



**UNIMORE**  
UNIVERSITÀ DEGLI STUDI DI  
MODENA E REGGIO EMILIA

**NO MORE**  
 **NO<sub>x</sub>**

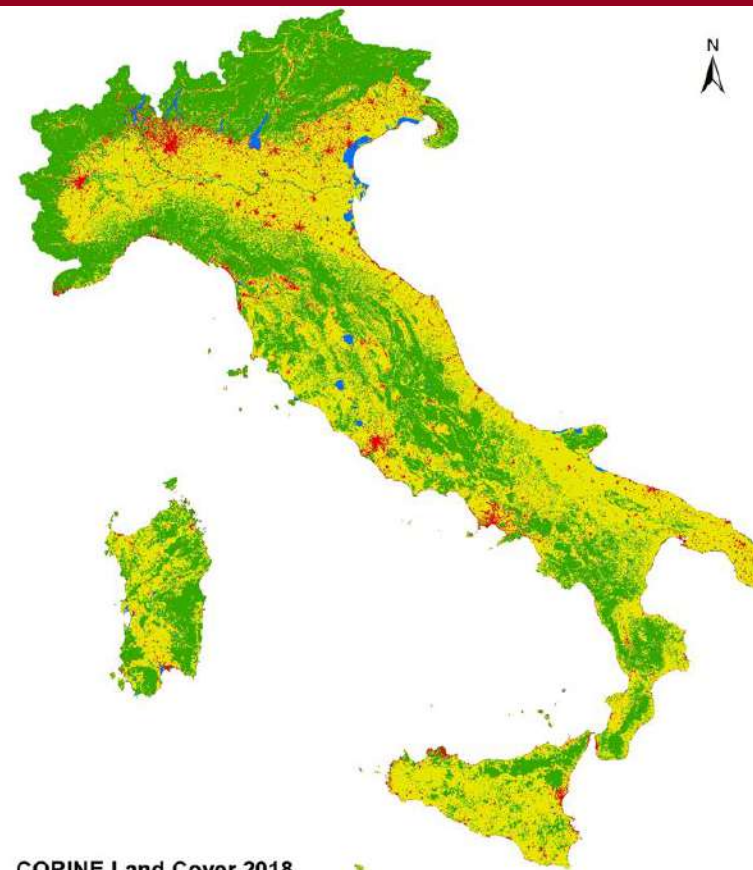
# Spazi verdi e salute

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**NO MORE NO<sub>x</sub> – 20 maggio 2026**

# Uso del suolo



CORINE Land Cover 2018

## I livello

- Superfici artificiali
- Superfici agricole utilizzate
- Terreni boscati e ambienti semi-naturali
- Zone umide e corpi idrici

0 30 60 120 180 240  
Kilometers

# Dati **satellitari**: NDVI



**HEALTHY**  
VEGETATION REFLECTANCE

50% NIR 8% RED



NDVI = 0.72

**STRESSED**  
VEGETATION REFLECTANCE

40% NIR 30% RED



NDVI = 0.14

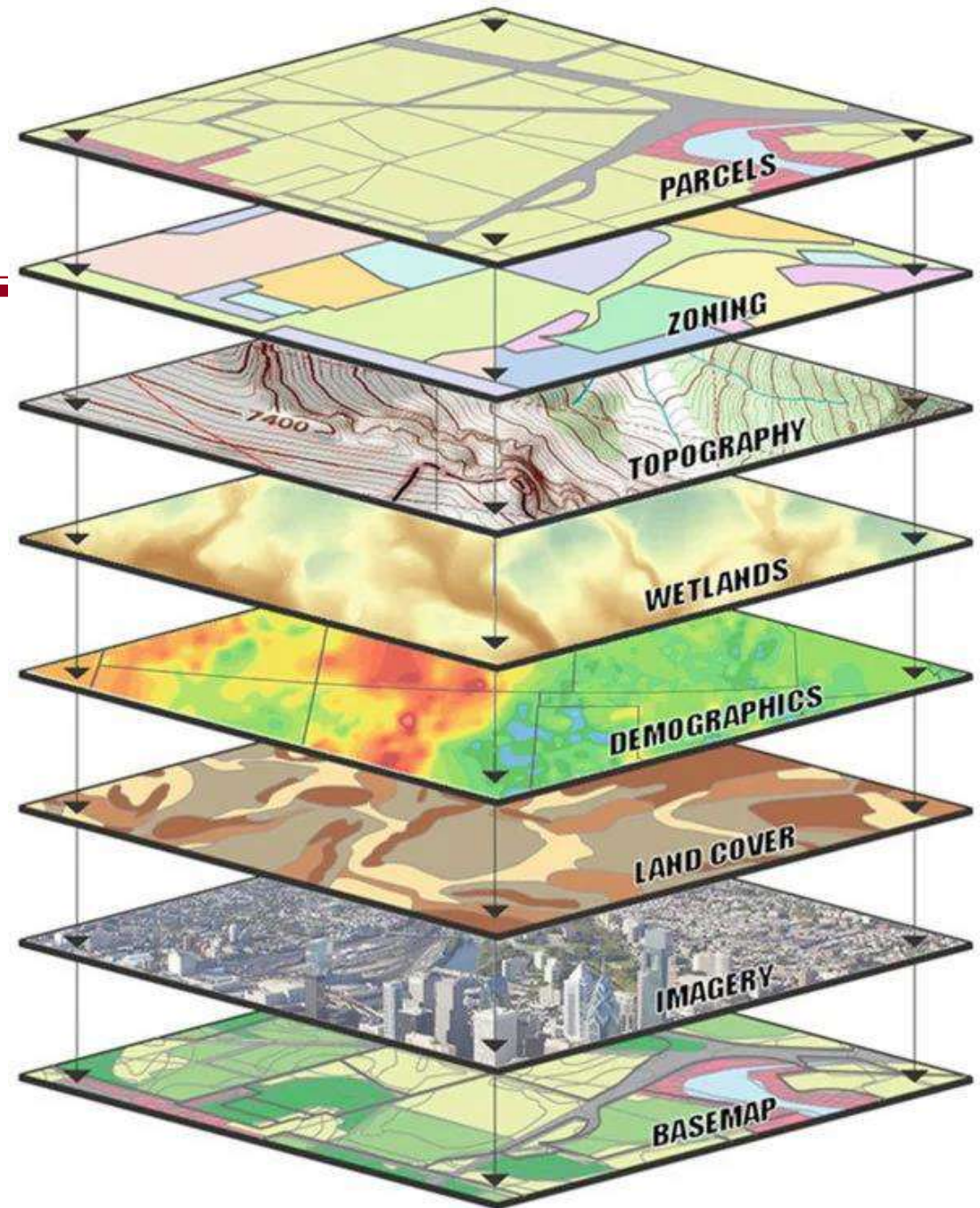
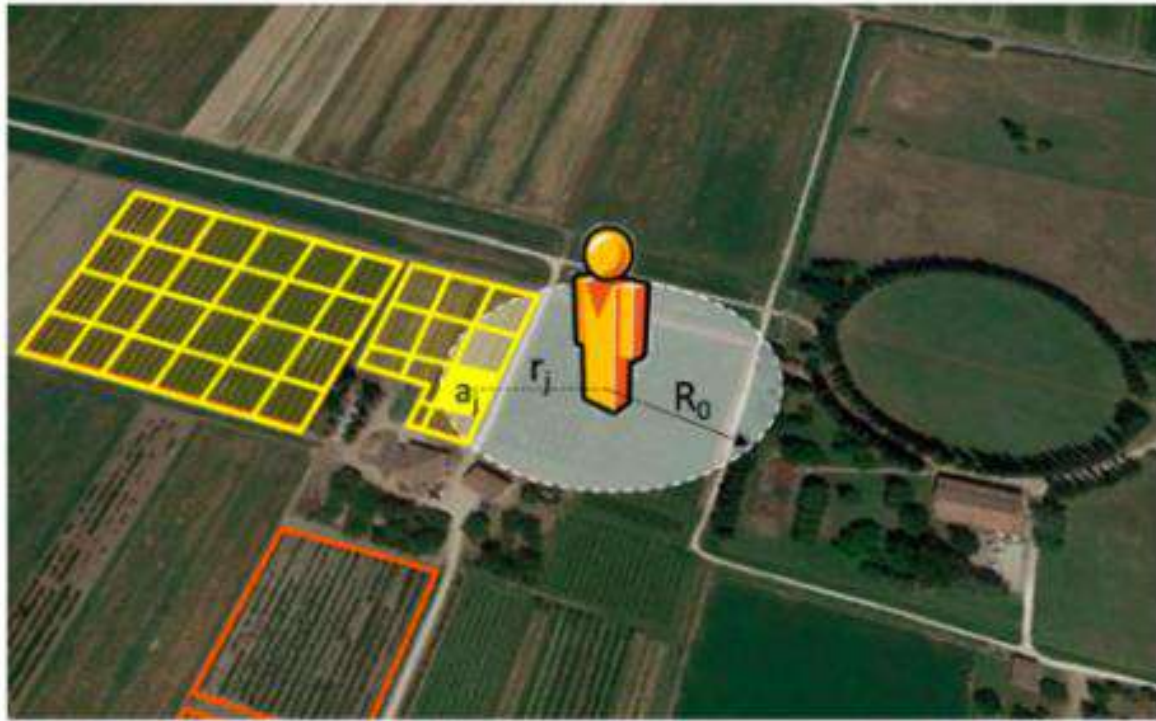
$$\text{NDVI} = \frac{\text{NIR} - \text{RED}}{\text{NIR} + \text{RED}}$$

Valori da -1 (acqua) a +1 (bosco fitto)

Normalized Difference Vegetation index

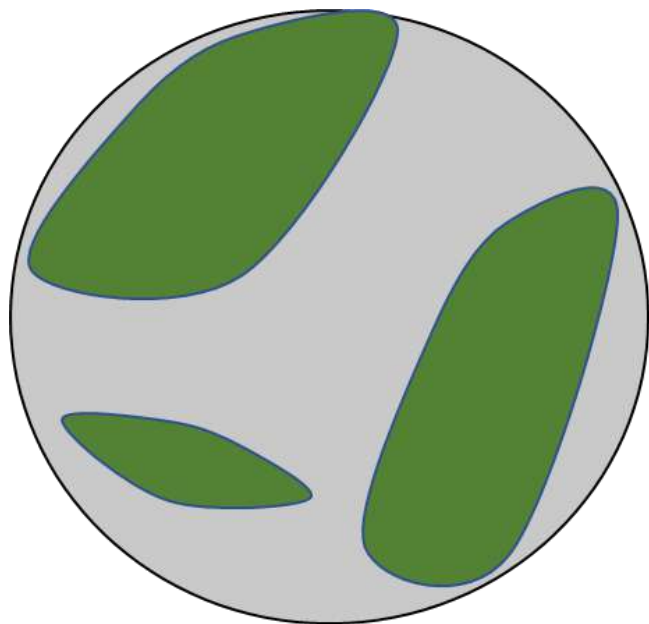
# GIS-Geolocalizzazione

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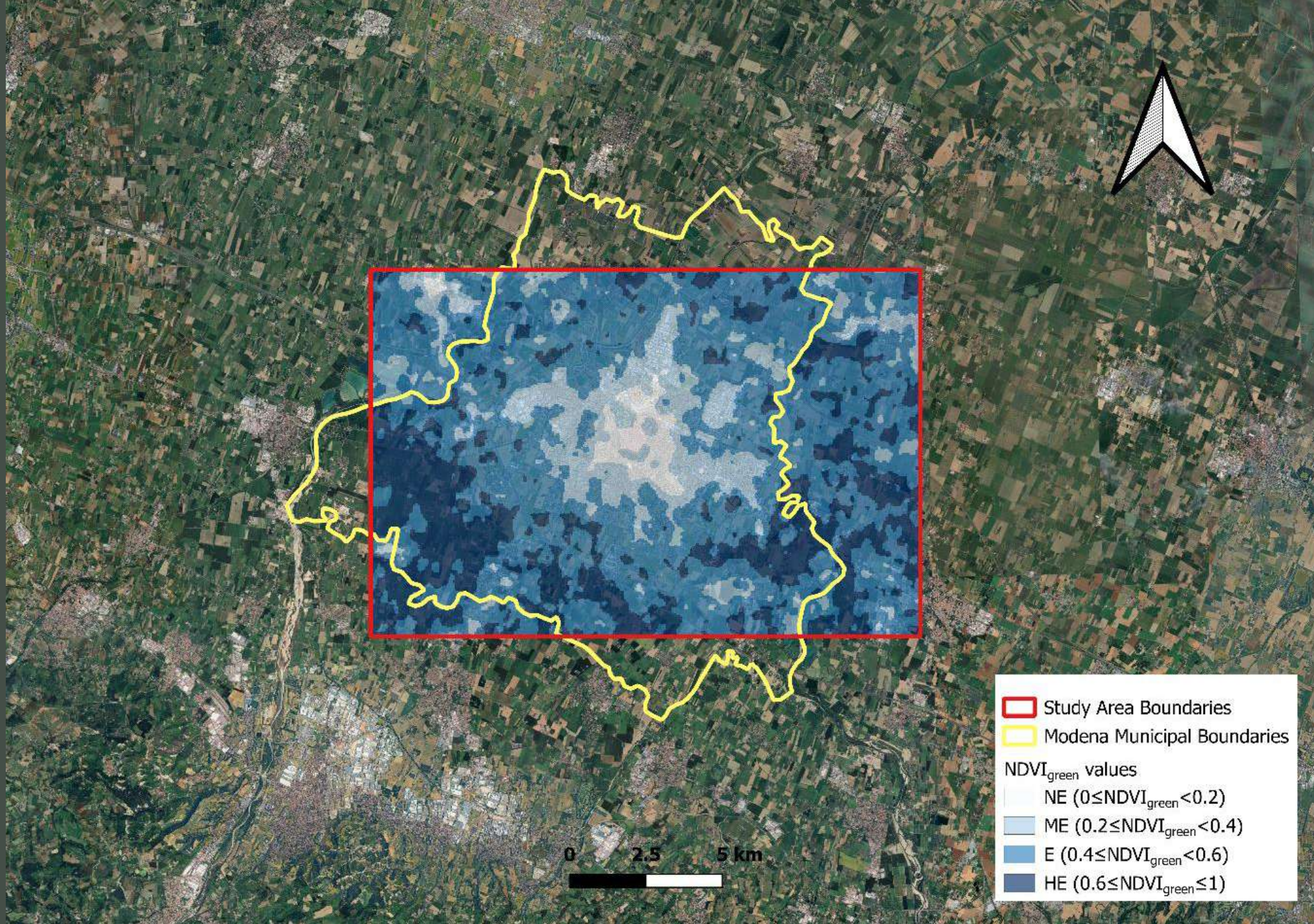
# Greenness 2.0

## Green Coverage Ratio (GCR)



## Indici di accessibilità





# Vivere in un ambiente più verde

Mortalità 

 Disturbi mentali

Malattie cardiovascolari 

 Basso peso alla nascita

Pressione arteriosa, glicemia 

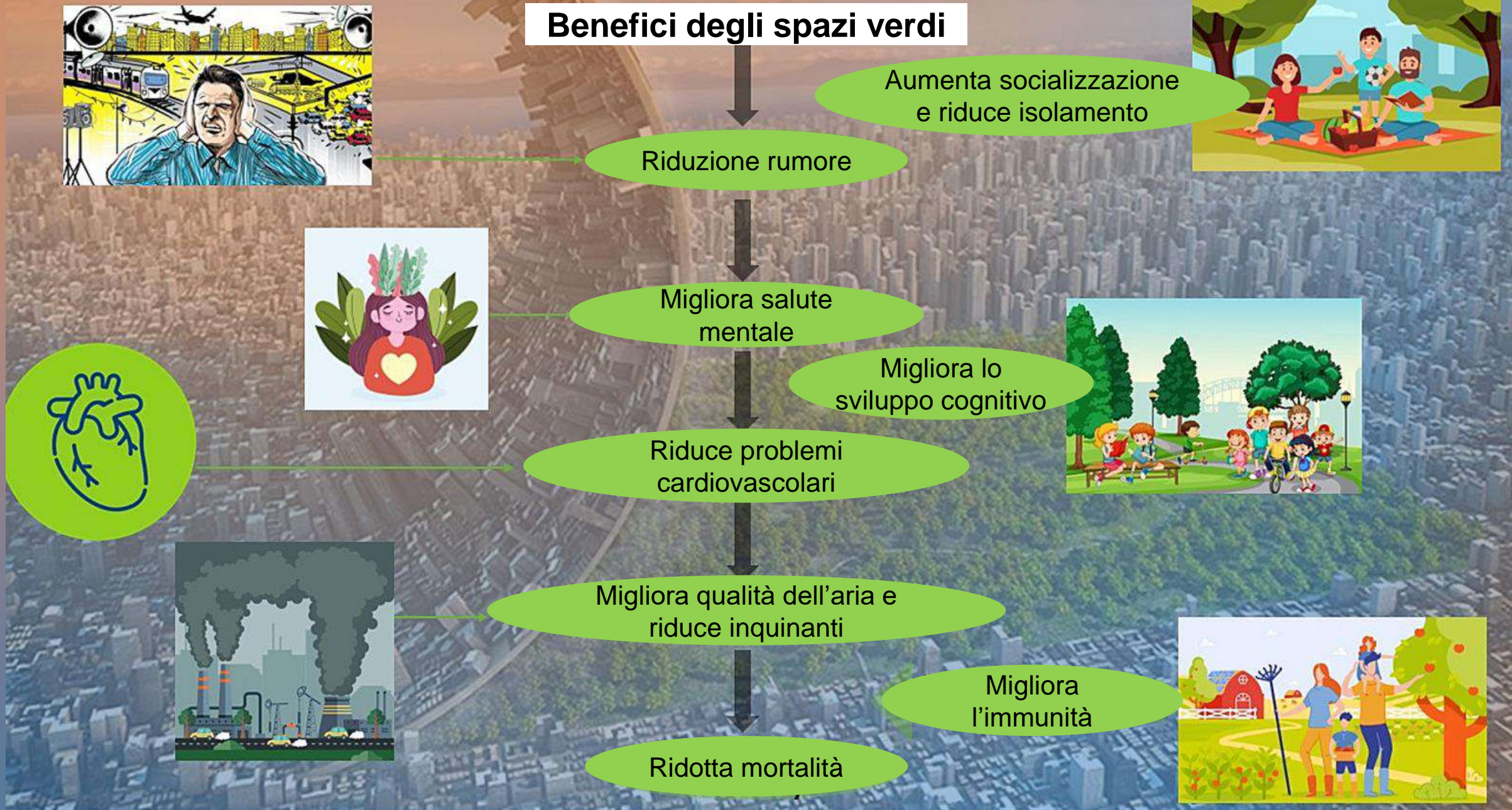
 Inattività fisica

Indice di massa corporea 

 Disturbi del sonno



# Benefici degli spazi verdi

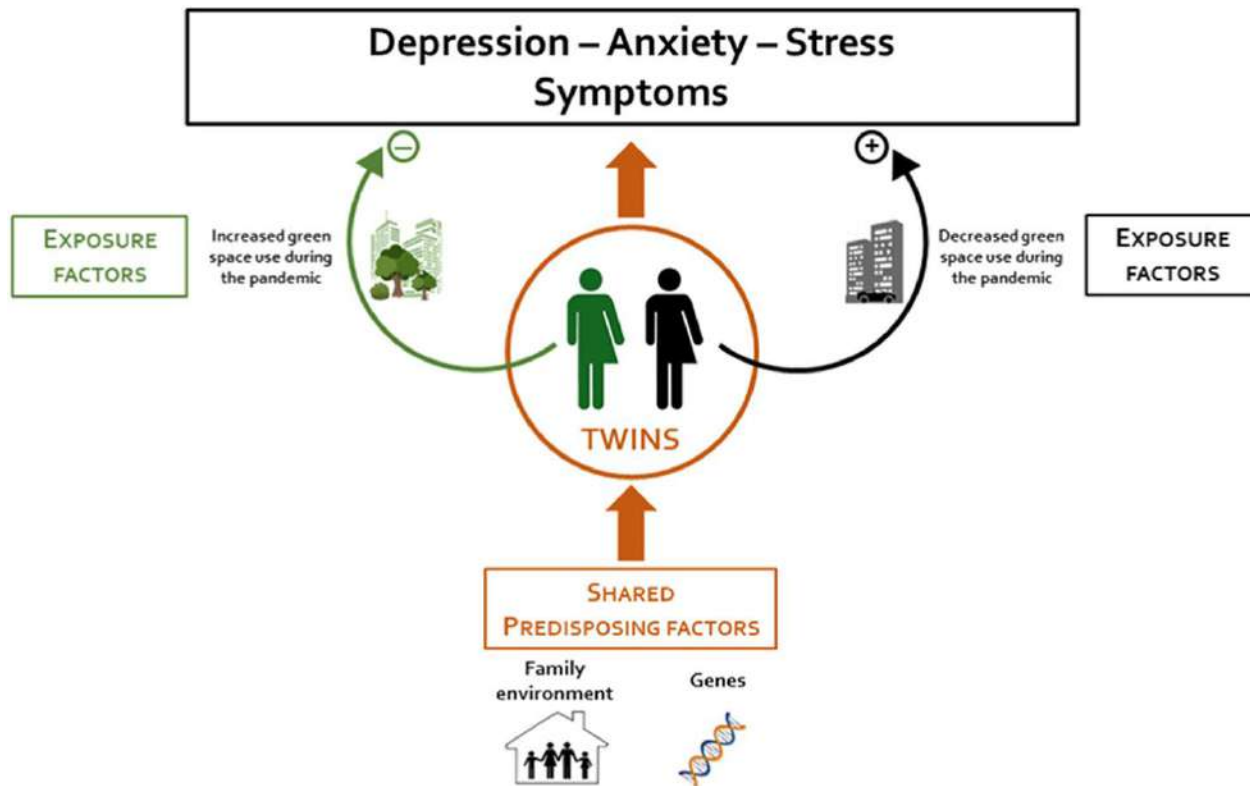


# Effetti sulla **salute**

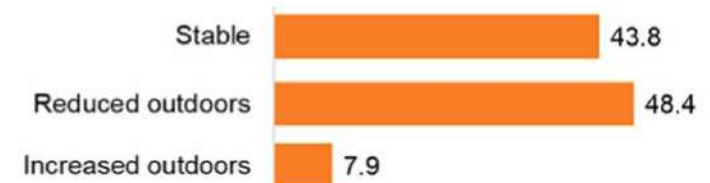
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- Diminuzione **mortalità** generale
  - Possibile riduzione **tumori** a polmone, prostata e mammella
  - Minore rischio di **basso peso alla nascita**
  - Promozione **attività fisica**
  - Diminuzione pressione, colesterolo e trigliceridi
  - Diminuzione obesità e diabete
- } Minore rischio **CVD**
- **Asma** e **allergie**: maggiore rischio di episodi
  - Diminuzione sintomi **depressivi**, inclusa in gravidanza
  - Miglioramento auto-percezione della **salute mentale**

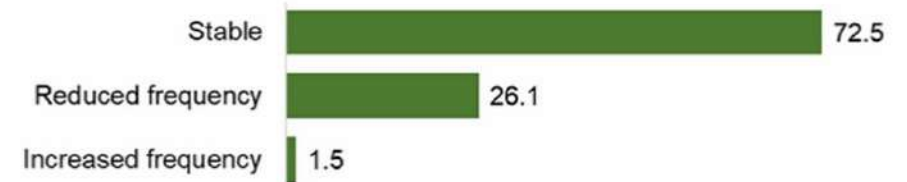
# Depression



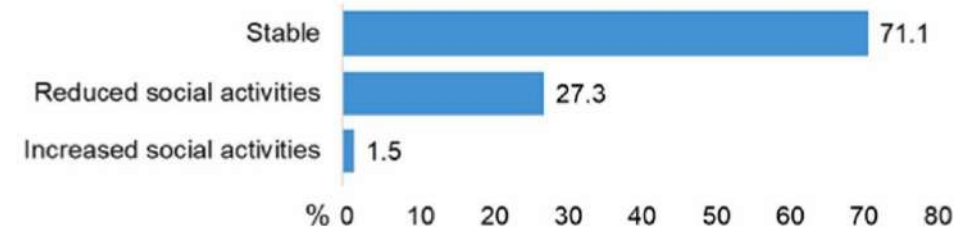
## a) Free time outdoors/indoors



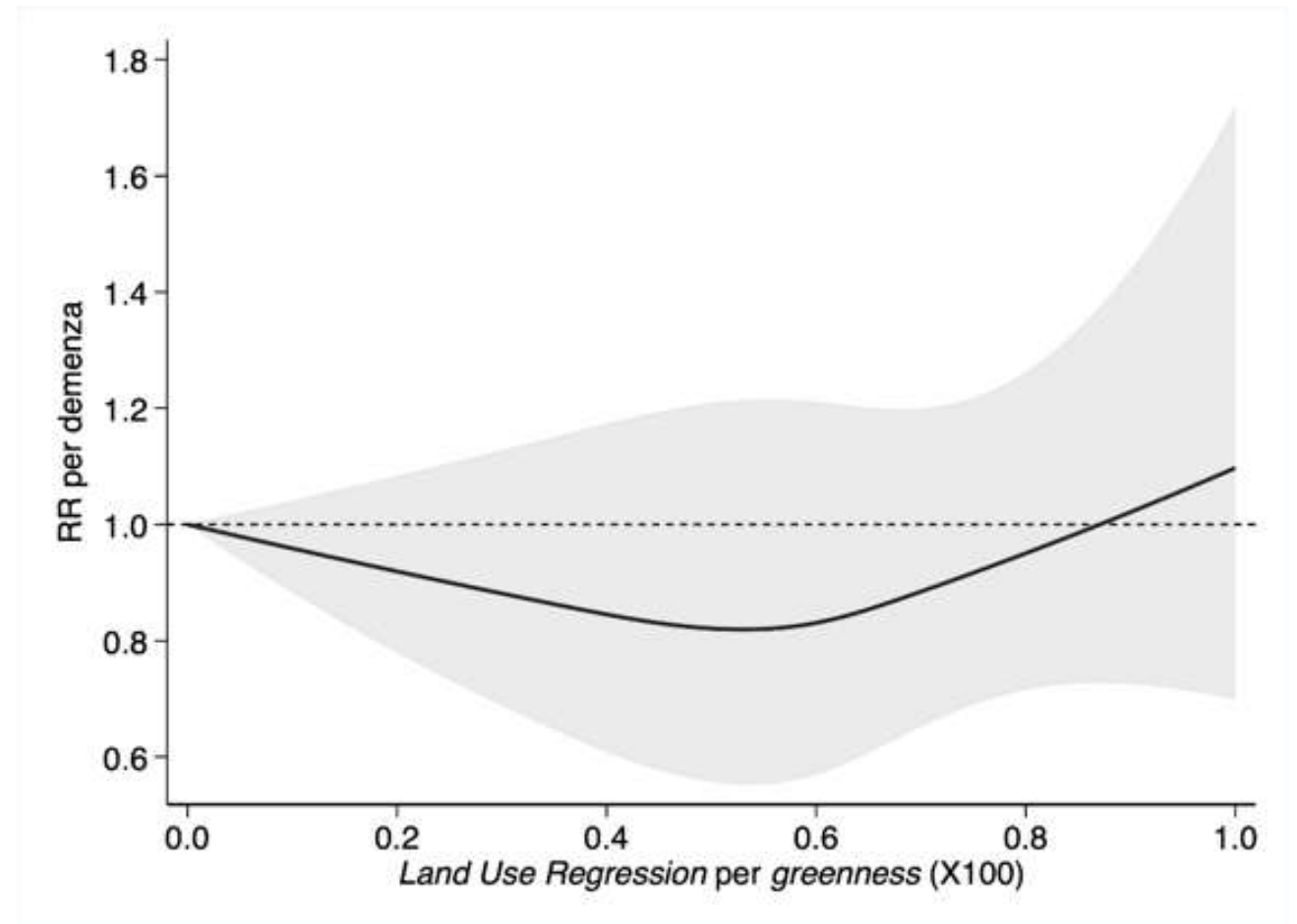
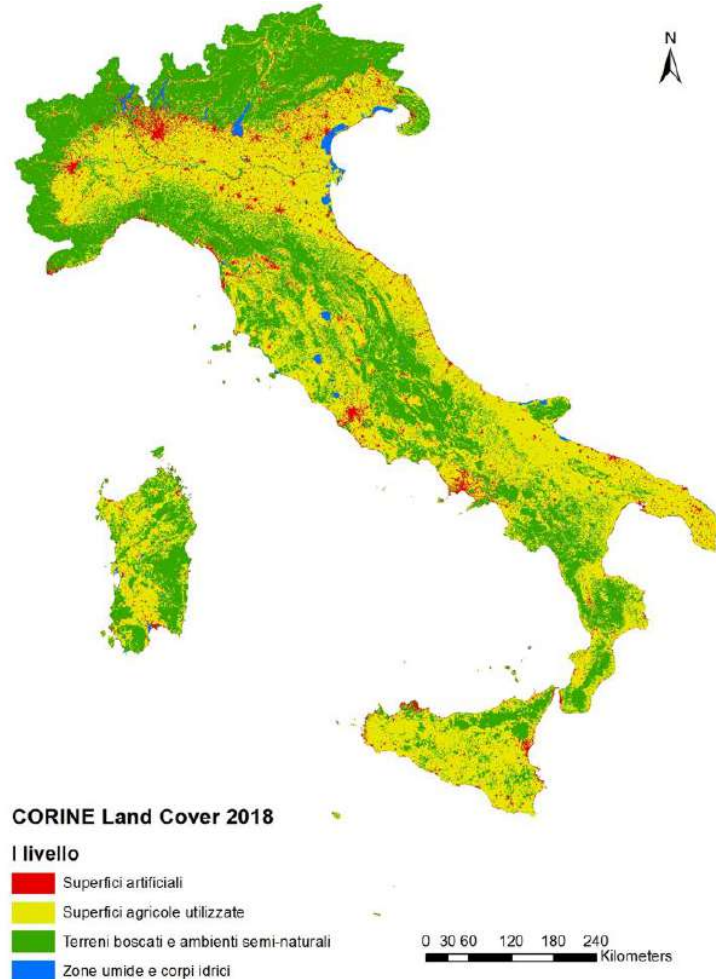
## b) Frequency of green space use



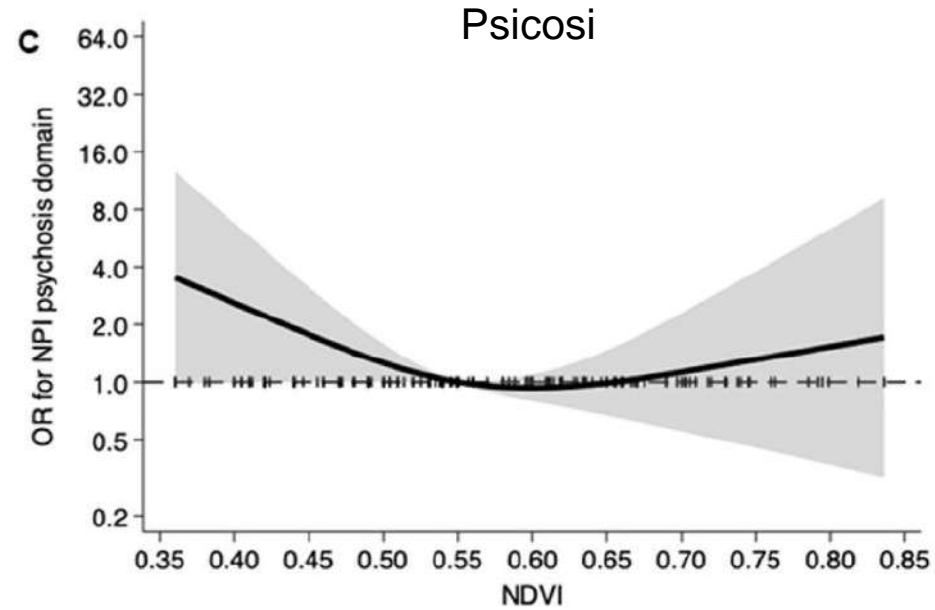
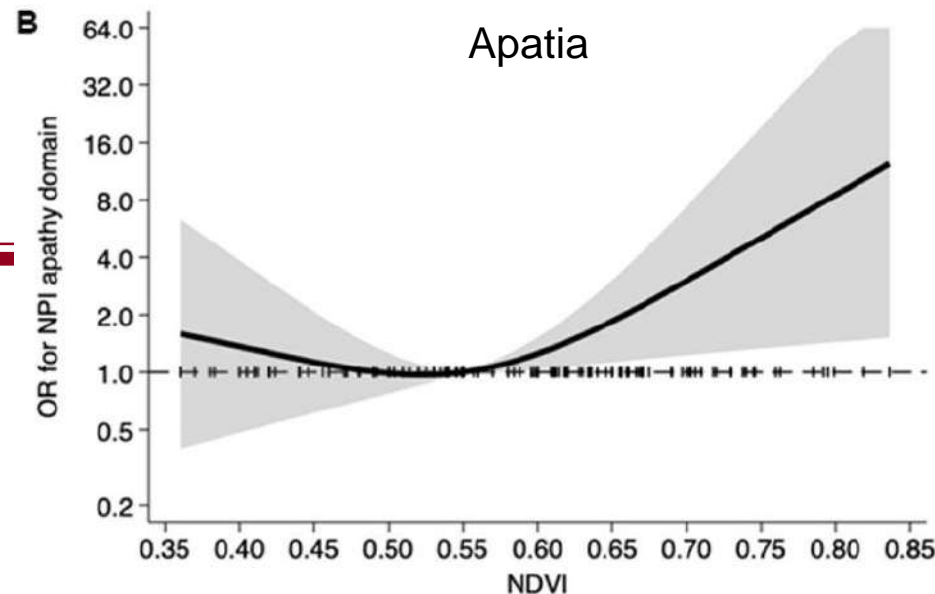
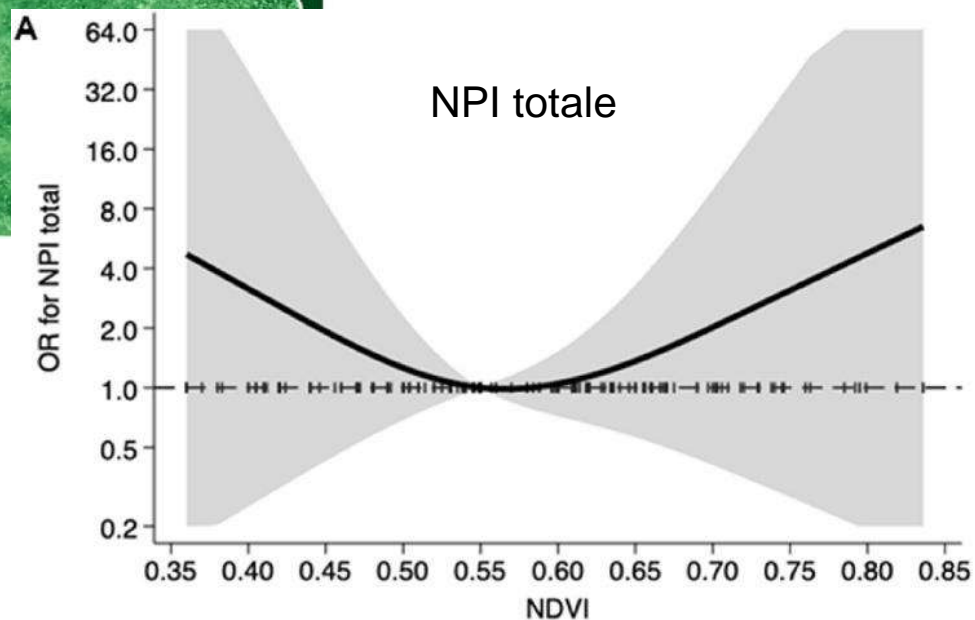
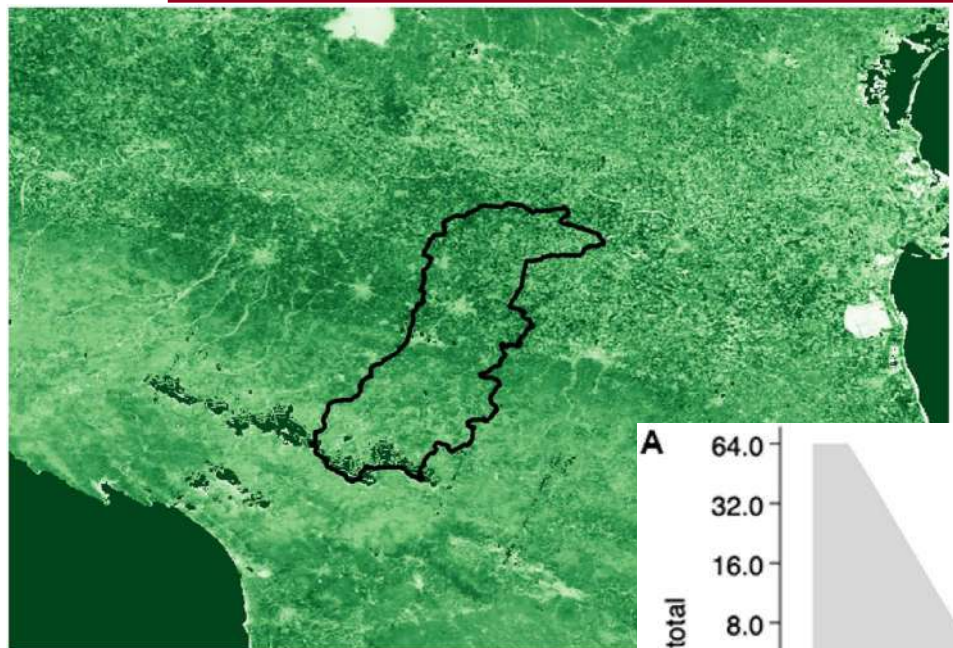
## c) Social activities in green spaces



# Demenza

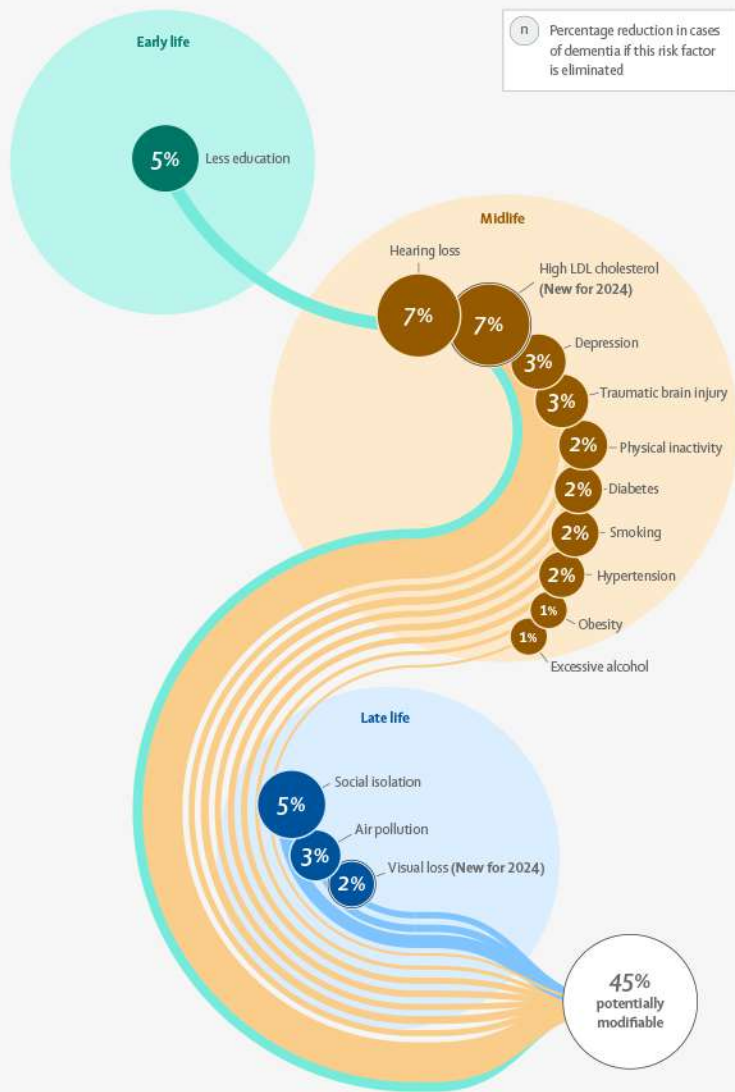


# Demenza: sintomi



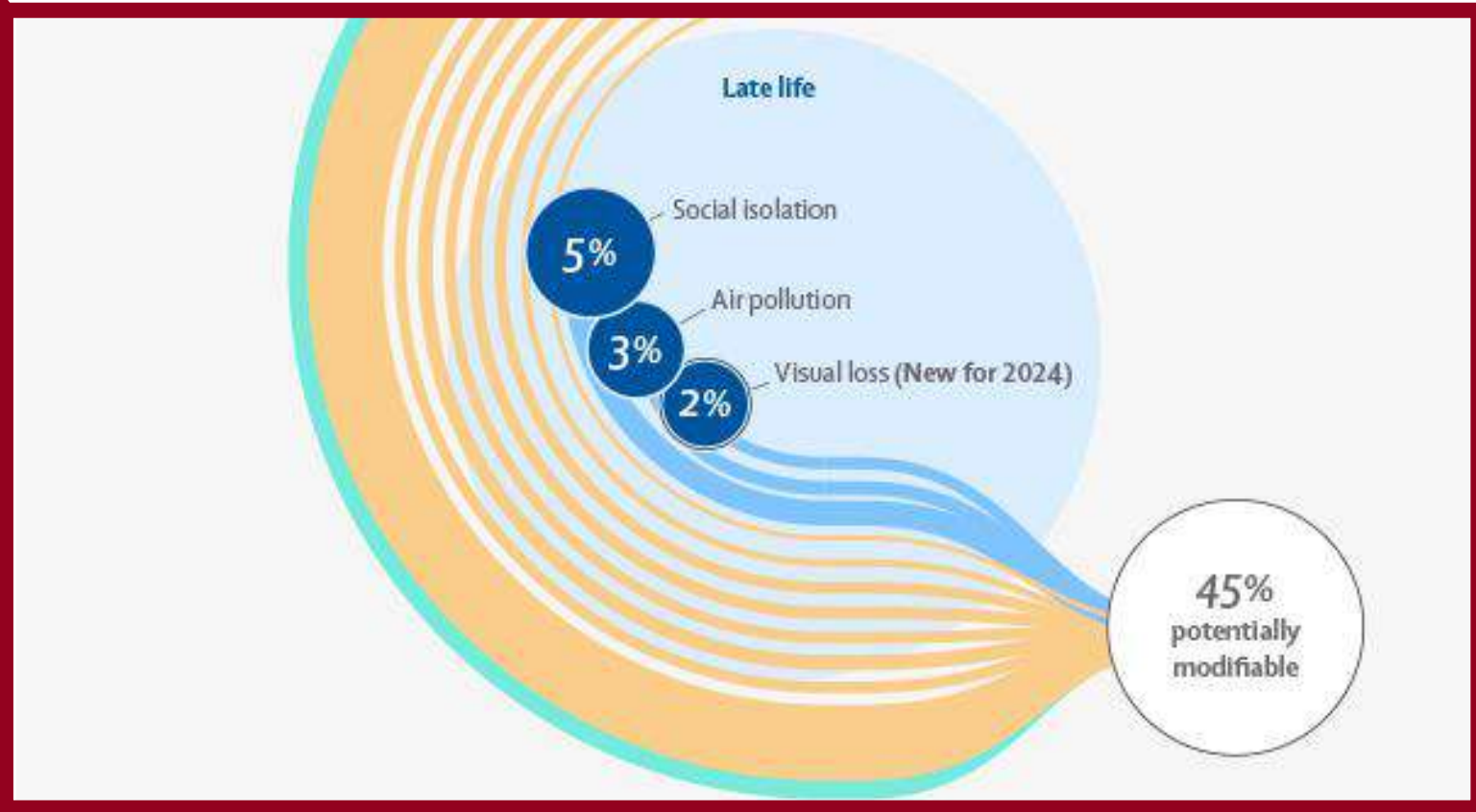
## Risk factors for dementia — 2024 update

The 2024 update to the standing Lancet Commission on dementia prevention, intervention, and care adds two new risk factors (high LDL cholesterol and vision loss) and indicates that nearly half of all dementia cases worldwide could be prevented or delayed by addressing 14 modifiable risk factors.

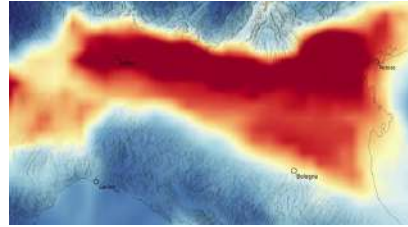


Read the full commission update at [thelancet.com/commissions/dementia-prevention-intervention-care](https://www.thelancet.com/commissions/dementia-prevention-intervention-care)

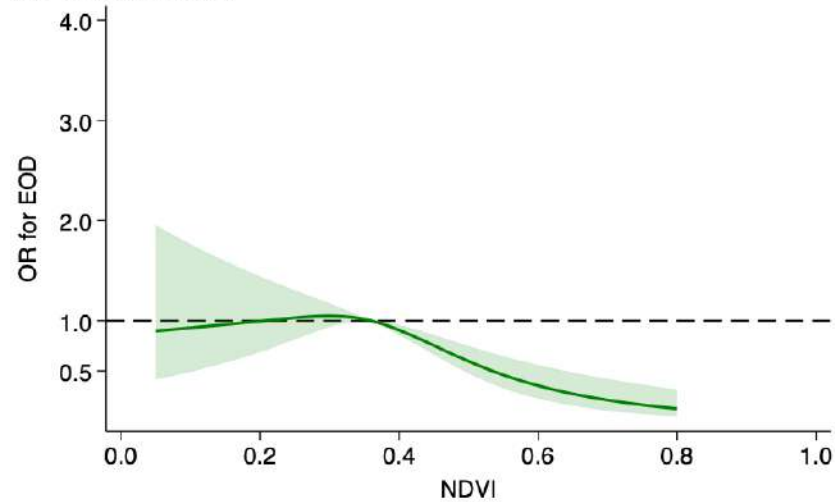
Livingston G, Huntley J, Liu KY, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. *The Lancet* 2024; published online July 31. [https://doi.org/10.1016/S0140-6736\(24\)01296-0](https://doi.org/10.1016/S0140-6736(24)01296-0).



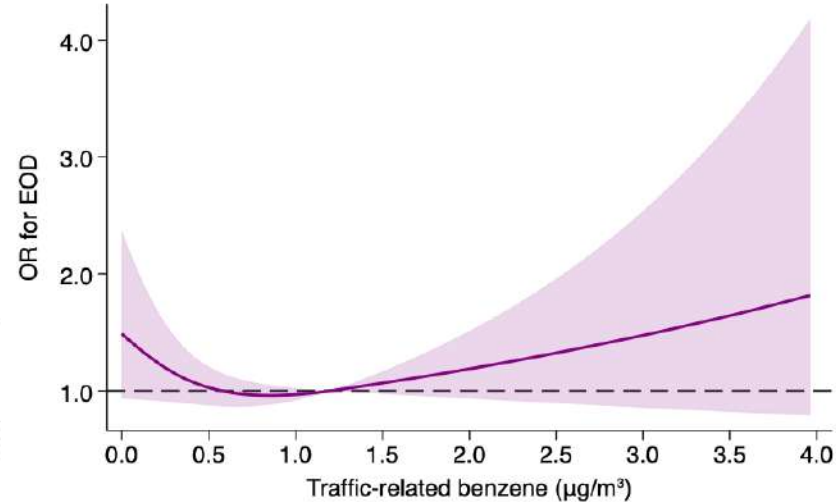
# Demenza a esordio precoce



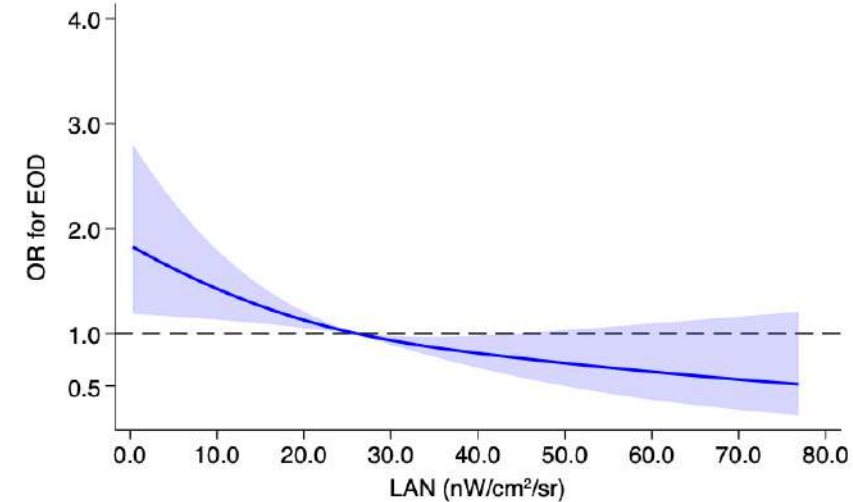
**A. Greenness**



**B. Benzene**



**C. LAN**





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**Grazie per l'attenzione**

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