Sobriété énergétique & transition écologique du système de santé en Normandie

Environmentally sustainable healthcare practices

FOCUS ON **ECO-PRESCRIPTION**

The carbon footprint of healthcare represents 8% of greenhouse gas emissions in France. The impact of medicines and medical devices accounts for more than half of these emissions (55% compared to 45% for the impact of healthcare). The regional working group Ecosoins (OMEDIT Normandie) has defined good practices around eco-prescription to enable health professionals to become actors in the ecological transition in health.

The 4 principles of **eco-prescription**

1. **Better prescribe :**
Ensure proper use of the drug

Explain to patients the importance of following indications and recommendations (dosage and duration of treatment).

2. **Prescribe less :**
Systematically examine the balance between benefits and risks

Re-evaluate each of your prescriptions.

3. **Limit the environmental contamination of its prescription :**

Prescribe drugs that cause less contamination of ecosystems : narrow spectrum antibiotics and drugs with a low **PBT index** (impact of drugs on the environment).

Educate patients on the importance of returning unused drugs to the pharmacy to be destroyed.

4. **Take into account the carbon footprint of your prescription :**
Prioritize drugs with lower carbon footprint with an equal quality of healthcare.

KEY DATA IN FRANCE

3 billion of drug boxes placed on the market / marketed each year	**13 443 tonnes** of drugs not used annually	**900 tonnes** of drug waste processed annually in Normandy

Everyday eco-prescription

1. Give preference to dry oral forms

Prefer dry oral forms (tablets, capsules, sachets) rather than oral solutions or parenteral forms.

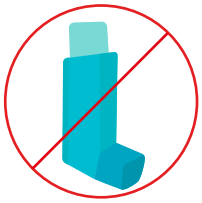
KEY DATA

Greenhouse gas emissions divided by 4 to 12

Carbon footprint for 1 dose (example for a 1 g Paracetamol) :

- 38 g CO_2 per 1 tablet;
- 151 g CO_2 for an oral solution;
- 310–628 g CO_2 for an intravenous form.

75 % to 90 % average greenhouse gas reduction per 1 tablet.



2. Avoid prescribing pressurized inhalers

Prefer powder or misting inhalers.

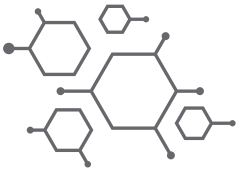
KEY DATA

Greenhouse gas emissions 10 to 20 times lower compared to 1 pressurized inhaler

Inhaler carbon footprint :

- 11 to 28 kg of CO_2 per box for a pressurized inhaler;
- 2 puffs of a pressurized inhaler correspond to 2 km by car.

Less than 1 kg of CO_2 per box for a powder / misting inhaler.



3. Within the same therapeutic class, give preference to drugs with the lowest daily doses of active ingredient

Within the same therapeutic class, give preference to drugs containing the lowest amount of active ingredient, examples:

1 tablet of Irbesartan 150 mg	1 tablet of Candesartan 8 mg (greenhouse gas emissions divided by 1.9)
1 tablet of Fexofenadine 120 mg	1 tablet of Desloratadine 5 mg (greenhouse gas emissions divided by 2.6)

KEY DATA

A 30% reduction of greenhouse gases on average

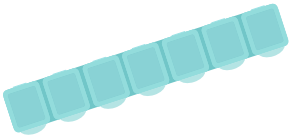
4. Give preference to drugs combining several active substances in the same dose

Prefer the prescription of a drug combining two active ingredients over the prescription of the two individually.

Examples: Perindopril/Amlodipine or Ezetimibe/Simvastatin

KEY DATA

A 29% reduction of greenhouse gases on average



5. Give preference to a dosage schedule with minimum administered doses

Prefer long-release forms and high doses, Prefer continuous intravenous route rather than discontinuous, examples:

2 tablets of Enalapril 5 mg	½ tablet of Enalapril 20 mg
2 tablets of Tramadol 50 mg	1 tablet of Tramadol LR 100 mg
2 tablets of Paracetamol 500 mg	1 tablet of Paracetamol 1 g
Orbenine 2g (discontinuous infusion every 4 hours)	Orbenine 12 g (continuous 24-hour infusion in an electric syringe)

KEY DATA

A 37% reduction of greenhouse gases on average

+ Information and references

omedit-normandie.fr