



Implementation of e-Bug in France and future prospects



French e-Bug team coordinated by the Department of Public Health, Nice University Hospital

Introduction

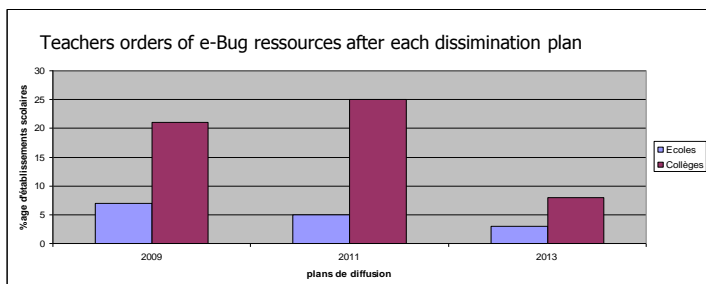
Antibiotic resistance as well as antibiotic prescription rates are particularly high in France. WHO highlights the importance of improving education, antimicrobial resistance being a global public health problem, affecting everybody. Determinants of antibiotic prescriptions include socio-cultural factors. Education is believed to decrease the influence of unfavourable cultural factors. France is an active e-Bug partner since 2006. E-Bug is included in the French national action plan to fight antimicrobial resistance and coordinated by the Department of Public Health (DPH) at Nice University Hospital.

Implementation

The implementation in France is based on multi institutional and multi ministerial collaboration. The Department of Health and the Department of Education (DoE) were the initial and key institutions contacted for endorsement, making it possible to expand further various partnerships. The National Institute of Health Education (INPES) and the National Health Insurance were other initial major partners. Currently, several other partners are involved: Department of Agriculture, Alfort Veterinary school, National Mutual Insurance Company for teachers (MGEN), National French Mutual Insurance Federation (Mutualité française), National Institute for Health Surveillance (InVS) and Medqual (information and resource centre for prudent antibiotic use in western France). Partners' contribution can be scientific (scientific expertise or provision of data), financial, and/or concern promotion and dissemination.

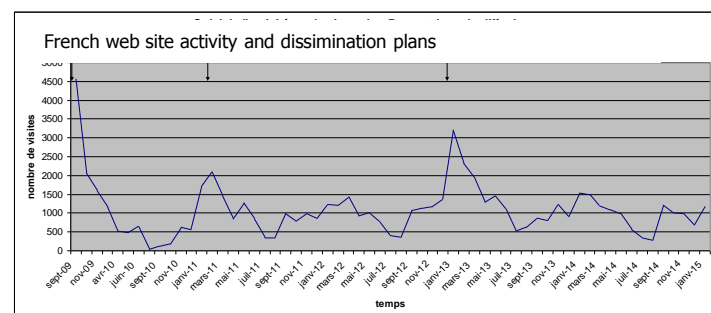
Currently, 3 dissemination plans have been conducted by INPES and a 4th is planned during 2016 after updating the initial resources.

- In 2009 an information letter with an order form was sent to all junior (52,900) and senior (7100) schools.
- In 2011 and in 2013 all junior (52,900) and senior (7100) schools received an information letter and a brochure.

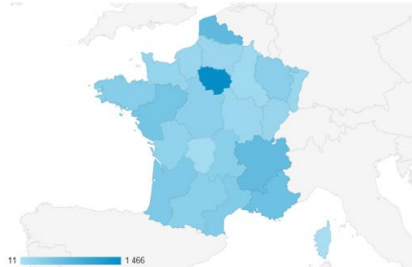


Thus, since 2009, 135,063 junior brochures and 35,787 senior brochures have been disseminated in France.

The number of visits to the French web site increased from 7356 during 2010-11 to 10,650 during 2013-14, with a basic activity of in average 1000 visites/month, following the activity of the school year with peaks after each dissemination plan.



Web site activity is present and rather consistent in the different school districts in France taking the differences in student number per district into account.



Overcome challenges

Involve the Department of Education and encourage e-Bug use in schools through:

- The Department of Health's National priority: Action Plan to fight antimicrobial resistance.
- Official approval from the Minister of Education.
- Context of a European project.
- Teachers and inspectors involved in background surveys and evaluations.
- French adaptation to curriculum changes, teaching conditions, epidemiological data, sociocultural factors. Multistage review method involving various partners.
- On-going update.
- Promotion via DoE and INPES as well as via MGEN, scientific and educational meetings.

Evaluation of use in schools and impact

- Involve teachers to participate through DoE, in particular local school district.
- Feasible methodology, involve DoE and local school district.

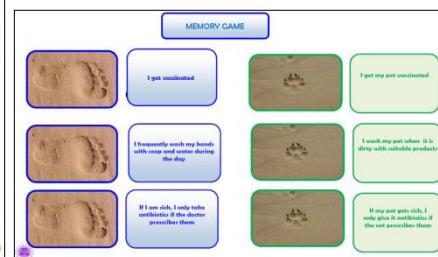
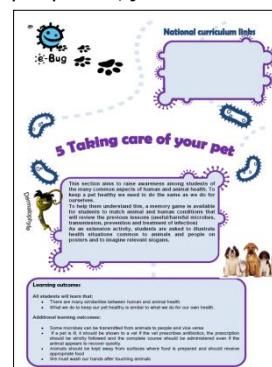
Continuous funding

- Extensive partnerships and stakeholders.
- Submission of numerous yearly calls for tender.
- Involve students.

Future prospects

On-going:

- Update junior and senior resources before new dissemination plan.
- Adapt, upload on web site and assess 15-18 year olds resources.
- Adapt key stage 1 resources.
- Develop «Taking care of your pet» activity in a «One Health» perspective, junior resource available for translation.



- Develop online courses for junior and senior curriculum teachers, access through national learning platform for teachers' continuous education.



Suggestions:

- Develop resources for a wider audience (medical students, nurses and other paramedical students, on-going GP training...).
- Extend partnership to the Environment Department (global health)...
- Evaluation of impact ???

Conclusion

E-Bug in France is considered as an expanding innovating educational resource welladapted to France, in line with European health messages regarding a global public health threat. The French support is multi institutional / ministerial.

