



# BURDEN OF DROWNING

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# Key facts

- Drowning is the 3rd leading cause of unintentional injury death worldwide, accounting for 7% of all injury-related deaths.
- There are an estimated 236 000 annual drowning deaths worldwide.
- Children, males and individuals with increased access to water are most at risk of drowning.
- Global estimates may significantly underestimate the actual public health problem related to drowning.

# Scope of the problem

- In 2019, an estimated 236 000 people died from drowning, making drowning a major public health problem worldwide.
- injuries accounted for almost 8% of total global mortality. Drowning accounting for 7% of all injury-related deaths.
- The global burden and death from drowning is found in all economies and regions, over half of the world's drowning occurs in the WHO Western Pacific Region and WHO South-East Asia Region; 27-32 times higher than those seen in the United Kingdom or Germany, respectively.

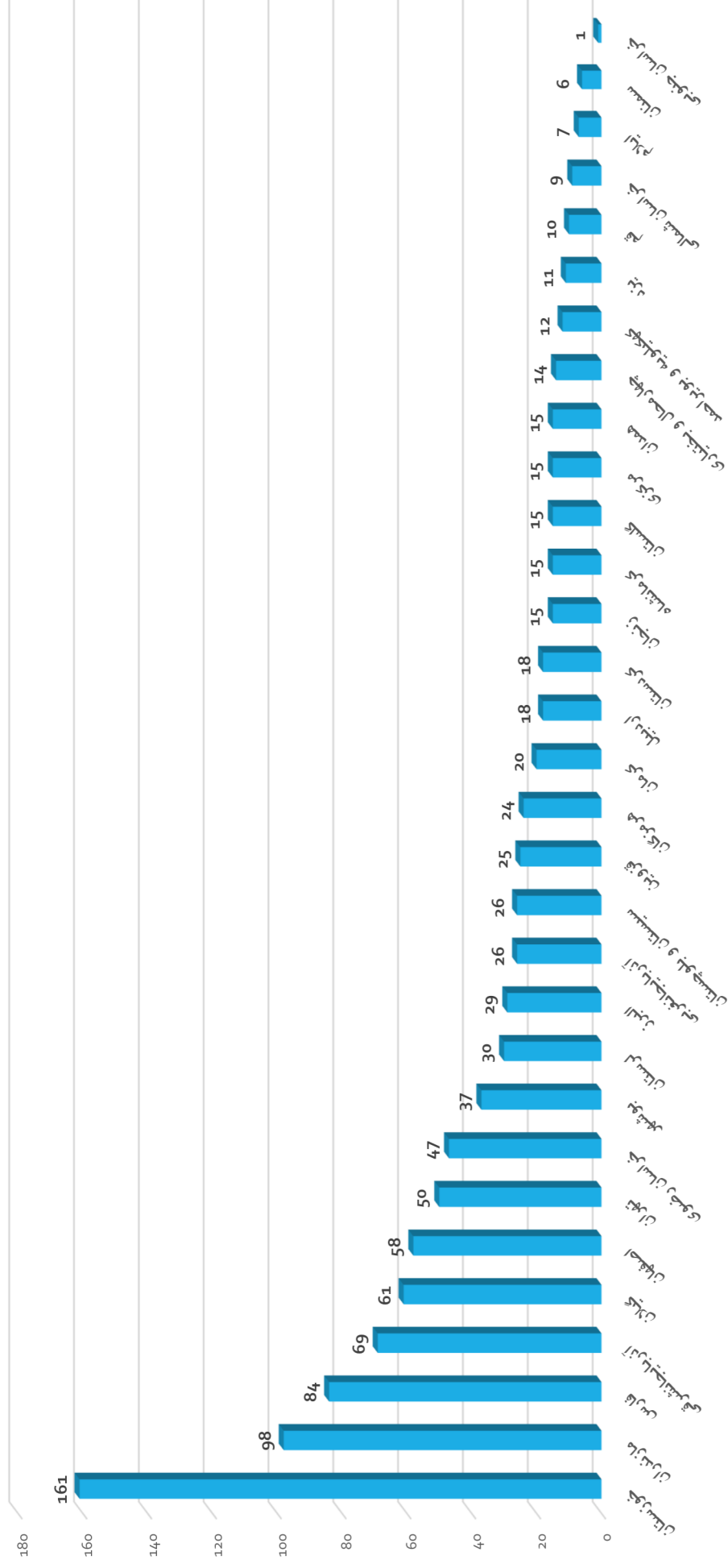


# DROWNING STATISTIC

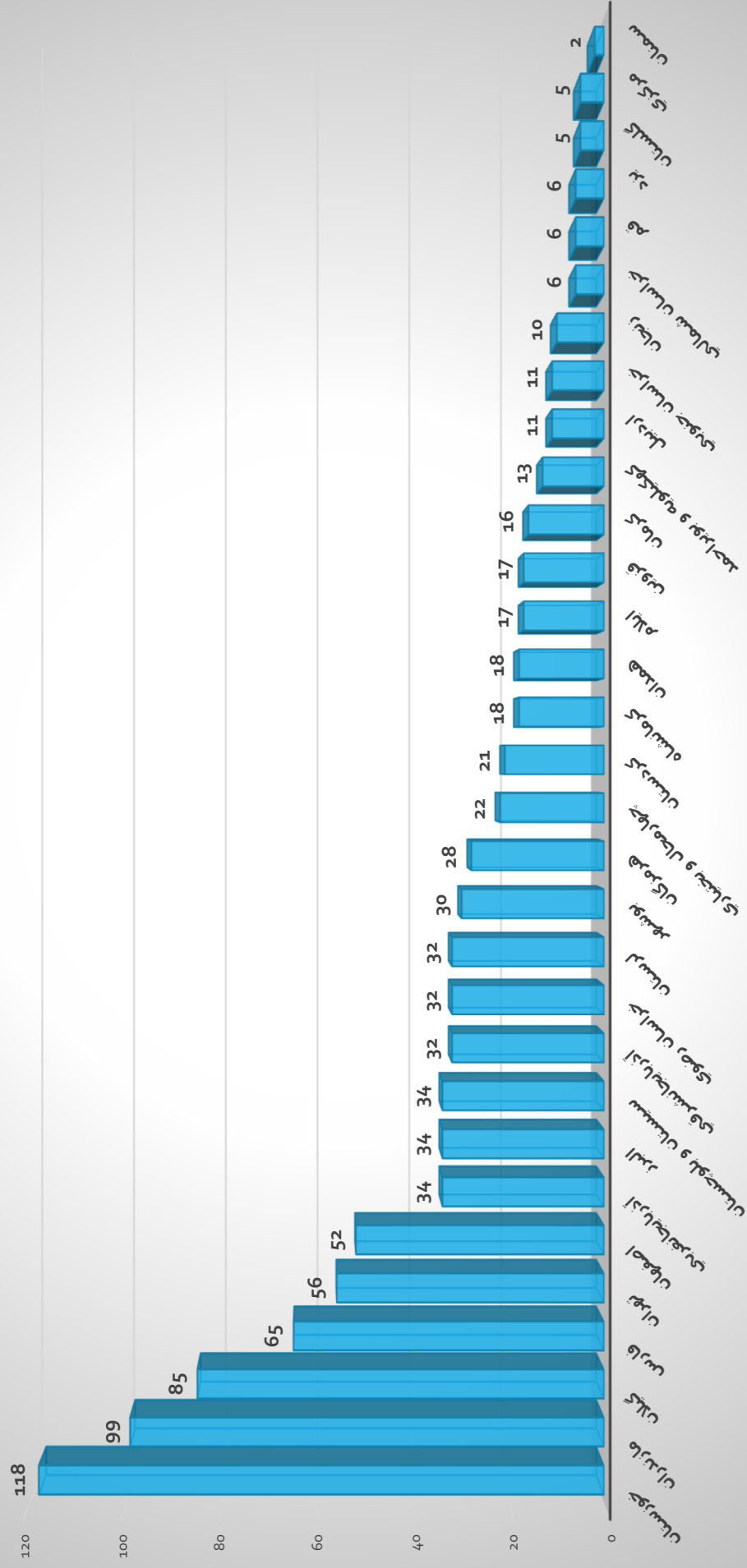
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## IRAN

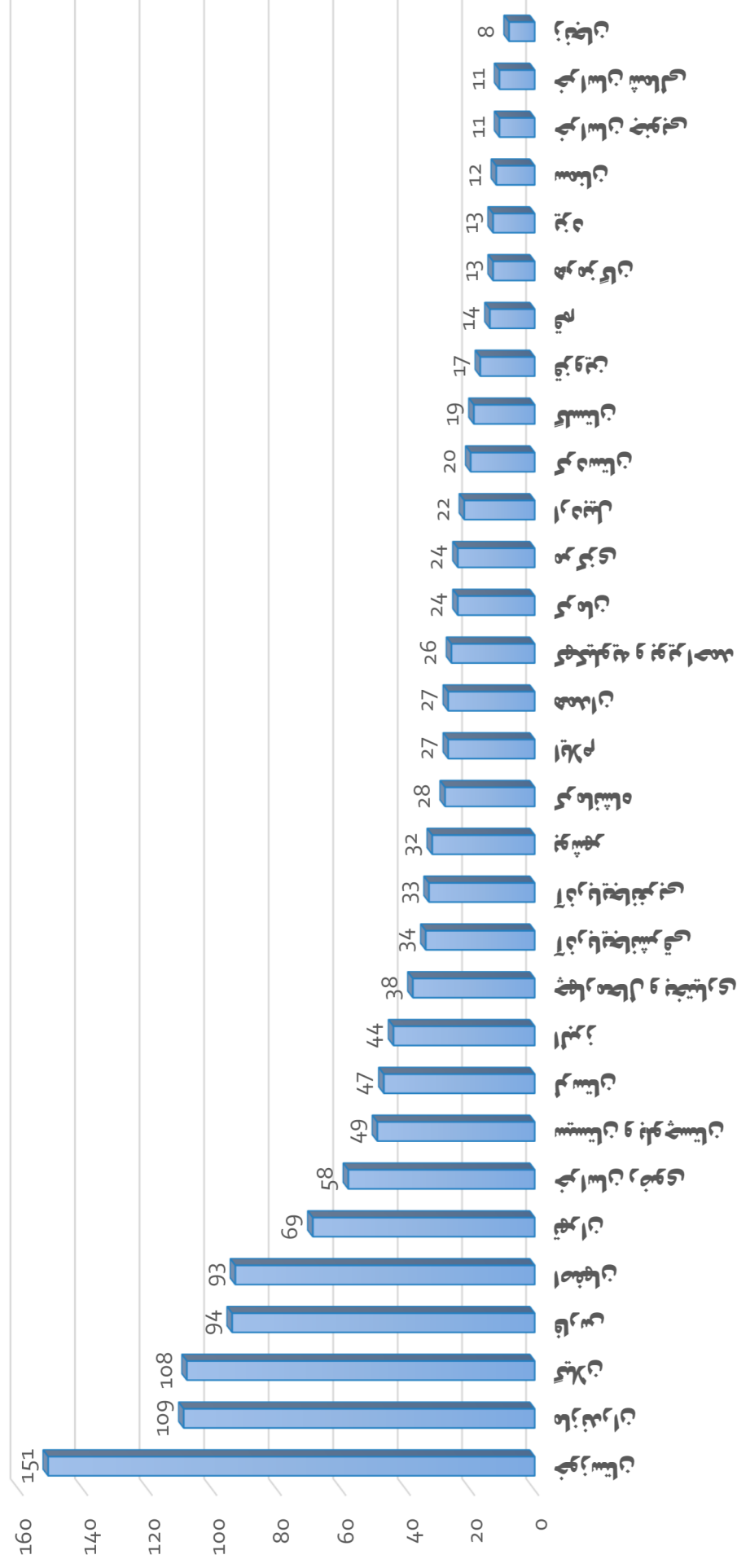
## غرق شدگی در سال ۱۳۹۶



## تعداد غرق شدگی ۱۳۹۷

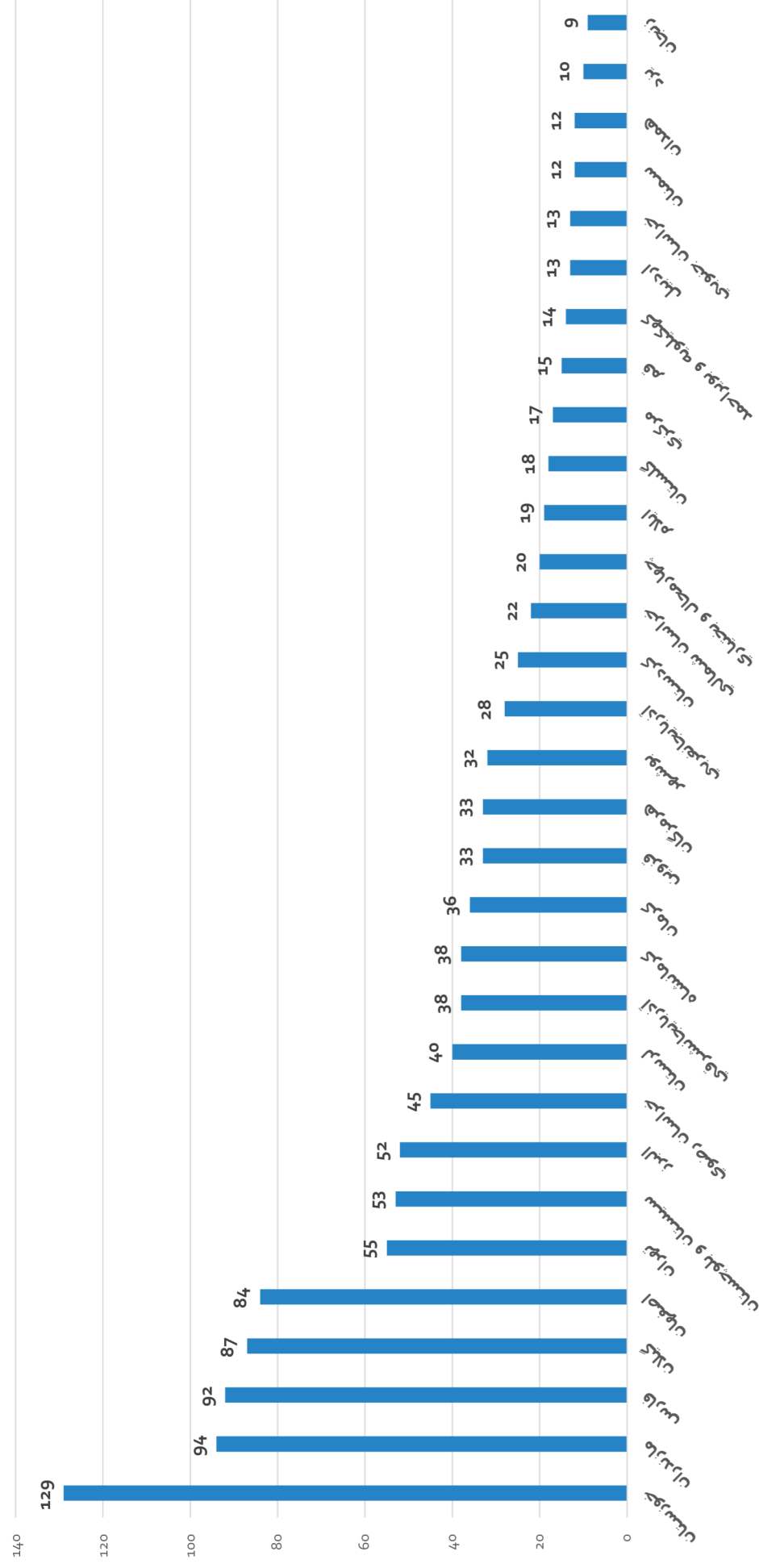


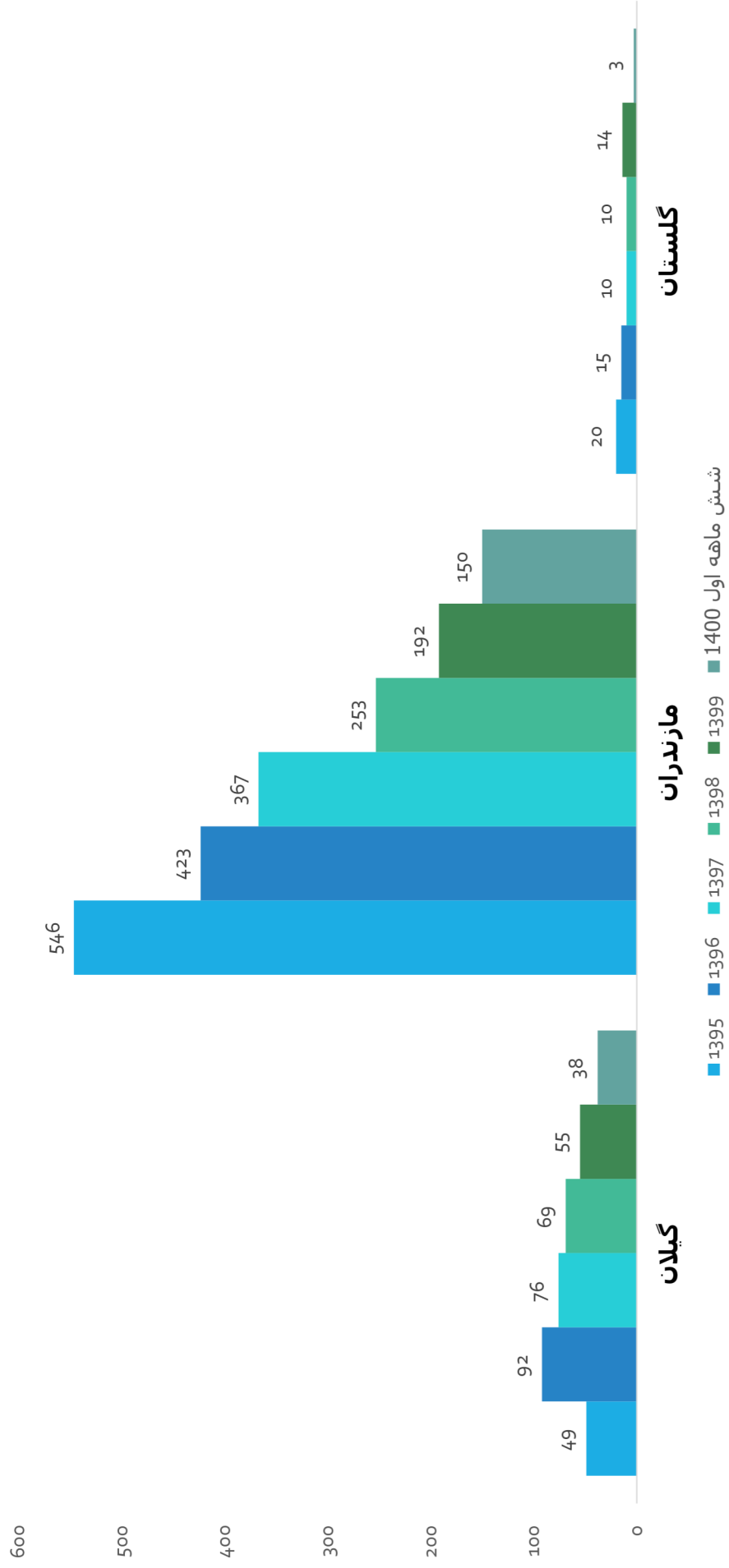
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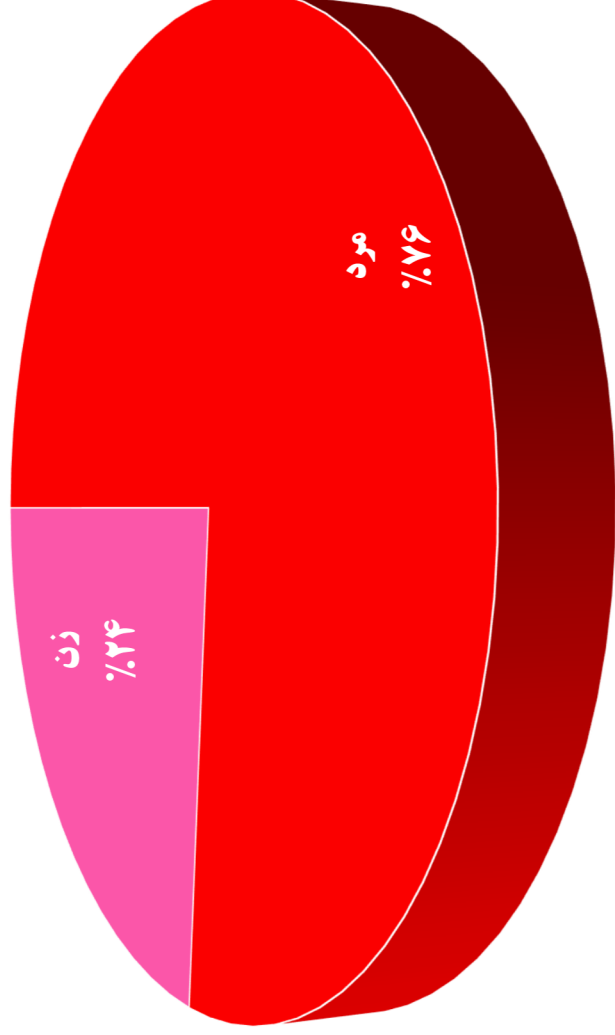


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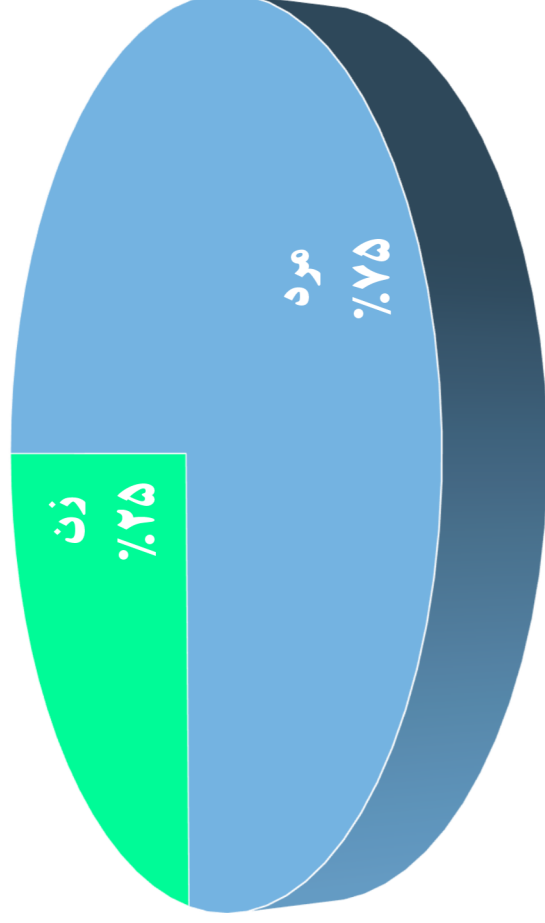




## درصد افراد غرق شده در دانشگاههای علوم پزشکی کشور به تفکیک جنس

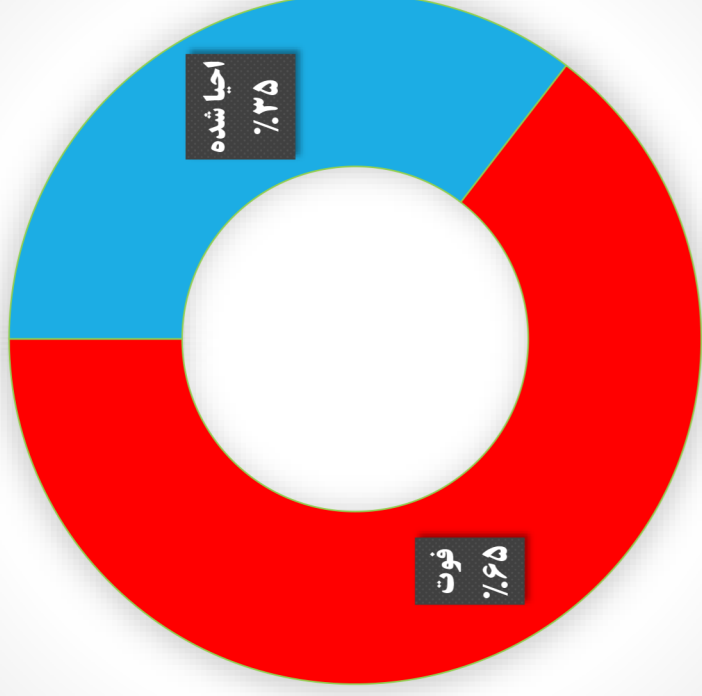


## درصد افراد غرق شده در استانهای شمالی کشور (گیلان، مازندران، گلستان)

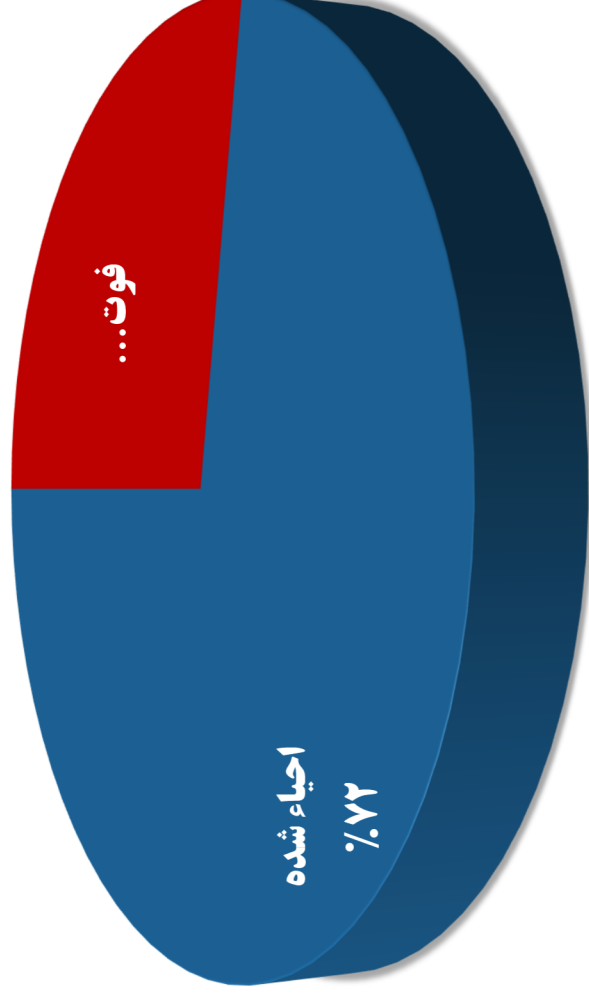




## فراوانی افراد غرق شده در دانشگاههای علوم پزشکی کشور به تفکیک نتیجه غرق شدگی

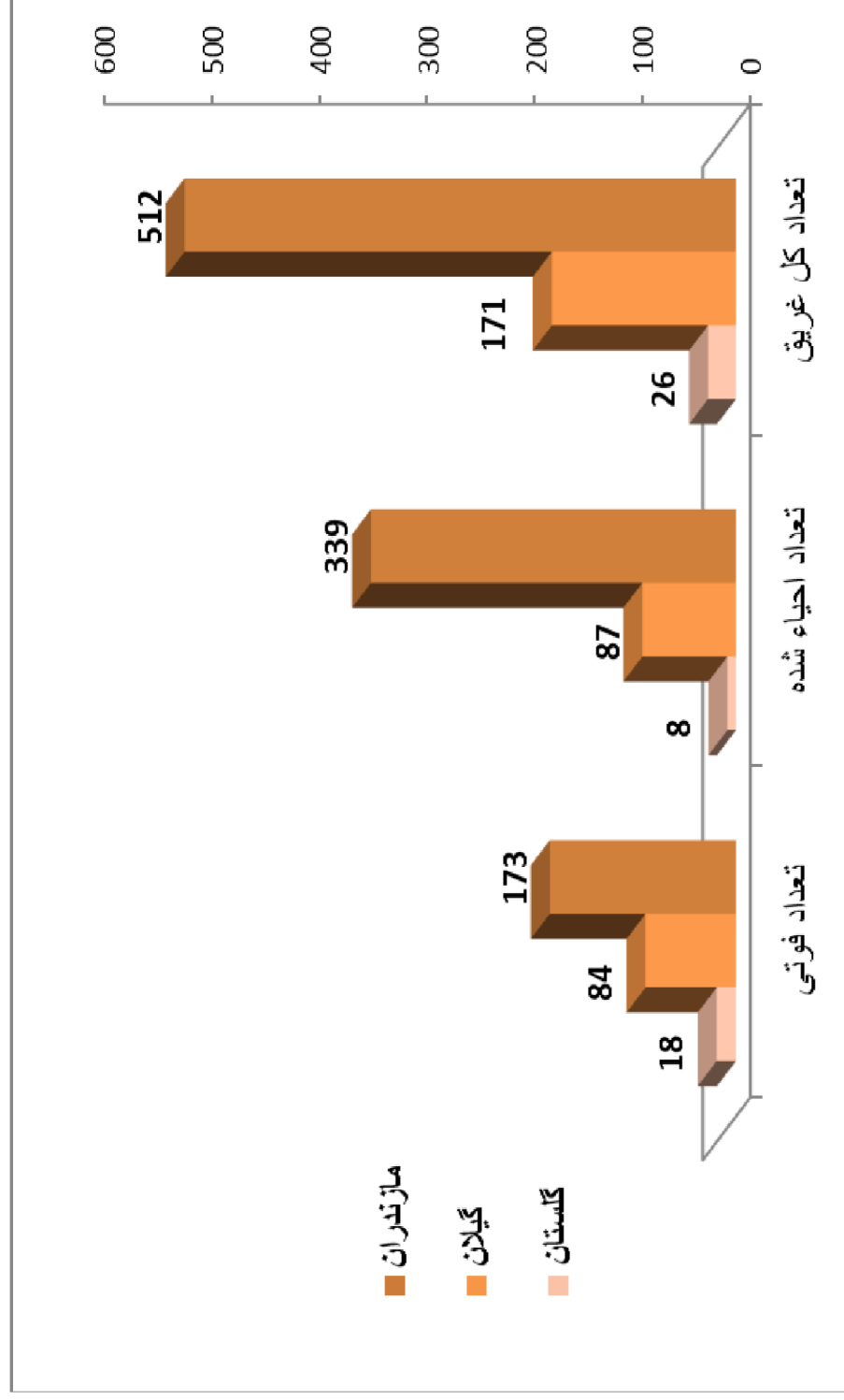


## درصد افراد فوت شده در اثر غرق شدگی در استانهای شمالی کشور (گیلان، مازندران، گلستان)

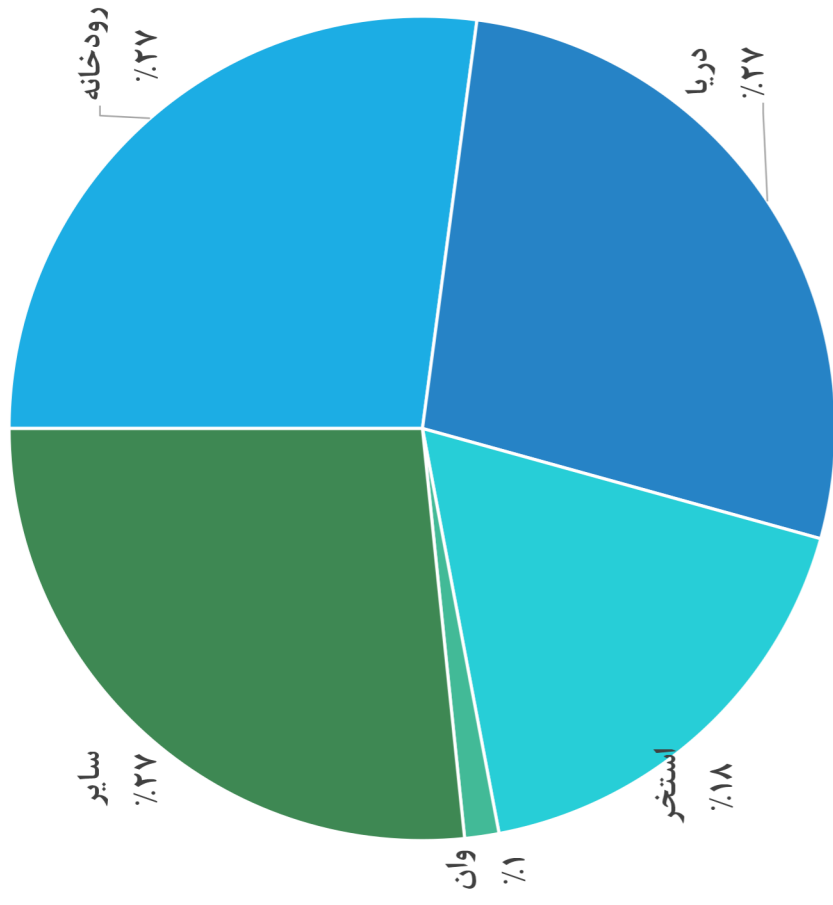


■ فوت ■ احیاء شده

## مقایسه ای از وضعیت غرق شدگی در سه استان مازندران، گیلان و گلستان

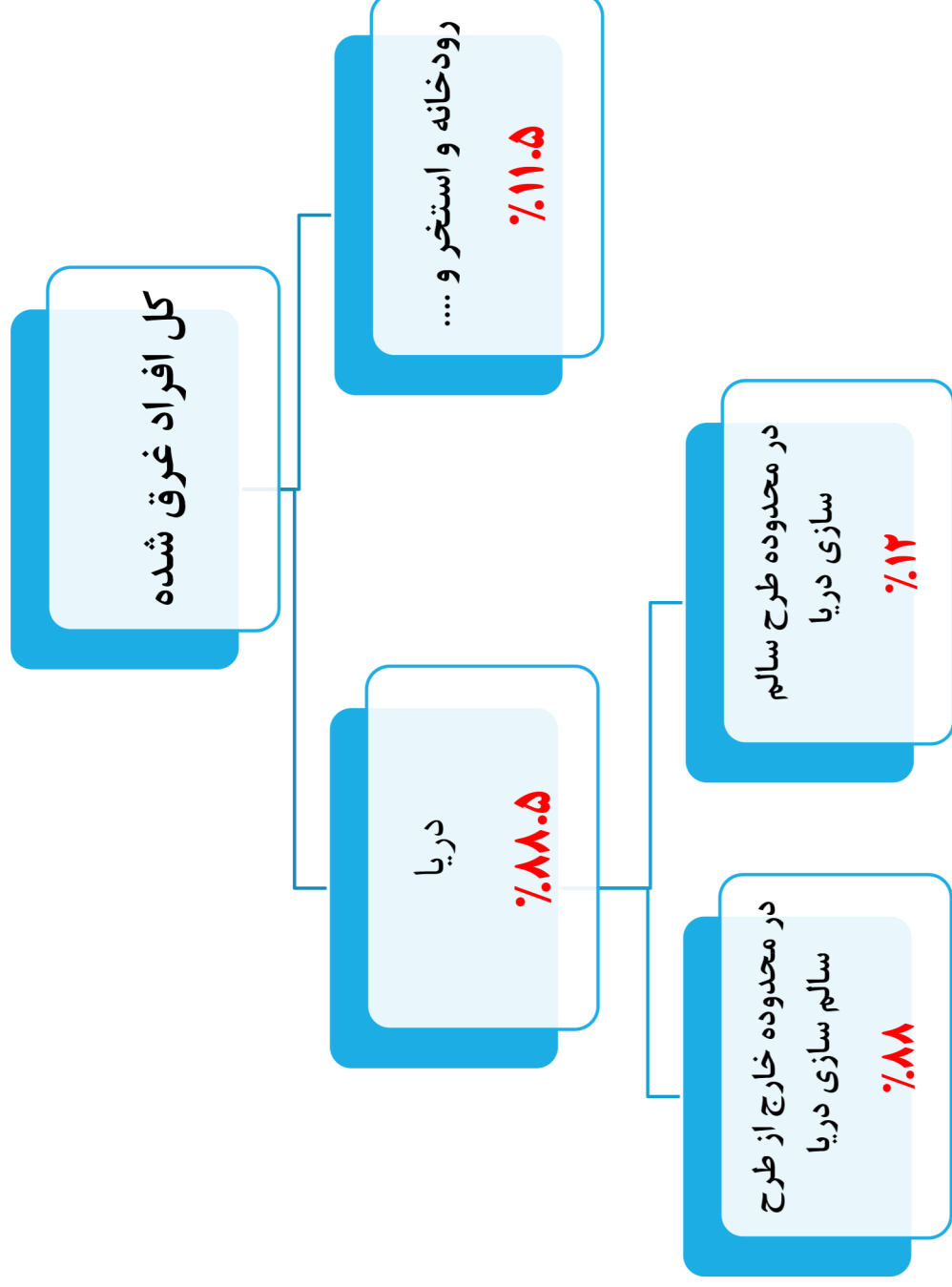


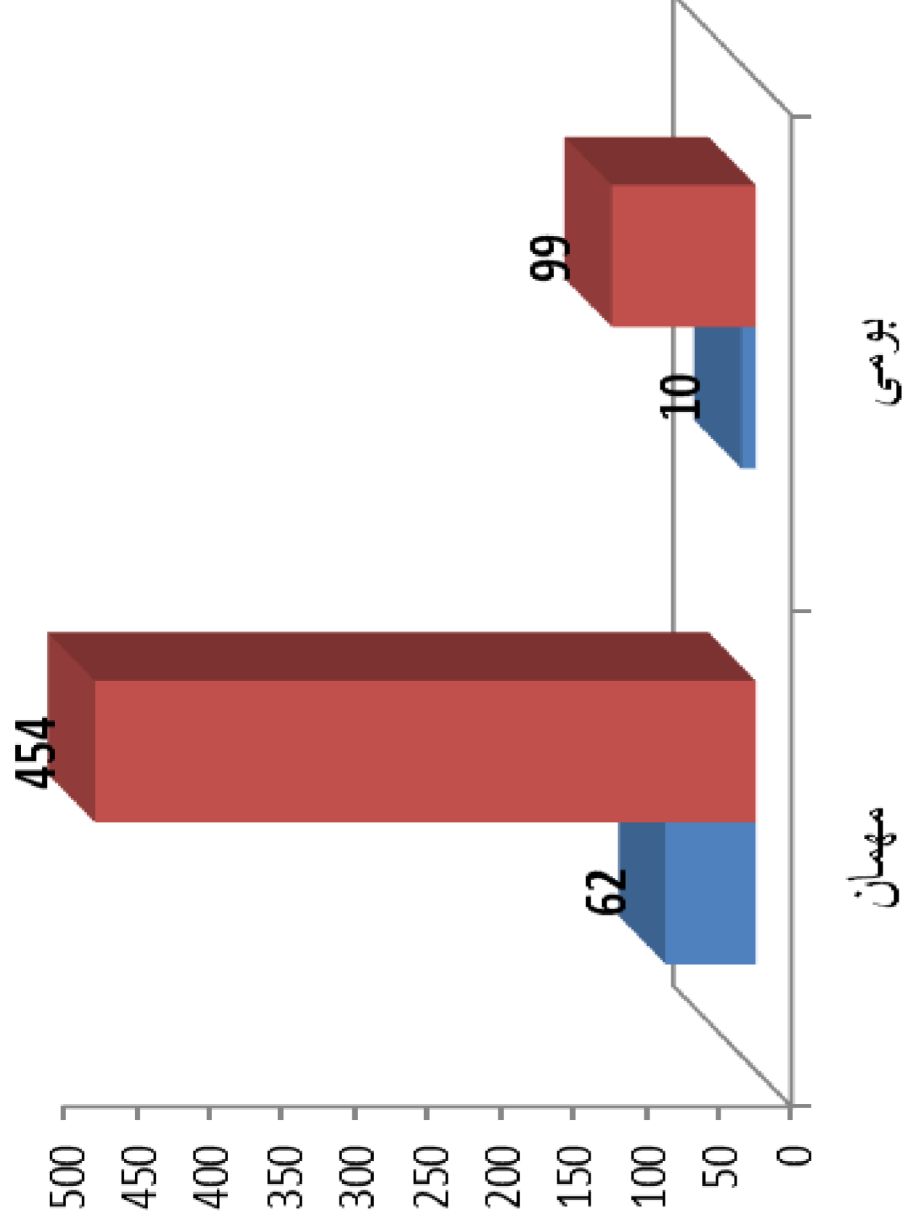
## فراوانی افراد غرق شده در دانشگاههای علوم پزشکی کشور به تفکیک محل غرق شدگی





## الگوی غرق شدگی در استانهای شمالی

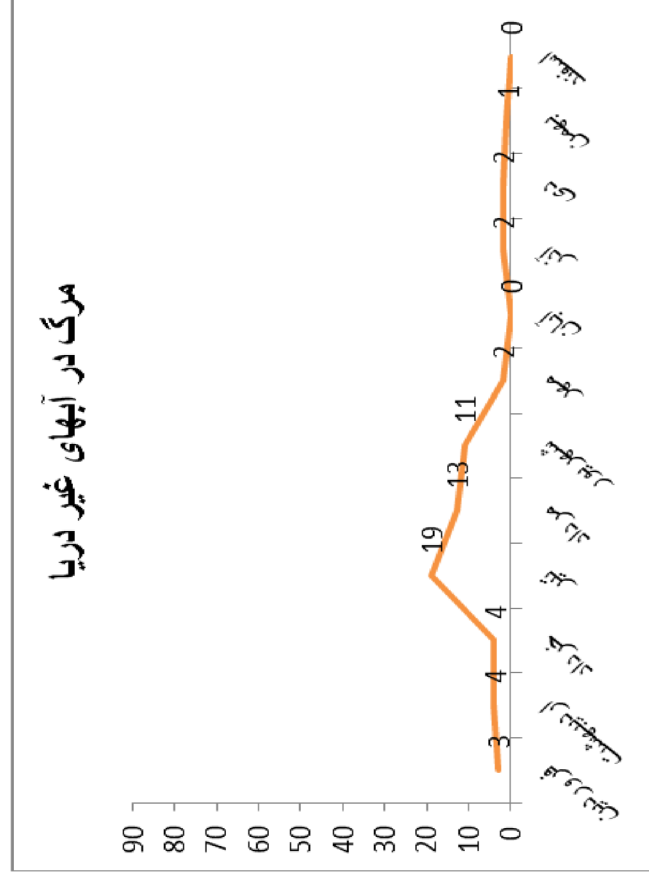
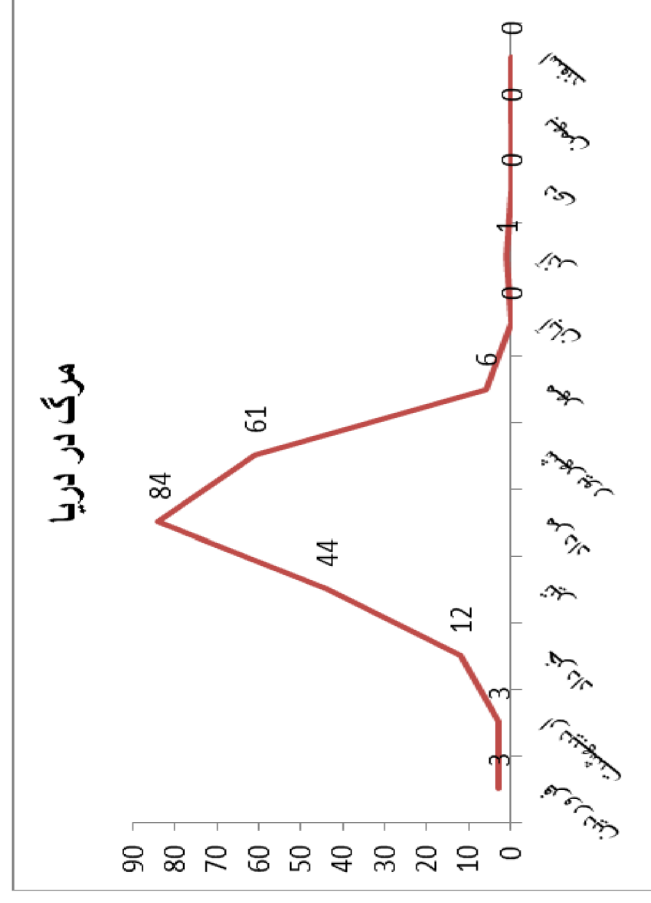




■ غرق شدگی دریا در محدوده طرح:

■ غرق شدگی دریا در خارج از محدوده طرح:

## الگوی فراوانی مرگ در دریا و غیر دریا برحسب زمان



# Burden of Drowning

- 45% of drowning deaths are among the most economically active segment of the population.
- estimated the burden of fatal drowning by combining Value of a Statistical Life Year (VSLY), hospitalization, productivity and emergency services costs
- Foregone life years from each drowning are estimated based on Countries life expectancies for the year of death.
- value of these Years of Life Lost was calculated using the VSLY, adjusted to reflect income elasticity. Corrections to discounting of VSLY were applied



# Burden of Drowning.....

- (exclude intentional drowning deaths (suicide or homicide) and drowning deaths caused by flood disasters and water transport incidents. )
- The economic burden of fatal drowning for Australia over this 14 year period was \$18.63 billion in 2017 Australian dollars, averaging \$1.24 billion annually.
- Coastal drowning in the United States alone accounts for US\$ 273 million each year in direct and indirect costs
- In Canada, the total annual cost of drowning injury is US\$ 85.5 million and US\$ 173 million
- In Iran 21400 Milliard Rials for one year excluding non fatal drowning
- ( Non-fatal drowning statistics in many countries are not readily available or are unreliable.)

هزینه امداد در کشورهایی مانند استرالیا ۳۴ تا ۳۰ دلار

به ازاء هر غریق می باشد در صورتی که در ایران ۱۳

میلیون تومان



# Risk factors.....

- **Gender**
- **Access to water:** Individuals with occupations such as commercial fishing or fishing for subsistence, using small boats in low-income countries are more prone to drowning. Children who live near open water sources, such as ditches, ponds, irrigation channels, or pools are especially at risk.
- **Flood disasters:** Drowning accounts for 75% of deaths in flood disasters.
- **Travelling on water:** journeys made by migrants or asylum seekers often take place on overcrowded, unsafe vessels lacking safety equipment or are operated by personnel untrained

# Other risk factors

- Lower socioeconomic status,
- being a member of an ethnic minority,
- lack of higher education,
- rural populations
- alcohol use, near or in the water;
- medical conditions, such as epilepsy;
- tourists unfamiliar with local water risks and features;

# Prevention

- Installing barriers
- Community-based, supervised child care for pre-school children
- Teaching school-age children basic swimming, water safety and safe rescue skills
- Effective policies and legislation
- enforcing safe boating, shipping and ferry regulations
- Building resilience to flooding and managing flood risks through better disaster preparedness planning
- Developing a national water safety strategy can raise awareness of safety around water

# تشکر از توجه تان

