

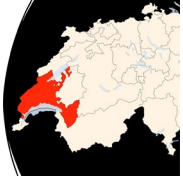
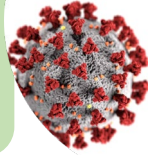
The impact of COVID-19 pandemic, related protective measures (containment), environmental changes and variations on the emergency demands: results based on 107,066 primary missions in Switzerland

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Background:

COVID-19 pandemic impacts not only the COVID-19 patients but also the patients seeking for prehospital emergency help due to other health issues.



The aims:

- Delineate the impact of COVID-19 pandemic, related protective measures (containment), environmental change and variation on the prehospital emergency demands.
- Identify difference in **health issues, severity and the patient population before and during the outbreak** and identify potential collateral effects.

Method: Statistical analysis of **107,066 ambulance primary emergency missions** during the years **2018, 2019 and 2020** in the State of Vaud in Switzerland

Variables:



NACA score: National Advisory Committee for Aeronautics score

Without acute threat to life « non urgent »

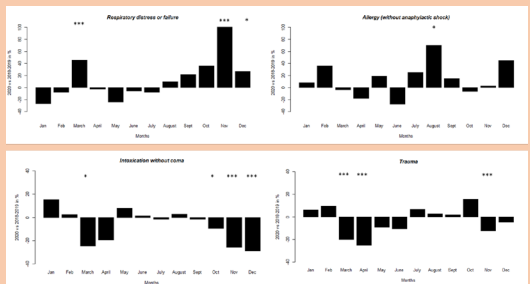
- 0 No injury or disease.
- 1 Injuries/diseases without any need for acute physicians' care.
- 2 Injuries/diseases requiring examination and therapy by a physician, but hospital admission is not indicated.
- 3 Injuries/diseases without acute threat to life but requiring hospital admission.
- 4 Injuries/diseases which can possibly lead to deterioration of vital signs.
- 5 Injuries/diseases with acute threat to life.
- 6 Injuries/diseases transported after successful resuscitation.
- 7 Lethal injuries or diseases (with or without resuscitation attempts).

Results

- 87% of missions are “non-urgent”.
- Over half of patients are 65 or older.
- Most missions takes place between 7:00 am and 6:00 pm (67%).
- Around 12% of missions lead to the non-transport of the patient.



- **COVID-19 pandemic waves increase significantly health issues such as respiratory issues (more than 100% increase).**
- **Confinement decreased significantly the number of trauma (around 30%) and intoxication (around 30%) while a significant increase in number of cases of allergy is measured through time.**



Conclusion: COVID-19 pandemic, containment, as well as environmental variations significantly impacted emergency demands during the pandemic.