replace existing supply stations but function as the main-source-portable-unit. The trauma bags are checked and maintained daily. Any supplies used are replaced. The trauma bags are loaded in a prescribed manner; every item has a place and every item is in its place. This maintains consistency at all pools.

Trauma Kit Minimum Equipment List

1) First Aid Supplies.

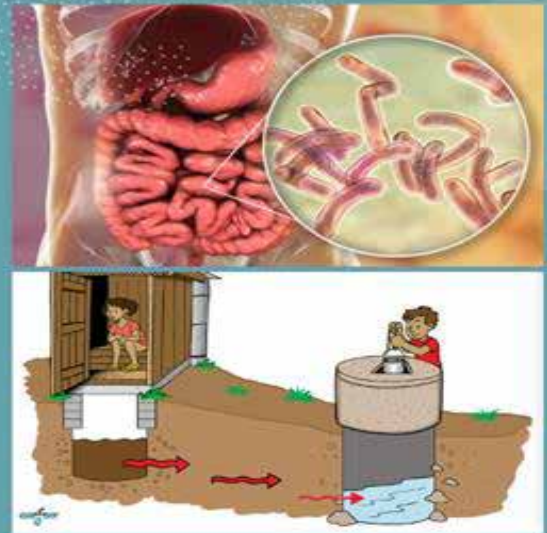
- 8 sterile bandage compresses, 10 cm x 10 cm.
- 8 roller bandages, 10 cm x 4.5 m, individually packaged in plastic.
- 2 Mylar rescue blankets.
- 2 rolls waterproof tape, self-contained 2.5cm X 6m.
- 2 chemical ice packs.
- 2 splinter tweezers, stainless steel, and blunt nose.
- 2 pair stainless steel safety scissors, approx. 10 cm long.
- 2 large "Zip lock" plastic bags.
- Contents list and First Aid Manual (left outside pocket).
- 100 sterile adhesive dressings, 2.5 cm wide.
- 12 safety pins.
- 5 envelopes Steri-strips 3mm X 75mm.
- 10 medium skin closure bandages ("Butterfly bandages").
- 2 tubes oral glucose.
- 9 triangular bandages.
- 4 non-stick dressings 20cm X 7.5cm.
- Antiseptic.
- Saline 250ml.
- 4 sterile gauze compresses, 1m x 1m.
- 30 sterile pads, 10 cm x 10 cm.

- 3 wooden splints (right outside pocket).
 - 2 – Large
 - 1 medium.
- 10 pair medical grade examination powder free Nitrile gloves.
- 2 non-static cloth blankets.
- 1 pen style disposable flashlight.
- 2 Report Clipboards.
 - 10 blank reports.
 - 2 pencils.

2) Oxygen Equipment Section.

- Front Pouch: SealEasys:
 - 1 full adult assembly, (mask with bite-block, one-way valve & oxygen adapter).
 - 1 full pediatric assembly, (mask, one-way valve & oxygen adapter).
 - 1 non-kink tubing with assemblies.
- Centre bag:
 - 1 "D" Oxygen bottle with regulator attached.
 - 2 main valve wrenches.
 - 1 spare seal washer
 - 2 spare non-kink tubing.
 - 1 Spare adult SealEasy assembly.
 - 1 Spare pediatric SealEasy assembly.
- Non re-breath masks:
 - 2 adult.
 - 2 pediatric.

Rapid Response to a Cholera Outbreak in Dhangadhi, Kailali: A Multi-Sectoral Public Health Intervention



Hemraj Joshi, PHD Sudurpaschim; Dr Sujan Adhikari, WHO; Puran Bohara, WHO

Rapid Response to Cholera Outbreak in Dhangadhi, Kailali: A Multi-Sectoral Public Health Intervention

Introduction:

Cholera remains a major public health threat in Nepal, particularly in areas with unsafe water sources and inadequate sanitation. Its rapid onset and potential for explosive outbreaks call for swift detection, coordinated response, and community-level interventions. In July 2024, a cholera outbreak was identified in Dhangadhi Sub-Metropolitan City, Ward No. 1, Kailali District, Sudurpaschim Province. The swift action by provincial and local health authorities, including the mobilization of a multidisciplinary Rapid Response Team (RRT), proved critical in preventing further transmission and controlling the situation.

This article outlines the detection, investigation, response, and outcomes of the outbreak to serve as a learning reference for future water- and food-borne disease events in Nepal.

Event Notification and Outbreak Confirmation:

On 25 July 2024 at 15:24 hours, the Provincial Health Emergency Operation Center (PHEOC) Sudurpaschim received a report from the Epidemiology and Disease Control Division (EDCD) regarding two confirmed cholera cases. The patients, both female residents of Dhangadhi-1, Kailali, had tested positive for *Vibrio cholerae* on stool culture at Seti Provincial Hospital Laboratory. Both individuals lived in the same household shared by six families—totaling approximately 28 people.

By 16:00 hours the same day, PHEOC had coordinated with the hospital's medical record section and Health Office Kailali to verify the outbreak. A multidisciplinary RRT was quickly formed, including officials from the Health Office Kailali, Dhangadhi Sub-Metropolitan City Health Section, Provincial Public Health Laboratory (PPHL), and the World Health Organization (WHO). The investigation was led by Mr. Hemraj Joshi,

PHEOC focal person and FETP graduate, with support from public health, laboratory, and field staff.

Demography of the outbreak site:

Dhangadhi Sub-Metropolitan City is the administrative hub of Kailali District in Sudurpaschim Province. With a population of approximately 147,741 (Census 2011) and covering 271.74 sq. km, Dhangadhi lies at 109 meters above sea level and borders India to the south. Ward No. 1, the outbreak site, is a densely populated area with mixed housing conditions and multiple families sharing water and sanitation facilities. It is characterized by high human mobility and frequent challenges in water quality control.

Case Definitions and Data Collection

Standard case definitions were applied:

Suspected cholera: Any person ≥ 2 years old with three or more loose stools in 24 hours with signs of dehydration and no blood in stool.

Probable cholera: A suspected case with a positive RDT.

Confirmed cholera: A suspected or probable case with *Vibrio cholerae* (O1/O139) confirmed via bacterial culture or PCR.

A semi-structured questionnaire was used to interview patients, their families, and neighbors. Stool samples from 8 symptomatic individuals and water samples from household and communal sources (tap, tank, gagri, and the main supply line) were collected for laboratory analysis. A line list was created for active case finding and contact tracing.

Findings and Observations:

A total of 10 individuals met the case definition for suspected or confirmed cholera. The most affected age group was 5-15 years. Clinical symptoms included diarrhea, abdominal pain, nausea, vomiting, and mild fever. Two patients required treatment at Seti Provincial Hospital—one was admitted and discharged after stabilization, while the other left against medical advice after a few hours of observation. The remaining eight patients received care at local pharmacies and were reportedly stable.

Environmental observations revealed significant WASH (Water, Sanitation, and Hygiene) concerns:

Tap water and a shallow hand pump were used for drinking and cooking.

Gagris (water storage containers) were commonly used without adequate disinfection.

The water sources were located within a few meters of unsanitary toilets with visible waste accumulation.



Waste disposal and kitchen hygiene were poor, suggesting a high risk of fecal contamination.

Laboratory results confirmed cholera-positive stool cultures in two initial patients. Other stool samples were under investigation. Water samples showed risk factors but were not all confirmed for pathogens at the time of reporting.

Control Measures Implemented:

A series of rapid interventions were conducted:

Distribution of Piyush (chlorine solution) and chlorination of water sources, coordinated with Khanepani Sansthan, Dhangadhi Sub-Metropolitan City, and the Health Office Kailali.

FCHVs (Female Community Health Volunteers) were mobilized for health education and awareness campaigns in the affected community.

Information was shared via press briefings and stakeholder meetings, coordinated through a one-door mechanism managed by Health Office Kailali.

Communication and Coordination:

The outbreak response benefited from strong coordination among multiple stakeholders, including:

Ministry of Social Development, Health Directorate, Dhangadhi Sub-Metropolitan City Seti Provincial Hospital, PPHL, PHLMC, UNICEF, WHO, and local elected representatives

A multisectoral approach ensured that both medical and environmental interventions were aligned. The prompt case investigation, transparent information flow, and the use of Surveillance Outbreak Response Management and Analysis System (SORMAS) for line listing contributed to timely outbreak control.

Discussion:

This was a point-source outbreak, likely originating from contaminated household water stored in gagris. The proximity of water sources to unhygienic toilets may have led to fecal contamination. Most cases occurred in children, highlighting their vulnerability and the need for targeted preventive messaging.

The early notification through surveillance channels and immediate field investigation prevented the outbreak from escalating into a broader community transmission event. Media coverage, data-driven response, and laboratory-backed confirmation helped reinforce public trust and accountability.

Strengths of the Response:

Early outbreak detection and prompt notification in SORMAS

Timely mobilization of RRT and multidisciplinary field investigation

Effective coordination between hospital, local, and provincial authorities
Active WASH cluster engagement for water treatment and hygiene support
Transparent information dissemination and press briefings
Practical documentation and report preparation for future reference

Recommendations:

Ensure safe and chlorinated drinking water at household and community levels.
Strengthen routine surveillance for early detection of waterborne diseases.
Promote personal hygiene and safe water storage practices (e.g., covered, cleaned garris).
Advocate for regular water quality testing in high-risk zones.
Improve coordination between health facilities and laboratories for sample handling and testing.
Institutionalize regular orientation programs on outbreak response for local governments and RRTs.
Continue using SORMAS and EWARS for timely reporting and outbreak tracking.

Conclusion:

The July 2024 cholera outbreak in Dhangadhi underscores the critical importance of surveillance, rapid response, laboratory confirmation, and community awareness. Strong collaboration among health authorities, local governments, and partner organizations allowed for timely containment. The lessons learned from this event reinforce the need to prioritize WASH and surveillance systems, especially in urban and border regions where waterborne diseases remain a persistent threat.

हैजा बारे जानौं, बुझौं र सतर्क रहौं

जर्मी तथा वर्षायाम सुरु भएसँगै विशेषगरि बालबालिकामा भाडापखाला, हैजा जस्ता रोगहरू फैलने हुँदा सावधानी र सतर्कता अपनाउन असाध्यै जरुरी छ ।

घरैमा उपचार गर्ने ५ नियम

- भाडापखाला हुनासाथ एक लिटर सफा पानीमा एक पुरिया जीवनजल राखी राखरी घोलने र पटक पटक खुवाउने
- प्रशस्त मात्रामा सफा तथा भोल कुराहरू पटक पटक खान दिने
- मरम तथा सजिले पक्के खानेकुरा थोरै थोरै भरी पटक पटक खुवाइरहने
- स्वास्थ्यकर्मीले सिफारिस गरे अनुसार जिडु चक्कीको मात्रा नबिराइफन खुवाउने
- व्यक्तिगत सरसफाईमा ध्यान दिने र स्वच्छ पानी तथा खाना खाने

जम्मातिका तीन अवस्थाहरू

खाना खानु अघि, बरवालाई खाना खुवाउनु अघि, खाना पकाउनु वा परकनु अघि

पछाडिका तीन अवस्थाहरू

दिना घुइसकेपछि, बरवाको दिना घुइसकेपछि, फोहर छोडपछि

जर्मी तथा वर्षायामसंगै फैलने भाडा पखाला तथा हैजा जस्ता पानीजन्य रोगहरूबाट बच्न खाना खानु/खुवाउनु अघि र चर्पी प्रयोग गरेपछि साबुन पानीले निविमिनि हात धुने जस्ता व्यक्तिगत सरसफाई अपनाऔं ।

Strengthening Disease Surveillance and Information Management for Public Health Emergency Preparedness in Gandaki Province: WHO-Supported EMR Implementation through PHEOC

PHEOC Gandaki Province

In a significant stride toward enhancing healthcare resilience, the World Health Organization (WHO), through the Provincial Health Emergency Operation Center (PHEOC) and the Pandemic Fund, is supporting the provincial government of Gandaki Province in implementing Electronic Medical Record (EMR) systems across Gandaki Province. This initiative, led by the WHE (World Health Emergency) team under PHEOC, in formal request from Ministry of Health (MoH) Gandaki, aims to bolster the province's capacity to respond effectively to health emergencies by equipping hospitals with robust EMR frameworks. This project deploys Electronic Medical Record (EMR) systems with key features—disease surveillance, enhanced patient care, Picture Archiving and Communication (PAC) integration for cost reduction, and Laboratory Information Systems (LIS)—to revolutionize healthcare delivery. This initiative aims to strengthen information management for public health emergency preparedness, integrating advanced digital health tools to enhance disease surveillance, patient care, and operational efficiency. Eight hospitals have successfully adopted EMR systems, with six more in progress, positioning Gandaki as a leader in technology-driven healthcare despite implementation challenges.

These hospitals benefit from four major EMR features:

Disease Surveillance: Real-time data collection and analysis enable early detection of infectious diseases, empowering health authorities to monitor outbreaks and respond swiftly to public health threats.

Information Management: A vital feature of Electronic Medical Records (EMRs) is their ability to support information management for public health emergency preparedness. The integration and interoperability of EMR systems across hospitals will enable real-time data collection and analysis, forming a robust digital infrastructure for health crisis response.

Better Patient Care: Digitized medical records streamline workflows, improve diagnostic accuracy, and enable personalized treatment plans, reducing hospital stays and enhancing patient outcomes.

PAC Integration: By digitizing medical imaging, PAC systems eliminate the need for costly film prints, reduce storage costs, and enable faster access to imaging results for clinicians.

LIS Integration: Laboratory Information Systems automate data capture from lab machines, accelerating diagnostic processes, minimizing human errors, and ensuring faster, more reliable test results.

These features collectively strengthen healthcare delivery, making it more efficient, cost-

effective, and responsive to both patient needs and public health demands.

Issues and Challenges in EMR Implementation

The EMR initiative faces challenges in achieving its goals:

Behavior Changes Among Clinical Staff: Transitioning to digital workflows requires significant adaptation, with resistance due to unfamiliarity with electronic systems.

Availability of ICT Equipment: Limited access to computers, reliable internet, and infrastructure hinders seamless EMR adoption.

Dedicated IT Personnel: The lack of on-site IT staff in hospitals poses challenges for real-time technical support and system maintenance.

Clinical Forms and Format Standardization: Variations in clinical documentation across hospitals complicate EMR integration, requiring standardized formats for consistent data management.

Strong Leadership: Effective implementation demands committed leadership to align stakeholders, drive change, and sustain momentum amid resource constraints.

Future Vision & Impact for Digital Health in Gandaki Province

The initiative's future vision focuses on establishing interoperability among EMR-implemented hospitals in Gandaki Province. This will create a connected healthcare network, enabling the seamless exchange of patient records, imaging data, and laboratory results.

Interoperability will significantly improve care coordination, reduce redundant testing, lower healthcare costs, and strengthen regional disease surveillance—allowing for faster and more effective outbreak responses. This interconnected system aims to position Gandaki Province as a national model for scalable, data-driven healthcare in Nepal.

To support this vision, a Digital Health Committee has been formed under the Ministry of Health (MoH) of Gandaki Province. Additionally, the Health Directorate (HD) has established a dedicated digital health team, comprising eight IT personnel, to support the province's digital health initiatives and tools.

The WHO-supported EMR initiative, facilitated through PHEOC and the Pandemic Fund, is transforming Gandaki Province's healthcare landscape. By integrating disease surveillance, PAC, and LIS into EMR systems, the project ensures real-time outbreak monitoring, cost-efficient diagnostics, and superior patient care and real time information management for public health emergency preparedness. The completed hospitals are already demonstrating faster response times, reduced errors, and improved outcomes, while the pipeline projects will extend these benefits further. With interoperability on the horizon, Gandaki Province is poised to lead Nepal in building a resilient, efficient, and patient-centered healthcare system, aligning with global health security and universal health coverage goals.



Jajarkot Earthquake Response

PHEOC Karnali Province

Introduction

On November 3, 2023 (17 Kartik 2080), a devastating 6.4 magnitude earthquake struck Karnali Province, with the epicenter at Ramidada, Barekot Rural Municipality in Jajarkot District. The tremor impacted multiple districts including Jajarkot, Rukum West, and Salyan, causing severe human casualties, injuries, and widespread destruction. According to the Ministry of Internal Affairs and Law, 154 people lost their lives, 934 were injured, and over 58,000 homes were either fully or partially damaged. Health services also bore a significant brunt, with 76 facilities affected. In response to the Jajarkot earthquake, considerable efforts were made to ensure uninterrupted medical logistics support and the establishment of health camps in affected areas. 37 medical camps were set up to provide immediate healthcare services, supported by the deployment of 3 fully equipped medical camp kits. Additionally, 23 medical tents were distributed and installed across 17 different locations to serve as temporary treatment centers. Regular supplies of essential health logistics, including medicines, medical equipment, and consumables, were delivered to district and local levels based on their specific needs and requests received through the Provincial Health Logistics Management Center (PHLMC). In this challenging context, the Provincial Health Emergency Operations Center (PHEOC) played a central and strategic role in coordinating and leading the health response effort.

Immediate Activation and Coordination

In the early hours following the earthquake, the PHEOC team arrived promptly at the office and began liaising with District Emergency Operation Centers (DEOCs) and District Health Service Managers. Rapid communication enabled the immediate collection of critical data on casualties, injuries, and damages to health infrastructure. The PHEOC also established contact with affected local governments to obtain more granular data on health facility status and operational capacity.

Following the Multi-Hazard Health and Nutrition Disaster Preparedness and Response Plan 2080/81, the Incident Command System was activated under the leadership of the Secretary of the Ministry of Social Development. The coordination between the PHEOC and the province hospital, support for the early deployment of the Emergency Medical Team consisting of Orthopedic Surgeons and the paramedics from the province Hospital Surkhet to Jajarkot district through an Army helicopter. A Health and Nutrition Cluster meeting was swiftly convened at the Health Service Directorate, bringing together key stakeholders. From that day, PHEOC began attending all cluster meetings, recording decisions, collecting partner activity data, compiling situation reports, and disseminating updates to all stakeholders.

Deployment and Field Mobilization

On the second day, seven health response teams were deployed to the hardest-hit municipalities. These teams were composed of members from the Health and Nutrition Cluster and the Provincial Health Coordination Committee. Their field presence was critical in ensuring immediate relief and needs assessment.

At the same time, hub hospitals across the province were activated to manage emergency referrals and treatment. The referral mechanism was promptly operationalized, demonstrating strong coordination between ground responders and tertiary care centers.

PHEOC's Core Functions During the Response

Throughout the emergency, PHEOC activated the Field Incident Management Team (IMT) with the division of roles and responsibilities.

Data Collection and Situation Reporting: Daily situation reports captured data on casualties, health facility status, partner response activities, and critical resource needs. By March 2024, 41 situation reports had been published, ensuring evidence-based decision-making.

Resource and Needs Mapping: PHEOC mapped key health resources, including Hub and satellite hospital functionality, Laboratory diagnostics kits and equipment, Rapid Response Team (RRT) and Rapid Response Coordination (RRC) deployment, Oxygen and electricity backup status in hospitals, Functional status of birthing centers, Human resource distribution across local levels, 4W (Who is doing What, Where, and When) mapping of development partner support.

HeRAMS and Health Facility Assessment: Using the Health Resources and Services Availability Monitoring System (HeRAMS), PHEOC evaluated the operational status of health facilities. This included identifying damaged facilities, capacity gaps, and immediate needs, which informed the establishment of a rehabilitation center in Sani Bheri, Rukum West.

Disease Surveillance and Outbreak Monitoring: Working closely with WHO, PHEOC monitored and verified outbreak-related rumors. Six Surveillance Associates were deployed for active syndromic surveillance to mitigate the risk of disease outbreaks in vulnerable communities.

Community Engagement and Psychosocial Support: Field-level activities were coordinated and tracked, including Distribution of tents, food, and medical items, Psychosocial training for earthquake survivors, RCCE (Risk Communication and Community Engagement) orientation for Female Community Health Volunteers (FCHVs)

Partnership and Support

The operations of PHEOC were significantly strengthened through inter-agency collaboration. The World Health Organization (WHO) played a crucial role by deploying surge personnel and supporting disease surveillance efforts in the affected areas. Additionally, WHO

assisted in the assessment of health facility damages and functionality using the Health Resources and Services Availability Monitoring System (HeRAMS). The findings from this assessment were compiled into comprehensive reports, which were presented and disseminated at the provincial level in the presence of key stakeholders—a process in which PHEOC played a central coordinating role. The Health Service Directorate (HSD) further supported the response by mobilizing internal staff and coordinating with development partners to provide both logistical and technical assistance. PHEOC also contributed timely and accurate information to WHO's internal situation reports, Provincial United Nations (UN) updates, and reports for the UN Resident Coordinator's Office (UNRCO), ensuring consistent and transparent communication across all levels.

Key contributors from the PHEOC team included Dr. Bhoj Raj Bam, who served as the Field Medical Officer, providing essential medical coordination and support on the ground. Sovit Shrestha played a vital role as the Information Management Associate, ensuring accurate data collection, analysis, and dissemination to all relevant stakeholders. Rishi Raj Adhikari contributed as the team's dedicated driver, facilitating timely field movements and logistical support during the emergency response. All these efforts were carried out under the leadership and guidance of Dr. Rabin Khadka, Director of the Health Service Directorate, who oversaw and directed the overall health response to the Jajarkot earthquake.

Conclusion

The Jajarkot earthquake tested the resilience and response capacity of Karnali Province. The PHEOC's early activation, strategic coordination, and diligent information management were instrumental in driving an effective health emergency response. From mapping critical needs to supporting outbreak prevention, PHEOC exemplified the crucial role of a well-prepared and agile emergency operations center in saving lives and restoring health services amid crisis. As recovery continues, the experience from Jajarkot underscores the importance of continued investment in emergency preparedness and robust public health infrastructure.



Community-Based Disease Surveillance: A Local Leadership Model for Early Outbreak Detection and Response

Chandan Subedi

Public Health Officer, Beni Municipality
chandansubedi5@gmail.com, +977-9848754505



The dengue outbreak of 2023-2024 hit Beni Municipality hard. But more than the illness, it exposed our system. We realized something very concerning: our health system wasn't listening to warning signals early enough. By the time the few cases were reported and verified, the disease had already spread through multiple wards.

That outbreak taught us a hard lesson "A system that hears too late, acts too late."

It pushed us to think differently. In addition to the top-down traditional surveillance and national-level alerts, we decided to build our own early warning system grounded in the community, led by the municipality, and supported by digital tools.

This is how CBDS, Community-Based Disease Surveillance was born in Beni Municipality.

Why We Built CBDS

Nepal's national disease surveillance systems are institutionally strong but often lacks deep integration at the local level. Municipalities, the primary units of basic health service delivery, frequently miss early signals of disease outbreaks due to limited surveillance capacity, delayed data flow, and lack of ownership. CBDS was designed to bridge this gap, a local model to strengthen disease intelligence from the ground up, using people we already have: Female Community Health Volunteers (FCHVs), mothers' groups, teachers, health workers, and private health providers.

Our vision was simple:

Early detection + Local action = Safer, healthier communities.

How CBDS Works

We identified nine priority syndromes based on their public health impact, outbreak potential, and alignment with national and international surveillance systems. These include: Fever with rashes, Acute febrile illness, Acute gastroenteritis, Acute encephalitis Syndrome, AFP (Acute Flaccid Paralysis), Neonatal Tetanus, Fever with cough, Fever with jaundice, Fever with swelling.

For each syndrome, we defined clear community and health workers targeted case definitions, trained frontline actors, and created reporting formats that are easy to use. If any case matching the case definition is seen, it is reported immediately. If not, a zero-report is submitted routinely.

All the data flows into the SORMAS platform, where we analyze trends, identify alerts, and prepare for early response.

A System That Belongs to the Community

What makes CBDS special is not just the technical design. It is the ownership.

Teachers are now reporting illnesses in school. Mothers' groups identify clusters in neighborhoods. FCHVs are not just helpers, they are disease sentinels. Even local clinics and pharmacies are engaged.

Beni Municipality has endorsed a formal CBDS Guideline (2082), ensuring this system is embedded in our health governance structure – not a project, but a policy.

A Model for One Health

CBDS doesn't just serve humans. By including events like animal bites, unexplained deaths, and environmental hazards, it aligns with the One Health approach – recognizing the connection between people, animals, and environment.

In an era of climate-sensitive diseases and emerging zoonotic threats, this integration is essential.

Conclusion: Local Leadership is National Strength

CBDS shows us that you don't always need big budgets or high-end technology to make systems work. You need intent, leadership, and local participation. -That is what public health is all about. With CBDS, Beni Municipality has taken a step toward resilient, responsive, and smarter public health.

Let this model inspire other local governments across Nepal to take charge of their health systems – because when communities lead, health systems succeed.

डेंगी सुरक्षित रहौ रोकथाम गरी निश्चयन गरौ

डेंगी रोग डेंगी भइरहका सभसिंह भइरह जसको लामखुट्टेको टोकाईबाट बाध गर्छ ।

खोरे मात्र चर्मी जम्मा भएको भइरह रनि को लामखुट्टेले चुल्ह चर्चिउ र यसको डुबि निशान हुन्छ ।

डेंगीका मूख्य लक्षणहरू

- ज्वर जस्तो लाग्नु
- कोली र मांसपेशीहरू बेचरी हुनु
- चोक्रको रंगी डुक्नु
- बेचरी लाग्नु
- हातमा राख्न विचिराक लाग्नु
- सकसको लाम्छु वा बम्या हिँड्नु

डेंगीका लक्षणहरू देखिएमा के गर्ने ?

स्वास्थ्य सेवादाता गर्नु विचिराक वा स्वास्थ्यकर्मीको सल्लाह लिने ।

मार्ने बस्ने उपचार गर्ने बाल्यक विद्या जस्तो सल्लाहमा रनि र ज्वर दुवैको कम गर्नेको लागि प्यारेसिटामोल चोक्र हस्तिन र एचिएन जस्ता ज्वर जस्तोको सेवन गर्नु ।

मरमात गर्न हुन सल्लाह दिएका दुक्ता गर्ने हुने ।

("विकिराकको सल्लाह नलिईकन कुनै पनि औषधी सेवन गर्नु)

लामखुट्टेले फुल पार्ने सबैको संभावित घर भित्र र वरपरका पानी जम्मेको ठाउँहरू र पानी राख्ने भाँडाहरू खोजी खोजी सफा गरी र लामखुट्टेको फुल नष्ट गरी ।

डेंगी रोग बाट कसरी बच्ने?

लामखुट्टेको टोकाईबाट हुने डेंगी रोगका बिरामीहरू नेपालमा केही समय यता बढिरहेकाले निम्न रोकथामका उपायहरू अपनाउनु हुन अनुरोध गरिन्छ:-

- पुरा बाहुला भएको लुगा लगाउने
- मलु भित्र मात्र सुत्ने
- घरको झ्याल ढोकामा लामखुट्टे नछिर्ने जाली हाल्ने
- घर, कार्यालय, विद्यालय वा सार्वजनिक क्षेत्रमा पानी जम्न नदिने
- खाल्डाखुल्डी पुर्ने र खानेपानी वा ढल चुहिएको छ भने तत्काल मर्मत गर्ने
- गमलाको प्लेट, फूल दानी, कुलर आदिको पानी कम्तीमा हप्ताको एक पटक फेर्ने
- पानी जम्मा गर्ने भाँडालाई लामखुट्टे छिर्न नसक्ने गरी छोप्ने
- साँझ र बिहान करेशाबारीमा जाँदा, घर बाहिर टहलिँदा वा पार्कमा जाँदा / बालबालिकालाई लैजाँदा लामखुट्टेले नटोकोस् भनेर विशेष सावधानी अपनाउने

Barju's Battle with the Red Rash: Measles and the Moments that Followed

RUSHA UPADHYAY

PUBLIC HEALTH PROFESSIONAL



On February 6, 2023, a quiet village in ward no 2 of Barju Rural Municipality became the epicenter of an unexpected storm. A seven-month-old girl, barely beginning to explore the world, was stuck by a wave of illness-cold, cough, fever and a rash that whispered of something more serious. Her journey led to Nobel Medical College in Biratnagar, where laboratory tests confirmed what many had feared: measles had returned. The Province Health Emergency Operations Center (PHEOC), that received the case information through media monitoring and hub and satellite hospital network, promptly informed the health office and municipality to initiate urgent response measures. Mobilized swiftly, Province Health Directorate, PHEOC, Health Office and Barju Rural Municipality-launched into action. They traced the path of the virus like detectives, following its silent footprints through homes and classrooms. It didn't take long to uncover a thread: the infant's 10-year-old brother had fallen ill a week earlier, showing symptoms. A teacher from the local school had too. The pieces began to align, pointing towards a school-based transmission. By the time the lab confirmed four positive cases, the truth was undeniable. Measles had not only resurfaced- but it had also begun to spread. The municipality, facing the weight of this revelation, officially declared an outbreak. Once the measles outbreak was officially declared, urgency filled in the air. A District Level Rapid Response Team (RRT) quickly convened, bringing together experts from Ministry of Health, Province Health Directorate, WHO IPD, PHEOC, District Program Focal Person and Municipality Health Units. Like pieces moving in a chessboard, teams were mobilized without delays, tasked with tracing every thread of the virus's spread.



A coordination meeting between the Health Office and Palika's Health Unit sparked the next wave of action. Ward by ward, health workers fanned out into the community- knocking on doors, recording symptoms. Their mission was clear: complete household survey within seven days and leave no case unnoticed. They compiled line lists, investigated every suspected infection, and followed each contact like a trail of breadcrumbs- working against time to stop the outbreak before it could dig in deeper.

Working hand in hand with Immunization Section of Family Welfare Division, Ministry of Health Koshi Province, Province Health Directorate, Province Health Logistic Management Center, PHEOC, Health Office and Health Unit, a detailed micro-plan was crafted to guide the response. Health workers were equipped with knowledge and strategy through a focused one-day orientation session. Drawing from their own coffers, the Health Office and Municipality spearheaded a six-day Outbreak Response Immunization Campaign across the community for children aged 9 months to 5 years. In the end, the initiative blossomed- an impressive 98% of the target group had rolled up their sleeves for vaccination, mounting a formidable defense against measles. And ever since the campaign's curtain fell, not a single new case has surfaced.

३. स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरूबाट आर्थिक वर्ष २०८०/८१ - २०८१/८२ मा सम्पादन भएका प्रमुख क्रियाकलापहरू

विपद्को अवस्थामा समन्वयात्मक पूर्वतयारी, प्रतिकार्यको उचित व्यवस्थापन तथा प्रभावकारी बनाउने उद्देश्यले स्वास्थ्य आपत्कालीन कार्यसञ्चालन केन्द्रले आर्थिक वर्ष २०८०/८१ देखि २०८१/८२ सम्म सञ्चालन गरेका प्रमुख गतिविधिहरू:-

S.N	Activity	Date	Venue
1	Global Outbreak Alert and Response Network (GOARN) Regional Partners Meeting	15-16 March 2023	Kathmandu
2	Training of Trainers on Basic Emergency Care and Toolkit	Jun-23	Kathmandu, Pokhara
3	National Workshop on Emergency Medical Team (EMT)	23-24 June 2023	Kathmandu
4	Handover Ceremony of Newly refurbished, technologically updated and expanded NHEOC	23-Jul-23	Kathmandu
5	PHEOC Madhesh Handover	27-Jul-23	Madhesh
6	Provincial Cross Sectoral Stakeholders' Workshops	17 July - 31 August 2023	Lumbini, Karnali and Sudurpaschim
7	Health Cluster Coordination Training	15-18 August 2023	Dhulikhel
8	Research Bootcamp	23-25 Aug 2023	Dhulikhel
9	Evaluation of Post-implementation of Emergency Care Toolkit and Conducting Basic Emergency Care and Tools Training	15 Aug - 30 Sep 2023	Kathmandu, Jumla
10	National Workshop on Collaboration Between Public Health, Nepal Army, Nepal Police and Armed Police Force, Nepal to Strengthen Health Emergency Preparedness	8-9 Oct 2023	Kathmandu
11	National workshop and hands-on-training on Hospital Safety Index Plus (HSI+) App	3-4 Oct 2023	Kathmandu
12	Oxygen spareparts handover ceremony	22-Jan-24	Kathmandu
13	Joint Operational Review - Jajarkot	20-21 Feb 2024	Nagarkot
14	Cross Sectoral Stakeholders' Table Top Exercise	1 May - 30 June 2024	Lumbini, Karnali and Sudurpaschim
15	Handover Ceremony of Emergency Medical Logistics	6-Sep-24	Kathmandu
16	A Dissemination Workshop on Emergency Medical Team -EMT	1-Oct-24	Kathmandu

S.N	Activity	Date	Venue
17	Orientation on Health Facility Assessment using Health Resources and Services Availability Monitoring System (HeRAMS) Questionnaire	28-29 Oct 2024	Kathmandu
18	workshop on development of Hospital Disaster Preparedness and Response Plan (H DPRP) of the Satellite Hospitals	Oct-Dec 2024	Lumbini, Karnali and Sudurpaschim
19	A Dissemination Workshop on Emergency Medical Team -EMT	3-Dec-24	Lumbini
20	Hands-on training on customized WHO Hospital Safety Index tool and its application in selected hospitals in Nepal	9-11 Dec 2024	Kathmandu
21	Hospital Safety Assessment of 7 hub hospitals	Dec 2024 - Jan 2025	All Provinces
22	Workshop for finalization of HEOCs' SOP	16-17 Jan 2025	Dhulikhel
23	Training on Basic Emergency Care (BEC)	20-24 January 2025	Kathmandu
24	Simulation Exercise (Simex) i.e., Tabletop exercise (TTX) and Drills to test hospital disaster preparedness and response plan (H DPRP) of selected hub and/or satellite hospital.	01 Nov 2024-01 March 2025	Lumbini, Karnali and Sudurpaschim
25	EMT Table-Top Exercise	19-Mar-25	Nepalgunj
26	Handover Ceremony of IT equipments (servers, UPS)	21-Mar-25	Kathmandu
27	Onsite Coaching and Monitoring of Hospital Disaster Preparedness and Response Plan (H DPRP) at selected satellite Hospitals to capacitate health care workers on effective and efficient response to disaster and public health Emergencies.	01 March 2025 to 15 May 2025	Lumbini, Karnali and Sudurpaschim
28	Dissemination of findings from the Assessment of Selected Hub Hospitals using Nepal Customized Hospital Safety Index Tool	17-Apr-25	Kathmandu
29	Workshop on strengthening cross-sectoral information management and coordination.	28 April - 31 May 2025	Lumbini, Karnali and Sudurpaschim
30	Consultative Workshop on Alternative Care Site (ACS)	May-June 2025	K a t h m a n d u , Nepalgunj and Dhulikhel

साथै, प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रहरूबाट भएका प्रमुख गतिविधिहरू यस प्रकार छन्:-

PHEOC Koshi Province:-

1. In September 2024, floods and landslides in Koshi Province impacted over 14 health facilities. A health facility assessment was carried out using the Health Resources and Services Availability Monitoring System (HeRAMS) tool, which facilitates a collaborative process to ensure that vital information on health resources and services is consistently collected and accessible to decision-makers at national, regional, and global levels. To support this effort, a HeRAMS workshop was held in Kathmandu, where health coordinators from the affected facilities and districts received orientation on the assessment tool and questionnaire. Following the HeRAMs Assessment, World Health Organization (WHO) handed over a Medical Camp Kit (MCK) to Phidim Municipality, Koshi Province, on 16 April to support the restoration of essential health services disrupted by the September 2024 floods and landslides. Designed to maintain access to essential health services while damaged facilities are being rehabilitated, the MCK enables uninterrupted delivery of healthcare through specialized tents equipped for outpatient consultations, Maternal Health services, laboratory diagnostics and medical storage. An Interagency Emergency Health Kit (IEHK) was also provided to address the urgent health needs of up to 10,000 people for a three-month period.
2. Hub and satellite hospital coordination meeting with Koshi Hospital, BPKIHS and Provincial Hospital Bhadrapur where representative were presented from Health Directorate, Representative from Hospital Development Division, MOH, Provincial Health Logistic Management center, Provincial Health Training Center, Provincial Public Health Laboratory Nepal Red Cross society Morang, Representative from Koshi Hospital, BPKIHS, Provincial Hospital Bhadrapur on 2079/01/09 in Biratnagar. Hub and satellite hospital network coordination meeting was conducted with satellite hospital of Koshi hospital where representative from Ministry of Internal Affair and Law, Minister of MOH, Chief of public health division, Chief of policy and planning division, PPHL, Nepal Red Cross Society Dhankuta, PPHL, Journalist, Department head of Koshi Hospital, and hospital representative from private hospital, medical colleges, representative from APHIN on 2079/03/22. Virtual meeting was also conducted with hub and satellite hospital of Koshi hospital and Katari hospital in year 2025.
3. Situation report of Covid-19 was published on a regular basis and was disseminated to relevant stakeholders of province, district and local level. Case Investigation and Contact tracing of cases was done and Provincial CICT team was formed for active surveillance of Covid-19 cases.
4. Establishment of Electronic Medical Record System in Okhaldhunga and Solukhumbu Hospital in 2024. The primary objective of an Electronic Medical Record (EMR) is to digitize patient health information, making it readily accessible and improving the quality, efficiency, and coordination of healthcare delivery. EMRs aim to replace traditional paper charts with a secure, digital format, facilitating better patient care through enhanced communication, streamlined workflows, and data-driven decision making.

5. Rapid Response Team and Rapid Response Committee advocacy workshop was conducted in 81 local level units of Koshi Province with technical support from WHO Nepal and Pandemic Fund
6. Supported in preparation of Monsoon Preparedness plan 2082 which was later endorsed by Ministry of Internal Affairs and Law, Biratnagar
7. Ministry of Health has allocated 10 Lakh rupees for PHEOC activity support disaster related medicine and supplies
8. The new structure of the PHEOC in Koshi is currently under construction with support from WHO Nepal.



Actions undertaken by PHEOC during Flood and Landslide Response 2024:

- ☆ HEOC-PHEOC coordination meeting was held on 3rd Oct 2024 to discuss the ongoing response on flood and landslide.
- ☆ Provincial Health Cluster meeting was held under the chairmanship of director of Health directorate to discuss on current scenario, gaps and way forward
- ☆ Provincial RRT meeting was held under chairmanship of director of Health directorate and the meeting alerted all the members of RRC and RRC to be vigilant for any upcoming outbreak and health related event
- ☆ Provincial UN coordination meeting was held, and all the UN agencies agreed to support on the response according to their mandate
- ☆ PHEOC team participated in Health cluster meeting organized by HEOC. PHEOC provided the update about Koshi Province, Preparedness ongoing at Provincial level and upcoming plan.
- ☆ Injured cases were responded by the provincial ambulance dispatch center, Koshi province
- ☆ PHEOC was managing information and coordinating with concerned authorities PEOC, DEOC and other key stakeholders at district and local level
- ☆ Partners were vigilant about the situation

Key activities conducted at provincial level:

Preparedness activities

1. Development of Monsoon preparedness plan of year 2081 endorsed by MOIAL
2. RRT/RRC training and orientation
3. HOPE training to HCWs
4. Ambulance Driver Training
5. Formation of Provincial RRT committee

During Disaster activities

1. Coordination with the local level and district health offices for information collection and sharing
2. Coordination and Communication
3. Situation report publication
4. RCCE activities like sharing of IEC materials and contents

Post Disaster activities

1. Recording and Reporting
2. Regular communication and coordination
3. Restoration of Services
4. Coordination for chronic health needs
5. Study, gap analysis and recommendation, action points

PHEOC Madhesh Province:-

Battling Cholera: A Community Unites in Rajpur Municipality

In mid-September 2024, the quiet routines of Rajpur Municipality in Rautahat were disrupted when cases of acute watery diarrhea began surfacing at the local primary health center. What began as a few isolated reports quickly turned into a public health alert, with 18 individuals requiring admission to Gaur Hospital. Among them, laboratory tests confirmed the feared diagnosis: cholera.



By 22 September, the Provincial Public Health Laboratory had confirmed 12 cholera cases. The outbreak, concentrated in Ward No. 4, triggered an immediate and coordinated response. Health officials, social mobilizers, and community volunteers rallied together, launching door-to-door awareness campaigns and distributing crucial hygiene education. Water, sanitation, and hygiene (WASH) measures were swiftly implemented, and public gatherings were temporarily restricted to curb further spread.

This episode stands as a powerful reminder of the importance of early detection and grassroots action. Through the rapid mobilization of resources and unwavering community cooperation, Rajpur turned a looming crisis into a story of resilience and readiness.

Strengthening the Frontlines: RRT and RRC Workshops Drive Local Health Resilience

In a pivotal move to fortify local health systems across Madhesh Province, a series of advocacy workshops brought together a diverse group of stakeholders under a shared

mission—enhancing readiness for public health emergencies.

The workshops focused on building the capacity of Rapid Response Teams (RRTs) and forming Rapid Response Committees (RRCs), essential units in emergency preparedness and response. Through engaging discussions and technical sessions, local leaders—including Mayors, Chairpersons, Administrative Officers, Health Coordinators, and frontline workers—explored their roles in emergency scenarios. They learned about rapid surveillance, inter-sectoral coordination, mobilization of resources, and the power of timely public communication.

Crucially, these sessions fostered collaboration between sectors often working in silos—human health, animal health, and water sanitation—laying the groundwork for a truly integrated response mechanism. By the end of the year, 67 out of 136 local levels had successfully formed their RRCs, signaling a major step forward in community-led health governance.

These workshops not only equipped communities with the tools to act but also inspired a shared vision: a province that is informed, empowered, and ready to respond.

From Feasts to Field Response: Tackling Foodborne Illness in Dhanusha

In April and May 2025, two wedding celebrations in Dhanusha District turned into public health emergencies. On 24 April, over 120 people in Bagewa Village, Laxminiya RM, fell ill after consuming sweets prepared in unhygienic conditions. Fifty-four required hospitalizations. A joint investigation by the District Health Office and PHEOC was launched, with swift treatment and containment efforts. A secondary cluster appeared in Siraha District, but all patients recovered.

Just weeks later, on 12 May, nearly 100 people—mostly children and girls—in Kachuri Village, Mithila Bihari Municipality, developed symptoms after eating snacks served at another wedding. Seventy were hospitalized. DHO and PHEOC teams responded quickly, collecting samples, and initiating toxicological tests. Though the risk was rated low, heightened surveillance and FCHV-led hygiene campaigns were activated.

These events highlight the need for food safety awareness and rapid coordination to prevent future outbreaks during community gatherings.

Flood Emergency Update - (HeRAMS) Madhesh Province

Between 26 and 28 September 2024, Madhesh Province faced severe floods due to unexpected torrential rainfall, displacing 2,311 households (5,983 individuals) and causing 4 deaths, 12 injuries, and 2 missing persons. The most affected districts were Parsa, Rautahat, Sarlahi, and Saptari. Displaced populations are at heightened risk of disease outbreaks and public health emergencies due to poor sanitation and access to services. In response, the Provincial Health Emergency Operations Center (PHEOC) coordinated multisectoral interventions—clean water, sanitation, medical aid, shelter, and psychosocial care—while activating health emergency functions such as surveillance, logistics, and capacity building. Eleven local levels submitted HeRAMS data to inform evidence-based recovery planning.

Regular Activities

The Provincial Health Emergency Operations Center (PHEOC) in Madhesh Province is pivotal in ensuring preparedness, coordination, and response to public health emergencies. Its core functions include disease surveillance through EWARS, information management, inter-sectoral coordination, operational planning with risk assessments, logistics management of emergency supplies, and capacity building through training of Rapid Response Teams and Committees. During emergencies, PHEOC activates coordination mechanisms, deploys RRTs, and facilitates timely reporting and resource mobilization to support effective health emergency response and recovery phase

PHEOC Lumbini Province:-

The Provincial Health Emergency Operation Centre (PHEOC) Lumbini, which was previously situated in Butwal, has been officially relocated into the premises of Ministry of Health, Lumbini Province in Dang with support from WHO country office for Nepal. This strategic move aims to further institutionalize and strengthen the province's public health emergency management system.

The newly established PHEOC in Dang is equipped with upgraded infrastructure, enhanced security features, and advanced telecommunication facilities to ensure uninterrupted operations during critical times. This includes dedicated spaces for coordination meetings, real-time data analysis, and information sharing among stakeholders.

The relocation and operationalization of the new PHEOC reinforces the province's capacity to respond effectively to health emergencies and disasters. It supports timely communication and coordination among provincial authorities, health institutions, and national counterparts. Moreover, this development aligns with the core capacities outlined under the International Health Regulations (IHR) 2005, which call for robust systems for preparedness, readiness, and rapid response to public health threats.

With this move, the Lumbini Province is better positioned to safeguard public health, enhance multi-sectoral coordination, and facilitate evidence-based decision-making in times of crisis.

PHEOC Lumbini organized a HUB satellite hospitals network meeting in Lumbini Province on 4th June 2025. Three HUB hospitals, 14 provincial hospitals, four medical colleges and 10 private hospitals were present in the meeting. Objective of the meeting was to build a network among HUB-satellite hospitals and PHEOC, to orient and encourage for revising and updating HDPRP using HSI+ application. This focuses discussion on hospitals' capacity, issues and challenges to respond to monsoon induced, natural and infectious hazards and other disasters.

The program was chaired by Ms. Durga Laxmi Shrestha, Secretary MoH Lumbini and



chief guest of the program was Mr. Khem Bahadur Saru, Minister, Ministry of Health Lumbini Province. Other Dignitaries included Directors from Health Directorate, PPHL, PHLMC, Chief Medical Superintendent, Hospital Directors and Managers from Hub and satellite hospitals of the provinces.

In June 2025, PHEOC Lumbini, with support from WHE Lumbini Province team, conducted on-site training on the Surveillance Outbreak Response Management and Analysis System (SORMAS) for frontline health workers stationed at the Jamunaha, Krishnanagar, and Belahiya Points of Entry. The training aimed to strengthen real-time disease surveillance, early outbreak detection, and response capacity at border health desks.

Highlighting the significance of digital surveillance, Health Secretary Ms. Shrestha underscored the critical role of systems like SORMAS in enabling timely, data-driven public health responses. Mr. Chaudhary emphasized the importance of capacity building at border entry points to ensure the effective detection of priority diseases.

The training included practical sessions on case registration, contact tracing, and outbreak management through the SORMAS platform. Participants welcomed the hands-on learning and committed to applying the skills in their routine work. The program concluded with a joint commitment from WHO and provincial and local health authorities to strengthen digital surveillance and border health security across Lumbini Province.

PHEOC Lumbini with technical and financial support from WHO Nepal conducted a one-day Rapid Response Team-Rapid Response Committee (RRT-RRC) Advocacy workshop in different local levels of Lumbini Province. The meeting was chaired by the respective Mayor or Ward Chairperson and attended by key stakeholders, including Chief Administrative Officers, Health Section Chiefs, Ward Chiefs, Female Community Health Volunteers (FCHVs), and local health workers.

Representatives from district focal person participated as paper presenter and local level authorities as technical resource persons.

The provincial team highlighted local hazard profiles, recent RRT activities, and efforts aligned with national and provincial health emergency action plans. Emphasis was placed on strengthening surveillance systems, identifying epidemic indicators, and improving information flow across the Local, District, Province and National level.

Participants shared experiences on past RRT mobilizations, challenges encountered during responses, and strategies to enhance coordination with local disaster management teams. Health Section Chiefs from municipalities also presented local hazard assessments and ongoing mitigation efforts. Following the discussions, RRTs and RRCs were formally established or updated at each municipality as per national guidelines.

PHEOC Sudurpaschim Province:-

The Provincial Health Emergency Operation Center (PHEOC) Sudurpaschim has played a vital role in enhancing public health emergency preparedness and response throughout Fiscal Year 2081/82. In close coordination with the Ministry of Health and Population (MoHP), DoHS, EDCC, NPHL, WHO Nepal, and relevant stakeholders, the PHEOC led multiple strategic, technical, and field-level initiatives to strengthen the province's emergency health system.

1. Rapid Response Committee (RRC) Advocacy:

Municipal-Level RRC Advocacy Workshops:

Successfully supported and facilitated 63 out of 88 local levels to conduct RRC Advocacy Workshops.

Covered districts: Bajhang, Baitadi, Kailali, Kanchanpur, Dadeldhura, and Achham.



Provincial-Level RRT Guideline Advocacy Workshop:

Provided technical and logistical support for the 2-day workshop organized by EDCD in Dhangadhi, held from 11-12 September 2024.

2. Hub and Satellite Hospital Network Strengthening

Conducted one virtual interaction meeting among Hub and Satellite hospitals, with one physical meeting planned.

Supported Dadeldhura Hospital (Hub) in organizing a physical Hub-Satellite coordination meeting.

Assisted in updating Health Disaster Preparedness and Response Plans (HDPRP), 11-point declarations, and Emergency Medical Teams (EMTs) within the HSI Plus system.

Updated resource mapping of Hub and Satellite hospitals across the province.

3. Capacity Building and Technical Trainings

Supported the STAR Workshop organized by EDCD and WHO Nepal.

Participated in the SPAR (Self-Assessment Annual Reporting under IHR 2005) preparatory meeting led by EDCD.

Facilitated HOPE (Hospital Preparedness for Emergencies) training conducted by NHTC in Dhangadhi.

Conducted a wide range of SORMAS trainings and orientations across multiple districts, including sessions for private hospital medical recorders and virtual training programs.

Supported the EMR System implementation in Bajhang Hospital, with technical support from WHO Nepal.

4. Outbreak Investigation and Emergency Response

Supported investigation and coordinated response to:

Several foodborne disease outbreaks

Several mushroom poisoning cases

Several cholera outbreak in Dhangadhi

Collaborated with local governments, Health Offices, PPHL, and NPHL for sample collection and transportation.

Prepared and disseminated outbreak investigation reports to stakeholders.

Provided coordination during emergency events, including:

Road traffic accidents

Floods and landslides

Earthquake incidents in Bajhang, Bajura, Darchula, and Baitadi—with no fatalities reported.

5. Surveillance, Information Management, and Reporting

Maintained and regularly updated the line list of dengue, scrub typhus, and other priority diseases.

Conducted rumor verification, event investigation, and timely report dissemination.

Published monsoon-related disease situation reports and daily media monitoring summaries.

Updated the RRC and RRT rosters for the province.

Completed health facility mapping across all 88 local levels.

Maintained and regularly revised stakeholder contact directories.

6. Multisectoral and Strategic Support

Supported organization of:

Provincial One Health Workshop

All-Hazard Health Emergency Risk Assessment Workshop in Dhangadhi (organized by EDCCD)

Cross-sectoral tabletop exercise led by HEOC in Dhangadhi

Assisted in hospital safety assessment at Seti Provincial Hospital (January 2025).

Supported simulation exercises at:

Dadeldhura Hospital (drill)

Seti Hospital (tabletop)

Coordinated high-level visits from MoHP and European Union officials to PHEOC Sudurpaschim.

Supported the Ministry of Internal Affairs and Law (MoIAL) in updating the province's Multi-Hazard Preparedness and Response Plan (MPRP).

Conclusion

Through collaborative planning, evidence-based decision-making, and rapid coordination, PHEOC Sudurpaschim continues to play a crucial role in enhancing the province's resilience to public health emergencies. These efforts significantly contribute to achieving the national objectives of the Health Emergency Operation Center (HEOC), MoHP in safeguarding the health of the population.

४. जनस्वास्थ्य आपतकाल तथा विपद् प्रतिकार्यहरु

**In response to
major public health
emergencies
and disasters**



Nepal Earthquake
2015



Flood and Landslide
2017



US Bangla Air Crash
2018



Kavre Panchkhal Food Poisoning
2018



Bara Parsa Windstorm
2019



Human Case of H5N1
2019



COVID-19
2020



Cholera Outbreak
2022



Simulation exercise
2022



Pokhara Air Crash
2023



Jajarkot Earthquake
2023



Flood and Landslide
2024

Nepal Earthquake 2015

The 7.8 magnitude earthquake of April 25, 2015, severely affected 14 districts in Nepal. HEOC was activated immediately as the central hub for health sector response. It coordinated daily situation updates, rapid deployment of over 200 medical teams, and mobilized essential medicines and surgical supplies. Temporary health facilities were set up in collapsed or damaged hospitals and airlifting of critical patients was organized in coordination with the Nepal Army. HEOC facilitated foreign medical team registration and deployment, avoiding duplication and ensuring alignment with national priorities. It supported the health cluster meetings in partnership with WHO, ensuring information management, needs assessments, and gap identification. With disrupted communications, HEOC served as a 24/7 information exchange center, relaying critical updates to decision-makers and responders. Effective operations management from HEOC was instrumental in preventing disease outbreaks despite overcrowded shelters and damaged water systems. This marked a turning point for institutionalized health emergency response coordination in Nepal.



Flood and Landslide 2017

In August 2017, severe monsoon floods and landslides affected over 1.7 million people across 35 districts in the Terai and hilly regions. HEOC led the health sector coordination by mobilizing response teams to the hardest-hit areas. It coordinated with regional medical stores to dispatch emergency health kits, diarrheal disease kits, and reproductive health supplies. Surveillance for waterborne and vector-borne diseases was intensified, with real-time reporting established from affected health facilities. HEOC coordinated with WASH and nutrition clusters to reduce public health risks in temporary shelters. Emergency medical camps were organized in areas where health posts were submerged or inaccessible. HEOC facilitated distribution of mosquito nets and water purification tablets, reducing the risk of cholera, dengue, and malaria outbreaks. Daily situation updates were disseminated through the MoHP and WHO platforms. Its coordination prevented secondary health crises and enabled faster recovery and continuity of essential services post-disaster.



US-Bangla Air Crash 2018

On March 12, 2018, the US-Bangla Airlines Flight BS211 crashed at Tribhuvan International Airport, killing 51 people and injuring several others. Though not a large-scale public health disaster, the HEOC was immediately activated to support emergency health coordination. It liaised with nearby hub and satellite hospital network to ensure emergency services

were available for the injured. HEOC coordinated with the Ministry of Home Affairs, security agencies, and airport emergency teams to manage triage, transportation, and referral of survivors to appropriate medical facilities. It facilitated forensic support, body identification, and post-mortem coordination with the Ministry of Foreign Affairs and concerned embassies. HEOC also supported the provision of psychosocial counseling services to victims' families. Health facilities were put on alert, and communication lines remained open 24/7 for emergency updates. This incident strengthened HEOC's capacity in handling aviation-related mass casualty events and emphasized the need for health sector readiness in non-traditional emergencies.



Bara-Parsa Windstorm 2019

On March 31, 2019, a sudden windstorm struck Bara and Parsa districts, causing 28 deaths and injuring over 400 people. HEOC was immediately activated to coordinate the health sector's response. It facilitated the deployment of emergency medical teams from nearby districts and tertiary hospitals, including specialists in trauma care and surgery. In collaboration with the Nepal Army and Nepal Red Cross Society, HEOC supported the setup of temporary health tents and mobile camps for emergency treatment. It ensured prompt availability of essential medicines, surgical supplies, and blood units by coordinating with regional supply centers. Psychosocial support was provided to affected families, including those who lost loved ones or homes. HEOC maintained regular situation updates to the Ministry and partners and ensured coordination among the district health offices, provincial health directorate, and federal agencies. The windstorm highlighted the importance of pre-hospital care and emergency coordination even in localized, sudden-onset disasters.



COVID-19 Pandemic

During the COVID-19 pandemic, HEOC served as the nerve center for national health emergency coordination from early 2020. It coordinated case investigation, contact tracing, quarantine facility management, and treatment protocols across federal, provincial, and local levels. HEOC established a nationwide information-sharing mechanism, ensuring daily situation reports, health bulletins, and press briefings. It worked closely with the COVID-19 Crisis Management Center (CCMC), WHO, and UN agencies to ensure logistics flow, medical oxygen distribution, and timely supply of PPE, test kits, and vaccines. HEOC coordinated training for thousands of frontline health workers and facilitated telemedicine services



and psychosocial counseling. A real-time hospital bed tracking system was established, and the vaccination campaign was launched with HEOC support across all 77 districts. Despite major challenges, HEOC's leadership helped minimize collapse of the health system. It transformed into a resilient institution managing the most prolonged and complex health emergency in Nepal's history.

Jajarkot Earthquake 2023

On November 3, 2023, a 6.4 magnitude earthquake hit Jajarkot and Rukum West districts, killing over 150 people and injuring hundreds. HEOC activated its emergency response mechanisms within hours, coordinating with the Karnali Province Health Directorate, Nepal Army, and WHO. It deployed federal response teams to affected areas and airlifted critically injured patients to referral hospitals in Surkhet and Kathmandu. Emergency health kits, tents, and trauma supplies were dispatched via road and air. HEOC worked closely with security forces to facilitate emergency evacuation, especially from remote mountainous terrain. It coordinated mobile medical camps, mental health services, and post-disaster disease surveillance to prevent outbreaks in crowded shelters. Three temporary health facilities (using Medical Camp Kits) were established in support of WHO following detailed damage assessment and functional assessment of health facilities using Health Resources and Services Availability Monitoring System (HeRAMS). HEOC remained alert 24X7 for real-time updates and decision-making. Partnerships with humanitarian organizations ensured fast delivery of aid. The Jajarkot response demonstrated improved federal-provincial-local coordination, piloted the HeRAMS assessment tool during disaster and emphasized the importance of health infrastructure resilience in remote areas.



Flood and Landslide 2024

In July-August 2024, intense monsoon rains triggered floods and landslides across eastern Nepal. HEOC issued early alerts to PHEOCs and health facilities and coordinated with humanitarian agencies. After the disaster onset, HEOC strengthened coordination with the health, WASH, shelter, and nutrition clusters to manage health risks. HEOC also rolled out the HeRAMS in the most affected palikas in support of WHO and assessed the functional status of the health facilities in those palikas. HEOC ensured daily reporting from provincial health emergency operation centers and essential and mental health services were emphasized, with special focus on displaced and marginalized groups. Two temporary health facilities (using Medical Camp Kits) were also established in support of WHO. The response included joint coordination meetings with humanitarian partners and line ministries. HEOC's proactive role reduced health impacts and supported continuity of essential services in challenging environments.



५. HEOC मा कार्यरत प्रमुख र हाल कार्यरत कर्मचारीहरूको विवरण

HEOC मा कार्यरत पूर्व प्रमुखहरूको विवरण



Dr Guna Raj Lohani
Joint Secretary



Dr Bhola Ram Shrestha
Joint Secretary



Dr Dipendra Raman Singh
Joint Secretary



Satya Acharya
Under Secretary



Dr Madhab Prasad Lamsal
Under Secretary



Chudamani Bhandari
Under Secretary



Sagar Dahal
Under Secretary



Dr Samir Kumar Adhikari
Under Secretary



Dr Prakash Budhathoky
Joint Secretary



Dr Radhika Thapaliya
Joint Secretary



Dr Prakash Budhathoky
Joint Secretary (Current)

हाल HEOC मा कार्यरत कर्मचारीहरूको विवरण



Dr Prakash Budhathoky
Chief, HEDMU/HEOC



Bandana Bhatta
Public Health Administrator



Gauri Prasad Acharya
Section Officer



Dr Tejesh Nepal
Medical Officer



Surat Bahadur Khadka
Public Health Inspector



Gopal Prasad Pandey
Sr AHW



Bimala Napit
Sr. ANM Nursing Inspector



Nara Maya Rijal
Nursing Inspector



Shreya Subedi
Staff Nurse



Mahesh Subedi
Nayab Subba

विश्व स्वास्थ्य संगठनतर्फबाट HEOC मा कार्यरत कर्मचारीहरूको विवरण



Dr Gaurav Devkota
Health Emergency
Officer



Bimal Singh Bist
Health Emergency
Intervention Officer

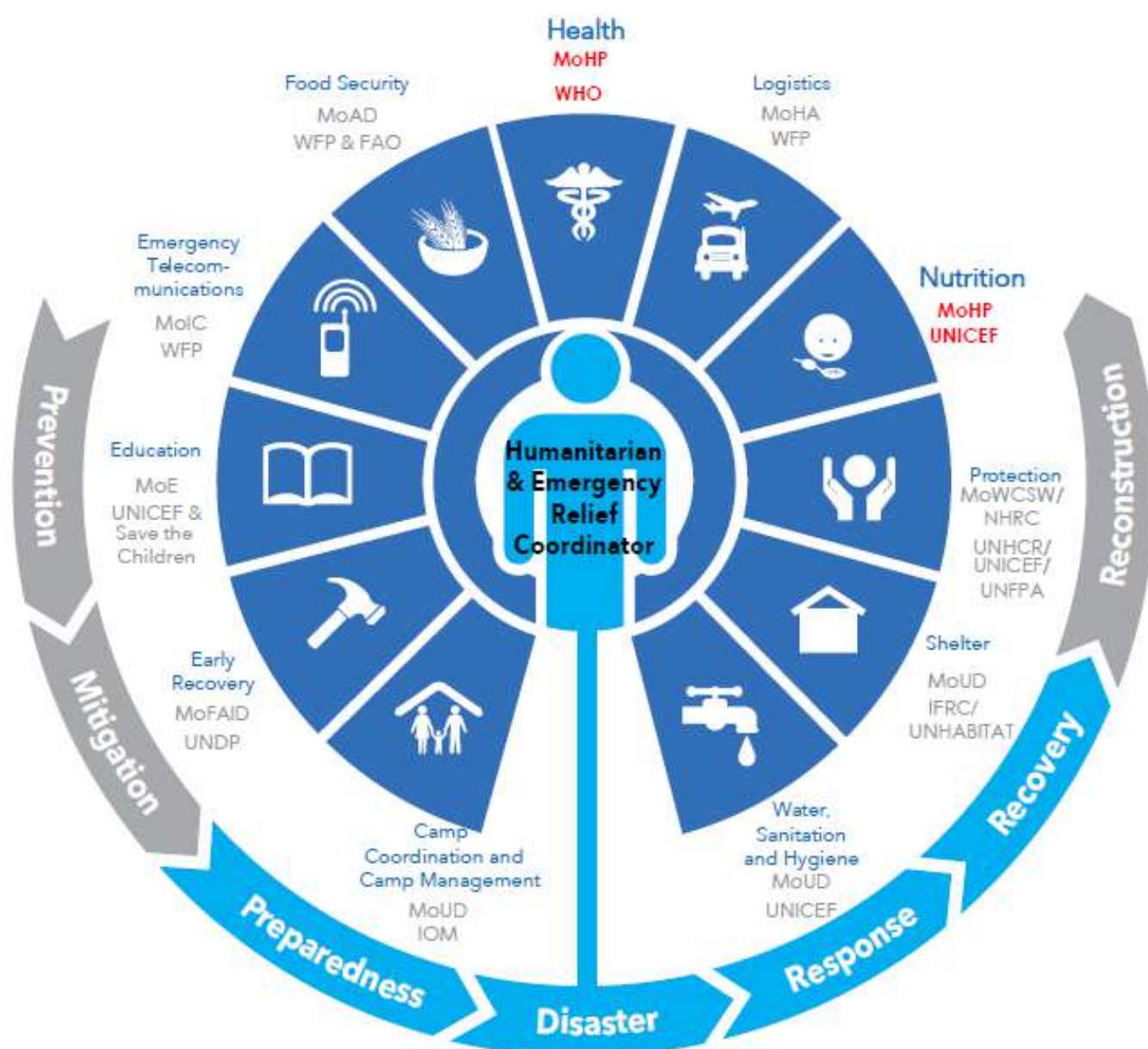


Sanjib Gautam
Information Management
Officer



Ganesh Singh Dhimi
Admin & Operations
Assistant

Cluster Mechanism in Nepal



६. आपत्कालिन सम्पर्क नम्बर

६.१. प्रदेश अन्तर्गत स्वास्थ्य हेर्ने मन्त्रालय:-

Province	Organization	Official E-mail Address	Landline
Koshi	Ministry of Health	info.moh@pl.gov.np	021-590671
Madhesh	Ministry of Health and Population	mohp.madhesprovince@gmail.com	041-590724
Bagmati	Ministry of Health	moh@bagamati.gov.np	057-590391
Gandaki	Ministry of Health	mohp.gandaki@gmail.com	061-535095
Lumbini	Ministry of Health	mohp.lumbini@gmail.com	082-402132
Karnali	Ministry of Social Development	mosdsurkhet@gmail.com	83521705
Sudurpaschim	Ministry of Social Development	mosdkailali07@gmail.com	091-524563

६.२. स्वास्थ्य निर्देशनालय:-

Province	Organization	Director	Name	Mobile	E-mail	Official E-mail
Koshi	Health Directorate	Director	Gyan Bahadur Basnet	9851073878	basnetgyan23@gmail.com	hdplanning.p1@gmail.com
Madhesh	Health Directorate	Director	Vijay Jha	9854030161	jha.vk2014@gmail.com	hdpd2janakpur2075@gmail.com
Bagmati	Health Directorate	Director	Maheshwor Shrestha	9851238188	maheshwarshrestha22@gmail.com	hd.prov3@gmail.com
Gandaki	Health Directorate	Director	Khim Bahadur Khadka	9857623809	bhumari80@gmail.com	hd.gandaki@gmail.com
Lumbini	Health Directorate	Information Officer	Tuk Prasad Pokhrel	9857061538	tukprasadpokhrel@gmail.com	hd.prov5@gmail.com
Karnali	Health Directorate	Information Officer	Padam Bahadur KC	9841178790	kcpadam90@gmail.com	hdsurkhet@gmail.com
Sudurpaschim	Health Directorate	Information Officer	Om Prakash Joshi	9849146952	omprkjoshi@gmail.com	phdnseven@gmail.com

६.३. प्रादेशिक स्वास्थ्य आपत्कालिन कार्यसंचालन केन्द्रमा कार्यरत सम्पर्क व्यक्तिको विवरण:-

PHEOCs	Name	Contact	E-mail
Koshi Province	Dr Samir Parajuli	9818150926	pheocmosd1@gmail.com
Madhesh Province	Phulendra Yadav	9819942760	pheocprov2@gmail.com
Bagmati Province	Kiran Shrestha	9851223186	pheoc.bagmati@gmail.com
Gandaki Province	Buddhi Sagar Adhikari	9846138400	pokharapheoc@gmail.com
Lumbini Province	Chitra Khanal	9849460217	pheoc.p5@gmail.com
Karnali Province	Kiran Kumar Sharma	9858321043	pheocsurkhet@gmail.com
Sudurpaschim Province	Hem Raj Joshi	9848720998	dotipheoc@gmail.com

६.४. हब अस्पतालमा कार्यरत अस्पताल प्रमुख तथा अस्पताल विपद् सम्पर्क व्यक्तिको विवरण:-

Province	Hub Hospital	Official Contact	Official Email Address	Coordinator	Contact	Email Address
Koshi Province	Koshi Hospital	9852029174	koshizonalh@gmail.com	Dr Runa Jha	9852029174	runa75jha@gmail.com
Koshi Province	BPKIHS	025-525555	hospital.administration@bпкиhs.edu	Dr Ajay Kumar Yadav	9852062375	ajay.yadav@bпкиhs.edu
Koshi Province	Katari Hospital	035-450058	gaurabsah20@gmail.com	Dr Gaurab Sah	9848135832	gaurabsah20@gmail.com
Koshi Province	Ilam Hospital	027-520033	ilamhospital@gmail.com	Dr. Prabhu Shah	9852680122	ilamhospital@gmail.com
Madesh Province	Gajendra Narayan Singh Hospital	031-520155	sagarmatha_hospital@yahoo.com	Dr Prakash Sah	9852052243	Prakash_dshah@yahoo.com
Madesh Province	Madhesh Institute of Health Sciences	041-590867	vc@mihs.edu.np	Dr Jamun Singh	9851000009	vc@mihs.edu.np
Madesh Province	Narayani Hospital	051-521993	narayanihospitalbirgunj@gmail.com	Dr Chuman Lal Das	985-2029174	narayanihospitalbirgunj@gmail.com
Bagmati Province	Patan Academy Of Health Sciences	01 5545112	director@pahs.edu.np	Prof Dr Rabi Shakya	9849440543	
Bagmati Province	Civil Service Hospital	01 4793000	info@csh.gov.np	Dr. Mohan Chandra Regmi	9852044055	
Bagmati Province	TUTH	14412303	tuthdirector@iom.edu.np	Dr. Subash Acharya	9851147242	
Bagmati Province	Bir/NAMS Hospital	14221119	director.birhospital@gmail.com	Prof. Dr. Dilip Sharma	9851046070	
Bagmati Province	Shree Birendra Hospital	9869371375	bh@nepalarmy.mil.np	Dr. Bhuwan Raj Kuwar		
Bagmati Province	Dhulikhel Hospital	011-490497	direct@dhulikhelhospital.org	Dr. Bala Ram Malla	9801002309	mallabr504@gmail.com
Bagmati Province	Bharatpur Hospital	056-597003	hospitalbharatpur@gmail.com	Dr. Krishna Psd Poudel	9855081411	drkrishna.poudel@gmail.com
Bagmati Province	Trishuli Hospital	010-560231	distrishulihospital@gmail.com	Dr. Rajendra Lama	9851168188	
Gandaki Province	Dhaulagiri Hospital	068-520288	dhaulagiri.hospital@gmail.com	Dr.Kiran Tiwari	9857670288 9801633042	meh.kiran07@gmail.com
Gandaki Province	Pokhara Academy of Health Sciences	061-520310 /061-520461	wrhpokh@gmail.com	Dr Bharat Khatri	9856022455	bbkhatrinp@hotmail.com
Gandaki Province	G.P. Koirala National Center For Respiratory Diseases	065-571455	gpkoirala04@gmail.com	Dr Ram Kumar Shrestha	9841295964	ramshresthamd@gmail.com
Lumbini Province	Bheri Hospital	9849361872	bheri.hospital@gmail.com	Dr. Prakash Thapa	9849361872	prakashthapa253@gmail.com
Lumbini Province	Lumbini Provincial Hospital	071-542248	lzhospital@gmail.com	Shiva Bahadur kunwar chettri	9848090568	warshiva6@gmail.com
Lumbini Province	Rapti Academy of Health Sciences	082-563976	raptizonalhospital@gmail.com	Jhankar Lamichhane	9857849000	itsmejhankr@gmail.com
Karnali Province	Karnali Academy Of Health Sciences	087-520355	info@kahs.edu.np	Dr. Rajiv Shah	9849627254	rjvshaj512@gmail.com
Karnali Province	Province Hospital, Surkhet	083-523200/ 522200/520200	provincehospitalskt@gmail.com	Keshar Bahadur Dhakal	9868730856	drkeshar_dhakal@yahoo.com
SudurPaschim Province	Seti Provincial Hospital	91521271	seti.hospital@gmail.com	Dr Hem Raj Pandey	9841277823	hrpandeydr@gmail.com
SudurPaschim Province	Dadeldhura Hospital	096-410372	ddlhospitalddl@gmail.com	Dr Santosh Gupta	9858753201	santoshk7g@gmail.com

६.५. जिल्ला प्रशासन कार्यालय प्रमुखहरूको सम्पर्क नम्बर:-

क्र.सं.	कार्यालय	फोन (कार्यालय)	मोबाइल
1	जिल्ला प्रशासन कार्यालय, उदयपुर	035-420133	9852817777
2	जिल्ला प्रशासन कार्यालय, झापा	023-455125	9852617777
3	जिल्ला प्रशासन कार्यालय, संखुवासभा	029-560133	9852077777
4	जिल्ला प्रशासन कार्यालय, भोजपुर	.	9852017777
5	जिल्ला प्रशासन कार्यालय, पाँचथर	024-520250	9852627777
6	जिल्ला प्रशासन कार्यालय, मोरङ्ग	.	9852057777
7	जिल्ला प्रशासन कार्यालय, धनकुटा	26522132	9852037777
8	जिल्ला प्रशासन कार्यालय, तेह्रथुम	26460599	9852097777
9	जिल्ला प्रशासन कार्यालय, ओखलढुङ्गा	9852877777	9852877777
10	जिल्ला प्रशासन कार्यालय, सुनसरी	025-560151	9852087777
11	जिल्ला प्रशासन कार्यालय, इलाम	027-520555	9852607777
12	जिल्ला प्रशासन कार्यालय, सोलुखुम्बु	38520133	9852827777
13	जिल्ला प्रशासन कार्यालय, खोटाङ्ग	.	9852807777
14	जिल्ला प्रशासन कार्यालय, ताप्लेजुङ	024-460133	9852023523
15	जिल्ला प्रशासन कार्यालय, धनुषा	041-420075	9854007777
16	जिल्ला प्रशासन कार्यालय, सिराहा	.	9852837777
17	जिल्ला प्रशासन कार्यालय, महोत्तरी	.	9854027777
18	जिल्ला प्रशासन कार्यालय, सर्लाही	.	9854077777
19	जिल्ला प्रशासन कार्यालय, वारा	.	9855007777
20	जिल्ला प्रशासन कार्यालय, पर्सा	.	9855077777
21	जिल्ला प्रशासन कार्यालय, रौतहट	055-520033	9855037777
22	जिल्ला प्रशासन कार्यालय, सप्तरी	031-520624	9852857777
23	जिल्ला प्रशासन कार्यालय, चितवन	056-521944	9855017777
24	जिल्ला प्रशासन कार्यालय, रामेछाप	048-540333	9854057777
25	जिल्ला प्रशासन कार्यालय, दोलखा	421133	9854017777
26	जिल्ला प्रशासन कार्यालय, ललितपुर	.	9851227777
27	जिल्ला प्रशासन कार्यालय, धादिङ	10520133	9851247777
28	जिल्ला प्रशासन कार्यालय, काभ्रेपलान्चोक	11490123	9851237777
29	जिल्ला प्रशासन कार्यालय, नुवाकोट	.	9851147777
30	जिल्ला प्रशासन कार्यालय, रसुवा	10540132	9851277777
31	जिल्ला प्रशासन कार्यालय, सिन्धुली	.	9854067777
32	जिल्ला प्रशासन कार्यालय, सिन्धुपाल्चोक	11620106	9851257777
33	जिल्ला प्रशासन कार्यालय, मकवानपुर	057-520495	9855027777

क्र.सं.	कार्यालय	फोन (कार्यालय)	मोबाइल
34	जिल्ला प्रशासन कार्यालय, भक्तपुर	.	9851217777
35	जिल्ला प्रशासन कार्यालय, काठमाडौं	.	9851207777
36	जिल्ला प्रशासन कार्यालय, तनहुँ	065-560133	9856067777
37	जिल्ला प्रशासन कार्यालय, स्याङ्जा	063-420133	9856047777
38	जिल्ला प्रशासन कार्यालय, नवलपरासी (बर्दघाट सुस्ता पूर्व)	.	9857087777
39	जिल्ला प्रशासन कार्यालय, मुस्ताङ्ग	.	9857637777
40	जिल्ला प्रशासन कार्यालय, लमजुङ्ग	066-520133	9856017777
41	जिल्ला प्रशासन कार्यालय, म्याग्दी	069-520343	9857627777
42	जिल्ला प्रशासन कार्यालय, वाग्लुङ्ग	.	9857607777
43	जिल्ला प्रशासन कार्यालय, कास्की	061-461764	9856007777
44	जिल्ला प्रशासन कार्यालय, गोरखा	064-420133	9856057777
45	जिल्ला प्रशासन कार्यालय, मनाङ्ग	066-440133	9856037777
46	जिल्ला प्रशासन कार्यालय, पर्वत	067-420133	9857617777
47	जिल्ला प्रशासन कार्यालय, रोल्पा	.	9857827777
48	जिल्ला प्रशासन कार्यालय, गुल्मी	79520133	9857017777
49	जिल्ला प्रशासन कार्यालय, नवलपरासी (बर्दघाट सुस्ता पश्चिम)	078-520133	9857047777
50	जिल्ला प्रशासन कार्यालय, अर्घाखाँची	.	9857007777
51	जिल्ला प्रशासन कार्यालय, कपिलवस्तु	.	9857037777
52	जिल्ला प्रशासन कार्यालय, बर्दिया	084-420133	9858037777
53	जिल्ला प्रशासन कार्यालय, दाङ्ग	.	9857807777
54	जिल्ला प्रशासन कार्यालय, प्यूठान	086-420033	9857817777
55	जिल्ला प्रशासन कार्यालय, बाँके	.	9858027777
56	जिल्ला प्रशासन कार्यालय, रुकुम - पूर्व	088-413083	9857867777
57	जिल्ला प्रशासन कार्यालय, पाल्पा	.	9857057777
58	जिल्ला प्रशासन कार्यालय, रुपन्देही	.	.
59	जिल्ला प्रशासन कार्यालय, दैलेख	89410008	9858017777
60	जिल्ला प्रशासन कार्यालय, जाजरकोट	.	9858047777
61	जिल्ला प्रशासन कार्यालय, मुगु	.	9858347777
62	जिल्ला प्रशासन कार्यालय, जुम्ला	087-520012	9858327777
63	जिल्ला प्रशासन कार्यालय, सुर्खेत	083-520123	9858007777
64	जिल्ला प्रशासन कार्यालय, डोल्पा	087-550033	9858307777
65	जिल्ला प्रशासन कार्यालय, रुकुम (पश्चिम)	.	9857837777
66	जिल्ला प्रशासन कार्यालय, सल्यान	88520133	9857847777
67	जिल्ला प्रशासन कार्यालय, हुम्ला	087-680033	9858317777
68	जिल्ला प्रशासन कार्यालय, कालिकोट	087-440112	9858337777

क्र.सं.	कार्यालय	फोन (कार्यालय)	मोबाइल
69	जिल्ला प्रशासन कार्यालय, कैलाली	.	9858427777
70	जिल्ला प्रशासन कार्यालय, वझाङ्ग	092-421013	9858417777
71	जिल्ला प्रशासन कार्यालय, कञ्चनपुर	521110	9858737777
72	जिल्ला प्रशासन कार्यालय, बैतडी	.	9858707777
73	जिल्ला प्रशासन कार्यालय, बाजुरा	.	9858447777
74	जिल्ला प्रशासन कार्यालय, डोटी	094-420133	9858437777
75	जिल्ला प्रशासन कार्यालय, डडेल्धुरा	96420133	9858717777
76	जिल्ला प्रशासन कार्यालय, अछाम	.	9858407777
77	जिल्ला प्रशासन कार्यालय, दार्चुला	.	9858727777

६.६. स्वास्थ्य कार्यालय:-

Province	District	Name	Phone	E-mail	Official E-mail
Koshi	Ilam	Aditya Shakya	9849598097	shakyaditya@gmail.com	dpohilam@gmail.com
Koshi	Udaypur	Brij kumar das	9852685819	dasbrijkumar@gmail.com	dhoudayapur@gmail.com
Koshi	Okhaldhunga	Ahmad Mansoor	9842941143		info.dhor@gmail.com
Koshi	Khotang	Punya prasad sigdel	9852835707	sigdelpp707@gmail.com	dho.khotang@gmail.com
Koshi	Jhapa	Yograj ghimire	9852060190	dpohjhapa@gmail.com	dpohjhapa@gmail.com
Koshi	Taplejung	Raj Kumar Pokharel	9842667659	rajkumar.dpoh@gmail.com	taplejungpho@gmail.com
Koshi	Terathum	Phanindra Thapa	9852060190		dhothm@gmail.com
Koshi	Dhankuta	Tulashi guragain	9852055934	tguragai1967@gmail.com	dhodhankuta999@gmail.com
Koshi	Panchthar	Tej bahadur Tumbapho	9852681355	tumbapotej1964@gmail.com	healthofficepanchthar@gmail.com
Koshi	Bhojpur	Suman Tiwari	9842059833	nir.tiwari6@gmail.com	dhobhojpur10@gmail.com
Koshi	Morang	Dr Suresh Meheta	9852029180	sureshmht@gmail.com	dphomorang@gmail.com
Koshi	Sankhuwasabha	Ramesh barakoti	9852033060	barakotiramesh@gmail.com	dhosankhuwasabha@gmail.com
Koshi	Sunsari	Sagar Prasain	9842849748	sagarprasai214@gmail.com	dhosunsari@yahoo.com
Koshi	Solukhumbu	Narad Subedi	9852851360	naradsubedi76@gmail.com	info.dhor@gmail.com
Madhesh	Dhanusha	Yugal Kishor Yadav	9854026856	yugalk266@gmail.com	
Madhesh	Parsa	Nawal Kishor Sah	9844031647	sahnabal@gmail.com	dpoh.parsa1@gmail.com
Madhesh	Bara	Ram Naresh Yadav	9855023567	dhobara@gmail.com	dhobara@gmail.com
Madhesh	Mahottari	Bhola Yadav	9854030034	bholayadav25021@gmail.com	mahottari@yahoo.com
Madhesh	Rautahat	Suresh Yadav	9845132942	ysuresh2027@gmail.com	dhorautahat2014@gmail.com
Madhesh	Saptari	Duniyalal Yadav	9845282606		dpoh.saptari@yahoo.com
Madhesh	Sarlahi	Nawal Kishor Jha	9842037477	nkjha.ktm@gmail.com	dhosarlahi19@gmail.com
Madhesh	Siraha	Krishna Dev Yadav	9852880512		dho_siraha@yahoo.com

Province	District	Name	Phone	E-mail	Official E-mail
Bagmati	Kathmandu	Basant Chalise	9851173934	abasant99@gmail.com	dphokathmandu2011@yahoo.com
Bagmati	Kavreplanchok	Jitendra Kumar Sah	9841323924	shedainmr@gmail.com	dhokavre@gmail.com
Bagmati	Chitwan	Satish Bisht	9845828385		dpho.chitawan@gmail.com
Bagmati	Dolakha	Rajaram Karki	9847266314	poudel.arjun28@gmail.com	dhodolakha@yahoo.com
Bagmati	Dhading	Rajan Prasad Pokharel	984133639	sagarprasadghimire33@gmail.com	dhodhading@yahoo.com
Bagmati	Nuwakot	Mahendradhwaj Adhikari	9851179355	mahendradhose@gmail.com	dho.nuwakot@gmail.com
Bagmati	Bhaktapur	Krishna Bahadur Mizar	9841884419	mijark04@gmail.com	dphobhaktapur@gmail.com
Bagmati	Makwanpur	Bhim Sagar growled	9855071305	bhimsagarguragain@gmail.com	dho.makawanpur1@gmail.com
Bagmati	Rasuwa	Basant Chalise	9841601213	chalisebt@gmail.com	dhorasuwa@gmail.com
Bagmati	Ramechhap	Jitendra Kumar Sah	9868815087	jitusah22@gmail.com	dhoramechhap21@gmail.com
Bagmati	Lalitpur	Satish Bisht	9841750491	sbista101@gmail.com	dpholp@gmail.com
Bagmati	Sindhupalchok	Rajaram Karki	9854045249	karki1010@gmail.com	sindhupalchokdho@gmail.com
Bagmati	Sindhuli	Rajan Prasad Pokharel	9842029205	rajanpokharel205205@gmail.com	hmissindhuli@gmail.com
Gandaki	Kaski	Ram bahadur Nepali	9856048350	dphokaski@gmail.com	
Gandaki	Gorkha	Yam prasad Sharma	9856040119	sharmayamprasad83792gmail.com	dao.gorkha@gmail.com
Gandaki	Tanahun	Amar Dawadi	9856064119	amardawadi5552gmail.com	dhotanahun@gmail.com
Gandaki	Nawalparasi east	Angad Bahadur Shahi	9857047831	cdonawalpur2074@gmail.com, daonawalpur2074@gmail.com	
Gandaki	Parbat	Badri Raj Acharya	9857635119	badriacharya47@gmail.com	dhoparbat44@gmail.com
Gandaki	Manang	Rabina Thagunnna	9856049197	dhomanang@gmail.com	thagunnarabina@gmail.com
Gandaki	Mustang	Bidhya Tamang	9857650688	hdomustang808@gmail.com	
Gandaki	Myagdi	Bhuwan Thakurathi	9857628800	bhuwanthk@gmail.com	healofficemagdi@gmail.com
Gandaki	Lamjung	Pravin khanal	9856046119	dpholumjung1@gmail.com	pravin22june@gmail.com
Gandaki	Baglung	Ghanashyam Sapkota	9857622788	baglungdho@gmail.com	gs.sapkota28@gmail.com
Gandaki	Syangja	Keshab Chapagain	9856051232	keshabchapagain65@gmail.com	sangjadho@gmail.com
Lumbini	Arghakhanchi	Puspa Thapa	9843687353	pushpathapa242@gmail.com	dhoarghakhanchi@gmail.com,
Lumbini	Kapilavastu	Hemraj Pandey	9857053706	dhokapilvastu@gmail.com	
Lumbini	Gulmi	Pashupati Acharya	9857067790	pashupati.acharya2015@gmail.com	dphogulmi@gmail.com
Lumbini	Dang	Angad Bahadur Shah	9857834581	dphodang@gmail.com	
Lumbini	Nawalparasi	Om Prakash Panthi	9847050256	dhonawal@yahoo.com	
Lumbini	Palpa	Rajendra Giri	9857080739	giri72rajendra@gmail.com	

Province	District	Name	Phone	E-mail	Official E-mail
Lumbini	Pyuthan	Madusudhan khadka	9857860018	healthofficepyuthan@gmail.com	
Lumbini	Bardiya	Gokarna Giri	9858070027	healthoffice.bardiya@gmail.com	
Lumbini	Banke	Dhir Jung Shah	9848061493	healthofficebankey@gmail.com	
Lumbini	Rukum East	Narayan Prasad Chaudhary	9847845146	dpho.rukumpurba@gmail.com	
Lumbini	Rupandehi	Gaurav Dhakal	9841690883	dpho.rupandehi@gmail.com	
Lumbini	Rolpa	Nokraj Pokhrel	9857822197	rolpadho@gmail.com	
Karnali	Kalikot	Dr.Bhishm Pokharel	9858322665	bppokharel150@gmail.com	hokalikot@gmail.com
Karnali	Jajarkot	Sunil Pun	9841569028	pun2magar@gmail.com	hsojajarkot@gmail.com
Karnali	Jumla	Krishna Sapkota	9848050578	krishnasapkota319@gmail.com	hojumla2075@gmail.com
Karnali	Dolpa	Dr.Season Rawal	9858390110	seasonrawal@gmail.com	dolpahso77@gmail.com
Karnali	Dailekh	Dr.Manoj Bishwakarama	9858023564	manojbishwakarama27@gmail.com	dhodailekh@gmail.com
Karnali	Mugu	Nirmal Nagarkoti	9847421923	nirmalnagarkoti123@gmail.com	dhomugu@gmail.com
Karnali	Rukum West	Mahesh Chaulahain	9848124179	mahesh23chaulagain@gmail.com	dhorukum@gmail.com
Karnali	Salyan	Dr.Arjun Kumar	9857820587	manipalate048@gmail.com	hosalyan2075@gmail.com
Karnali	Surkhet	Karuna Bhattarai	9849296188	bhattaraikaruna3@gmail.com	hosurkhet75@gmail.com
Karnali	Humla	Dr.Pratikshya Bharati	9858320878	bharatoratikshyas143@gmail.com	hojumla2075@gmail.com
Sudurpaschim	Acham	Mr. Jhanak Raj Dhungana	9858421119	jrdtss28@gmail.com	info.healthofficeachham@gmail.com
Sudurpaschim	Baitadi	Mr. Yogesh Prasad Bhatt	9858776664	bhatta.yogesh13@gmail.com	healthofficebaitadi@gmail.com
Sudurpaschim	Bajhang	Mr. Bhanu Joshi	9858483888	bhanujoshibajhang@gmail.com	bajhangdho@gmail.com
Sudurpaschim	Bajura	Mr. Mahesh Chand	9858425937	mchandthakuri@gmail.com	healthofficebajura@gmail.com
Sudurpaschim	Dadeldhura	Mr. Asutosh Shrestha	9849599012	ashutoshman7@gmail.com	healthofficeddl019@gmail.com
Sudurpaschim	Darchula	Mr. Jay Raj Bhatt	9858776867	bhatt.jay123@gmail.com	healthofficebaitadi@gmail.com
Sudurpaschim	Doti	Mr.Dilli raman Joshi	9858787206	joshidilli2075@gmail.com	dhodoti1@gmail.com
Sudurpaschim	Kailali	Mr. Lal Bahadur Dhami	9848720208	lalitdhami54@gmail.com	dpho71kailali@gmail.com
Sudurpaschim	Kanchanpur	Mr. Shivraj Sunar	9858776509	sunarshivraj@gmail.com	kanchanpur.ho@gmail.com

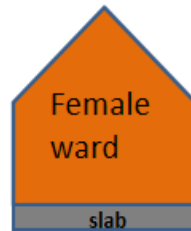


If too big tent can be divided with partition
 1 metallic trunks
 2 Tables +3 Chairs
 1 mattress + bed
 2 Fan
 1 Stationary kit
 2 bulbs + 1 plug
 1 extra tarpaulin cover + ropes

Equipment in MCK

Optional/ additional

1 tent for delivery room with table, chair, delivery table and 1 bed +mattress
 1 tent for male or female staff or male or female ward (on request) with furniture
 1 tent for pharmacy /storage room



6 mattresses+ beds/ each
 1 Fan / each
 2 bulbs/ each
 2 mobile partition /each (local made)
 Extra Tarpaulin cover + ropes



Delivery table
 1 Fan
 1 bulb
 1 mobile partition
 Extra Tarpaulin cover + ropes



6 mattresses
 1 Fan
 1 bulbs
 2 mobile partition (local made)
 Extra Tarpaulin cover + ropes

Concrete slab will be constructed with cement or with stones and mud

slab



REPRODUCTIVE HEALTH KITS



When disaster strikes, UNFPA ensures that the reproductive health needs and protection concerns of women and girls are integrated into emergency responses.

One of the ways in which UNFPA supports women and girls in the aftermath of natural disasters is by providing life saving 'Reproductive Health Kits'.

6 KITS | for 10,000 persons / 3 months
 for use at the community/primary health care level



Administration



Male & female condoms



Clean delivery



Treatment for rape victims



Oral & injectable contraception



Sexually transmitted infections / HIV

5 KITS | for 30,000 persons / 3 months
 for use at the community/primary health care level



Clinical delivery assistance



IUD for family planning



Managing complications from abortion



Vaginal examination & suture of tears



Vacuum extraction for delivery

2 KITS | for 150,000 persons / 3 months
 for use at referral hospital level



Referral level for reproductive health (Caesarian section)



Blood transfusion

७. फोटो ग्यालरी:



Global Outbreak Alert and Response Network (GOARN) Regional Partners Meeting



Training of Trainers on Basic Emergency Care and Toolkit



National Workshop on Emergency Medical Team (EMT)



Handover Ceremony of Newly refurbished, technologically updated and expanded NHEOC



Provincial Cross Sectoral Stakeholders' Workshops



National Workshop on Collaboration Between Public Health, Nepal Army, Nepal Police and Armed Police Force, Nepal to Strengthen Health Emergency Preparedness



National workshop and hands-on-training on Hospital Safety Index Plus (HSI+) App



Joint Operational Review - Jajarkot



Cross Sectoral Stakeholders' Table Top Exercise



Handover Ceremony of Emergency Medical Logistics



A Dissemination Workshop on Emergency Medical Team -EMT



workshop on development of Hospital Disaster Preparedness and Response Plan (HDPRP) of the Satellite Hospitals



Hospital Safety Assessment



Onsite Coaching and Monitoring of Hospital Disaster Preparedness and Response Plan (HDPRP) at selected satellite Hospitals to capacitate health care workers on effective and efficient response to disaster and public health Emergencies.



Orientation on Health Facility Assessment using Health Resources and Services Availability Monitoring System (HeRAMS) Questionnaire



Dissemination of findings from the Assessment of Selected Hub Hospitals using Nepal Customized Hospital Safety Index Tool



Workshop on strengthening cross-sectoral information management and coordination.



Consultative Workshop on Alternative Care Site (ACS)



Roshi MCK Handover





ECHO Visit to Project sites



स्वास्थ्य आपतकालीन तथा विपद व्यवस्थापन इकाई

रामशाह पथ, काठमाडौं

फोन: ०१५३६९७३५

ईमेल: heocmohp@gmail.com

फेसबुक: fb.com/HEOCMoHP

वेब पोर्टल: heoc.mohp.gov.np

११६६

आत्महत्या रोकथामको लागि
राष्ट्रिय हेल्पलाईन

National Helpline for
Suicide Prevention



