

Medical Dispatch in Crises and Disasters

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Benoît Vivien

31.1 What You Should Know

The causative events of the uncommon health crises (UHC) greatly differ in terms of mechanism, pathophysiological outcomes, kinetics, and required therapeutics (pandemic vs. terroristic attack); nonetheless, they all share common points regarding their natural evolution, and strategies and plans implemented to face them.

Every SAMU has a crisis unit enabling the team to upscale their activity in case of emergency calls overflow or UHC. This unit works in conjunction with the call centre, firefighters' command centre, and other involved services.

Every local SAMU is in charge of managing multi-victim events that happen on the territory it covers. However, once the number of victims exceeds the capacity of a single local SAMU, the coordination of supplementary medical resources will be

B. Vivien (🖂)

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SAMU of Paris, Necker University Hospital (CHU), Paris, France e-mail: benoit.vivien@aphp.fr

transferred to the corresponding zonal SAMU. There are 12 zones of defence in France, of which seven are in mainland.¹

ORSEC plan (Organising Response of civil defence services) comprises many specific measures. The most important in terms of emergency and healthcare is NOVI plan (Numerous Victims).² ORSAN plan (Organising Response of health system in uncommon health crises) was created by the Ministry of Health in 2014 to organise progressive and coordinated upscaling of health system response facing UHC. It is composed of six components: AMAVI (including AMAVI damage control), MEDICO-PSY, EPI-VAC, CLIMATE, CRN, and BIO.³

31.2 What You Should Understand

When a given event generates a big number of victims/patients, the clinical presentations are common for all patients, hence the following:

- The injuries/diseases of the same nature differ only in extension and severity;
- The diagnosis is simplified, and only severity assessment becomes essential for triage, immediate treatment, and hospitalisation.

Once alerted, SAMU will reciprocally exchange information with LFRS and police/gendarmerie in order to organise the health

¹Zones of defence: https://www.legifrance.gouv.fr/qffichCodeArticle.do?cid Texte=LEGITEXT000006071307&idArticle=LEGIARTI000036598574&d ateTexte=20200822.

²ORSEC NOVI plan: https://www.interieur.gouv.fr/Archives/Archives-publications/Archives-inforgraphies/Securite-des-biens-et-des-personnes/ Mobilisation-de-l-Etat-en-temps-de-crise/Le-plan-NOVI-Nombreuses-Victimes.

³ORSAN plan: https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico--social/securite-sanitaire/article/le-dispositif-orsan.

response for each victim, from the field medical chain until hospital admission as dispatched by SAMU.

The objective of SAMU medical dispatch in UHC is to broaden the hospital response area by calling on all suitable and available health facilities.

ORSEC NOVI plan (former red plan) focuses on field management and break up of pre-hospital patients' flow, thus serves as a buffer against hospital saturation and spares them activating hospital contingency plan.

The rule is to anticipate to which hospitals patients could be sent, and to systematically look for available beds, even before having the initial report. On the one hand, this helps alert the contacted hospital facilities, and on the other hand, enables SAMU to have a precise situational analysis of the real-time hospitals capacities.

31.3 What You Should Do

The simplified diagnostics helps the team rapidly initiate a standardised response to patients' influx in terms of field care protocols and to which hospitals patients would be sent.

Installing a SAMU field command post (CP), on the disaster scene, optimises dispatch of patients. This post works in close collaboration with the local/zonal SAMU dispatch centres to look for and centralise information about the available hospital capacities and casualty evacuations.

In multi-site events, a SAMU CP (failing that, a dispatch doctor) on each site is required to manage evacuations to hospitals from each. For such, the coordination is upheld by local (or zonal) SAMU.

Patients' evacuations should be organised at the exit of AMP in order to avoid "chaotic evacuation" towards hospitals not prepared to receive victims, which could lead to unjustified mortalities.

No patient should leave the AMP (or CCP if very critical) without a prior medical decision concerning the evacuation destination. Dispatching patients to hospitals should take into account the following imperatives:

- The medico-technical platform required for each victim;
- The reception capacity of every hospital, public or private, already pre-alerted by the dispatch centre;
- The available evacuation means, especially air transport;
- · Keeping victims of the same family together.

For each victim, three elements guide the selection of the required technical platform, hence the hospital:

- How critical the patient is;
- How much care is needed;
- Expected transportation time (land or air).

Medical reports, inside the medical chain, and between the dispatching medical officer and the hospital departments should be "targeted" and concise as compared to records transmitted by SMUR (the French mobile emergency and resuscitation structure) on a daily basis. Medical reports should be transmitted in groups, in the form of a "package" of victims who will be conveyed together or successively to the same hospital.

A system to track all victims should be setup to document in real time their number, case severity, and the hospital to which they are sent. In France, this tracking is usually performed using the Standardised E-information system (*SINUS*).⁴

The objective is to resume normal daily work as soon as possible, at field pre-hospital level as well as at SAMU dispatch centre level.

⁴SINUS system: https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JO RFTEXT000030236009&categorieLien=id.