Prevalence of markers for hepatitis B virus and vaccination compliance among medical school students in Italy.

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6830 students
Italian students

*percent*

- Non-protected: 46.6% born before 1980, 50.8% born after 1980
- Anti-HBs+: 84.7% born before 1980, 30.8% born after 1980
- Anti-HBc+: 2.5% born before 1980, 0.4% born after 1980
- HBsAg+: 0% born before 1980, 0% born after 1980
- HBeAg+: 0% born before 1980, 0% born after 1980

Foreign students

*percent*

- Non-protected: 43.9% born before 1980, 44.6% born after 1980
- Anti-HBs+: 37.9% born before 1980, 30.8% born after 1980
- Anti-HBc+: 14.7% born before 1980, 19.2% born after 1980
- HBsAg+: 3.1% born before 1980, 5.4% born after 1980
- HBeAg+: 0.3% born before 1980, 0% born after 1980
compliance to revaccination and to check markers

- Italian: Revaccination: 63.4%, Markers after revaccination: 68.2%
- Foreign: Revaccination: 69.2%, Markers after revaccination: 54.0%
- All: Revaccination: 64.1%, Markers after revaccination: 66.0%
check of antibodies after revaccination

percent

73.2
54.1
63.2
52.5
72.9
53.5

italian
foreign
all

booster
full series
non-responders: “a person who does not develop protective surface antibodies (>10 IU/l) after completing two full series of the hepatitis B vaccine and for whom an acute or chronic hepatitis B infection has been ruled out” (CDC, 2011)
positivity after booster born before 1980

- all: 81.3%
- males: 80.0%
- females: 81.8%

positivity after booster born in or after 1980

- all: 95.6%
- males: 95.6%
- females: 95.3%
three months after 1 year vaccination age

- percent of non-protective antibodies:
  - three months: 47.2%
  - after 1 year: 17.0%
Group A

Group B

P < 0.0001
Engerix–B®

Recombivax HB®

* 0·00
* 0·01–<0·1
* 0·1–<1·0
* 1·0–<10
* all <10
* 10–99
* 100–1000
* >1000

percent

0·00 0·0 1·4 7·7 9·9 31·5 44·6 14·0
0·5 0·1 3·5 12·1 16·3 38·3 38·5 6·9
before booster (IU/l)

after booster (percent)

- non protected (<10 IU/l)
- high protected (>1000 IU/l)
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