3. To develop model characteristics of the most important parameters of physical training level of young people who live under the radioactive contamination conditions.

4. To develop the complex of innovation facilities and methods of increasing the level of young people’s physical training.

5. To examine the efficiency of complex effect of innovation facilities and methods of increasing the level of young people’s physical training experimentally.

6. To introduce scientific-and-practical recommendations concerning the development of physical training process of young people who live under the radioactive contamination conditions.

**Ideas and Hypotheses on the Project**

The development of physical training process of young people who live under the radioactive contamination conditions must facilitate the development and maintenance of adaptation mechanisms, must base on such theoretical and methodical targets, whose fulfillment will assure the necessary level of their physical training and health; the results of the research will facilitate the fulfillment of targets of the state purpose-oriented complex program “Physical Education is the Health of Nation” (1998).

**The Expected Results of the Project. Their Conformity with the World Level**

The advantage and scientific-and-practical significance of the project consist in the development of innovation technologies of physical training process of young people who live under the radioactive contamination conditions by increasing the reliability, informational content of separate tests and complex control system in general using the modern mathematical apparatus, which makes it possible to successfully study and forecast the physical training process of young people, and also by implementing the new facilities and methods of increasing the level of physical qualities, whose basis are the modern sport technologies.

The probability and reliability of research results will be assured by comprehensive consideration of the studying subject, theoretical-and-methodological grounding of initial positions, and extensive use of various methods, which add each other and match the goals and targets of research, quantitative and qualitative analysis of the empirical data.

The results of research will make an important contribution to the theory and practice of managing the teaching-and-training process of physical education of young people who live under the radioactive contamination conditions as it is the basis of creating the conditions for the formation of their organism opportunities to the maximal fulfillment of moving and energetic potentials.

**The Use of Results**

The main positions of the research will be used during the development and improvement of the “Physical Education” specialty curriculum for students, improvement of contents of “Theory and Methods of Physical Education”, “Biomechanics”, “Track-and-field”, “The Basics of Scientific Research in Physical Education and Sport” and other disciplines, methodological-and-studying seminars with the qualification raise faculty staff, students and teachers of physical education and sport faculties of Ukrainian higher education institutions.

The results of the research can be also introduced in training military servicemen in order to create the conditions for the formation of their organism faculties for the maximal fulfillment of moving and energetic potentials.
The results of the Chernobyl Nuclear Power Station accident have put forward the problem of bringing people, who live in the radionuclide contaminated territories, into a healthy state. The particular importance of this problem touches upon children, teenagers and young people who are the future of every nation.

After the Chernobyl disaster the great complex of divergences has been reflecting in psychological and physical spheres of human being, i.e. the decrease of intellectual capacity, rapid tiredness, physical activity worsening, which are connected with the long-lasting residence under the affect of low radiation doses.

Gene mutations are recessive; they become a reason of additive incidents to hereditary diseases, which reveal themselves just in the second-fifth descendant generations. These radiation affects will recur for 25-150 years after the accident and will lead to the appearance of 60-180 additive illness incidents of the all-world generations.

Thus, the analysis of literature sources proves the negative effect of low radiation doses on the human organism. The conditions, in which a person after the radioactive affection has to keep on living in radionuclide contaminated territory, are worsening. That’s why the problem of searching new affordable and efficient facilities and methods of physical training, bringing people into a healthy state and increasing the organism’s resistance to unfavorable factor activities of environment is topical.

As the national and foreign specialists think that there are no methods able to stop or decrease the internal irradiation, the increase of person’s health bases on the rapid isotope removal from one’s organism. According to this concept conditions of the increased metabolism as well as mobilization of the apportionment system activity should be created in the organism of the “irradiated person”. This stipulates the development of PE-and-sanitary technologies depending on various traditional and non-traditional kinds as well as forms of person’s physical activity, and also hygiene measures.

The research will be conducted in three ways:
– the first one is connected with the decrease of affect of environment’s negative factors on young people under the conditions of fulfillment of certain moving targets;
– the second one stipulates the development of model characteristics of the most important parameters of physical training level of young people who live under the radioactive contamination conditions;
– the third one stipulates the development of innovation technologies in order to increase the process of physical training of young people;
– the forth one stipulates the experimental examination of the efficiency of complex effect of innovation facilities and methods of increasing the level of young people’s physical training.

Goals: to develop the complex of innovation facilities and methods of developing the physical training process of 17-22 year old young people who live under the radioactive contamination conditions and to examine their efficiency experimentally.

Targets
1. To study the national and foreign experience in the problems of young people’s physical training.
2. To determine the physical training level of young people from various ecological resistance zones.
Innovation Technologies in the Development of Physical Training Process of 17-22 Year Old Young People Who Live Under the Radioactive Contamination Conditions

The results of the Chernobyl Nuclear Power Station accident have put forward the problem of bringing people, who live in the radionuclide contaminated territories, into a healthy state. The particular importance of this problem touches upon children, teenagers and young people who are the future of every nation.

After the Chernobyl disaster the great complex of divergences has been reflecting in psychological and physical spheres of human being, i.e. the decrease of intellectual capacity, rapid tiredness, physical activity worsening, which are connected with the long-lasting residence under the affect of low radiation doses.

Gene mutations are recessive; they become a reason of additive incidents to hereditary diseases, which reveal themselves just in the second-fifth descendant generations. These radiation affects will recur for 25-150 years after the accident and will lead to the appearance of 60-180 additive illness incidents of the all-world generations.

Thus, the analysis of literature sources proves the negative effect of low radiation doses on the human organism. The conditions, in which a person after the radioactive affection has to keep on living in radionuclide contaminated territory, are worsening. That’s why the problem of searching new affordable and efficient facilities and methods of physical training, bringing people into a healthy state and increasing the organism’s resistance to unfavorable factor activities of environment is topical.

As the national and foreign specialists think that there are no methods able to stop or decrease the internal irradiation, the increase of person’s health bases on the rapid isotope removal from one’s organism. According to this concept conditions of the increased metabolism as well as mobilization of the apportionment system activity should be created in the organism of the “irradiated person”. This stipulates the development of PE-and-sanitary technologies depending on various traditional and non-traditional kinds as well as forms of person’s physical activity, and also hygiene measures.

The research will be conducted in three ways:
– the first one is connected with the decrease of affect of environment’s negative factors on young people under the conditions of fulfillment of certain moving targets;
– the second one stipulates the development of model characteristics of the most important parameters of physical training level of young people who live under the radioactive contamination conditions;
– the third one stipulates the development of innovation technologies in order to increase the process of physical training of young people;
– the forth one stipulates the experimental examination of the efficiency of complex effect of innovation facilities and methods of increasing the level of young people’s physical training.

Goals: to develop the complex of innovation facilities and methods of developing the physical training process of 17-22 year old young people who live under the radioactive contamination conditions and to examine their efficiency experimentally.

Targets
1. To study the national and foreign experience in the problems of young people’s physical training.
2. To determine the physical training level of young people from various ecological resistance zones.
3. To develop model characteristics of the most important parameters of physical training level of young people who live under the radioactive contamination conditions.

4. To develop the complex of innovation facilities and methods of increasing the level of young people’s physical training.

5. To examine the efficiency of complex effect of innovation facilities and methods of increasing the level of young people’s physical training experimentally.

6. To introduce scientific-and-practical recommendations concerning the development of physical training process of young people who live under the radioactive contamination conditions.

**Ideas and Hypotheses on the Project**

The development of physical training process of young people who live under the radioactive contamination conditions must facilitate the development and maintenance of adaptation mechanisms, must base on such theoretical and methodical targets, whose fulfillment will assure the necessary level of their physical training and health; the results of the research will facilitate the fulfillment of targets of the state purpose-oriented complex program “Physical Education is the Health of Nation” (1998).

**The Expected Results of the Project. Their Conformity with the World Level**

The advantage and scientific-and-practical significance of the project consist in the development of innovation technologies of physical training process of young people who live under the radioactive contamination conditions by increasing the reliability, informational content of separate tests and complex control system in general using the modern mathematical apparatus, which makes it possible to successfully study and forecast the physical training process of young people, and also by implementing the new facilities and methods of increasing the level of physical qualities, whose basis are the modern sport technologies.

The probability and reliability of research results will be assured by comprehensive consideration of the studying subject, theoretical-and-methodological grounding of initial positions, and extensive use of various methods, which add each other and match the goals and targets of research, quantitative and qualitative analysis of the empirical data.

The results of research will make an important contribution to the theory and practice of managing the teaching-and-training process of physical education of young people who live under the radioactive contamination conditions as it is the basis of creating the conditions for the formation of their organism opportunities to the maximal fulfillment of moving and energetic potentials.

**The Use of Results**

The main positions of the research will be used during the development and improvement of the “Physical Education” specialty curriculum for students, improvement of contents of “Theory and Methods of Physical Education”, “Biomechanics”, “Track-and-field”, “The Basics of Scientific Research in Physical Education and Sport” and other disciplines, methodological-and-studying seminars with the qualification raise faculty staff, students and teachers of physical education and sport faculties of Ukrainian higher education institutions.

The results of the research can be also introduced in training military servicemen in order to create the conditions for the formation of their organism facilities for the maximal fulfillment of moving and energetic potentials.