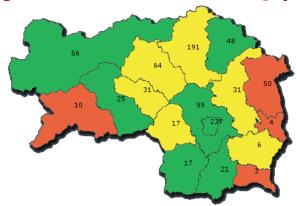


# Steirische Gesundheitslandkarte (Styrian Health Map)



### **Data Description**

translation by Uwe Ligges

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Biomedical Engineering / eHealth systems

DI Christoph Adl

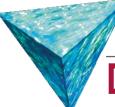
Donau-City-Straße 1 / 8. Stock, 1220 Wien

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www.arcsmed.at/eHs, E: eHs@arcsmed.at



#### **eHealth systems**



# **Data collection**

WEGE ZUR GESUNDHEIT

BRUCK AN DER MUR

29.4.-29.10. Steirische Landesausstellung 2006

- Styrian state exhibition 2006 "Wege zur Gesundheit"
- April 29, 2006 to October 29, 2006
- 3 terminals for data collection
- 12 parameters
- > 16 000 measurements





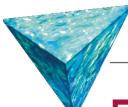




## **Parameters**

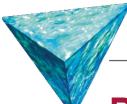
- *id* (auto-incremented number in database)
- zeit (date and time, sorted)
- terminal (1, 2, 3)
- Place of residence
  - postleitzahl (postcode, 4 digits, null for foreigners)
  - *gemeinde* (municipality, *null* for foreigners)
  - bezirk (district, null for foreigners)
  - bundesland (federal state, null for foreigners)
- befinden (felt health condition, 1: very good, ..., 5: very poor)
- geburtsjahr (year of birth)
- geschlecht (gender: f, m)
- raucher (smoker: WAHR (true) or FALSCH (false))
- blutzucker\_bekannt (diabetes know: WAHR (true) or FALSCH (false))
- cholesterin\_bekannt (cholesterole known: WAHR (true) or FALSCH (false))
- in\_behandlung (receives hypertension treatment: WAHR (true) or FALSCH (false))
- schaetzwert\_bp\_sys (self estimated systolic blood pressure)
- schaetzwert\_by\_dia (self estimated diastolic blood pressure)
- messwert\_bp\_sys (measured systolic blood pressure)
- messwert\_bp\_dia (measured diastolic blood pressure)





### **Extra Information**

- Terminal 3 was equipped with an upper arm blood pressure (bp) monitor (Oberarmmessgerät) roughly until end of May, afterwards with a wrist bp monitor (Handgelenksmessgerät).
- Wrist blood pressure monitor less accurately than upper arm bp monitor.

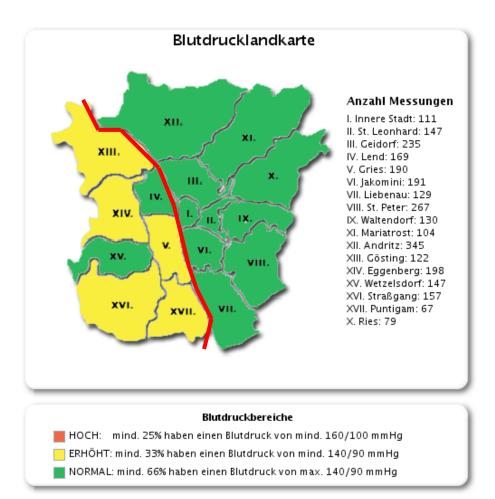


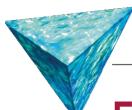
## **Blood Pressure Map Graz**

Does a significant difference of mean blood pressure exist between the districts east and west of the Mur river?

east: Andriz, Mariatrost, Ries, Innere Stadt, St. Leonhard, Geidorf, Waltendorf, Jakomini, Liebenau, St. Peter)

west: Lend, Gries, Gösting, Eggenberg, Wetzelsdorf, Straßgang, Puntigam





# Further Hypotheses....

- 1. Is there some geographical influence?
  May the age be related (which differs by region)?
- 2. Can we statistically prove the relationship between age and bp in the data?
- 3. Are there differences in blood pressure by gender, diabetes, smoking, cholesterole, well being?
- 4. Are patients that receive treatment well adjusted by their doctors?
- 5. Which group of people knows best about their blood pressure?
- 6. Have all terminals worked well all the time?

